Frontiers in Business, Economics and Management
ISSN: 2766-824X | Vol. 6, No. 1, 2022

A Study on the Impact of Government Subsidies on Business Start-Up Performance

Jing Fan[1, 2, *]

[1]Hunan University of Arts and Science, Changde, Hunan, 415000, China

[2]Philippine Christian University Center for International Education, Manila, 1004, Philippines

* Corresponding author: Jing Fan (Email: 782381586@qq.com)

Abstract: Based on the data of A-share listed companies in Shanghai and Shenzhen from 2015 to 2020, the data were initially compiled by using EXCEL2020, and econometric analysis was conducted by using Stata15.1 and Spss23.0. The study investigates whether government subsidies can promote the innovation performance of enterprises, and constructs the internal corporate governance index through principal component analysis to study its moderating effect on government subsidies and enterprise innovation performance. The results of the study show that government subsidies have a significant positive impact on the innovation performance of enterprises; improvement in the level of internal corporate governance can promote the positive development of the relationship between government subsidies and innovation performance. The higher the level of internal corporate governance, the more efficient the use of government subsidies. Thus, the government should improve corporate innovation subsidies, and companies should establish clear information disclosure systems and better internal governance.

Keywords: Government Grants, Corporate Innovation Performance, Internal Corporate Governance.

1. Introduction

China's economic development has now entered a new normal, with economic growth transforming from resource-consuming "sloppy growth" to technological innovation "intensive growth". Looking back at the history of China's scientific and technological development, there are countless achievements such as the two bombs and one star, the Three Gorges Project, manned spaceflight and Beidou-3, which have greatly enhanced China's international status. At the same time, it must also be soberly recognised that there are still some areas where China's independent innovation capability is not strong, and some key core technologies are in the hands of developed countries. In order to break away from technological dependence on other countries in certain fields as soon as possible, mobilising and stimulating the relevant enterprises to carry out scientific research and innovation is one of the paths. However, the ability and willingness of Chinese enterprises to engage in innovative activities is currently limited. In order to promote corporate innovation, the government has launched a series of subsidy policies. By collating relevant data from the China Stock Market & Accounting Research Database (CSMAR) database, it was found that government subsidies provided to A-share listed companies in Shanghai and Shenzhen amounted to RMB 163.123 billion in 2020. Some scholars have found that government subsidies can release signals of the government's role to the outside world, and market investors give higher investments to enterprises by virtue of their trust in the government's assessment, which can alleviate corporate financing constraints[1]. However, the internal governance of some firms is flawed, and government subsidies are often used to increase executive compensation, for example, without increasing the ability and willingness of firms to engage in innovation. Some scholars have found that government subsidies can make firms dependent on policy and thus fail to promote corporate innovation[2]. At the same time, when governments use direct subsidies to firms, the role of the market may be inhibited, leaving the economy full of rent-seeking behaviour[3]. With government subsidies, firms may engage in 'strategic innovation' rather than 'substantive innovation' [4]. It is still a question of whether government subsidies are "not what you want" or "what you want" in terms of incentivising innovation performance, and whether good corporate governance mechanisms can help to enhance the effectiveness of government subsidies. This study uses principal component analysis to construct an internal corporate governance index to firstly empirically examine the impact of government subsidies on corporate innovation performance, and then to examine the moderating effect of internal corporate governance on the relationship between government subsidies and corporate innovation performance, and to suggest relevant countermeasures in order to provide evidence to support the further role of government subsidies in corporate innovation performance.

2. Object and Methodology

2.1. Research hypothesis

Corporate innovation has a strong spillover effect, and this characteristic will make it difficult for innovators to enjoy the R&D results of the company exclusively, thus weakening the incentive for companies to carry out innovative activities. At the same time, innovation activities are highly risky and uncertain, investors are unable to make rational judgments on the innovation results of enterprises, and enterprises are unwilling to disclose more information due to the confidentiality of their innovation projects, which results in information asymmetry between investors and enterprises, and enterprises thus face credit discrimination and financing constraints, and it may be difficult to sustain the innovation activities of enterprises with internal funds alone. If firms are motivated to engage in innovation on their own, the investment of R&D resources will fall below the socially desirable level [5]. This is where government financial support is needed to make the costs and benefits paid by firms as

balanced as possible. Some scholars have found that government innovation subsidies are beneficial to innovation in both current and lagged periods, and that government subsidies are significantly less effective in promoting innovation in private environmental firms than in state-owned environmental firms[6]. Some scholars have empirically examined the relationship between government subsidy policies and firms' innovation performance using A-share listed companies in Shanghai and Shenzhen, and found that government subsidies help firms to improve their innovation performance[7]. By giving financial support to enterprises, the government not only reflects the strategic direction of the country, but also conveys the message to the market that the enterprises have good development prospects. This alleviates the problem of information asymmetry between enterprises and the outside world, which in turn attracts external capital investment and enriches the R&D resources of enterprises, thus stimulating their motivation to innovate.

