

# Research on the Impact of Tax Cuts on the Financial Performance of Listed Companies in Sichuan and Chongqing

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**Abstract:** Under the important historical background of “international and domestic economic double cycle” and “Chengdu-Chongqing Double City Economic Circle”, how can enterprises in Sichuan Province make full use of tax reduction policies to achieve continuous improvement of their own financial performance, and fully understand their own long-term development the focus of this article is to make contributions to the double circulation and the double city circle. Based on the empirical research and comparative analysis of the financial performance of listed companies across the country, Sichuan Province, Chengdu, and Chongqing from 2008 to 2019 under the tax reduction policy dividend, this paper finds that there are differences in different regions, different taxes, and different industries. Propose corresponding countermeasures.

## 1. Introduction

In 2019, Sichuan Province ranked 6th in the country with a total GDP of 4.6 trillion yuan. However, because Sichuan Province has a population of 85 million and a per capita GDP of only 50,000 yuan, the huge population base makes Sichuan Province's per capita GDP only rank 18th in the country. First, Sichuan's GDP total and per capita GDP rankings are seriously inconsistent. Looking back to history, in 1996, Chongqing, one of the super cities in Sichuan Province, was designated as a municipality directly under the Central Government. Its economy has developed rapidly, and the local economic development of Sichuan has been affected to some extent. Another super city in Sichuan is also the provincial capital, Chengdu. The development in recent years cannot be underestimated. Chengdu integrates Sichuan's superior resources, has extensive transportation, active interaction with the outside world, and clusters of colleges and universities.

The Outline of the Construction Plan for the Chengdu-Chongqing Double-City Economic Circle was submitted to the Politburo meeting of the CPC Central Committee in October 2020 for deliberation. The outline pointed out that efforts to promote the development of the Chengdu-Chongqing Double-City Economic Circle will help to form complementary advantages between the two cities and promote the economy. The regional economic structure of high-quality development has a positive effect on the expansion of market space, the optimization and stability of the industrial chain and the supply chain. The construction of the dual-city economic circle is also a major new historical move to build a new development pattern of domestic and international dual-cycle economies as the mainstay of the domestic cycle. The Chengdu-Chongqing twin-city economic circle is not only a major national development strategy deployment, but also an important measure for regional economic development. It is the interaction between Chengdu and Chongqing, as well as the interaction between Sichuan and Chongqing. It will bring about the entire Sichuan through the diffusion effect. development of. For a long time, Chengdu's economic development has advantages such as superior policies, geography, and talents. Other cities have developed relatively slowly. The construction of the two-city economic circle can bring certain development opportunities and new impetus to the large, medium and small cities in Sichuan. The new situation of multi-branch economic development contributes to the new situation.

The economic development is dominated by enterprises. In recent years, due to the drastic changes in the international and domestic situation, it has brought huge challenges to the

development of enterprises. From the macro level, the development of enterprises directly affects the total GDP of a country, and from the micro level, it directly affects the employment and income of tens of thousands of families. In order to promote the development of enterprises and provide continuous impetus to enterprises, the Chinese government has carried out a series of tax reforms. The Central Economic Work Conference put forward the term “structural tax cuts” for the first time. After this meeting, my country has formulated and implemented a series of direct tax cuts and indirect tax cuts. Direct tax cuts include tax rate reduction, Tax deductions, etc., indirect tax deduction policies such as accelerated depreciation, investment credits, and additional deductions. In order to further promote the transformation of the economic structure and the upgrading of industrial formats, the Central Financial and Economic Work Conference at the end of 2015 proposed to improve the total factor productivity as the goal, actively promote the supply-side reform, and kick off a new round of tax reduction policies. Until 2019, the scale, intensity and impact of my country's tax and fee reduction policies have been further deepened and improved, providing strong policy support for enterprises to reduce their tax burdens and go into battle.

