Research on the Influence of Fiscal Decentralization on the Return Rate of China's Real Economy

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Abstract: Based on the panel data of 30 provinces from 2000 to 2020, this paper empirically analyzes the impact of local fiscal decentralization on the return rate of China's real economy from two dimensions, that is, income decentralization and expenditure decentralization. It is found that income decentralization and expenditure decentralization can improve the overall real economic return rate with heterogeneity in different regions. The empirical results in the central region are consistent with the core conclusions, and the regression results of expenditure decentralization in the eastern and western regions are significant, while income decentralization is not significant. With industrial structure affecting the role of fiscal decentralization, the more advanced the industrial structure, the greater role of fiscal decentralization in promoting the return rate of the real economy.

Key Words: Fiscal Decentralization, Real Economic Return Rate, Regional Heterogeneity, Industrial Structure.

1. Introduction and Literature Review

According to the report of the 19th National Congress of the Communist Party of China, "China's economy has changed from a rapid growth stage to a high-quality development stage... To build a modern economic system, we must focus on the real economy." In a broad sense, the real economy is an integrated unity of manufacturing, industry, and service industry except financial industry and real estate industry compared with the virtual economy[1]. Since the 18th National Congress of the Communist Party of China, China has accumulated a lot of experience and wealth under the strategic guidance of high-quality development of the real economy. In 2021, the national industrial added value was 37.26 trillion yuan, an increase of 9.6% over the previous year. [Sourced from China Statistical Yearbook] However, in the face of the long-term and structural problem of unbalanced development of the real economy, the Chinese government has adopted a series of policies and measures aimed at effectively improving the development quality of the real economy. The return on investment of the real economy is an important indicator to measure the economic benefits of the real economy, which is also the basis for the flow of funds[2]. In order to guide the flow of funds to key development departments, the government often chooses to intervene in the financial system. Therefore, it is necessary to pay attention to the financial system environment with fiscal decentralization as the core in the process of studying the development path of China's real economy. The fiscal decentralization system

implemented in China for a long time has profoundly affected the behavior preference of local governments and the innovation activities of enterprises, then leaving a farreaching impact on the rate of return of the real economy. Analyzing the relationship between fiscal decentralization and the return rate of China's real economy is of great practical significance for understanding the institutional causes of the high-quality development of the real economy and promoting its stability and far-reaching development.

The positive role of fiscal decentralization has been widely recognized by academic circles at home and abroad. Weingas (2000) and Qian (1997) believe that fiscal decentralization will produce economic incentives and government competition, affect the industrial structure, and then promote economic growth[3-4]. More literature explores the impact of fiscal decentralization on enterprise performance, enterprise risk-taking, enterprise production efficiency, enterprise R&D, and so on from a micro perspective. Tai Hang and Sun Rui (2017) empirically analyzed the production efficiency of stateowned industrial enterprises above in various regions from 1999 to 2014. They found that the improvement of fiscal decentralization can encourage local governments to take measures to improve the R&D enthusiasm of stateowned enterprises, thus promoting the production efficiency of state-owned enterprises[5]. Xie Qiaoxin and Song Liangrong (2016) found that fiscal decentralization has a stronger role in promoting enterprise risk-taking and performance in areas with sufficient fiscal decentralization, which is also inhibited in areas with