Based on the above analysis, Hypothesis I: Government grants promote innovation performance of firms is proposed.

A government grant is a non-reimbursable financial contribution from the government to an enterprise, initially intended to provide financial support to enhance the performance of the enterprise. However, due to the imperfect monitoring mechanism of government subsidies and the information asymmetry between the government and enterprises, the management of a company is likely to use its information advantage and control power to change the use of government subsidies for its own personal benefit [8]. Some scholars have found that large shareholders of firms with high equity concentration have a greater desire to control the firm, which leads to the innovative performance of government grants being affected [9]. Internal governance is a corporate mechanism used to discipline the behaviour of shareholders and management and to address agency problems between major and minor shareholders, and between shareholders and management. Studies have shown that good internal corporate governance enables firms to consider both short-term and long-term goals and facilitates the establishment of a long-term commitment to technological innovation [10]. Effective internal corporate governance enables enterprises to operate transparently, thus ensuring that government subsidies are used exclusively, and also reduces information asymmetry between the government and the enterprises, thus improving the efficiency of the use of government subsidies. Therefore, in the critical period of transforming the development mode and optimising the economic structure, as an important force in promoting China's economic and social development, enterprises should not only focus on the innovation capability of their projects, but also on their own internal governance level to maximise their innovation performance and ensure long-term development.

Based on the above analysis, Hypothesis II is proposed: internal corporate governance positively moderates the relationship between government grants and corporate innovation performance.

2.2. Research objects

This study selects A-share listed companies in Shanghai and Shenzhen from 2015 to 2020 as the object of empirical research, and in order to ensure the accuracy and completeness of the relevant data and eliminate the influence of outliers on the empirical results, the raw data are scrubbed: firstly, banks and other financial sectors were excluded due to the special nature of the financial sector; secondly, samples with missing relevant data were excluded; thirdly, ST and *ST companies were excluded; fourthly, continuous variables were subjected to 1% up and down tailing to eliminate the influence of extreme values. Fourthly, the continuous variables are trimmed by 1% to eliminate the effect of extreme values, resulting in a sample of 10,367. The number of patent applications for financial data used in this study was obtained from the Chinese Research Data Services Platform (CNRDS) database, while all others were obtained from the China Stock Market & Accounting Research Database (CSMAR) database.

2.3. Research methods

2.3.1. Core variables

The first is innovation performance (*IP*). There are currently two main measures of innovation performance, one using the number of patent applications as a proxy, and the other using the number of patents granted as a proxy. Some scholars believe that the number of patents granted may be affected by the uncertainty of human factors such as audit and judgment, while the number of patent applications can reflect the willingness and level of technological innovation of enterprises, so this study uses the number of patent applications as a measure of innovation performance [11]. Second, government subsidies (*Lngov*). Government subsidies given to enterprises range from direct government subsidies such as earmarked funds to indirect government subsidies such as export tax rebates. As not all government grants are related to business innovation. Therefore, this study uses keywords to filter the breakdown of government grants. The filtered keywords include research, development, R&D, innovation, science and technology, technology, star and fire, torch, 863, invention, copyright and copyright, etc. Government grants containing these keywords are considered as innovation-related grants and are aggregated as government grants for this study. To reduce the effect of endogeneity, government grants with a one-period lag were used as explanatory variables. Third, control variables. By referring to the relevant literature, the control variables in this study are: firm size (*Size*), measured by taking the natural logarithm of total assets; capital intensity (*Ci*), measured by taking the natural logarithm of net fixed assets divided by the number of employees; gearing ratio (*Lev*), measured by dividing total liabilities by total assets; capital position (*Cash*), measured by dividing net cash flow from operating activities by total assets The first is the return on equity (*Roe*), measured as net profit divided by shareholders' equity; and the fixed effects variables Year and Industry. Fourth, the internal corporate governance index (*Score*). Internal corporate governance is a reflection of a company's comprehensive level of governance and consists of a series of monitoring and coordination mechanisms; therefore, it is often difficult for a single indicator to reflect the true state of a company's governance level. In this study, a total of nine indicators on board and management and executive shareholding ratio, shareholding concentration, shareholding checks and balances, board size, proportion of independent directors, executive remuneration and two-job integration were selected to obtain the internal corporate governance index using principal component analysis through Spss 23.0 econometric software [12], and KMO and Bartlett's tests were conducted (Table 1).