There are 126 listed companies in Sichuan (including 79 in Chengdu) and 52 in Chongqing. In the process of building the Chongqing-Chongqing Double City Economic Circle, the important role of listed companies must be fully mobilized and at the same time striving to achieve Chengdu-Chongqing and Sichuan-Chongqing the harmonious and mutually promoting situation of “you chase me to catch up” among enterprises. Tax reduction policies are measures taken by the government to mobilize the enthusiasm of enterprises. So, what effect does the tax reduction policy have on the financial performance of enterprises? Is it negative? What are the differences between tax reductions of different types of taxes? What are the actual effects of tax reduction policies enjoyed by enterprises in different regions? For these specific issues, we will establish models and empirically conduct the next step of research. In order to enhance the competitiveness of listed companies in our province and provide continuous power support for the construction of dual-cycle and dual-city circles, it is necessary to continuously improve the level of corporate financial performance and achieve its sustainable development. This paper makes a comparative analysis of the effect of tax reduction policies on corporate financial performance, mainly comparing listed companies in Sichuan and Chongqing, and conducts empirical research from the perspective of the impact of tax burden on corporate financial performance. It enriches the research field of tax reduction policy effects while also Provide useful reference for enterprises to make full use of policy dividends to improve financial performance.

## **2. Action Path and Research Hypothesis**

Tax reduction policies can exert influence not only from the macro level but also from the micro level, thereby coordinating the macro economy and improving the production and operation of enterprises at the micro level. Tax reduction policies have an effect on corporate financial performance, which can be summarized as internal effects and external effects.

The internal “physical and technical personnel” effect means that a significant effect of the tax reduction policy is that it can increase the company's own cash flow, ease financing constraints, and make the company more active in investing. Enterprise investment is mainly divided into three categories: one is ““Things” investment is investment in fixed assets, the second is “technology” investment, investment in technological advancement, and the third is “people” investment, that is, human capital. When the company's own cash flow increases, it is likely to increase its efforts to update production equipment and improve the working environment, thereby increasing the company's labor productivity and employee labor efficiency, and expanding the scale of enterprise production. At the same time, it also enables companies to have greater enthusiasm to outsource technical services or directly carry out technological independent innovation. The tax reduction policy not only brings about an increase in cash flow, but also largely compensates for the external effects caused by corporate technological progress. In order to avoid the frustration of innovation enthusiasm. In addition, the tax reduction policy has not only brought about the expansion of enterprise production scale and the specialized division of production, but also generated new job

demand, requiring enterprises to invest more manpower. At the same time, in order to enhance the competitiveness of products in the market, there is a greater demand for high-tech talents. Big. Through the continuous and continuous investment of enterprises in things, technology and people, financial performance can be improved.

The external “expected” effect means that the government formulates tax reduction policies, as a proactive fiscal policy, by reducing tax burdens, reducing tax rates, optimizing the external business environment and the freedom of market competition, and bringing better expectations to companies. The further optimization of the tax system will bring stronger confidence by raising the positive expectations of enterprises, thereby achieving the purpose of improving financial performance.

### 3. Research Design

#### 3.1 Sample Selection and Data Sources

The samples in this article are the 2008-2019 panel data of A-share listed companies across the country, Sichuan Province, Chengdu, and Chongqing. In order to avoid companies misleading the analysis due to information disclosure and possible extreme values or outliers, this article provides data on listed companies Elimination: (1) Eliminate sample data from ST and \*ST companies; (2) Eliminate unreasonable data such as negative numbers, extreme values, and outliers through tailing processing; (3) Eliminate sample data from the financial and real estate industries. The research data in this paper adopts the current major specialized databases CSMAR and WIND, and Stata 15.1 software is used for statistical analysis of financial data.

#### 3.2 Variable Selection

A very important angle for evaluating corporate financial performance is shareholder returns. This article selects return on net assets (roe) as the dependent variable. This indicator can well reflect the income of listed companies’ shareholders’ equity and can be used to measure the profitability of companies using their own capital. Efficiency, according to the practice of most scholars, this article selects the return on net assets as the evaluation index of corporate financial performance (Li Qiping, 2019; Sun Zheng, 2020; Li Linmu, 2020).

Tax reduction policy is an independent variable. In this article, the inverse index tax burden is used to represent the tax reduction policy. If the government reduces the tax, the enterprise will bear the corresponding tax burden. The independent variables of this article are income tax reduction and turnover tax reduction. To represent.

The actual corporate income tax rate (etr): The actual corporate income tax rate is an inverse indicator of the degree of preferential income tax implemented by the government. The lower the income tax burden, the greater the degree of tax reduction. The calculation formula is:

The actual corporate income tax rate = current income tax expense / total profit before tax for the current period.

The actual tax rate of turnover tax (ctr): Since turnover tax is an extra-price tax, it cannot be downloaded directly from the database and needs to be calculated. The calculation formula is:

The actual corporate turnover tax rate = turnover tax amount / operating income = (city construction and maintenance tax / 7%) / operating income.

