

New Budget Law, Government Information Disclosure and Pricing of Local Government Bonds

Liu Zhizheng

Shanghai University, Shanghai

ABSTRACT: On January 1, 2015, the new budget law was officially implemented, and there are many changes in local government debt. This paper constructs a double difference model to observe the changes of the interest rate of local government bonds before and after the implementation of the new budget law, to examine whether the new budget law has played the expected role, and to introduce government information disclosure for in-depth analysis. Before the implementation of the new budget law, local governments raised debts in the form of multi city investment bonds, which were not open and transparent enough and had a high degree of guarantee, resulting in low interest rates, large sums and high risks; After the implementation of the new budget law, great changes have been made in these aspects and the expected results have been achieved.

KEY WORD: New Budget Law, Local Government Bonds, Government Information Disclosure

Date of Submission: 08-05-2021

Date of Acceptance: 22-05-2021

I. INTRODUCTION

Local government bonds in China have always been the focus of attention of all walks of life. In 2008, the global financial crisis broke out. In order to promote the rapid recovery of China's economy and get out of the predicament, the central government of China has issued a series of policies to stimulate economic growth. Among them, it is also one of the important measures to encourage local governments to invest and finance to stimulate economic recovery. Under the policy call, local governments were in the way of laws and regulations at that time - most local governments did not have the right to issue debt independently, and they began to establish local financing platforms. The city investment companies emerged like a spring up. Local governments raised funds in the form of corporate bonds through the urban investment platform, and got a lot of funds. Although the city investment debt provided the capital source for the local governments to recover and develop local economic conditions, there is no clear law and rules as the basis and restriction of this mode of borrowing. The financing process of local financing platform is mostly in the situation of "opaque, non-public and irregular", with its rapid development speed and large scale, The debt risk of local governments has been greatly increased.

In view of the above situation, the new budget law came into being. On January 1, 2015, the new budget law was formally implemented, in which there was a clear specification for the local government debt problem. On the one hand, we should promote the transparency of government financial information and strengthen government information disclosure. Article 4 of the new budget law clearly stipulates that "all revenues and expenditures of the government shall be included in the budget". Of course, it also includes bringing local government debts into the scope of budget management, requiring them to raise and repay debts under the supervision of the people's Congress. On the other hand, we should adopt the method of "combination of dredging and blocking" to deal with local government debt. Article 35 of the new budget law stipulates that local governments can only borrow by issuing local government bonds, and the scale of borrowing must be reported to the people's Congress for approval. No local government shall refuse to borrow or provide guarantee for the debts of other units or individuals in any other way. In addition, it is required to establish the corresponding local government debt early warning, evaluation, emergency response mechanism and accountability system. The new budget law strengthens the supervision of the whole process of local government borrowing from multiple dimensions and all aspects.

So far, the new budget law has been implemented for more than six years. Has it played a role in the debt financing of local governments? What kind of effect has it played? It needs to be investigated. Therefore, this paper will take January 1, 2015 as the cut-off point, build a dummy variable according to the date, and use the variable and the local government bond interest rate variable to build a model for regression analysis. This paper explores the impact of the new budget law on the pricing of local government bonds, and then discusses the role of the new budget law on the financing of local governments. Furthermore, this paper will examine the impact of the new budget law on the pricing of local government bond issuance in different regions with different degrees of information disclosure. The main innovations of this paper are as follows: firstly, it is the

first time to study the relationship between the new budget law and the pricing of local government bonds. Previous studies mostly focus on the urban investment bonds issued by local governments through local financing platforms and urban investment companies, rather than the local government bonds used in this paper. This paper attempts to provide new research ideas and insights by cutting into this research field with different research objects. Secondly, this paper not only studies the impact of the new budget law on the pricing of local government bonds, but also introduces the degree of local government information disclosure as a moderating variable to analyse the different impact of the new budget law on the pricing of local government bonds in different regions with different degrees of information disclosure. The existing research tends to study the three in pairs, this paper adopts a combination of the way, with different perspectives for new exploration.

The following structure is as follows: the second part combs the existing literature, constructs the theoretical framework of this paper, and then puts forward the hypothesis of this paper; The third part shows the specific research design from three aspects: model selection, variable construction and data source and processing; The fourth part carries on the model regression, and displays and analyses the regression results, as well as carries on the robustness test; The last part is the conclusion and suggestion.

II. LITERATURE REVIEW AND THEORETICAL BASIS

The new budget law, which came into effect on January 1, 2015, clearly stipulates that "part of the construction investment funds in the budgets of provinces, autonomous regions and municipalities directly under the central government approved by the State Council can be raised by issuing local government bonds and borrowing debts within the limit determined by the State Council." This represents that the "front door" of local government bond issuance has been moderately opened, and before that, local governments did not have the autonomy to issue bonds. At the same time, the new budget law explicitly forbids local governments to provide any form of debt guarantee to solve the problems of local government financing platform and urban investment debt, blocking the "back door" of local government debt. As a result, the new budget law has established a new pattern of "opening the front door and blocking the back door" for local government debt. In addition, the relevant documents of the State Council clearly stipulate that local governments are responsible for repaying the debts that have existed before, the central government implements the principle of no relief, and the responsibility for repaying the debts that have existed before is entirely borne by local governments themselves. It can be seen from the above central documents that the central government hopes to impose constraints and norms on the whole process of local government debt repayment through the new budget law. Under the premise of central control, the local government will be given certain autonomy in debt issuance and financing, so that the local government will become an independent "debtor", and then promote the marketization of local government bonds.