Table 1. KMO and Bartlett's test

KMO Sampling	Bartlett's test		
Quantity of suitability	Approximate cardinality	Freedom	Significance
0.640	109642.044	36	0.000

The KMO value of 0.640 was greater than 0.5 and the p-value corresponding to the Bartlett test was significantly less than 0.001, therefore, factor analysis could be done. The results of the principal component extraction are shown in Table 2. Taking into account the correlation between different indicators, in order to facilitate the extraction of the intrinsic information between the indicators and the interpretation of the meaning of the factors, the factors were rotated in this study, and the matrix of components after the rotation was listed. As can be seen from Table 3, only a few factors in each group had large indicator loading coefficients. The high loading indicators for the principal factors were named (Table 4). After extracting the common factors, the factor scores were calculated based on the extracted common factors. Based on the factor scores of the above four main components, the variance contribution of each main factor was divided by the total variance contribution as the weight and weighted together to arrive at a comprehensive governance index of the level of the internal governance structure of the company, calculated as follows:

$$Score=0.3422/0.7964\times Z_1+0.1878/0.7964\times Z_2+0.1531/0.7964\times Z_3+0.1133/0.7964\times Z_4$$

2.3.2. Model Design

First, Model I is constructed to examine the relationship between government grants and firms' innovation performance.

$$IP_{i,t}=a_0+a_1Lngov_{i,t-1}+a_2Lev_{i,t-1}+a_3Roe_{i,t-1}+a_4Cash_{i,t-1}+a_5Ci_{i,t-1}+a_6Size_{i,t-1}+\sum Year+\sum Industry+\varepsilon \quad (1)$$

where: $IP_{i,t}$ is the innovation performance of firm i in year t, measured by the number of patent applications; $Lngov_{i,t-1}$ is the result of taking the natural logarithm of government grants in year $t-1$; *Lev*, *Roe*, *Cash*, *Ci*, *Size*, *Year* and *Industry* are control variables, denoting capital structure, return on net assets, capital intensity, cash position, firm size, year and industry respectively. size, year and industry, respectively. If the coefficient $a1$ of government grants ($Lngov_{i,t-1}$) is significantly positive, it proves that there is a positive relationship between government grants and innovation performance.

Table 2. Results of principal components extraction

Ingredients	Initial Eigenvalue			Extraction of sum of squares of loads			Sum of squared rotating loads		
	Variance	Cumulative / %	Total	Variance	Cumulative / %	Total	Variance	Cumulative / %	Total
1	24.218	24.219	3.080	34.219	34.219	3.080	32.108	32.108	2.890
2	18.777	52.995	1.690	18.775	52.996	1.690	18.896	51.005	1.701
3	15.313	68.309	1.375	15.313	68.308	1.378	17.212	68.219	1.549
4	11.327	79.635	1.019	11.327	79.634	1.019	11.418	79.635	1.028
5	9.358	88.994	0.842						
6	5.295	94.287	0.476						
7	3.219	97.507	0.290						
8	2.438	99.946	0.220						
9	0.054	100.000	0.005						

Table 3. Component and coefficient matrices after rotation

Variables	Component Matrix				Coefficient Matrix			
	1	2	3	4	1	2	3	4
Two jobs in one	-0.485	0.033	0.257	-0.377	-0.167	0.055	0.131	-0.389
Board size	-0.149	-0.018	0.846	0.113	0.034	-0.028	0.554	0.090
Executive Compensation	-0.106	0.042	0.096	0.910	-0.005	0.010	0.034	0.883
Percentage of independent directors	0.015	-0.030	-0.865	0.054	-0.077	0.006	-0.582	0.072
Board shareholding	0.942	0.099	-0.040	-0.125	0.333	-0.005	0.068	-0.095
Executive shareholding ratio	0.908	0.008	-0.080	0.073	0.330	-0.060	0.036	0.100
Management shareholding	0.940	0.118	-0.040	-0.127	0.331	0.007	0.066	-0.097
Concentration of shareholding	0.009	-0.923	0.008	0.027	0.072	-0.557	0.034	0.046
Degree of shareholding checks and balances	0.152	0.907	0.025	0.063	-0.005	0.533	0.003	0.046

