

The Economic Influencing Factors of Local Government Transfer Payment in the Context of Province Governing County

Based on the Empirical Analysis of Sichuan Province

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ABSTRACT

Studying the factors of transfer payment and improving the financial transfer payment system to achieve the equalization of basic public services is of great significance to the realization of high-quality and high-level regional economic stable and coordinated development. This paper uses the cross-sectional data of province governing county in the third batch of Sichuan Province in 2018. It mainly examines the economic impact factors of general transfer payments and special transfer payments from the economic dimension. The paper believes that the general transfer payment to promote the balanced development of the local situation needs to be further improved. In addition, it is believed that the general transfer payment is more effective than the special transfer payment in promoting fair development. Furthermore, this paper also puts forward relevant policy recommendations in this regard.

Keywords: province governing county, transfer payment, economic factors

I. INTRODUCTION

The reform of the financial system of county administrated by province has been carried out in China since the 1990s. The reform of province governing county involved multiple interests. In order to take into account the interests of prefecture-level cities, at present, the main planning, statistical caliber affiliation, and cadre system of the reform of county administrated by province are unchanged, which are under the management of the province governing county. financial transfer payment mainly consists of three parts: tax refund, general transfer payment and special transfer payment [1]. The intergovernment financial transfer payment system is an important method for the upper-level government to make up for the funding gap of the lower-level government, and it is also an important measure to achieve fairness of financial funds among local governments. Provincial-level transfer payments can not only increase the financial revenue of lower-level governments, but also maintain the financial operations of their governments. Therefore, the influencing factors between the transfer payments between local governments against the background of province governing county have become a common concern of government staff and scholars. According to the current research, the focus of the research on the

influencing factors of intergovernmental transfer payments is still on the transfer of the central government by province, and the research on sub-provincial governments is relatively less. The current financial transfer payment system is mainly based on the existing levels, and the transfer of financial funds is carried out step by step. It is more manifested in the level of central to the provincial. The relevant systems below the provincial level are not yet perfect, and the relevant theory is not sound enough [2]. This paper analyzes the distribution situation and improvement paths of financial transfer payments in the province governing county through the cross-sectional data of each province governing county in the third batch of Sichuan Province in 2018.

II. THEORY OVERVIEW

Judging from the existing literature, Chinese and foreign scholars have conducted research on financial transfer payments. The research contents of foreign scholars mainly focus on the following aspects. The first is the influencing factors of financial transfer payments. Kai-yuen Tsui (2004) mainly studies the influencing factors of the difference in government financial resources. The research perspective is two aspects of income and transfer payments [3] [4]. The second is the study of the legal system of financial

transfer payments. Yi Wenjia and Li Fengmei (2005) pointed out that the success of developed countries in the construction of legal systems for transfer payments depends on the country's rich financial resources, a sound legal system and the improvement of the tax distribution system.[5] The research by Philippe Cyrenne and Manish Pandey (2014) concluded that in Canada, after the lower level government receives the financial transfer payment from the higher level government, the financial support of the lower level government for production activities will decrease[4] [5] [6]. Chinese scholars' research on financial transfer payments is roughly the same as that of foreign scholars. From 1999 to 2009, the focus of research by Chinese scholars was also on the research of transfer payment systems, especially the research on legal systems. Since 2010, research on transfer payment and equalization of public services has begun to increase, which is also the focus of scholars' research in recent years. The research of Hu Hongshu (2019) shows that transfer payments can improve the supply of public services in the prefecture to a certain extent, and the enhancement effect of transfer payments on basic public services shows a stepwise increase [7]. Qiao Junfeng (2019) pointed out that both general transfer payments and special transfer payments can improve the level of equalization of public services, but compared with special transfer payments, the impact of general transfer payments has weakened. [8] Research on influencing factors has always existed, but most of them have focused on the level of central government to local government. Liu Liang (2015) discusses the influencing factors of financial transfer payment from three aspects of politics, economy and society, and uses political, economic and social factors such as economic development level, government scale and social conditions as independent variables to understand the situation of the current financial transfer payment system under provincial level and give suggestions [1].