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insufficient fiscal decentralization[6]. Fiscal decentralization can also stimulate R&D and innovation of enterprises through government subsidies. Local governments get more financial resources to subsidize enterprises through income decentralization, help enterprises share part of R&D costs, and reduce their R&D innovation risks[7]. He Guosheng (2020) and Cheng Jianhua (2022) empirically test the assertion that the financial industry serves the high-quality development of the real economy under the fiscal decentralization system. The results show that the higher the degree of fiscal decentralization, the higher the financial freedom, which is conducive to the governmental financial resources distribution according to the local actual development situation, which can not only help local traditional enterprises complete the transformation and realize industrial upgrading, but also promote the rapid development of potential enterprises[8-9]. The benefit of fiscal decentralization is also manifested in releasing the autonomy of state-owned enterprises. With fiscal decentralization, local governments will gradually reduce their control over state-owned enterprises. In areas with a high degree of decentralization, local governments tend to reduce their shareholding ratio in state-owned enterprises. Because the government shareholding ratio is negatively correlated with the operating performance of state-owned enterprises, the more perfect fiscal decentralization is, the more conducive it is to reducing the damage caused by the high government shareholding ratio to the operating performance of state-owned enterprises[10]. Dewatripont and Maskin (1995) pointed out that under the background of fiscal decentralization and inter-regional competition, local inefficient state-owned enterprises obtained less fiscal expenditure, which weakened the governmental control over local state-owned enterprises, thus promoting privatization reform of local state-owned enterprises[11].

Since the implementation of the tax-sharing reform in China, the central government has promoted the great development of the local economy and various market players by decentralizing financial autonomy and sharing budget revenue, which is inseparable from the extensive development mode in China at the early stage of reform and opening up. Today, when we strive to be an "economic major power", various drawbacks under the fiscal decentralization model also appear, which has been confirmed by many studies. Wu Yanbing (2019) explored the deep-seated reasons for China's lack of innovation ability from the perspective of the system and official incentives. Chinese-style fiscal decentralization not only encouraged local officials to develop the economy within their jurisdiction, but also caused problems such as shortsighted behavior of local officials, government-led economy, biased investment promotion policies, and collusion between government and enterprises[12]. The failure of local government is also reflected in the economic catch-up between governments, which significantly strengthens the inhibitory effect of fiscal decentralization on urban green innovation ability[13]. With the deepening of fiscal decentralization, it is difficult to further improve the product quality of China's export enterprises[14], which is not conducive to the

comprehensive implementation of supply-side structural reform. Although the fiscal decentralization system has its defects, it can't be denied that in the past 30 years, under the guarantee of the fiscal decentralization system, China has made a series of remarkable achievements and achieved many miracle-like economic take-offs. Fiscal decentralization has played an imperative role in promoting regional economic development and improving the return rate of China's real economy, which will continue to improve and develop in China in the future.

At present, there is little literature on the mechanism of Chinese fiscal decentralization on the return rate of the real economy, and the related research ignores the reasons for the fiscal decentralization system behind the highquality development of China's real economy. Compared with previous studies, this paper has the following three possible contributions. (1) This paper discusses the relationship between Chinese fiscal decentralization and the return rate of the real economy, which is a useful supplement to the existing literature; (2) This paper uses regional heterogeneity analysis to test the impact of fiscal decentralization on the return rate of the real economy in the eastern, central, and western regions, which enriches the relevant empirical research; (3) This paper finds that fiscal decentralization has a significant incentive effect on the high-quality development of the real economy, and optimizing the fiscal decentralization system can effectively improve the living environment of enterprises to promote its sustainable development.

2. Empirical design

(1) Setting of Measurement Model

This paper assumes that local fiscal decentralization has a significant role in promoting the return rate of the real economy. In order to test the impact of local fiscal decentralization on the development of the real economy, the following econometric models are constructed:

$$Re_eco_{it} = \beta_0 + \beta_1 FD_{it} + \varphi Controls_{it} + \lambda_t + \mu_i + \varepsilon_{it}$$
(1)

In model (1), the explained variable Re_eco_{it} is the real economic return rate of the province i in the year t, FD_{it} is an agent index to measure the fiscal decentralization index of the province i in the year t, β_1 is a coefficient parameter of explanatory variables, $Controls_{it}$ is a series of control variables, φ is a parameter coefficient set of each control variable, λ_t is a time-fixed effect that does not change with regions, μ_i is a regional fixed effect that does not change with time, and ε_{it} is a random disturbance term

(2) Description of Variables

1. Explained Variables

This paper chooses the return on capital of industrial enterprises (Re_eco_{it}) as the proxy variable of the return on the real economy. As an important part of China's real economy, it is more representative to reflect the development of the real economy, and the financial data disclosure of industrial enterprises is relatively complete. Therefore, based on the method of the CCER "China"

Economic Observer" research group (2007), the ratio of total profits to net fixed assets of industrial enterprises above the designated size is used to measure the return rate of the real economy[15].