From the research level, some scholars believe that the new budget law can effectively promote the marketization of local government bond pricing. Sun Bo (2014) believes that the new budget law has opened up a way to standardize the marketization and transparency of local government bond pricing. Gu Shengzhi et al. (2015) believe that the improved new budget law can build and improve a multi-level local government debt management mode combining market constraints, rule management and new deal control. From the perspective of government guarantee, government guarantee can be divided into two forms: explicit guarantee and implicit guarantee. On the one hand, the new budget law clearly stipulates that "the central government shall implement the principle of no relief for the debts that should be paid by the local governments", clarifies the subject of the debts, adheres to the principle of "who uses, who pays", and the higher level government will not cover the debts of the lower level government, cutting off the implicit guarantee of the central government for the debts of the local governments. Yan Xiaodong et al. (2019) proved by empirical test that the introduction and implementation of the new budget law and No. 43 document significantly increased the issuing interest rate of local government bonds, indicating that it effectively reduced the implicit guarantee of the government and promoted the marketization process of local government bonds. On the other hand, Chen Yufei (2020) pointed out that although government guarantee is explicitly prohibited, once local government bonds default, it will have a significant negative impact on local economic development, local government credit, refinancing and many other aspects. Therefore, some scholars are not optimistic that the new budget law can play an effective role in promoting the marketization of local government bond issuance pricing. Wang Liying et al. (2014) believe that it is difficult for the central government to give up the implicit guarantee for local government debt, and continue to provide financial subsidies to local governments in disguised form will become a serious obstacle in the process of marketization of local government bond issuance, and the new budget law is difficult to play its role in practice.

Although the role of the new budget law in dealing with the issue of local government bonds is still uncertain, according to the policy itself and previous studies, the implementation of the new budget law, on the one hand, strictly limits the financing channels of local governments, so that local governments can only issue formal local government bonds for debt financing; On the other hand, it strictly limits the amount and process of

local government debt. Local government bonds need to be approved by the State Council and issued according to the amount. In addition, the issuance of local government bonds is strictly supervised by the State Council and the National People's Congress. The pricing of local government bonds can no longer be arbitrarily stipulated, let alone the abnormal phenomenon that the interest rate of local government bonds is generally lower than that of national debt. Moreover, the central government clearly requires local governments to bear the responsibility of debt repayment and implement the principle of no relief, which cuts off the implicit guarantee from the policy level. For creditors, it will undoubtedly improve their risk assessment of local government bonds, and then make them demand higher return on investment. Based on the above analysis, the new budget law is likely to increase the financing cost of local governments. Therefore, we put forward our first hypothesis:

H1: after the implementation of the new budget law, the interest rate of local government bonds will increase significantly

Information disclosure is one of the basic elements of the bond market. Local government bonds are also issued and circulated in the bond market, and their issuance pricing must be affected by the degree of financial information disclosure of local government. The notice of the Ministry of Finance on the issuance of local government general bonds in 2015 emphasizes the important role of credit rating in the pricing of local government bonds, and makes clear provisions on the disclosure scope of local government finance, debt and other information. There are many studies on the impact of government information disclosure on local government financing cost in China, but most of them focus on urban investment bonds. Zhang Guangming (2015) believes that improving the degree of financial information disclosure can effectively reduce the financing cost of urban investment bonds. Pan Jun (2016) found that the higher the degree of financial information disclosure, the higher the credit rating of urban investment bonds, which makes the cost of debt financing relatively low. Wen Laicheng et al. (2019) believe that in areas with low degree of government information disclosure, the financing cost of local governments is higher, and the financial information of local governments is opaque and not open, which will always be the constraint effect of the bond market. In contrast, there are many empirical studies focusing on the degree of government financial information disclosure on the pricing of local government debt. Harris and piwowar (2006) found that in the municipal bond market, information disclosure can effectively reduce the transaction cost of local government bonds. Bernoth and Wolff (2008) pointed out that government financial information disclosure can reduce the risk uncertainty of the government, and then reduce the interest rate of local government bonds. Wang (2012) believes that the availability of financial information of local governments has a reverse relationship with the cost of debt financing.