In general, scholars have always studied the financial transfer payment, but the focus of the research has changed from the research on the financial transfer system to the relationship between the financial transfer payment and the equalization of public services. Researches on the influencing factors of financial transfer payment don't have much of the above two studies, and most of them focus on the influencing factors of financial transfer payments in the central government. There are few studies on the influencing factors of financial transfer payments between governments below the provincial level.

III. MODELS AND HYPOTHESIS

In this part, the general transfer payment and special transfer payment of the provincial government of Sichuan Province to the county government are used as dependent variables, and the economic development

level, urbanization rate, government debt, financial self-sufficiency rate and other factors are used as independent variables for regression analysis. It analyzes the current status of county-level government financial transfer payments in the context of province governing county in Sichuan Province.

A. Models

Data source: The statistical yearbook and statistical bulletin data are from "Sichuan Statistical Yearbook 2019", the financial budget and final accounts of 19 counties and the 2018 national economic and social development statistical bulletin of 19 counties.

$$\ln Y = b + b_1 \ln X_1 + b_2 \ln X_2 + b_3 \ln X_3 + b_4 \ln X_4$$

Y is financial transfer payment (general transfer payment per capita and special transfer payment per capita); X1 is GDP per capita, X2 is urbanization rate, X3 is government debt and X4 is financial self-sufficiency rate.

To alleviate the collinearity between independent variables, logarithm of independent and dependent variables is taken.

B. Hypothesis

Dependent variable setting: per capita financial transfer payment. It is mainly per capita total financial transfer payment, per capita general transfer payment and per capita special transfer payment.

The setting of independent variables starts from the economic dimension, mainly including economic development level, urbanization rate, government debt, financial self-sufficiency rate, etc.

Basic assumptions: The following economic factors: economic development level (GDP per capita), urbanization rate, government debt, and financial self-sufficiency rate have an important impact on local government financial transfer payments.

Hypothesis 1: The provincial government will transfer more financial resources to places with high levels of economic development. The level of economic development is closely related to GDP, and GDP per capita even more closely combines the economy and regional population, which allows the scale of the economy to modify the comparison between regions[9]. Per capita GDP is directly controlled by the level of local economic development, so there is such a transmission mechanism between the level of economic development and financial transfer payments, that is, the amount of GDP reflects the level of regional economic development, and then the relationship between financial transfer payments and the level of economic development is understood.

Hypothesis 2: The provincial government will transfer more financial resources to places with low urbanization rates. The urbanization rate is measured by the proportion of urban population in the total population of the area. That is, rural areas should receive more funds from higher-level financial transfers. At present, the speed of urbanization in China is accelerating and the rate of urbanization is increasing, but the fact that can't be denied is that the number of rural areas in China is still large. Compared with cities, rural areas not only lag behind in development, but farmers' incomes are also incomparable with those of urban residents. Rural areas receive very little financial revenue, and neither public goods nor public services can clearly catch up with urban areas. In order to narrow the gap between urban and rural areas, higher-level financial funds should tend to areas with large rural populations [10].

Hypothesis 3: The provincial government will transfer more financial resources to places where the government has more debt. Generally speaking, the more difficult the regional finance is, the more it will receive financial transfer payment from its superior government. After the local government is caught in the debt crisis, that is to say, once the pressure of local debt repayment is high, it will threaten the local economic development and social stability, and even seriously affect political stability. Therefore, higher-level governments use important means such as financial transfers to supplement local finances and reduce the

threat brought about by local debt. But in fact, financial transfer payment is also one of the important reasons that affect the local government's debt. The general transfer payment obtained by the local government can only maintain basic survival and development, and has no spare power to provide public products and meet the public's social needs. This is also an important reason for local governments, especially the central and western local governments incurring debt.

Hypothesis 4: The provincial government will transfer more financial resources to places with low financial self-sufficiency rate. The high financial self-sufficiency rate shows that the region has strong financial revenue capability. The lower the financial revenue is, the more backward the development of the region is. The local financial resources are one of the most important indicators of a local economic development level.