2. Explanatory Variables

The core explanatory variable of this paper, fiscal decentralization (FD_{it}), represents the scope of tax rights and expenditure responsibilities given by the central government to local governments, which can be measured from two dimensions, that is, fiscal expenditure and fiscal revenue. The income decentralization index is expressed as the ratio of per capita local fiscal revenue to the sum of per capita local and per capita central fiscal revenue, while the expenditure decentralization index is expressed as the ratio of per capita local fiscal expenditure to the sum of per capita local and per capita central fiscal expenditure. Fiscal decentralization indicators are all in the form of per capita to control the impact of population size in each province[12]. The specific calculation formulas of income decentralization and expenditure decentralization are as follows:

Provincial Fiancial Income / Provincial Total Population by the Year End

(Provincial Fiancial Income/Provincial Total Population by the Year End) + (National Fiancial Income/National Total Population by

Local Expenditure Decentralization =

Provincial Fiancial Expenditure / Provincial Total Population by the Year End

(Provincial Fiancial Income/Provincial Total Population by the Year End) + (National Fiancial Income/National Total Population by

3. Control Variables

This paper comprehensively considers various factors affecting the return rate of the local real economy and selects environmental regulation intensity (Envit), government intervention intensity (Govit), traffic density (Traf_{it}), population density (Popu_{it}), R&D investment intensity (RD_{it}), and urbanization rate (Urban_{it}) as control variables of the model.

The intensity of environmental regulation reflects the cost and price paid by a region to control environmental pollution. This paper uses the proportion of industrial pollution control investment in the industrial added value of each province to characterize environmental governance; The intensity of government intervention is expressed by the ratio of fiscal expenditure to GDP; Traffic density reflects the perfection of infrastructure construction in different regions, and infrastructure construction can promote the development of the local real economy. This paper uses the ratio of the sum of highway mileage and railway mileage in each province to the area of each province; Population density is the ratio of the total population at the end of the year to the area of each province. The denser the population, the stronger the economic development momentum; R&D investment intensity is expressed by the proportion of R&D internal expenditure of all enterprises in each province to local GDP, and local governments will infiltrate fiscal expenditure preference into policies[16], which will affect R&D investment and production activities of enterprises. The urbanization rate is expressed by the proportion of the urban population to the total population at the end of the year, which can measure the economic development of a country or region.

(3) Data Description

The sample of this paper mainly includes panel data from 30 provinces in China from 2000 to 2020. Based on the availability of data, this paper eliminates Tibet Autonomous Region from the sample and constructs a two-way fixed effect model to empirically test the impact of fiscal decentralization on the return rate of China's real economy. All data come from China Statistical Yearbook, China Industrial Statistical Yearbook, China Urban Statistical Yearbook, and provincial statistical yearbooks. In order to avoid the interference of heteroscedasticity on the empirical results, all non-negative samples are logarithmized to reduce the heteroscedasticity of variables. The descriptive statistics of the original data are shown in Table 1.

Table 1 Descriptive Statistics of Original Variables

Categ ory	Variable	Vari able Na me	Obser vation Value	Me an Val ue	Stan dard Devi ation	Mini mum Valu e	Maxi mum Valu e
Explai ned Varia ble	Return rate of real econom y	Re_ eco	630	0.16 08	0.09 14	0.17 66	0.461
Expla	Decentr alization of income	Frd	630	0.47 68	0.14 11	0.25 53	0.864 4
natory Varia ble	Decentr alization of expendit ure	Fed	630	0.80 02	0.09 01	0.51 88	0.937 0
Contr ol Varia ble	Intensity of environ mental regulatio n	Env	630	0.00 42	0.00 36	0.00 01	0.028
	Intensity of governm ent intervent ion	Gov	630	0.20 93	0.09 72	0.06 89	0.643
	Traffic density	Traf	630	0.77 41	0.50 82	0.02 22	2.225 4
	Populati on density	Pop u	630	434. 974	618. 2351	6.68 00	3949. 2100
	R&D input intensity	RD	630	0.01 39	0.01 10	0.00 15	0.064 4
	Urbaniz ation rate	Urb an	630	51.7 807	15.5 639	19.2 300	89.60 00