According to the theory of information asymmetry, in the bond market, information asymmetry between issuers and investors will lead to the increase of credit risk, and information disclosure is the main way to solve this problem. When the information disclosure is not sufficient, the issuers know their own financial situation and project situation, while the investors are in the information disadvantage and it can't accurately grasp the true situation of the issuers, so the bond market will appear "adverse selection" and "moral hazard" and other phenomena. Therefore, high-quality information disclosure is conducive to improving the credit level of bond issuers, thereby reducing their financing costs and obtaining more financing (yuan Weiqiu, Wang Lijing, 2016). Wu Jianhua et al. (2014) believe that if the bond issuer can take the initiative to carry out high-quality accounting information disclosure, it can effectively reduce the risk assessment of investors, and then reduce their expectation of investment return. Local government bonds are no exception. As a participant in the bond market, local governments can enhance information disclosure, improve fiscal transparency, make investors more convenient to obtain more and more authentic government financial information, understand the investment projects used by local government debt funds, alleviate the problem of information asymmetry, and then reduce the financing cost of local governments. On the contrary, if the local government's financial information disclosure degree is lower, then investors will demand higher bond investment return, which will lead to the rise of its bond financing cost. Therefore, we put forward our second hypothesis:

H2: compared with the areas with high government information disclosure, in the areas with low government information disclosure, the new budget law has a greater impact on the interest rate of local government bonds.

III. RESEARCH DESIGN

III.1 Regression model

In order to test H1, the regression model (1) was constructed as follows:

$$\text{rate} = \alpha + \beta_1 \text{post} + \beta_2 \text{term} + \beta_3 \text{total} + \beta_4 \text{rf_rate} + \beta_5 \text{pergdp} + \beta_6 \text{pertrade} + \beta_7 \text{pergap} + \beta_8 \text{ft} + \varepsilon$$

In order to test H2, the regression model (2) was constructed as follows:

$$\text{rate} = \alpha + \beta_1 \text{postftl} + \beta_2 \text{term} + \beta_3 \text{total} + \beta_4 \text{rf_rate} + \beta_5 \text{pergdp} + \beta_6 \text{pertrade} + \beta_7 \text{pergap} + \beta_8 \text{ft} + \varepsilon$$

III.2 Variable description

Explained variable: issuing interest rate

Interest rate of local government bonds (rate). The purpose of this model is to study the impact of the new budget law on the issue pricing of local government bonds. The issue interest rate of local government bonds represents the issue pricing of local government bonds. The explained variable “**rate**” is the coupon rate of each single bond issued by each province every year.

Explanatory variable: virtual variable of new budget method; Virtual variable of new budget method and the degree of government information disclosure

The new budget method virtual variable (post). The new budget law officially came into effect on January 1st, 2015. Using this time point as the grouping standard, the **post** of all local government bonds issued before 2015 is taken as 0, and later years, and **post** takes 1.

The new budget law virtual variable (post) and the degree of government information disclosure virtual variable (ftl) of the intersection (postftl). By using the double difference method, this paper observes the utility differences of the new budget method in local governments with different degrees of information disclosure. Taking the median (41.33) of the degree of government information disclosure of each province over the years as the grouping standard, the provinces whose degree of government information disclosure is less than the median are classified as low government information disclosure areas, which are regarded as the experimental group, and the **ftl** value is 1; The provinces whose degree of government information disclosure is greater than or equal to the median belong to the regions that engage in government information disclosure. This part is regarded as the control group, and its **ftl** value is 0. The cross multiplication term **postftl** is mainly used to test the hypothesis **H2** in this paper, so it is constructed according to the above method.

Control variables:

The control variables of this paper are divided into two levels, one is the micro characteristic variables of local government bonds, the other is the macro financial and economic conditions of local government.

Micro variables:

The repayment period of bonds issued once a year in each province (term). According to the general experience of bond market, the longer the bond issuance period, the greater the uncertainty and higher risk for investors. Therefore, the longer the issuance period of local government bonds, the higher the interest rate of issuance (Zhu Zhiqi et al., 2018)

The natural logarithm of the amount of bonds issued each year (total). Under the condition of a certain amount of regional capital supply, the larger the scale of local government bonds, the higher the interest rate. In addition, Han Liyan et al. (2003) found that the default risk of local government bonds increases with the increase of the scale of local government bonds, so the issuing interest rate will also rise.

Macro variables:

Risk free interest rate (rf_risk). The interest rate of local government bonds in the same period on the day of issue. Compared with treasury bonds, the risk level of local government bonds is higher in the eyes of investors, and the expected investment return of local government bonds must be higher than that of treasury bonds. Therefore, the higher the interest rate of treasury bonds in the same period, the higher the pricing of local government bonds.

Economic level (pergdp). Under the background of marketization, the issuing interest rate of government bonds represents its issuing price, and the price fluctuates around the value. Therefore, different economic development levels have different effects on the issuing price of local government bonds. Therefore, this paper chooses per capita GDP to control the economic development level of each province.

Regional openness (pergdp), the total import and export per capita of each province. Mainly referring to the research of Zhong Huiyong et al. (2016), the degree of openness of local governments is likely to affect the interest rate of government bond issuance. This paper also controls this index.