IV. DATA ANALYSIS

A. Descriptive statistical analysis

In the third batch of data from 19 counties directly under the government of Sichuan Province ("Table I"), there is the biggest difference in GDP per capita with a minimum value of 18377 and a maximum value of 71074. In addition, there is a certain gap between government debt, general transfer payments and special transfer payments.

TABLE I. DESCRIPTIVE STATISTICAL MATERIAL

	N	Minimum	Maximum	Average	Standard deviation
GDP per capita	19	18377	71074	39462.42	15611.453
Government debt	19	2300	12481	7450.16	2506.359
Financial self-sufficiency rate	19	.08	.55	.2758	.12057
Urbanization rate	19	.3059	.5179	.407405	.0516837
General transfer payment	19	2338	6255	3969.47	1262.751
Special transfer payment	19	1188	3983	2296.11	1001.345
Effective N (listwise)	19				

B. General transfer payment per capita

As can be seen from the table below ("Table II" and "Table III"), with the gradual addition of predictors and stepwise regression, the estimated error is getting smaller, and on the contrary, the adjusted R2 is getting larger. This shows that the fitting degree of regression equation is gradually increasing [11].

From the result analysis, it can be seen that the financial self-sufficiency rate, GDP per capita, and urbanization rate of the lower-level local governments have a significant impact on the general transfer payments of the higher-level governments. The GDP per capita has a significant positive impact on general transfer payments. The financial self-sufficiency rate and urbanization rate are significantly negatively

affected. Among them, the factor of urbanization rate has the greatest influence. The government debt has no significant impact on the general transfer payment.

TABLE II. MODEL SUMMARY OF GENERAL TRANSFER PAYMENT PER CAPITA

Model	R	R ² ^b	Adjusted R ²	Error of standard degree of skewness
1	.999 ^a	.997	.997	.44539
2	.999 ^c	.998	.998	.39615
3	1.000 ^d	.999	.999	.20591
4	1.000 ^e	.999	.999	.21336
5	1.000 ^f	1.000	1.000	.18375

^a. Predicted value: Xfz

^b For regression through the origin (no intercept model), R2 will measure the proportion of the origin-related change explained by the regression in the dependent variable. This can't be compared with the R2 of the model including the intercept.

^c. Predicted values: Xfz, Xzj

^d. Predicted values: Xfz, Xzj, Xgdp

^e. Predicted values: Xzj, Xgdp

^f. Predicted values: Xzj, Xgdp, Xcz

TABLE III. COEFFICIENTS^{A,B}

Model		Unstandardized coefficient		Standardized coefficient	T	Significance
		B	Standard error	Beta		
1	Xfz	.929	.012	.999	80.577	.000
2	Xfz	.855	.033	.918	26.041	.000
	Xzj	-.477	.199	-.085	-2.398	.028
3	Xfz	.155	.104	.167	1.501	.153
	Xzj	-.819	.115	-.145	-7.139	.000
4	Xgdp	.545	.080	.695	6.850	.000
	Xzj	-.917	.098	-.163	-9.398	.000
5	Xgdp	.663	.014	.845	48.779	.000
	Xzj	-.736	.109	-.131	-6.774	.000
5	Xgdp	.607	.024	.774	25.026	.000
	Xcz	-.928	.353	-.103	-2.630	.018

