Available online www.jocpr.com

Journal of Chemical and Pharmaceutical Research, 2014, 6(6):2012-2019

Research Article

ISSN : 0975-7384
CODEN(USA) : JCPRC5

Effects of financing factors on investment behavior of Chinese cultural industry listed company-an empirical study based on unbalanced dynamic panel data

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ABSTRACT

Based on the unbalanced dynamic panel data from Chinese cultural industry listed companies from 2006 to 2013,by using the System —GMM estimation, this paper establishes a financing-investment dynamic econometrical model, in order to examine the influences of cumulative effect and three financing factors. The results demonstrate that, on the whole ,internal funds of the cultural industry listed companies faced with significant shortage, and the investment mainly rely on external financing. It showed that investment behavior is dominated by internal financing, but debt financing and equity financing have dominant active affect on investment behavior, and the latter′s impact is larger. Moreover ,the small and medium of cultural media firms have a preference for equity financing.

Key words: cultural industry; financing factors; investment behavior; system—GMM

INTRODUCTION

Financing difficulty is a great problem listed companies in Chinese cultural industries are confronting, and financing factors would affect the supplement of business capital and the formation of investment decisions directly, which eventually determine the direction, degree and sustainability of the development of Chinese cultural industries. The successional introduction of new policies, such as Regulatory Commission on the Financial Sector's Supporting Role in Boosting the Revitalization, and Development and Prosperity of the Cultural Industry, has provided good financial support for the development of cultural industries ever since 2010. In fact, only with the cumulative effect of internal financing, external financing and investment, as well as gradual improvement of efficiency of investment and financing of listed companies in Chinese cultural industries taken into consideration could the problem of financing difficulty be solved.

An enterprise can obtain sufficient funds through external financing, and its investment behavior is immune to financing factors in a sound financial market, which proves the theorem Modigliani-Miller in 1958 tenable [1]. However, due to the existence of information dissymmetry factor, an enterprise is easily affected by factors such as agency cost and transaction cost, and once it fails to obtain sufficient funds, it would eventually fail to make the best decisions on investment behavior [2-3]. In recent years, scholars have analyzed the relationship between enterprise's investment and financing from different perspectives, but so far have failed to take the combined functions of internal financing and external financing into account. As to the field of relative empirical research, most recent studies just focus on the effect of certain financing factor on the investment behavior of manufacturing enterprises [4-5], but studies on the investment behavior of cultural industries are rare. The mainstay listed companies in domestic cultural industries started late with a short development history. On one side, the listed companies have occupied a huge developing space. On the other side, the listed companies are faced with grim problems of investment and financing during the process of industrialization. Previous literature reviews mostly focused on the

qualitative study on policies of cultural investment and financing [6-8], but rarely adopted static empirical analysis method [9].

Panel Data, obtained from continuous trace of the same individuals in the same group at multiple times, mostly manifest as large number of cross-section unit numbers and small number of time quantum, with the features of time-series data and cross-section data combined. Hsiao pointed out that the application of panel data analysis onto cross-sectional data could control individual heterogeneity, whereas time-series data analysis could lead to less collinearity issues and more degrees of freedom [10]. Moreover, since panel data analysis could help provide more information and individual heterogeneity, the process of an individual's dynamic adjustment, such as the continuity of unemployment and poverty [11], or the relationship between enterprise's investment and financing variation [12], could be well studied. Therefore, models based on panel data are widely applied, including static panel models, dynamic panel data models and panel limited dependent variable models. For dynamic panel data models, the explanatory variables include the lagged components of explained variables, which then lead to the correlation relationship between explained variables and individual effects as well as the endogenous problem. Difference-GMM, which was first proposed by Arellano and Bond in 1991 [13], used second-order lag dependent variables as instrumental variables, substantially improved the estimation efficiency of dynamic panel data models, and effectively solved the endogenous problem. As a result, the effectiveness and consistency of estimation has been dramatically improved. Currently, difference-GMM and system-GMM represent two major forms of GMM models, and the former sets the differential values of explained variables as instrumental variables, so that the endogenous and heteroscedasticity problem could be overcame. However, Wind Meijer's research demonstrated that difference-GMM failed to make full use of sample information, and the problem of week instrumental variables could occur [14]. By contrast, system-GMM could apply differential equations and horizontal equations simultaneously and thus treat lagged variables of differential variables as instrumental variables. As a result, the shortfall of difference-GMM in dealing with small sample bias could be compensated.