Fiscal gap (pergap), the per capita fiscal gap of each province, can be calculated by dividing the difference between fiscal expenditure and fiscal revenue of each province by the population of each province at the end of the year. The larger the per capita fiscal gap is, the stronger the motivation of local government to issue bonds is. The scale of a single issue of bonds may also be affected, which in turn affects the issuing interest rate of local government bonds (Pan Jun et al., 2017).

Financial transparency (ft). this paper selects the "China's financial transparency report" published by the public policy research center of Shanghai University of Finance and economics as the variable data. According to the theoretical derivation, fiscal transparency will affect investors' risk assessment of local government bonds, so it is necessary to control them.

Table 1: variable description

Variable type	Variable name	Variable description	
Explained variable	rate	The coupon rate of each single bond issued by each province every year	
Explanatory variable	post	Is the new budget law a virtual variable	
	postftl	Whether the new budget law is implemented (post) and the cross item of low fiscal transparency areas (ftl)	
control variable	microcosmic	term	Repayment period of single bond issued by each province every year
		total	Natural logarithm of the amount of bonds issued by each province every year
	macroscopic	rf_rate	The interest rate of local government bonds in the same period on the date of issue
		pergdp	Natural logarithm of GDP per capita in each province
		pertrade	Natural logarithm of total import and export per capita in each province
		pergap	Natural logarithm of per capita financial gap in each province
		ft	The degree of government information disclosure in different provinces

III.3 Data sources

The relevant data of local government bonds used in this paper are from the wind database, which includes the issue date, coupon rate, bond maturity and total amount of single issue of bonds issued by each province in each year. The data of per capita GDP, per capita total import and export and per capita fiscal gap are all from China Statistical Yearbook. The data of the degree of government information disclosure comes from the report on China's fiscal transparency published by the public policy research center of Shanghai University of Finance and economics from 2009 to 2017. The risk-free rate of return comes from Rex database. Limited by the year of government information disclosure degree data, the year span of this paper is limited to 2009-2017, after data screening, a total of 3792 observations are obtained.

Descriptive statistics are as follows:

Table 2: descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
rate	3792	3.401	.53	1.6	4.75
post	3792	.972	.166	0	1
ftl	3792	.496	.5	0	1
postftl	3792	.47	.499	0	1
term	3792	6.184	2.482	1	10
total	3792	21.591	1.257	16.811	24.598
rf_rate	3792	3.137	.45	1.604	4.41
pergdp	3792	10.848	.393	9.085	11.68
pertrade	3792	9.185	1.196	6.423	11.722
pergap	3792	8.409	.609	6.196	10.675
ft	3792	42.017	13.311	15.36	70.01

Table 2 reflects the descriptive statistics of variable data used in this paper. It can be seen from the table that the average debt cycle of local government bonds is more than 6 years, the shortest is 1 year, and the longest is 10 years. It can be seen that the average debt cycle of local government bonds is long, and the cycle difference is large. Because the government's financial funds are often invested in the public welfare projects with low income and long payback cycle, the long debt cycle is also a normal phenomenon. There is a great difference in the total amount of single bond issued by local governments, which is related to the regions where the local governments issue bonds and the purpose of issuing bonds. It is speculated that the local governments in the more developed regions have a larger scale of borrowing. From the perspective of bond issuing interest rate, the minimum value is 1.6%, which is significantly lower than the interest rate of treasury bonds in the same period. According to the data query, it is found that this is the local bonds issued before 2015. From the average value of 3.401%, it is obvious that the interest rate of most local government bonds has increased significantly

after 2015. Finally, there are great differences in fiscal transparency among different regions in each year, which indicates that there is a big gap in the financial information disclosure of local governments in China, and the fiscal transparency of the same region also fluctuates greatly in different years. The financial information disclosure of local governments in China needs to be strengthened.

IV EMPIRICAL RESULTS AND ANALYSIS

IV.1 Regression results and analysis

First, the paper discusses the influence of the new budget method on the issuance pricing of local government bonds. In order to avoid the influence of unknown heteroscedasticity, the paper adopts the common least square method to regression, and the regression results are shown in Table 3.

Table 3: regression results of model (1)

rate	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
post	.169	.019	8.80	0	.132	.207	***
term	.007	.001	5.37	0	.004	.009	***
total	-.011	.002	-4.54	0	-.015	-.006	***
rf_rate	1.06	.007	152.67	0	1.047	1.074	***
pergdp	.121	.015	8.12	0	.091	.15	***
pertrade	-.056	.006	-9.18	0	-.068	-.044	***
pergap	.006	.008	0.78	.434	-.009	.021	
ft	.001	0	6.59	0	.001	.002	***
Constant	-.806	.138	-5.86	0	-1.076	-.536	***
Mean dependent var	3.401				SD dependent var	0.530	
R-squared	0.889				Number of obs	3792	

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

Regression model (1) focuses on the coefficient sign between the explanatory variable post and the explained variable rate. According to the regression results in the table above, we can find that there is a significant positive correlation between the virtual variable post formally implemented by the new budget law and the interest rate rate of local government bonds, and the regression coefficient is 0.169, which is significant at the significance level of 1%. This shows that the formal implementation of the new budget law has a significant positive impact on the pricing of local government bonds, and the cost of local government financing through local government bonds has increased. This also means that the implementation of the new budget law effectively blocks the influence of the central government's implicit guarantee to the local government and other related policy factors, making the local government gradually become the real main body of independent bond issuance, effectively promoting the marketization process of local bond pricing. Therefore, the regression results verify the hypothesis H1: after the implementation of the new budget law, the interest rate of local government bonds will increase significantly.