^a. Dependent variable: Xyb

^b. Linear regression through the origin

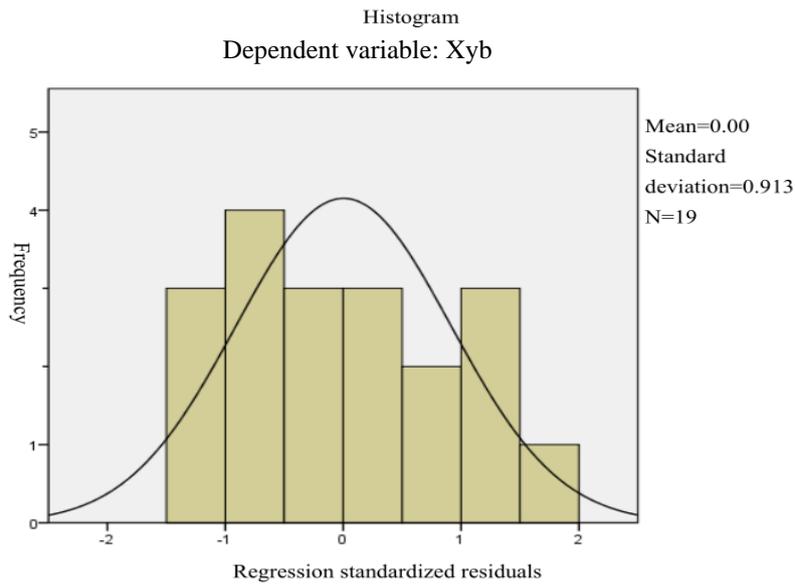


Fig. 1. Regression standardized residual histogram of general transfer payment.

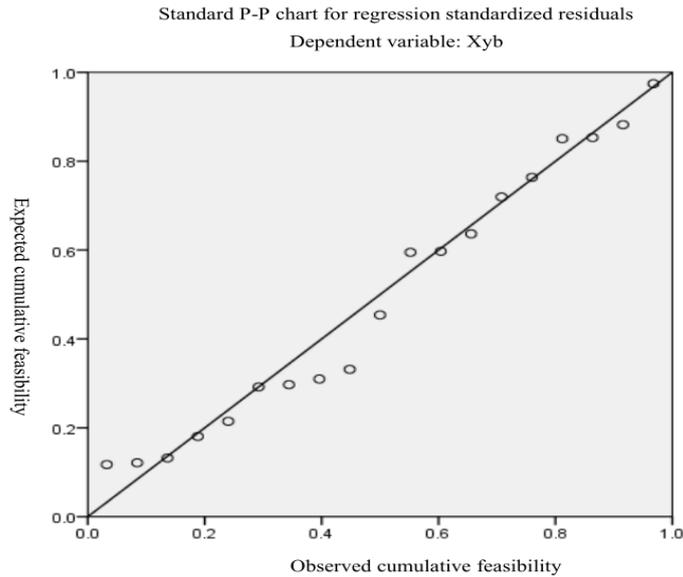


Fig. 2. Standard P-P chart of regression standardized residuals of general transfer payment.

The histogram above ("Fig. 1") shows that the data presents a normal distribution, and the P-P chart ("Fig. 2") below shows that the data is probably in a positive straight line trend, indicating that the equation is meaningful. [11]

C. Special transfer payment per capita

With reference to the multiple linear regression method of the above general transfer system analysis, similar conclusions are drawn, and all data analyses have passed relevant tests.

It can be seen from the analysis of the special transfer payment that the urbanization rate has a significant negative correlation with the provincial special transfer payment. There is a significant positive correlation between government debts and higher-level special transfer payments, while provincial per capita GDP and county-level government's financial self-sufficiency rate have no significant relationship with higher-level special transfer payments. ("Table IV" and "Table V")

TABLE IV. MODEL SUMMARY^{D,E}

Model	R	R ²	Adjusted R ²	Error of standard degree of skewness
1	.998 ^a	.997	.997	.45049
2	.999 ^c	.998	.997	.40157

^a. Predicted value: Xfz

^b. For regression through the origin (no intercept model), R² will measure the proportion of the origin-related change explained by the regression in the dependent variable. This can't be compared with the R² of the model including the intercept.

^c. Predicted values: Xfz, Xcz

^d. Dependent variable: special transfer payment

^e. Linear regression through the origin

TABLE V. COEFFICIENTS^{A,B}

Model		Unstandardized coefficient		Standardized coefficient	T	Significance
		B	Standard error	Beta		
1	Xfz	.863	.012	.998	74.009	.000
2	Xfz	.684	.076	.791	8.997	.000
	Xcz	-1.751	.736	-.209	-2.378	.029

^a. Dependent variable: special transfer payment

^b. Linear regression through the origin

V. CONCLUSION AND SUGGESTION

A. Conclusion

The urbanization rate has a significant negative impact on general transfer payments and special transfer payments, and the effect on general transfer payments is more obvious. That is, places with higher urbanization rates receive fewer financial transfer payments. Urbanization seems to be a census register issue, but it is actually a financial system issue. From one aspect, rapid urbanization will bring huge financial pressure to local governments. The rapid advancement of urbanization will increase the financial pressure on local governments, and financial transfer payments can provide economic compensation for the huge revenue and expenditure deficits caused by urbanization. On the other hand, in order to better reflect the function of financial transfer payments to promote regional fair development, transfer payments need to be inclined to backward areas, and what's more, higher-level governments should care more for areas with low urbanization rates.