Second, Model II was constructed to test the moderating effect of internal corporate governance on government grants and firms' innovation performance.

$$IP_{i,t}=a_0+a_1LnGov_{i,t-1}+a_2Score_{i,t-1}+a_3Lngov_{i,t-1}\times Score_{i,t-}$$

$$_1+a_4Lev_{i,t-1}+a_5Roe_{i,t-1}+a_6Cash_{i,t-1}+a_7Ci_{i,t-1}+a_8Size_{i,t-1}+\sum Year+\sum Industry+\varepsilon \quad (2)$$

where: $IP_{i,t}$ is the innovation performance of firm i in year t, measured by the number of patent applications; $Lngov_{i,t-1}$ is the result of taking the natural logarithm of government grants in year $t-1$; and *Score* is calculated according to principal component analysis. Because there is interaction in the model, the interaction is decentralised to avoid the effect of multicollinearity. If the coefficient a_3 of the interaction term ($Lngov_{i,t-1}\times Score_{i,t-1}$) between government grants and internal corporate governance is significantly positive, it indicates that internal corporate governance positively moderates the relationship between government grants and innovation performance.

Table 4. Principal component naming

Main Factor	Primary factor naming	High load indicator
F_1	Board, executive and management incentives	Board, executive and management shareholding ratios
F_2	Shareholding structure	Shareholding concentration, shareholding checks and balances
F_3	Board Staffing	Board size, proportion of independent directors
F_4	Short-term incentives for executives	Two jobs in one, executive remuneration

3. Results and Analysis

3.1. Statistical analysis and discussion

Descriptive statistical analysis of the sample data yielded descriptive statistics for the main variables (Table 5). From Table 5, it can be seen that the minimum value of innovation performance (*IP*) is 0, the maximum value is 7780, the median is 3 and the mean is 33.444, indicating that innovation performance varies greatly between enterprises. The natural logarithm of government grants (*Lngov*) has a mean value of 15.983 and a standard deviation of 1.865, indicating that there is a large difference in the amount of government grants received by each company. The internal governance index (*Score*) has a mean value of -0.022 and a median value of -0.115, which indicates that internal governance needs to be improved, and the large standard deviation of 0.540 reinforces the need to examine this indicator. The minimum value of Lev is 0.008 and the maximum value is 1.352, indicating that there is a large variation in the solvency of companies; the minimum value of Roe is -20.737, indicating that some companies do not create value for shareholders; the maximum value of Cash is only 0.661, indicating that companies in general do not have a strong ability to create cash. The median of the other control variables such as capital intensity (*Ci*) and firm size (*Size*) are roughly equal to the mean, indicating that these variables are normally distributed, suggesting that these financial indicators tend to be concentrated, with fewer firms at either end of the spectrum.

Table 5. Descriptive statistics

Variable name	Observations	Average	Standard deviation	Median	Minimum value	Maximum value
IP	10367	33.44	244.504	3.000	0.000	7780.00
Lngov	10367	15.983	1.865	16.064	6.215	23.115
Score	10367	-0.022	0.540	-0.115	-1.800	2.077
Lev	10367	0.410	0.206	0.396	0.008	1.352
Roe	10367	0.063	0.310	0.670	-20.737	14.775
Cash	10367	0.045	0.084	0.045	-4.270	0.661
Ci	10367	12.519	1.151	12.504	4.835	19.233
Size	10367	7.691	1.240	7.605	1.946	13.207

3.2. Regression analysis results and discussion

3.2.1. Government subsidies affect firms' innovation performance

Model I was used to regress the relationship between government subsidies and firm innovation performance and the regression results were obtained (Table 6). The regression results of Model I in Table 6 show that the regression coefficient of government subsidies (*Lngov*) is 11.286 and is significant at the 1% level, indicating that government subsidies do help to promote the innovation performance of firms, indicating that Hypothesis I is valid. From the regression results of the control variables, the coefficient of gearing (*Lev*) is significantly negative at the 1% level (-47.119), indicating that the higher the gearing of a firm is, the less conducive to innovation, while the coefficients of other control variables such as return on net assets (*Roe*), cash capacity (*Cash*), capital intensity (*CI*) and firm size (*Size*) are all significantly positive, indicating the coefficients of the other control variables such as Roe, Cash Capacity, Capital Intensity (*CI*) and Firm Size (*Size*) are all significantly positive, indicating that higher earnings, cash abundance, capital intensity and size are more conducive to innovation.