Furthermore, the paper examines the impact of the new budget law on the pricing of local government bonds in different regions with different degrees of government information disclosure. This paper makes an empirical test by constructing the double difference model (2), and the regression results are shown in Table 4.

Table 4: regression results of model (2)

rate	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
postftl	.069	.01	6.73	0	.049	.089	***
term	.007	.001	6.15	0	.005	.01	***
Total	-.01	.002	-4.41	0	-.015	-.006	***
rf_rate	1.054	.007	150.97	0	1.04	1.068	***
Pergdp	.104	.016	6.55	0	.073	.136	***
Pertrade	-.047	.006	-7.38	0	-.06	-.035	***
Pergap	.02	.007	2.74	.006	.006	.035	***
ft	.004	0	10.50	0	.003	.005	***
Constant	-.797	.141	-5.66	0	-1.072	-.521	***
Mean dependent var	3.401				SD dependent var	0.530	
R-squared	0.888				Number of obs	3792	

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

In the double difference model (2), the sign of the coefficient between postftl and rate is observed. From the regression results in Table 4, we can see that the correlation coefficient between the virtual variable of the implementation of the new budget law and the local government information disclosure degree, the cross multiplier of the regional virtual variable postftl and the local government bond issuance pricing rate is 0.069, which is significantly greater than 0 and significant at the 1% significance level. Therefore, there is a significant

positive correlation between postfl and rate, which indicates that the new budget law can significantly improve the pricing of local government bonds in areas with low degree of government information disclosure compared with areas with high degree of government information disclosure. Therefore, the above results and analysis verify the H2 of this paper: compared with the areas with high government information disclosure, in the areas with low government information disclosure, the new budget law has a greater impact on the interest rate of local government bonds.

IV.2 Robustness test: placebo test; Parallel trend test

IV.2.1 Placebo test

The term "placebo" comes from randomized trials in medicine, such as testing the efficacy of a new drug. At this time, the people participating in the experiment can be randomly divided into two groups, one of which is the experimental group, taking real medicine; The other group was the control group, which took placebo (for example, useless sugar pills), and did not let the participants know whether they were taking the real medicine or placebo, in order to avoid the effect of the experiment due to subjective psychological effects, which was called "placebo effect". The core idea of placebo test is to estimate the time of fictitious treatment group or fictitious policy. If the regression results of the estimators under different fictitious ways are still significant, then the original estimation results are likely to be biased. The change of our explained variable rate is likely to be affected by other policy changes or random factors.

Therefore, in order to ensure the effectiveness and robustness of the regression results, this paper will learn from the practice of Shangguan Zeming et al. (2012), assuming that the new budget law is implemented in 2011, and reconstruct the virtual variable post of the implementation of the new budget law. The virtual variable of bonds issued before 2011 is set to post = 0; Release time in 2012 and after, set to post = 1. The new post is replaced by regression model (1) to test the robustness of model (1). The new regression results are shown in Table 5.

Table 5: placebo test results

rate	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Post	.046	.029	1.59	.113	-.011	.103	
term	.007	.001	6.01	0	.005	.01	***
Total	-.01	.002	-4.36	0	-.015	-.006	***
rf_rate	1.054	.007	145.83	0	1.04	1.069	***
Pergdp	.144	.015	9.67	0	.115	.173	***
Pertrade	-.06	.006	-9.78	0	-.072	-.048	***
Pergap	.019	.008	2.43	.015	.004	.034	**
ft	.002	0	8.31	0	.001	.002	***
Constant	-1.021	.138	-7.38	0	-1.292	-.749	***
Mean dependent var		3.401	SD dependent var		0.530		
R-squared		0.887	Number of obs		3792		
F-test		3698.061	Prob > F		0.000		
Akaike crit. (AIC)		-2296.114	Bayesian crit. (BIC)		-2239.948		