Based on the analysis of current investment and financing environment of listed companies in Chinese cultural industries, the present paper chosen those listed companies between year 2006 and 2013 as the sample, took the angle of the dependent relationship between enterprise investment behavior and financing factors, considered the three financing factors explicitly, including the cumulative effect of internal financing and investment, equity financing and debt financing, and applied the system-GMM approach with enterprise scale factors fully took into account. .Overall, the present paper aimed to analyze the different influential effects of financing factors on investment behavior of listed companies in Chinese cultural industries.

1. LITERATURE REVIEW

Literature reviews involved in this paper could be generally categorized as three types: the main focus of the first type is on the capital structure, with the four classical theories as solid theoretical basis for the present paper, whereas the main focus of the second type is on the relationship between investment and financing, with the combined effects of all three financing factors rarely took into account. As to the third type, the main focus is on the cultural industry policies, which mainly rely on qualitative analysis or relevant suggestions rather than quantitative analysis.

1.1 Research on Capital Structure

The MM theory first proposed by Modigliani and Miller lays the basis for capital structure research on modern companies. The theory makes it clear that in a sound financial market, the investment decision is independent of the financing structure, or, in other words, an enterprise's investment behavior is immune to financing factors. However, the actual financing market is not so sound because it is usually affected by the dissymmetry structure of obtained information, and an enterprise's investment behavior is inevitably affected by financing factors. Therefore, the new capital structure theory arises from an expansion of the assumptions made by the MM theory. Jensen and Mackling incorporated the agent cost into the research of capital structure. By doing so, they created the agent theory with financing structure explicitly took into consideration. This theory demonstrates that the choice of financing structure would affect an enterprise's investment behavior and market value by influencing the following three aspects, the incentive effect, the transfer of information, and the control power. Considering the existence of transaction cost, Myers and Majluf established the financing pecking order theory, which states that the cost of external financing is relatively high, and relevant equity financing has some negative effects. Also, an enterprise's financing should follow steps of internal financing, debt financing and equity financing in order. In addition to the classical MM theory and its extensions, many researchers have also studied an enterprise's investment and financing behavior from the perspective of behavioral finance. For example, Baker and Wurgler carried out the first research on the effect of equity financing on capital structure in the context of non-sound market. The research result showed that financing behavior that depends on market opportunities would impose a significant impact on an enterprise's capital structure [15].

1.2 Research on the cultural industry policies

Apart from the above mentioned four classical theories, some international researchers also analyzed an enterprise's financing priorities from the perspectives of internal financing, debt financing and equity financing, and thus arose positive discussions regarding the influence of stock price volatility [16], information dissymmetry [17] and debt contract issues [18]. However, such studies generally failed to take into account the combined effect of all three factors on the investment behavior. Based on the Euler equation, Bond analyzed the sensibility of investment behavior in response to the internal and debt financing, and they used panel data to establish the dynamic investment model that British companies rely on to implement financing strategies [19]. Calamari's took the levels of mercantile paper as the proxy variable of financing restriction to compare the cost difference between external and internal financing, with the finding that internal cash flow of high value-added company could impose significant effect on investment behavior [20]. Sean Cleary discovered that an enterprise's investment decision could directly correlate with many financing factors [21]. Also, by using large sample size and adopting the fixed effect model, his work supported Kaplan and Zing ales' viewpoint that the investment expenditure of an enterprise with less financing constraints was more sensitive to the cash flow arising from internal financing [22]. Viet used panel data of British companies between year 1996 and 2003 to study the interactive relationship between investment decision and enterprise financing, and they proposed a new method to test the effect of enterprise financing factors on investment behavior based on the leverage function [23].

Generally speaking, domestic research on the relationship between investment and financing started late, with western classical theories as the basis and large companies (i.e., manufacturing companies) as the study object. Tong Pan and Lu Zhengfei's empirical results demonstrated that debt ratio could negatively correlated with the scale of an enterprise's investment, and the degree of correlation was affected by risks of such investment and the enterprise itself [24]. Hao Yin and Liu Xing focused on equity financing and investment behavior from the perspective of no-effective market, and they found that the investment behavior of the insider-controlling enterprise tended to expand with the expansion of equity financing scale. Based on the sample statistics data of listed Chinese manufacturing companies, Huang Qianfu and Shen Hongbo found out that debt financing could strongly constrain an enterprise' excessive investment behavior, and the short-term check-and-balance function was easy to identify. Using the panel threshold model, Liu Kangbing studied the interactive relationship between financing constraints and financing uncertainty of listed Chinese manufacturing companies, and they found that with higher level of uncertainty, investment expenditure was more likely to be constrained by financing.