The urbanization rate affects both general transfer payments and special transfer payments, but the effect of special transfer payments is not as significant as that of general transfer payments. Although some laws clearly stipulate the method for allocating special transfer payments, in practice, this part of the funds has become a vested interest of the department. Because the special transfer payment must be applied by the lower-level local government for a specific item, and the higher level will then examine and approve the application based on the application, so there may be a problem of information asymmetry between the higher-level and lower-level governments, leading to practice favouritism and corruption, making the development between different regions more uneven, and even violating the general transfer payment funds that local governments can receive. In addition, most of the public services rely on special transfer payments. During the process of urbanization, due to the lack of targeted projects, the role of special transfer payments has not been fully played [7].

Government debt has no effect on general transfer payments, but has a significant positive effect on special transfer payments. Government debt generally comes from various infrastructure construction projects, including municipal construction projects, transportation projects and affordable housing projects. The reason for the formation of local government debt essentially lies in the financial system. Certain funds in the financial transfer payments of higher-level governments are mainly used to induce lower-level government investments and promote local economic growth, so that financial expenditures far exceed financial revenues. This has led to the increase of local

debt. Generally speaking, in order to maintain the financial stability of local governments, the higher the local debt, the more special transfer payments received from superiors, and the more transfer payments they receive, the more they push local governments into debt. This has created an endless loop and has put great pressure on the financial revenues and expenditures of higher-level local governments. At the same time, it also encourages the mentality of lower-level local governments relying on higher-level financial transfer payments.

B. Suggestion

1) *The government should adhere to the function of general transfer payments to promote balanced development of regions:* The improvement in the quality of urbanization is not only reflected in the growth of the urban economy, but also in the coordinated development between urban and rural areas and between regions. To improve the general transfer payment system, it is necessary to start from the construction of a financial system with grading and decentralization as the main body, develop more effective transfer payment methods and improve the quality of financial managers, and then expand transfer payments to remote and poor areas scale. It's necessary to break the traditional practice of census register-oriented financial transfer payment, tend to establish a permanent population-oriented transfer payment system [7] [8] and give a certain amount of financial funds to regions with a large number of migrants.

2) *Improving the supervision and management mechanism of special transfer payments to ensure that special funds are put into practice:* Efforts should be made to reasonably make special transfer payments to local governments, monitor the entire process of fund allocation and use and improve transparency. It's needed to vigorously promote the construction of informatization, realize information disclosure, establish a complete information platform, and allow information about special transfer payments to be carried out transparently, so as to make better use of the equalization effect of special transfer payments. Finally, it is necessary to promote the legal process of special transfer payments in a timely manner, so that special transfer payments will enter the orbit of the rule of law as soon as possible. It's also necessary to promulgate and implement transfer laws and regulations with stronger legal effects as soon as possible, improve the policy of handling violations, and increase accountability.

3) *Strengthening the reform of the financial and taxation system to ensure the financial strength of local governments:* The local debt is formed because the

revenue of local government is less than the expenditure. Therefore, to solve the debt problem, it is necessary to guarantee the financial strength of local governments. Specifically, it's necessary to reform the financial and taxation system and increase the proportion of local government financial revenue distribution in accordance with the authority. Another issue involved in the reform of the financial and taxation system is the transfer payment system . It's necessary to ensure the legalization of the financial transfer system with the emphasis on ensuring the basic financial resources of lower-level governments and ensuring that lower-level local governments have the financial resources to provide public goods and meet public service needs. For general transfer payments, it is important to continue to maintain or increase the proportion of general transfer payments in transfer payments. For special transfer payments, it's needed to standardize its operation process and supervise the disbursement and use of funds. In order to avoid the negative impact of special subsidies on local financial and taxation, financial and taxation efforts can be considered in the relevant provisions [12].

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