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

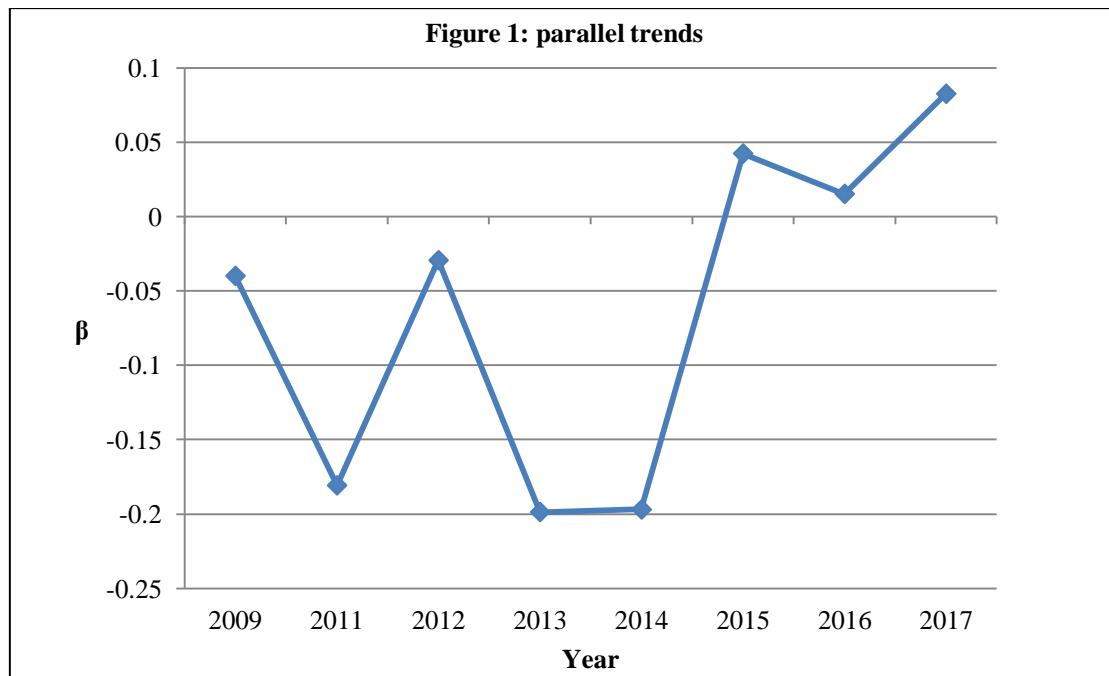
In the data shown in Table 5, the regression coefficient direction of post is not different from the previous regression results, but it is no longer statistically significant. This means that there is no bias in the previous estimation results, and the significant positive correlation between the original explanatory variable post and the explained variable rate is robust. Therefore, our test of hypothesis H1 is valid and credible.

IV.2.2 Parallel trend test

The regression model (2) of this paper uses the double difference method, and one premise of the application of the double difference method is that the control group and the experimental group must have the same development trend before the implementation of the new policy. That is, before the implementation of the new budget law, the pricing of local government bonds in the regions with high government information disclosure and low government information disclosure has the same change direction. If this condition is not met, the policy effect (coefficient of intersection multiplier) obtained by the two differential can not fully and truly reflect the policy effect of the implementation of the new budget method, some of which are likely due to the differences between the control group and the experimental group. Therefore, in order to ensure that the double differential regression of the regression model (2) in this paper is effective, we use the practice of Chen Xiaoguang s (2017) to verify the parallel trend of the issuing interest rates of the two groups of local government bonds with high and low government information disclosure before the implementation of the policy, and further analyze after the implementation of the new budget law in 2015, The dynamic impact of the new policy on the pricing of local government bonds. The test model is as follows:

$$\text{rate} = \alpha + \beta_1 \text{pre5ftl} + \beta_2 \text{pre4ftl} + \beta_3 \text{pre3ftl} + \beta_4 \text{pre2ftl} + \beta_5 \text{pre1ftl} + \beta_6 \text{currentftl} + \beta_7 \text{post1ftl} + \beta_8 \text{post2ftl} + X + \varepsilon$$

Among them, pre5 is whether the current year is 2009, yes is 1, no is 0; In the original data, local government bonds were not issued in 2010, so pre4 is whether it is 2011, yes is 1, no is 0. Pre3, pre2, pre1, current, post1, post2 and so on. X It represents all characteristic variables and control variables used in regression model (1) and regression model (2). The details are as follows:



It can be seen from Figure 1 that in the five years before the implementation of the new budget law, there is no significant difference in the interest rate of issuing local government bonds between the two groups of provinces in terms of the degree of government information disclosure. The cross coefficient of the first five years is not significant, and the direction of the coefficient is not in line with the expectation. Therefore, the premise of parallel trend of the double difference method has been verified. In the year of the implementation of the new budget law and the two years after, the interest rates of local government bonds issued by provinces with low degree of government information disclosure are significant at the significance level of 1%, and the cross multiplier coefficient is positive, and fluctuates with the implementation time of the policy. It can be seen that the implementation of the new budget law has effectively blocked the implicit guarantee of the central government to the local government, promoted the marketization of the issuance and pricing of local government bonds, and the effect is more obvious in areas with low degree of government information disclosure. Therefore, the regression model and results of the hypothesis H2 in this paper are robust and effective.