1.3 Research on the relationship between investment and financing

Compared with the abundant literature with the effect of financing factors on an enterprise's investment behavior as the major theme, studies relevant to cultural industries are quite limited. Among a handful of such studies, most focused on relevant policies related to cultural industries, and qualitative analysis was lacking in general. Jones recognized that creative cultural industries have contributed significantly to the economic growth in British, and further suggested that the government should offer more support to improve the capital management mode and establish a more standardized evaluation system of creativity. Keane analyzed the function of creative cultural industries on China's social transformation from the perspectives of the origin, current situation, philosophy and target of such industries, and suggested that the joint effort of national culture policies and entrepreneurs for supporting cultural creative industry is a must. Hua Jian believed that investment strategies of Chinese cultural industries should be formulated according to the characteristics of such industries, the investment level should be scaled up, and the proportion of long-term investment, short-term investment, public investment and business investment should be reasonably determined. Xie Min pointed out that cultural industries could achieve the innovation of the investment and financing mode by changing risk type and pay off structure, as well as introducing stakeholders and risk measurement methods.

In recent years, a few scholars brought the concept of panel data into their research. For example, Sun Jianjun introduced the unbalance static panel data, and conducted research on investment and financing behavior of listed Chinese companies from the perspectives of financing behavior, equity structure and asset specificity. The results suggested that government capital should be the core of such investment and financing mode.

2. THE DESIGN OF FINANCING-INVESTMENT MODEL FOR LISTED CHINESE COMPANIES IN CULTURAL INDUSTRIES

2.1 Sample selection and variable definition

Considering the reform influence of non-tradable shares in 2005, annual data between year 2006 and 2013 for all the listed A-share companies in Shenzhen and Shanghai in cultural industries are used for analysis. To ensure the validity of the entire dataset, data collected from the following companies are excluded for further analysis: (1) companies that are listed after January 1, 2009; (2) listed companies that are not stably operated with ST and PT; (3)

companies with missing data. After the filtering process, a total of 20 listed companies in cultural industries are used as the research object, with 9 companies from Shenzhen market, 11 companies from Shanghai market, and the annual observed values of a total of 107 enterprises. Because listed Chinese companies in cultural industries generally start late, the panel data belong to unbalance panel category due to the missing of 1-3 year data, all companies' financial data are from CSMAR data base.

How to precisely define and measure investment behavior of list companies is the key part of this paper.. Since most literature regards capital investment as investment in fixed assets, listed companies in cultural industries are fixed assets based, and other capital investment ratio of listed companies is extremely low (i.e., near zero). The present paper is set to use fixed assets investment to measure investment behavior of listed Chinese companies in cultural industries. Specifically, fixed asset investment is defined as the ratio of net fixed assets to the year-end total assets. By doing so, the effect of enterprise scale can be eliminated. Also, the net fixed assets refer to the sum of project materials, original value of fixed assets, and ongoing construction projects.

In the present paper, financing factors are divided into internal financing and external financing, with the latter further divided into debt financing and equity financing. Also, net operating cash flow, current liabilities and shareholders' rights and interests of the parent company in the balance sheet are used to describe the three financing factors in the present paper. The financing factors variables are also divided by the year-end total assets to eliminate the effect of enterprise scale on financing divides. Moreover, an enterprise's investment decision mainly depends on the initial financing situations but weakly relates to current financing situations. This paper also introduces the three financing factors as explained variables.

According to some research results, the addition of some control variables could be helpful. The present paper finds out that factors like enterprise scale, growth ability, profit ability, investment opportunity and annual virtual variables could affect the investment behavior of listed companies. Through regression and comparison analysis, it is founded that enterprise scale at current phase and the lag phase, profit ability and investment opportunity could all significantly affect the investment behavior of listed companies. Therefore, we include the three variables and the lag phase variable as the control variables to amend the system, although they don't represent the major focus of our research paper.