This paper selects the most important differences between companies as the control variables, including the size of the company (zcj), the age of the company (age), and the property rights (noe) of the company (Wang Min, 2018; Feng Taozhu, 2019; Xu Bin, 2019) .

Table 1 Variable Settings

Variable type	Variable code	Variable name	Calculation method
Dependent variable	roe	Roe	Profit after tax/net assets
	roa	Roa	Profit before interest and tax/average total assets
Independent variable	etr	Actual income tax rate	Current income tax expense of the enterprise /Total pre-tax profit for the current period

	ctr	Actual turnover tax rate	(Urban construction and maintenance tax/7%)/operating income
Control Values	zczj	Enterprise size	Take the logarithm of the total asset value at the end of the year
	age	Business age	2021-year of establishment of the company
	noe	Enterprise property rights	State-owned is 1, non-state-owned is 2

### 3.3 Model Setting

This paper establishes a regression model of individual fixed effects to analyze the impact of tax reduction policies on corporate performance. The tax reduction policy is represented by the inverse indicator actual tax burden rate. The model is as follows:

$$roe_{it} = \beta_0 + \beta_1 tax_{it} + \beta_2 X_{it} + \tau_i + u_{it}$$

The above model is used to test the impact of changes in actual tax burden on corporate performance. roe represents the independent variable, tax represents the independent variable, X represents the control variable,  $\tau$  represents the individual effect, and u represents the residual.

## 4. Empirical Analysis

### 4.1 Descriptive Statistics

It can be seen from Table 2 that the average ages of Sichuan and Chongqing are higher than the national average, and it can be seen that these enterprises have been well developed for a long time. From the perspective of asset scale, the overall scale of listed companies in Sichuan is close to the intermediate level, slightly lower than the national average, and the scale of listed companies in Chongqing is generally larger, slightly higher than the national average. From the perspective of return on net assets, Sichuan, Chongqing and the whole country are not significantly different. From the perspective of the actual income tax burden rate, the tax burden of listed companies in Sichuan and Chongqing is slightly lower than the national average, and there is almost no difference in the level of turnover tax.

Table 2 Variable Description

VARIABLES	mean				min				max			
	Nation	Sichuan	Chengdu	Chongqing	Nation	Sichuan	Chengdu	Chongqing	Nation	Sichuan	Chengdu	Chongqing
age	20.78	21.79	21.14	23.12	4.00	7.00	7.00	10.00	65.00	54.00	54.00	42.00
noe	0.35	0.35	0.32	0.50	0.00	0.00	0.00	0.00	2.00	2.00	2.00	2.00
lnzczj	22.02	21.81	21.70	22.09	10.84	15.42	15.42	10.84	28.64	26.03	26.03	26.50
roe	0.06	0.06	0.06	0.07	0.00	0.00	0.00	0.00	0.31	0.30	0.30	0.30
etr	0.19	0.18	0.18	0.18	0.00	0.00	0.00	0.00	0.78	0.77	0.77	0.74
ctr	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.08	0.07	0.07	0.07

### 4.2 Correlation Analysis

Correlation analysis of all variables found that the absolute values of their coefficients are between 0 and 0.3. It can be seen that there is no significant correlation between the variables. See Table 3 for details.

Table 3 Correlation of Variables

Variables	(1)	(2)	(3)	(4)	(5)	(6)
(1) roe	1.000					
(2) etr	-0.237***	1.000				
(3) ctr	0.031***	-0.011*	1.000			
(4) age	0.206***	0.148***	-0.021***	1.000		
(5) lnzczj	0.104***	0.166***	-0.109***	0.073***	1.000	
(6) noe	0.109***	0.120***	-0.067***	0.175***	0.270***	1.000

\*\*\* p<0. 01, \*\* p<0. 05, \* p<0. 1

### 4.3 Regression Analysis

Perform multicollinearity analysis on all variables before regression. As shown in Table 4, the vif value is between 1 and 1. 2, which is far less than the standard limit of 10. In addition, the average value is only 1. 070, indicating that there is no multicollinearity. For interference problems, regression analysis can be performed.