V CONCLUSION AND SUGGESTION

This paper uses the real data of local government bonds issued by various provinces in China from 2009 to 2017, takes the new budget law officially implemented on January 1st, 2015 as a virtual variable, and conducts quasi natural experiments to investigate the changes of the implementation of the new budget law on the financing cost of local governments through local government bonds. Further, according to the annual financial transparency report data issued by Shanghai University of Finance and economics, the provinces are divided into two groups of government information disclosure level areas according to their government information disclosure degree. The double difference analysis method is used to observe the specific reflection of the implementation of the new pre algorithm in the two groups of regions. The empirical results are as follows: first, after January 1, 2015, the implementation of the new budget law effectively blocked the influence of the central government on the implicit guarantee of local governments and other related policy factors, which made local governments gradually become the main body of real independent issuance of bonds, and effectively promoted the Marketization process of local bond pricing, The issue price of local government bonds has been increased. Secondly, through the analysis of double difference model, compared with the regions with high degree of government information disclosure, the new budget method can significantly improve the issuance

pricing of local government bonds in low level of government information disclosure. This also shows that the implementation of the new budget law further exposes the debt risk with low disclosure degree of government information, and makes the risks hidden in the government so that more investors can observe and make the government information more open and transparent.

According to the empirical results, we put forward the following policy recommendations:

First, we will further strengthen supervision over the issuance of local government bonds. Local government debt in China is an important kind of securities to undertake economic development and infrastructure construction. In the development of local government bonds, the bond financing mode of local government is still being explored. In 2009, the Ministry of Finance formally defined local government bonds. By 2015, the new budget law began to implement, and more strict requirements and regulations were made for local governments to issue local bonds, and the issuance and approval plans of local bonds were stipulated to be reported layer by layer, and the limits were issued step by step. Then the repayment mode of local debt changed from "paying on behalf of the agent" and "self repayment on behalf of the local government" to "spontaneous repayment". The central government needs to further improve legislation, strictly enforce law and regulate the judiciary, strengthen the supervision of local government debt raising, strictly "rectify" the illegal borrowing behavior of local governments, and make the new budget law and other laws and regulations come into effect, so that the local government can become an independent debt subject, Make use of the debt funds and bear the liabilities.

Second, we should further improve the legal system of government information disclosure. The Fourth Plenary Session of the 19th Central Committee of the CPC clearly requires "to perfect the budget system with scientific standards, to standardize transparency and to restrain effectively", which requires the formation of a comprehensive and systematic legal system. Although the new budget law clearly puts forward the requirements for refining the budget preparation, it does not stipulate that the detailed budget content must be fully open and transparent, and the local government has certain autonomy over the disclosure of its financial information. In addition, the new budget law restricts the local government to make information disclosure only when the application for information disclosure is replied, and there is no clear requirement for the quality of information disclosure. Therefore, it is suggested that in the follow-up regulations, the scope and standards of the disclosure of local government financial information should be more specific, and the quality requirements for the local government paved financial information should be strengthened to meet the legitimate needs of the information demanders.

Third, we should further improve the transparency of financial information. First of all, local governments should continue to implement the requirements of the new budget law on financial information disclosure. In accordance with the requirements of full caliber budget, we should refine the contents of budget and final accounts, strengthen the construction of financial information disclosure platform, innovate the ways and methods of financial information active disclosure, improve the service ability of financial information disclosure according to the application, constantly summarize the experience of financial information disclosure, and continuously improve the financial transparency of the party. Secondly, local governments should improve the public participation mechanism and smooth the channels of public participation in the process of financial information disclosure, actively publicize the effectiveness of financial information disclosure to the public, meet the public's demand for high-quality financial information, and invite representatives of the National People's Congress, the Chinese people's Political Consultative Conference and the news media to participate in the process of financial information disclosure. We should mobilize the public's enthusiasm and initiative to participate in the disclosure of financial information, and give full play to the synergy of the government's "top-down" and the public's "bottom-up". Finally, we should improve the sharing and coordination mechanism of financial information disclosure. The Ministry of finance should regularly organize and hold national working meetings on the disclosure of financial information, so that all provinces can fully exchange the successful experience and challenges of the disclosure of financial information, pool their wisdom, solve the problems together, and turn the recognized good practices into systems and extend them to all parts of the country. The provinces with less experience in financial information disclosure should actively go to the provinces with rich experience to do research and study, learn from advanced practices, learn from each other's strong points to make up for their weak points, form the advantage of backwardness, vigorously improve financial transparency, and realize the balanced development of financial information disclosure among provinces. The provincial government should do a good job in the guidance and supervision of the financial information disclosure of the city and county governments, and realize the comprehensive improvement of the financial information disclosure within the region.

BIBLIOGRAPHY

- [1]. Gu S.Z., Liu W., Zhuang Q.Q. (2015), New budget law and the prevention of local government debt risk. *The Development*; 2015: 1: p9-11.
- [2]. Sun B. (2014), The standardization of local debt must be market-oriented and transparent. *Economic Herald*; 2014: 1: p6.