Involving variables in this paper are defined as shown in table 1.

Table.1: Definitions of research variables

Symbol	Variable Name	Computing Method
I	Capital Expenditure	Net Fixed Assets
K	Capital Stock	Total Assets at Year End
I/K	Investment Scale	Net Fixed Assets / total assets at year end
IF/K	Internal Financing	Net operating cash flow / Total Assets at Year End
DF/K	Debt Financing	Current Liabilities / Total Assets at Year End
EF/K	Equity Financing	Interests Belonging to the Parent Company Shareholders/ Total Assets at Year End
SIZE	company scale	Napierian Logarithm of Total Assets at Year End
EBIT	Profit Ability	Earnings Before Interest and Tax / Total Assets at Year End
Q	Investment Opportunity	Market Value / Total Assets at Year End

2.2 Construction of dynamic econometric models

Financing activities provide important financial support for the investment behavior of listed companies. Financing factors of listed companies could be generally divided into internal financing and external financing, with the latter further divided into debt financing and equity financing. On one hand, an overall consideration of the effect of the three factors on investment behavior could help further explore the relationship between investment and financing of listed companies. On the other hand, investment activities always display the cumulative effect since previous investment behavior would affect later investment behavior. It is difficult to define and measure the variables when used to figure out the influence of such cumulative effect on investment behavior, but the introduction of lagged variable of investment scale can effectively solve this problem. Given this, the present paper implements the dynamic panel regression model that contains explained variable at lag one phase as shown below:

$$I_{it} = \alpha I_{i,t-1} + \beta X_{it} + \varepsilon_{it} \quad (1)$$

I_{it} refers to investment scale of the cultural industry list company i in the year t, $I_{i,t-1}$ refers to the lag one phase variable; X_{it} refers to the vector of a group of variables, which contains three financing variables, including

internal financing, debt financing and equity financing; disturbance term $\varepsilon_{it} = \mu_i + v_{it}$, and ε_{it} refers to the unobservable individual effect, which is used to control the unobservable and no time-varying characteristics; v_{it} refers to stochastic error term.

The lag one phase variable $I_{i,t-1}$ is related to the disturbance term μ_{it} , and the endogenous problem exists in the model. Under such circumstances, the ordinary least squares estimate would rise too high, and the fixed effects estimator would decline too low. Given this, this paper adopts the system-GMM established by Arellano, Bover, Blundell and Bond to evaluate model (1).

On the basis of model (1), the established financing-investment model with added control variables is shown as below:

$$\frac{I_{it}}{K_{it}} = \alpha \frac{I_{i,t\text{-}1}}{K_{i,t\text{-}1}} + \beta_1 \frac{IF_{i,t\text{-}1}}{K_{i,t\text{-}1}} + \beta_2 \frac{DF_{i,t\text{-}1}}{K_{i,t\text{-}1}} + \beta_3 \frac{EF_{i,t\text{-}1}}{K_{i,t\text{-}1}} + \beta_4 SIZE_{it} + \beta_5 SIZE_{i,t\text{-}1} + \beta_6 EBIT_{it} + \beta_7 EBIT_{i,t\text{-}1} + \beta_8 Q_{it} + \beta_9 Q_{i,t\text{-}1} + \mu_i \quad (2)$$

$\mathbf{i = 1,2,\cdots,N}$ refers to different list companies in cultural industries; $t = 1,2,\cdots,T$ refers to different time period, $t-1$ refers to the lag one phase of variable, and μ_i refers to the disturbance term.

3. ECONOMETRIC TEST AND ANALYSIS

3.1 Statistic Analysis

In order to classify the scale of sampled enterprises, this paper sorts the average values of year-end total assets of all sampled listed companies between year 2006 and 2013, with the first 30% ones treated as large listed companies, and the rest as small or medium listed companies. As a result, 6 of 20 sampled companies belong to large listed companies, whereas 14 of 20 sampled companies belong to small or medium listed companies. Descriptive statistics of every variable is shown in Table 2:

Table .2: Descriptive statistic of variables

Variable	Whole Sample（N=107）			Large（N1=36）			Small and Medium（N2=71）		
	average value	median	standard deviation	average value	median	standard deviation	average value	median	standard deviation
I/K	0.263	0.221	0.171	0.275	0.273	0.118	0.258	0.187	0.193
IF/K	0.086	0.083	0.086	0.071	0.063	0.061	0.093	0.092	0.079
DF/K	0.251	0.230	0.127	0.270	0.244	0.125	0.242	0.230	0.127
EF/K	0.632	0.625	0.188	0.528	0.537	0.154	0.685	0.701	0.182
SIZE	3.145	3.001	0.949	4.163	4.166	0.540	2.628	2.770	0.644
EBIT	0.061	0.058	0.048	0.066	0.062	0.030	0.058	0.056	0.055
Q	2.218	2.027	1.141	2.113	1.808	0.967	2.271	2.079	1.119

Correlation coefficients and respective significance level of each variable are listed in Table 3. The results demonstrate that the three selected financing factor variables are all significantly correlated with the investment scale, and the correlation relationship among explained variable is rather weak. Apart from equity financing variable, other financing variables are all positively correlated with the investment scale.

Table.3: Correlation relationship among variables

	I/K	IF/K	DF/K	EF/K	SIZE	EBIT	Q
I/K	1.000						
IF/K	0.274***	1.000					
DF/K	0.337***	0.142	1.000				
EF/K	-0.504***	-0.052	-0.748***	1.000			
SIZE	0.201**	-0.039	0.096	-0.413***	1.000		
EBIT	-0.147	0.372***	-0.020	0.039	0.083	1.000	
Q	-0.118	0.265***	-0.140	0.237**	-0.289***	0.282***	1.000

*Note: ***, ** and * respectively refers to the significance level at 1%, 5% and 10%.*

3.2 Empirical test and analysis

Panel data selected in this paper-belong to the category of unbalance panel due to the missing of 1-3 year data. .Also, cross-section unit numbers are larger than time-series span in the panel data. With the cumulative effect of dependent variables and the existing endogeneity problem took into account, this paper adopts system-GMM approach to estimate relevant model parameters. To ensure the validity of system-GMM, this paper applies

Arellano-Bond method to test colinearity among variables, and applies Sargan to test over-identifying instrumental variables. The results of dynamic panel system-GMM estimation matrix for large, medium and small listed companies are presented in Table 4. It can be seen from this table that Wald statistic values stay at the 1% significant level regardless of the size of studied companies. Obviously, the model is valid with high level of fitness. Meanwhile, the result of Sargan test also affirms that the null hypothesis of non-existing over-identifying is invalid. Therefore, all instrumental variables are valid regardless of the size of studied companies. Additionally, Arellano-Bond test shows that in the context of small or medium listed companies with whole sample size, model (2) meets the assumption that disturbance terms of system-GMM are only found in the first-order autocorrelation but not in the second-order autocorrelation, and all disturbance terms are not correlated.

Table.4: The results of dynamic panel system-GMM

	Whole Sample	Large size	Small and medium size
L.(I/K)	0.884***	0.586**	0.958***
	(7.01)	(2.43)	(4.99)
L(.IF/K)	-0.219**	-0.184	-0.235*
	(-2.00)	(-1.04)	(-1.73)
L.(DF/K)	0.399**	-0.140*	0.863**
	(2.06)	(-1.66)	(2.89)
L.(EF/K)	0.526*	0.0138	0.994***
	(1.82)	(0.08)	(2.82)
SIZE	0.0338	-0.131**	0.0452
	(0.94)	(-2.55)	(0.92)
L.SIZE	0.0391	0.0827	0.0129
	(0.79)	(1.83)	(0.43)
EBIT	-0.111	0.0335	-0.219
	(-0.29)	(0.04)	(-0.47)
L.EBIT	-0.808*	-0.0495	-1.060**
	(-1.75)	(-0.16)	(-1.98)
Q	0.00324	0.00767	0.00279
	(0.32)	(0.55)	(0.24)
L.Q	-0.0108	0.00235	0.000311
	(-1.18)	(0.21)	(0.02)
_cons	-0.552*	0.351	-0.957**
	(-1.73)	(0.83)	(-2.75)
N	87	30	57
Wald	197.99***	108.78***	1845.44***
Sargan	0.1034	0.624	0.513
AR(1)	0.011	0.178	0.097
AR(2)	0.268	0.466	0.338

*Note: ***,** and * respectively refers to the significant level at 1%,5% and 10%; Value z is in brackets; standard error is robust standard error after the adjustment.*

Empirical results are illustrated as bellow:

(1) For all three situations, the variables of Investment scale at lag one phase are all beyond the 5% significant level, with the values of all estimated coefficients as positive. This demonstrates that investment behavior at lag one phase is positively correlated with the current investment behavior, which suggests that investment behavior of listed companies in cultural industries displays a significant cumulative effect, and investment decisions of the subsequent two years are of significant systematicness and continuity. Also, the regression coefficient of dynamic model is 0.958 for small or medium listed companies, which is significant at the 1% level. Under such circumstances, current investment behavior is more likely to be significantly affected by previous investment behavior.