Table 1 reports the descriptive statistical results of the original variables. The standard deviation of the real economic return rate is 0.09, and the gap between regions is small. The real economic return rate of individual regions in individual years is negative. On the whole, China's real economy is developing steadily. The level of expenditure decentralization in various regions is generally greater than that of income decentralization. Meanwhile, the fluctuation range of expenditure decentralization is greater than that of income decentralization. It can be seen that under the institutional framework of Chinese fiscal decentralization, although local governments have certain discretion over regional political and economic affairs[17], under the dual influence of an imperfect financial system and performance evaluation mechanism, local governments still bear greater financial pressure and expenditure responsibility.

3. Empirical Results and Discussion

(1) Full Sample Analysis

Table 2 reports the regression results of the bidirectional fixed effect model. To test the robustness of the results, the regression results of adding control variables and not adding control variables in this paper are compared. (1) (3) are listed as the regression results of income decentralization without adding control variables and adding control variables to the real economic return rate, and (2) (4) are listed as the regression results of expenditure decentralization without adding control variables and adding control variables to the real economic return rate. Whether it is fiscal revenue decentralization or fiscal expenditure decentralization, their coefficients are significantly positive at 1%. It is found that fiscal decentralization can mobilize the enthusiasm of local governments to participate in social management, and local governments use the expenditure power and income power given by the central government to effectively overcome the information asymmetry of the central government on the local development status. In this way, the allocation of resources within their jurisdiction is optimized to develop the economy, thus improving the return rate of the real economy. As the GDP of the jurisdiction is the main performance evaluation index of the official performance evaluation system, officials compete to develop the economy of the jurisdiction in order to get faster political promotion[18], and even once evolved into a "GDP championship". However, on the whole, fiscal decentralization has more advantages than disadvantages for the development of the local real economy.

Among the control variables, the intensity of environmental regulation and government intervention show significant negative effects. It can be inferred that environmental regulation has a negative impact on local economic benefits, and areas with serious pollution need to invest a lot of money in ecological environment governance. The limited resources lead to environmental investment crowding out development investment, which in turn has an impact on real industries. Therefore, local governments should give priority to green and low-carbon development modes. Too strong government interference in the economy is not conducive to the development of the real economy. Population density has a positive incentive effect on the return on investment of the real economy. Areas with high population density have large market scales, a high degree of the social division of labor, and correspondingly higher economic development benefits. Enterprises are the main body of scientific and technological innovation activities, and vigorously carrying out technological innovation activities within enterprises will help stimulate the vitality of economic and social innovation to drive the innovation and development of the real economy.

Table 2 Benchmark Regression Results of the Impact of Fiscal Decentralization on the Return Rate of the Real Economy

	(1)	(2)	(3)	(4)
Frd	0.1379***		0.1670***	
Fra	(5.26)		(5.58)	
Б. 1	, ,	0.2541***	` /	1.001***
Fed		(4.71)		(12.09)
		(')	_	-
Env			0.0193***	0.0128***
			(-4.83)	(-3.48)
			-	-
Gov			0.1332***	0.2126***
00.			(-6.64)	(-11.20)
			0.0083	-0.0152
Traf			(0.52)	(-1.06)
			0.1241***	0.3615***
Popu			(2.83)	(7.91)
			0.0575***	0.0360***
RD			(5.11)	(3.43)
			(5.11)	(3.43)
Urban			-0.0193	0.1661***
Orban			(-0.67)	
				(-5.53)
G	0.1774***	0.1718***	-0.4663	1 1012***
Constant	(7.50)	(6.90)	(-1.59)	1.1912***
m:	,	,	, ,	(-4.38)
Time				
Effect	YES	YES	YES	YES
Regional	125	125	125	125
Effect				
R ²	0.4986	0.4941	0.5826	0.6493
N	630	630	630	630

Note: The data in brackets are t statistics, ***, **, and * are significant at 1%, 5%, and 10% respectively, the below is the same.