3.2.2. The relationship between internal corporate governance and government grants and innovation performance

Model II was used to test whether the level of internal corporate governance and its interaction with government grants had an impact on innovation performance. Model II introduces an indicator of the level of internal corporate governance and its interaction with government subsidies

based on Model I. The results of the regression show that the R^2 of Model II is larger than the R^2 of Model I, indicating that the explanatory power of the model is stronger with the inclusion of corporate governance variables. The coefficient of government subsidies (*Lngov*) is significantly positive at the 1% level (13.423), the level of internal corporate governance (*Score*) is significantly positive at the 1% level (26.230) and the interaction term (*Lngov* x *Score*) is also significantly positive at the 1% level (25.395), indicating that the level of internal corporate governance has a significant positive moderating effect on the positive relationship between government subsidies and innovation performance. This suggests that the positive relationship between government subsidies and innovation performance is significantly moderated by the level of internal governance, i.e. the higher the level of internal governance, the more significant the incentive effect of government subsidies on firms' innovation capability. The control variables are all significant at the 1% level and do not show any significant change from Model I, further indicating that the findings of this study are relatively robust.

Table 6. Robustness test analysis of regression results

Variables	Model I	Model II	Replacement Innovation Performance Model I	Replacement Innovation Performance Model II
Lngov	11.286***(7.15)	13.423***(8.45)	14.143***(9.39)	15.108***(9.92)
Lev	-47.119***(-3.25)	-43.456***(-2.99)	-49.801***(-3.60)	-48.772***(-3.50)
Roe	24.784***(3.33)	22.555***(3.05)	18.636***(2.63)	17.704**(2.50)
Cash	104.348***(3.59)	93.376***(3.23)	55.581**(2.00)	50.921*(1.84)
Ci	11.058***(4.33)	12.810***(5.02)	13.737***(5.64)	14.233***(5.89)
Size	39.015***(15.27)	40.643***(15.97)	59.468***(24.39)	60.138***(24.64)
Score		26.230***(5.83)		10.203**(2.36)
Lngov* × *Score		25.395***(10.75)		11.172***(4.93)
Year	Control	Control	Control	Control
Industry	Control	Control	Control	Control
N	10367	10367	10367	10367
Adjusted R^2	0.139	0.151	0.187	0.189
Note: t-values in brackets, *, ** and * indicate significant at the 10%, 5% and 1% levels respectively.**				

3.3. Robustness test analysis

To ensure the accuracy of the results, the robustness test analysis was conducted by replacing the innovation performance indicator with the number of patents obtained. According to Table 6, the coefficient of government subsidies (*Lngov*) in Model I is significantly positive at the 1% level (14.143), indicating that government subsidies do help firms to innovate, further supporting the conclusion of Hypothesis I. The coefficients of government grants (*Lngov*), internal corporate governance (*Score*) and their interaction term (*Lngov* x *Score*) in Model II are all significantly positive at 15.108, 10.203 and 11.172 respectively, indicating that improvements in internal corporate governance structures can contribute to the impact of government grants on firms' innovation performance. The signs and significance levels of the control variables did not change significantly from the test results, suggesting that the conclusions of Hypothesis II remain robust.

4. Conclusion and Countermeasures

This study takes the A-share listed companies in Shanghai and Shenzhen from 2015 to 2020 as the research objects, and empirically examines the relationship between government subsidies and corporate innovation performance and the moderating effect of internal corporate governance on the impact relationship between government subsidies and innovation performance. The conclusions of the research analysis are as follows: firstly, government subsidies have a significant positive impact on corporate innovation performance; secondly, the improvement of the level of internal corporate governance can The higher the level of internal corporate governance, the more efficient the use of government subsidies. Based on the above findings, three countermeasures are proposed.

4.1. Improving corporate innovation subsidies

Government subsidies are one of the most direct tools used by the government to intervene in the economy of enterprises. Government subsidies can help enterprises to alleviate financing constraints and send positive signals to the outside world to stimulate the development of enterprise innovation activities. At the same time, when formulating subsidy policies for enterprises, the government should take into account the location environment of different enterprises and consider their innovation potential, and constantly adjust the way and intensity of government innovation subsidies. For those high-tech enterprises with strong technological capabilities and high innovation potential, increase the subsidies to them to reduce the risk of government capital investment. The government should also keep abreast of the completion of the enterprises' innovation projects and provide post-facto subsidies based on the actual input costs of the enterprises' innovation projects, so as to ensure that the enterprises have sufficient funds for completing their innovation projects. As there is still much room for improvement in the level of innovation of Chinese enterprises, this study argues that the government should increase the level of subsidies for enterprises' innovation and actively promote their innovation.