(2) For small or medium listed companies, the estimated coefficient of internal financing at lag one phase in the context of whole sample size is negative at the 10% significant level, which demonstrates that investment scale does not expand automatically with an increase of internal financing ratio. Although internal financing is of low cost, low risk and strong independence, it also has imposed some negative effect on investment behavior. The cause of such results may be due to the small sample size and the little retained benefit of listed companies in the cultural industries. Also, cash flow arising from business activities might fail to provide sufficient fund support for the investment behavior of listed companies.

(3) The estimated coefficients of debt financing and equity financing at lag one phase are positive, which demonstrates that an increase of the ratio of debt financing and equity financing is positively correlated with the investment scale of listed companies, and the fund demand of listed companies in cultural industries is met with an increase of external financing. Therefore, such observed phenomena is not due to the expansion of enterprise scale or the development of modern technology, but is related to the current situations that financing supporting policies and internal financing practice could not meet the enterprise's fund demand. Also, the estimated coefficient is 0.994 for small or medium listed companies in the context of equity financing at lag one phase, which is significant at the

1% level. Clearly, small or medium listed companies display some preference over equity financing practice.

(4) For all the control variables, apart from the fact that EBIT at lag one phase is negatively correlated with investment scale, the correlation coefficients of all other control variables are all positive and statistically insignificant. This suggests that the improvement of profit ability does not necessarily contribute to the expansion of investment scale of listed companies in cultural industries, and the specific reasons remain for further research and discussion. Also, the effect of enterprise size and investment opportunity on investment scale is uncertain.

(5) Compared with the whole sample, estimated coefficient values of investment cumulative effect variables and financing factor variables are relatively large for small and medium listed companies, which demonstrates that investment behavior of small and medium listed companies are more likely to be affected by financing factors and investment cumulative effect. It also conforms to the characteristic of strong investment momentum for small and medium listed companies during the initial stage. Due to its great development space and strong momentum, the demand for funds from financing would increase and the continuity of investment strategy would appear strong.

CONCLUSION

By using the unbalanced dynamic panel data of Chinese listed companies in cultural industries between year 2006 and 2013, the present paper applies the dynamic panel data model, and empirically tests the combined effects of financing factors and investment cumulative effect on Chinese listed companies in cultural industries by taking the angle of specifying the relationship between enterprise investment behavior and financing factors. Compared with the traditional OLS estimation using fixed effect model and random effect model, the present papers adopts the system-GMM that takes the endogenous problem of investment scale variables at lagged phase into fully account. Thus, our approach could compensate the shortage of difference-GMM instrumental variables, making the empirical results more accurate and trustable. The results demonstrate that investment behavior has a cumulative effect, and investment behavior at lag one phase has a significant promoting effect on the current investment behavior. Overall, Chinese listed companies in cultural industries are short of internal fund, and they rely heavily on external financing. As a consequence, the investment behavior is subjected to internal financing, and both debt financing and equity financing could impose a positive promoting effect on investment behavior, although the latter displays a more significant impact. Moreover, small and medium companies display preference to equity financing in external financing. Although the effect of enterprise scale and investment opportunity of listed companies in cultural industries is still uncertain, the profit ability could impose some negative effect on the investment behavior.

The above research conclusions could help enrich the study content concerning the relationship between financing factors and investment behavior, and provide some policy implicative functions: Firstly, Chinese listed companies in cultural industries should put more emphasis on the continuity and systematicness in investment, formulate long-term investment plans, take advantage of the positive accumulative effect, and reduce the negative effect of investment.