(2) Heterogeneity Test

In order to investigate the impact of fiscal decentralization on the real economic returns in different regions, this paper divides the whole sample into eastern, central, and western regions for sample regression. In Table 3, columns (1), (3), and (5) are the regression results of income decentralization and real economic return rate in eastern, central, and western regions. Columns (2), (4), and (6) are the regression results of expenditure decentralization and real economic return rate in eastern, central, and western regions. The results show that the estimated coefficient of income decentralization in central China is 0.4396, significantly positive at 1%. The estimation coefficients in the eastern and western regions are not significant. The expenditure decentralization coefficients in the eastern, central, and western regions are significantly positive. Thus, it is concluded that the decentralization of fiscal revenue improves the real economic return rate in the central region with a weak impact on the development quality of the real economy in the eastern and western regions, while the decentralization of fiscal expenditure improves the real economic return rate in the eastern, central, and western regions.

The reasons why fiscal decentralization has completely different effects on the real economy in the eastern and western regions and the central region can be explained by their economic development as a perspective. The economic situation in the eastern region is relatively good. After self-owned income meets self-owned expenditure, part of the income was transferred to backward areas as a "transfer payment" [19]. In addition, in order to achieve higher development in the eastern region, they tend to seek financial resources that match their own economic

strength with high requirements for the quality of financial resources. However, at present, the financial power delegated by the central government to all localities cannot make the eastern region obtain the financial resources it needs, so the decentralization of income fails to promote the real economy in the eastern region significantly. However, the western region is plagued by long-term problems such as backward infrastructure, insufficient resource development, and poor natural conditions. The economic growth is weak, the development potential is insufficient, and the local government's financial resources are relatively scarce. Income decentralization is mainly used to improve the economic growth rate, not to improve the quality of economic development. Therefore, the decentralization of financial power will not encourage the western government to improve the local real economic return rate.

Table 3 Sample Regression Results of the Fiscal Decentralization Impact on the Return Rate of Real Economy

	(1)	(2)	(3)	(4)	(5)	(6)
Frd	0.0796 (1.49)		0.4396 *** (7.60)		0.0415 (0.81)	
Fed		0.5388 *** (3.74)		1.6330 *** (6.50)		0.5849 *** (3.88)
Env	0.0024 (-0.49)	0.0012 (0.24)	0.0402 *** (-4.56)	0.0421 *** (-4.59)	0.0276 *** (-4.52)	0.0215 *** (-3.52)
Gov	0.1542 *** (-5.00)	0.1937 *** (-6.03)	0.0609 (-1.15)	0.2401 *** (-4.49)	0.1563 *** (-5.96)	0.1855 *** (-7.32)
Traf	0.0535 *** (-2.64)	0.0537 *** (-2.74)	0.2256 *** (4.43)	0.0821 (1.45)	0.0555 ** (2.46)	0.0415 ** (2.11)
Popu	0.0728 (1.34)	0.1729 *** (2.92)	0.1072 (0.65)	0.3708 ** (2.08)	0.3195 *** (-3.72)	0.0664 (-0.62)
RD	0.0605 *** (2.90)	0.0448 ** (2.18)	0.0196 (-0.71)	0.0380 (-1.30)	0.0242 (1.60)	0.0239 (1.64)
Urban	0.0315 (-0.79)	0.1123 ** (-2.50)	0.0622 (0.75)	0.2131	0.0340 (0.69)	0.0375 (-0.74)
Const ant	0.3211 (-0.72)	0.6431 (-1.45)	- 0.4498 (-0.49)	1.2026 (-1.29)	1.1704 ** (2.56)	0.4878 (1.02)
Time effect Regio nal effect	YES	YES	YES	YES	YES	YES
R ²	0.7333 231	0.7484 231	0.7764 168	0.7566 168	0.6912 231	0.7126 231