- [3]. Jia K.(2014),The breakthrough of The Budget Law on local debts. China Finance; 2014: 22:p21-22.
- [4]. Zhang G.M. (2015),Analysis of urban investment bond spread based on local government credit rating. Ji'nan University; 2015.
- [5]. He Z.G., Zhou Q., Lu Y.W. (2016), The impact of financial certification on bond financing cost——Take urban investment bonds as an example. Securities Market Herald; 2016: 2:P63-71.
- [6]. Pan J., Wang L.L., Wu N. (2016),Financial transparency and credit rating of urban investment bonds. Accounting Research; 2016: 12: p72-78.
- [7]. Yuan W.Q., Wang L.J. (2016), Information disclosure quality, monetary policy and commercial credit financing. Stock Market News,2016:p7.
- [8]. Fang H.X., Shi J.K., Zhang G.B. (2013),Property right nature, information quality and corporate bond pricing. Journal of Financial Research; 2013:p4.
- [9]. Wu J.H., Wang X.J., Zhang Y. (2014), Quantitative analysis of the impact of enterprise information disclosure lag on bond default risk. Research in Financial Economics; 2014: 11.
- [10]. Wen L.C., Ma Y. (2019), Financial transparency and financing cost of local government——Evidence from the implementation of The Budget Law in 2015.Sub National Fiscal Research; 2019: 12:p28-35.
- [11]. Wen L.C., Ma Y. (2019), Financial transparency and financing cost of local government——Evidence from the implementation of The Budget Law in 2015.Sub National Fiscal Research; 2019: 12:p28-35.
- [12]. Zhu Z.Q., Gao K., Wang T. (2018), The influence of the new budget law on the marketization of local bonds. Taxation and Economy; 2018: 5:p11-18.
- [13]. Zhu Y., Wang J. (2018), Can market constraints reduce the risk premium of local bonds?——Evidence from urban investment bond market. Journal of Financial Research; 2018: 6:p56-72.
- [14]. Zhou Y.M. (2018), Financial transparency, credit rating and financing cost of local government bonds. Journal of Jiangxi University of Finance and Economics; 2018: 1:p41-49.
- [15]. Xie L., Han W.L. (2017),Can information disclosure reduce the credit risk of urban investment bonds?——Test on the pricing of urban investment bonds. Journal of Southwest University for Nationalities(Humanities and Social Sciences), 2017: 38, 12:p141-147.
- [16]. Harris L.E., Piwowar M.S.(2006), Secondary Trading Costs in the Municipal Bond Market. Journal of Finance; 2006: 62, 3:p1361-1397.
- [17]. Wang T.(2012), An Analysis of the Effects of Online Disclosure on Municipal Bond Issuances. International Review of Public Administration; 2012: 17, 2:p1-18.
- [18]. Bernoth K.,Wolff G.(2008),Fool the Market? Creative Accounting, Fiscal Transparency and Sovereign Risk Premia. Scottish Journal of Political Economy; 2008: 55, 4:p465-487.
- [19]. CornaggiaJ.,Kimberly J. C.,Israelsen R.(2017), Credit Ratings and the Cost of Municipal Financing. Review of Financial Studies;2017.
- [20]. Liu G. (2011), Municipal Bond Insurance Premium,Credit Rating and Underlying Credit Risk. SSRN Working Paper,No.1859660; 2011.
- [21]. Schultz P. (2012), The Market for New Issues of Municipal Bonds:The Roles of Transparency and Limited Access to Retail Investors. Journal of Financial Economics; 2012: 106, 3:p492-451.
- [22]. Yan X.D., Zhang Y.C., Li J.X.(2019), 43 weaken the implicit guarantee of local government—— Based on the interest margin perspective of issuing bonds of urban investment. Southern finance; 2019: 9:P28.
- [23]. Hu Y., Wu W.F.(2019), Local government credit in urban investment bonds: implicit guarantee or implicit worry. Investment research; 2019: 38,9:P28.
- [24]. Zhu X.F., Lu Y.H.(2020), Analysis on the causes of government implicit guarantee of local enterprise bonds. Jiangsu business theory; 2020: 12:P78-80.
- [25]. Feng L., Wen L., Xiao Y.(2020), Repricing of default risk of financial institutions based on the expectation of government implicit guarantee exit. China management science; 2020: 28, 11:P43-50.
- [26]. Guo Y.Y., Xu G.J., Xu K.(2020), Formation mechanism and Countermeasures of local government debt. Macroeconomic management; 2020: 1:P 41-47.
- [27]. Wang X.G., Shen H.B., Zhong L.J.(2019), Government implicit guarantee, bond default and interest margin of credit debt of state-owned enterprises. Finance and trade economy; 2019: 40, 12:P65-78.
- [28]. Li Y.Y., Zhang F.(2019), Formation mechanism and incentive effect of vertical fiscal imbalance. Management world; 2019: 35, 7:P43-59.
- [29]. Zhang X.Y., Wang Y.L.(2019), Local government debt governance and government implicit guarantee effect: an analysis based on bond market data. Securities market guide; 2019: 1:P28-36+46.

Liu Zhizheng. "Determinant of Quality of Internal Audit Results with Work Experience As A Moderation." *International Journal of Business and Management Invention (IJBMI)*, vol. 10(05), 2021, pp. 01-10. Journal DOI- 10.35629/8028