4.2. Establishing a clear information disclosure system

At present, after the government provides funds to enterprises, it does not have a good understanding of the use of the relevant funds, and there may be cases where enterprises do not use the relevant funds in strict accordance with government regulations and misuse of funds, such as enterprises using government subsidies to enhance the remuneration of senior management. Once the use of funds is not properly monitored, the efficiency of the use of government funds will be reduced. Enterprises should establish a clear information disclosure system on the flow of government subsidies, regularly disclose the use of funds to the public on their websites, accept public supervision, improve the transparency of information and form an effective restraint mechanism for the use of funds, which can effectively prevent the misuse of funds and thus improve the efficiency of the use of government subsidies. A synchronised mechanism for sharing information on approval, use, penalties and regulatory disclosure among government authorities, enterprises, taxation departments, judicial bodies and financial institutions should be established. At the same time, the government can dispatch commissioners to regularly verify the use of grant funds so as to keep abreast of the flow of funds from the grant, pursue the use of government grants in violation of the law to the individual and take effective punitive measures.

4.3. Improve the internal governance mechanism of the company

As the regulating variable between government subsidies and innovation performance, the company's internal governance mechanism plays a crucial role. The company should also improve the incentive mechanism of the management and promote the combination of long-term and short-term incentives to make the management pay more attention to the long-term development of the company, so as to stop the negative behaviours fostered by the internal power of the company from the root; optimise the shareholding structure and strive to enhance the innovation awareness of the major shareholders, so as to reduce the possibility of the misappropriation of government subsidies due to the self-interest of the major shareholders; after receiving government subsidies, the company should fully and reasonably utilise the government subsidies by virtue of its internal perfect governance mechanism. After receiving government subsidies, enterprises should make full and reasonable use of the government subsidies by virtue of their sound internal governance mechanisms, so as to truly bring the value of government subsidies into play and further enhance the innovation capability and overall value of the enterprises.

References

[1] Wang G, Xie FJ, Jia Y. A re-examination of the incentive mechanism of R&D subsidy policy [J]. China Industrial Economy,2017,(2):60-78.

[2] Yan ZJ, Yu ZP. Government subsidies and total factor productivity of enterprises[J]. Industrial Economics Research,2017,(1):1-13.

[3] Lin Yifu. Development strategy, self-generating capacity and economic convergence[J]. Econometrics (Quarterly), 2002, (1): 269-300.

[4] Lai, W.J., Cheng, M.N.. Substantive innovation or strategic innovation? [J]. Economic Research,2016,51(4):60-73.

[5] HALL B. The financing of research and development [J].Oxford Reviews of Economic Policy,2002,18(1):35-51.

[6] YU Hui-Xin, GUAN Zhong-Lu, ZHANG Miao, et al. Research on the impact of government innovation subsidies on innovation of environmental protection enterprises[J]. East China Economic Management,2020,34(7):1-8.

[7] Yan Hua Hong, Lian Yingqi, Tian Delu. Which is better to promote enterprise innovation performance, government subsidies or tax incentives[J]. China Science and Technology Forum,2019,(9):40-48.

[8] Liu Jun, Cao Xiang. Information disclosure, rent-seeking and the effectiveness of government subsidies[J]. Financial Theory and Practice,2014,35(3):92-98.

[9] Zhao Min. Research on the impact of government subsidies on innovation performance of enterprises in strategic emerging industries[D]. Hefei:Anhui University,2017.

[10] Lu Tong, Dang Yin, Zhong Jiyin. A study on the relationship between governance and performance of large listed companies in China[J]. Financial Review, 2010,2(6):33-46.

[11] Wang Han, Liu Hui-Man, Dong Jian-Wei. Can government-guided fund participation in venture capital funds promote corporate innovation? [J]. Research and Development Management,2018,30(2):93-102.

[12] Li Weian, Corporate Governance Evaluation Group, Corporate Governance Research Center, Nankai University. An empirical analysis of governance index and corporate performance of Chinese listed companies[J]. Management World, 2006,(3):104-113.