(3) Regulatory Effect Analysis

There is a close relationship between the evolution of industrial structure and economic growth[19]. The industrial structure is one of the important factors affecting the development of the real economy. In order to further investigate the role of the industrial structure in the impact of fiscal decentralization on real economic returns, this paper constructs an interactive model to test the regulatory effect of fiscal decentralization and industrial structure.

$$Re_eco_{it} = \beta_0 + \beta_1 RD_{it} + \beta_2 Indu_{it} + \beta_3 RD_{it} \cdot Indu_{it} + \varphi Controls_{it} + \lambda_t + \mu_i + \varepsilon_{it}$$
 (2)

Drawing lessons from the practices of Li Yonggang and Luo Haiyan (2017)[20], the industrial structure upgrading index including the primary, secondary, and tertiary industries are constructed as the adjustment variable. The calculation formula $Indu = \sum_{i=1}^{3} x_i \times i$ is to indicate the proportion of the added value of the primary industry to GDP, and x_i means the value range of the i industrial structure upgrading index is $1 \le Indu \le 3$. The larger the index value, the more advanced the industrial structure. The inspection results show that the interaction items between fiscal revenue decentralization, expenditure decentralization, and industrial structure upgrading index are significantly positive. It shows that in areas with good industrial structure development, fiscal decentralization can effectively encourage local governments to develop high-tech industries and strategic emerging industries on a large scale, thus improving the return rate of the real economy. It can be seen that fiscal decentralization plays a more obvious role in promoting the real economy in areas with more advanced industrial structure services.

Table 4 Test Results of the Regulatory Effect of Fiscal Decentralization on the Return Rate of Real Economy

-	(1)	(2)
Frd	-0.0945 (-1.19)	
Fed		0.5907** (2.59)
$Frd \times Indu$	0.3175*** (3.55)	(2.37)
Fed × Indu		0.5346* (1.93)
Env	-0.0189*** (-4.79)	-0.0127*** (-3.45)
Gov	-0.1176*** (-5.78)	-0.2044*** (-10.53)
Traf	0.0058 (0.37)	-0.0198 (-1.37)
Popu	0.1137*** (2.61)	0.36245*** (7.95)
RD	0.0570*** (5.11)	0.0370*** (3.53)
Urban	-0.0031 (-0.11)	-0.1573*** (-5.19)
Constant	-0.4530 (-1.56)	-1.2099*** (-4.45)
Time effect Regional effect	YES	YES
\mathbb{R}^2	0.5916	0.6516
N	630	630

(4) Robustness Test

In order to test the robustness of the core results, this paper uses the following two methods to test the robustness. The first is to replace the core explanatory variables and substitute the original income decentralization variable with the ratio of per capita local fiscal revenue to per capita central fiscal revenue. The ratio of per capita local

promote the real economic return rate.

fiscal expenditure to per capita central fiscal expenditure is used to replace the original expenditure decentralization variable, and then the new explanatory variable is substituted into the model (1). It is found that the effects of income decentralization and expenditure decentralization on the real economic return rate are significantly positive, which shows that fiscal revenue decentralization and expenditure decentralization can

Secondly, the instrumental variable method is used to test the results. The instrumental variable method can alleviate the estimation error caused by endogenous problems. Referring to the practice of Qi Shaozhou et al. (2015)[21], we adopt the lag instrumental variable strategy, take the lag period of fiscal decentralization as the instrumental variable of the current value, and carry out second-order least square regression on the model. It is found that the estimated coefficients of fiscal revenue decentralization and expenditure decentralization are significantly positive at 1%, and the original hypothesis is still valid. The above results show that the core conclusion of this paper is robust.