Secondly, Chinese listed companies in cultural industries should optimize the management of internal cash flow, and improve the internal cash flow yield and the internal financing efficiency. Although internal financing can not completely satisfy the fund demand of investment behavior, and has some inherent negative effect, it has the advantages of low cost, low risk and strong independence. In terms of debt financing, it has a significant promoting effect on the investment behavior of listed companies in cultural industries, and bank credit has become the main vector of debt financing for Chinese listed companies in cultural industries. However, since cultural industries are known for their high financing risk and little mortgage assets, this inevitably causes the difficulty of bank financing. Therefore, the government should actively reform cultural assets evaluation system and improve the financing environment so that the source of cultural credit and credit amount could be expanded. Meanwhile, equity financing in Chinese market is preferred by small and medium listed companies in cultural industries due to its chronicity, low cost and burden free features. Although the investment of listed companies in cultural industries mainly relies on external financing, the unstable features and high financial risks of external financing deserve our attention. It is necessary to expand an enterprise’s capital scale and fund source so that the equity structure and equity financing system could be promoted.

Lastly, it is of vital importance to ensure the smoothness and diversification of financing channel for optimizing investment behavior and improving financing efficiency. Enterprises should make reasonable investment decisions and choose appropriate financing structure on the basis of the scale and the stage of listed companies in cultural industries.

REFERENCES

[1] Modigliani Franco,Miller Merton H. *The American Economic Review*. V48,n3, p 261－297,**1958.**
[2] Jensen Michael C. ,Meckling William H. *Journal of Financial Economics*, v.1, n.3, pp.305-360, 25, **1976**.
[3] Myers Stewart C. ,Majluf Nicholas S. *Journal of Financial Economic*, v 53, n 13, p 187-221, **1984**.
[4] Huang Qianfu, Shen Hongbo. *Journal of Financial Research*, vol.11, no.9, pp.143-155, **2009**.
[5] Liu Kangbing, Shen Pu, Elmer Sterken. *Nankai Economic Studies*, v. 4, p. 86-97, **2011**.
[6] Jones Peter,Comfort Daphen,Eastwood Ian,Hillier David. *Management Research News*, Vol.27, n.11, pp.134-145, **2004**.
[7] Hua Jian. *Journal of Shanghai Academy of Social Sciences*, v.2, p.139-147, June **2002**.
[8] Xie Min. *Journal of Shanghai Finance*, v.8, p. 26-29, **2010**.
[9] Sun Jianjun, Wang Hao, Zhu Hongjun. *Jianghai Academic Journal*, v 5, n 3, p 90-95, **2011**.
[10] Hsiao Cheng. *Econometric Reviews*, v.4, n.1, p. 121-174, **1985**.
[11] Ashenfelter Orley,Solon Gary. *The American Economic Review*, v.72, n.2, p. 233-236, **1982.**
[12] Carpenter Robert E,Fazzari Steven M,Petersen Bruce C. *The Review of Economics and Statistics*, v.80, n.4, p. 513-519, **1998.**
[13] Arellano Manuel,Bond Stephen. *The Review of Economic Studies*, v.58, n.2, p. 277-297, **1991.**
[14] Wind Meijer Frank. *Journal of Econometrics*, v.126, p. 25-51, **2005.**
[15] Baker Malcolm,Wurgler Jeffrey. *The Journal of Finance*, v.57, n.1, p. 1-32, **2002.**
[16] Barro Robert. *The Review of Financial Studies*, v.3, n.1, p. 115-131, **1990.**
[17] Whited Tonim. *The Journal of Finance*, v.47, n.7, p. 1245-1260, **1992.**
[18] Chqfq Sudheer,Roberts Michaelr. *The Journal of Finance*, v.113, n.6, p. 2085-2121, **2008.**
[19] Bond Stephen. *Review of Economics Studies*, v.61, n.2, p. 197-222, **1994.**
[20] Calomiris Charles W. Hubbardr Glenn. *The Journal of Business*, v.68, n.4, p. 443-482, **1995.**
[21] Sean Cleary. *The Journal of Finance*, v.54, n.2, p. 673-692, **1990.**
[22] Kaplan Steven N,Zingales Luigi. *Quarterly Journal of Economics*, v.12, n.2, p. 169-215, **1997.**
[23] Viet A. Dang. *Journal of Finance & Accounting*, v.38, n.1, p. 225-258, **2011.**
[24] Tong Pan, Lu Zhengfei. *Journal of Economic Research*, v.5, n.2, p. 75-84, **2005.**