Table 4 Multicollinearity Test

Variable	VIF	1/VIF
lnzcj	1. 120	0. 894
noe	1. 110	0. 899
etr	1. 050	0. 955
age	1. 050	0. 956
ctr	1. 010	0. 988
Mean VIF	1. 070	

The regression model in this paper uses individual fixed effects, and the results are shown in Table 5. From the perspective of the actual income tax burden rate, the financial performance of listed companies in Sichuan, Chongqing and the whole country is significantly negatively correlated with it, indicating that tax reduction policies can significantly improve corporate financial performance, and the tax reduction effects of Sichuan and Chongqing are better than the national level. The tax reduction effect in Chengdu is better than that in Chongqing. For the financial performance of listed companies in Sichuan and Chongqing, the turnover tax reduction did not play a significant role in promoting, but only played a significant negative role at the national level as a whole, that is, promoted the improvement of financial performance. In addition, from a national perspective, there is still a significant negative effect on the size of the enterprise. The larger the size of the enterprise, it does not necessarily promote the improvement of financial performance, but has a negative effect. As a result, Hypothesis 1 has been partially confirmed, and Hypothesis 2 has been confirmed.

Table 5 Benchmark Regression

VARIABLES	Nation	Sichuan	Chengdu	Chongqing
etr	-0. 148*** (-32. 21)	-0. 166*** (-6. 04)	-0. 195*** (-4. 49)	-0. 166*** (-3. 56)
ctr	0. 160** (2. 36)	0. 429 (1. 12)	0. 183 (0. 38)	0. 444 (0. 98)
lnzcj	-0. 006*** (-5. 93)	-0. 000 (-0. 08)	-0. 002 (-0. 30)	-0. 006 (-0. 63)
Constant	0. 253*** (10. 98)	0. 124 (1. 06)	0. 164 (1. 20)	0. 247 (1. 26)
Observations	22,524	801	470	337
Number of code	3,400	116	70	49
R-squared	0. 095	0. 103	0. 125	0. 102
Company FE	YES	YES	YES	YES
*** p<0. 01, ** p<0. 05, * p<0. 1				

### 5. Conclusion

From an overall point of view, the effect of the income tax reduction policy is obvious. Whether from the perspective of the whole country, Sichuan or Chongqing, the income tax reduction has significantly improved the financial performance of enterprises, and the tax reduction effect of Sichuan and Chongqing is better than the national level. In particular, the effect of income tax reduction in Chengdu is better than that in Chongqing. This may be because it is difficult for companies to pass on the income tax as a direct tax, and its collection has a substantial impact on the company's cash flow and eases the financing constraints of the company. On the other hand,

regional differences may be due to the degree of market openness and business environment. resulting in. The effect of the turnover tax reduction policy is not ideal. Whether it is viewed from a national or local perspective, the promotion effect of tax reduction is not significant, and may even have a negative impact. It may be because, compared with income tax, turnover tax is easier to pass on to consumers, and the cash flow and financing constraints of enterprises do not have a substantial impact due to the level of turnover tax.

From the perspective of the property rights of enterprises, the effect of income tax reduction on the financial performance of state-owned enterprises nationwide is significantly better than that of private enterprises. Sichuan and Chongqing only have a significant promotion effect on state-owned enterprises, and have no significant effect on private enterprises, but they are all negative. Related, this is probably because private enterprises have greater difficulties in obtaining government policy support and bank financing support than state-owned enterprises, while state-owned enterprises are easier to obtain government policy and bank financing support due to their own status, so they promote financial support. Performance has been improved to a greater extent. At the same time, the financial performance promotion effect of state-owned enterprises in Sichuan and Chongqing is greater than that of the whole country, indicating that Sichuan and Chongqing are higher than the national level in supporting state-owned enterprises, and have a better business environment than the overall national level. In addition, income tax cuts have better results in improving the financial performance of state-owned enterprises in Chongqing than in Sichuan. This may be due to Chongqing's status as a municipality directly under the central government and greater government policy support. From the perspective of the effect of the turnover tax reduction, the performance is different. It has a significant promotion effect on the financial performance of private enterprises in Sichuan and Chengdu, but has no significant effect on the financial performance of Chongqing enterprises. From a national level, it may even have a negative effect, most likely because On the one hand, turnover tax is easy to pass on, and has little effect on the actual cash flow and financing constraints of the enterprise. On the other hand, the turnover tax deduction chain is not perfect and the financial practitioners of the enterprise have a poor understanding of the policy.

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