Table 5 Robustness Test Results of the Fiscal Decentralization Impact on the Return Rate of the Real Economy

	Substitutio	n Variable	Instrumental Variable		
	(1)	(2)	(3)	(4)	
Frd	0.0814*** (5.07)		0.1332*** (3.84)		
Frd		0.1215*** (5.42)		1.0246*** (10.37)	
Fed	0192***	0.0182***	0200***	0.0138***	
	(-4.80)	(-4.56)	(-4.32)	(-3.17)	
Env	0.1361***	0.1800***	0.1406***	0.2113***	
	(-6.77)	(-8.67)	(-6.78)	(-11.23)	
Gov	0.0130	0.0146	0.0101	-0.0216	
	(0.83)	(0.94)	(0.66)	(-1.47)	
Traf	0.1193*** (2.71)	0.1668*** (3.65)	0.1100** (2.28)	0.3434*** (6.73)	
Popu	0.0544***	0.0584***	0.0600***	0.0352***	
	(4.80)	(5.18)	(5.13)	(3.10)	
RD	-0.0080	-0.0346	-0.0263	0.1767***	
	(-0.28)	(-1.14)	(-0.94)	(-5.46)	
Urban	-0.6212**	0.9428***	-0.7145*	1.7189***	
	(-2.11)	(-3.15)	(-1.85)	(-4.47)	
Time Effect Regional Effect	YES	YES	YES	YES	
Cragg- Donald Wald F Statistical			1793.820	1493.683	
R ²	0.5789	0.5814	0.7376	0.7808	
N	630	630	630	630	

4. Conclusions and Recommendations

In addition to constructing a two-way fixed effect model from the perspective of Chinese fiscal decentralization, this paper empirically tests the provincial panel data of 30 provinces in China from 2000 to 2020, and discusses the influence mechanism of fiscal decentralization on the return rate of China's real economy. The empirical results

show that (1) decentralization of income and expenditure significantly improves the quality and efficiency of China's real economy, promoting the improvement of the return rate of the real economy; (2) the effect of fiscal decentralization on the return rate of the real economy has regional heterogeneity. The development of the real economy in the eastern and western regions is not affected by income decentralization, but it stimulates the economy in the central region. Expenditure decentralization has obvious positive effects on the economies of the three regions; (3) fiscal decentralization can further promote the return rate of the real economy in areas with higher industrial structures.

According to the conclusion of this paper, on the basis of maintaining the existing analysis framework of the fiscal decentralization system and aiming at the characteristics of different regions, the author puts forward three fiscal policy suggestions on the overall strategic arrangement of China's current development. (1) In view of the eastern region where emerging industries and high-tech industries are concentrated, the financial pressure on the government in this region is small, and there is a weak correlation between income decentralization and the return rate of the real economy. It is suggested that the eastern provinces should choose more projects with long payback periods and beneficial to high-quality economic development. The finance of eastern provinces should be more inclined to the field of scientific and technological innovation, allocate economic resources within their jurisdiction to promote R&D and innovation of enterprises, and accurately serve major national strategies. (2) As for the central regions, the decentralization of fiscal revenue and expenditure has a significant positive correlation with the return rate of the real economy. We should continue to play the positive role of fiscal decentralization, vigorously develop real industries such as agriculture, industry, and manufacturing, promote the upgrading of industrial structure, serve the strategy of "the rise of the central region", and stimulate more economic development potential. (3) The primary task of the western region at present is to improve the economic growth rate. The western region should continue to increase infrastructure construction, such as railways, oil, and natural gas pipelines to lay the foundation for future economic development. The government should improve the forward-looking policy formulation and see the huge economic benefits brought by the construction of the "New Eurasian Continental Bridge" and the "Belt and Road Initiative" cooperation; The central government should increase financial assistance to the western region. When setting up the government assessment system, positive factors that contribute to the sustainable development of the real economy, such as national unity, revitalization. and urban-rural integration development, can be included in the assessment indicators of local officials in western China. Meanwhile, local governments are encouraged to use their income power to develop a characteristic economy, do their best to cover the expenditure responsibility for people's livelihood, and strive to achieve economic self-reliance.

References

- 1. Huang, Q. H. (2017). On the development of China's real economy in the new period. China Industrial Economics, (09), 5-24.
- 2. Zhang, Q. C. & Fan, C. L. (2021). Term structure of credit and return on capital in real economy. Studies of International Finance, (06), 23-33.
- 3. Weingast, B. R. (2000). The economic role of political institutions: Market preserving federalism and economic development. Journal of Law Economics and Organization, 11(1), 1-31.
- 4. Qian, Y. & Weingast, B. R. (1997). Federalism as a commitment to preserving market incentives. Journal of Economic Perspectives, 11(4), 83-92.
- 5. Tai, H. & Sun, R. (2017). Fiscal decentralization and production efficiency of SOEs: Empirical analysis on provincial industrial enterprise data. Finance and Trade Research, 28(08), 95-110.
- 6. Xie, Q. X. & Sun, L. R. (2016). Fiscal decentralization, risk taking, and firm performance. Commercial Research, (05), 58-65.
- 7. Zhang, C. Y. & Jiang, N. (2019). Fiscal decentralization and enterprise innovation: an analysis of the influence and mechanism. Journal of Macro-quality Research, 7(03), 99-110.
- 8. He, G. S. & Yan, J. N. (2020). Research on real economic development efficiency and regional difference of financial support entities under fiscal decentralization Empirical analysis based on the provincial panel data. Contemporary Economics Management, 42(03), 78-89.
- 9. Cheng, J. H. & Shu, Z. (2022). Analysis of the advantages and status quo of local finance supporting high-quality development of local real economy. Contemporary Economics Research, (08), 47-56.
- 10. Chen, G. & Chen, M. L. (2016). Fiscal decentralization, government control, and firm performance. Contemporary Economics Research, (03), 1-10.
- 11. Dewatripont, M. & Maskin, E. (1995). Credit and efficiency in centralized and decentralized economies. Review of Economic Studies, 62, 541-555.
- 12. Wu, Y. B. (2019). Does fiscal decentralization promote technological innovation? Modern Economic Science, 41(03), 13-25.
- 13. Dong, X. S., Wei, Y. Y. & Xiao, X. (2022). How does fiscal decentralization affect green innovation? China Population, Resources, and Environment, 32(08), 62-74.
- 14. Shen, H. & Gu, N. H. (2017). Fiscal decentralization, industrial agglomeration, and firm's exporting behaviors. Journal of International Trade, (09), 25-36.
- Research Group of CCER China Economic Observer & Lu, F. (2007). Measurements of China's capital return (1978-2006): Microeconomic underpinnings for the recent economic boom in China. China Economic Quarterly, (03), 723-758.

- 16. Li, E. J. & Li, Q. (2021). Financial decentralization, government preference, and enterprise innovation. Forum on Science and Technology in China, (07), 148-157.
- 17. Zhang, M., Ye, H. F. & Tong, L. J. (2015). Fiscal decentralization, corporate tax burden, and effectiveness of tax policy. Economic Perspectives, (01), 42-54.
- 18. Deng, X. L. & Jin, B. H. (2021). Fiscal decentralization, local government's taxation efforts and the actual tax burden of enterprise income tax. Commercial Research, (04), 85-97.
- 19. Ji, Y. S. & Wu, Y. M. (2006). On the co-integration model of the relations between industrial structure and economic growth in China. Contemporary Economics Research, (06), 47-51, 73.
- 20. Li, Y. G. & Luo, H. Y. (2017). Does land resource misallocation hinder the upgrading of industrial structure? Empirical evidence from Chinese 35 large and medium-sized cities. Journal of Finance and Economics, 43(09), 110-121.
- 21. Qi, S. Z., Lin, S. & Wang, B. B. (2015). Impact of economic growth pattern of the six provinces of central China on regional carbon emission: Based on the Tapio model and lag instrumental variable analysis of panel data. China Population, Resources, and Environment, 25(05), 59-66.