

Can Listed Companies Improve Corporate Performance by Improving the Quality of Accounting Information?

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Received: February 8, 2022

Accepted: March 5, 2022

Online Published: March 29, 2022

doi:10.20849/abr.v7i2.1061

URL: <https://doi.org/10.20849/abr.v7i2.1061>

Abstract

The quality of accounting information of listed companies is an important factor affecting corporate performance. This paper selects 3460 listed companies in China from 2005 to 2019 as the research object, and studies the relationship between accounting information quality and corporate performance of listed companies. Through empirical analysis, it is found that improving accounting information quality of listed companies can effectively improve corporate performance. And the improvement of accounting information quality of non-state-owned listed companies is more significant than that of state-owned listed companies. This study provides a new perspective for Chinese listed companies to carry out accounting information quality management, and may also contribute to the healthy development of listed companies in other countries and regions.

Keywords: accounting information quality, enterprise performance

1. Introduction

Accounting information is of great significance to the healthy and sustainable development of listed companies. True and reliable accounting information can fully improve the operational efficiency of the company and optimize the corporate governance structure. On the contrary, the distortion of accounting information may cause significant losses to corporate stakeholders and distort the market resource allocation mechanism. After more than 30 years of development and improvement, the construction of China's securities market has made great progress, but the accounting information disclosure of listed companies is still very serious. How to use the "invisible hand" of the market to reasonably standardize the disclosure of accounting information of listed companies, so that the company can obtain a "market premium" in the securities market, so as to improve the performance of enterprises is a problem worthy of attention and research. Based on this, we think that the study of the relationship between accounting information quality and corporate performance of listed companies may become a new entry point of accounting information quality management, for optimizing the corporate governance structure, improving the understanding of the importance of accounting information quality of listed companies, so as to improve corporate performance has important theoretical significance and practical value (Botosan, 1997).

2. Theoretical Analysis and Research Hypothesis

Through the study of the results of the inspection and announcement of accounting information quality in the Ministry of Finance of China, this paper finds that the problems existing in the quality management of accounting information of listed companies in China are manifested in the following aspects: first, due to the separation of ownership and management rights of the company, the managers of the company will actively seek to maximize their own interests from the perspective of "rational people" in economics, thus "whitewashing" the accounting information of the company. The "intentional distortion" of accounting information caused by artificial manipulation of profits and other factors Secondly, most listed companies do not consider the accounting information disclosure from the strategic level of the enterprise, and only regard the disclosure of accounting information as a mandatory task. Therefore, the lack of internal motivation to provide true and reliable accounting information, resulting in the non-standard disclosure of accounting information and other factors caused by the "unintentional distortion" of accounting information. In addition, the performance pressure of listed companies may also be an important cause of accounting information distortion, that is, listed companies are likely to ignore

"process rationality" accounting information distortion behavior (Imhoff,1992) when they value performance results. The statistical results also show that most of the listed companies with accounting information distortion behavior are in a state of loss. In summary, there may be some relationship between the performance of listed companies and the quality of accounting information.

In addition, the existing economic theory also supports this conjecture. On the one hand, the theory of enterprise resources holds that enterprises with a good external environment tend to actively disclose effective accounting information to investors from the perspective of corporate strategy, and the company project has the signal of development prospect. Because for this kind of enterprise, the effective accounting information disclosure can form the comparative advantage, obtains the "market premium" for the enterprise in the capital market, thus enhances the enterprise performance, that is, the listed company accounting information quality enhancement may have the positive influence to the enterprise performance. On the other hand, voluntary disclosure theory holds that it is easier for the public to recognize real and effective corporate information and social responsibility information, and this information is also helpful for the market to predict the long-term development of the company. However, the disclosure of objective accounting information needs to bear a variety of costs, including actual costs and potential costs. Therefore, enterprises with good economic benefits and development prospects are more able to bear these costs and are more willing to provide comprehensive, true and reliable accounting information.

In recent years, many scholars have studied the relationship between accounting information quality and corporate performance of listed companies. Grossman and Hart (1980) believes that when the market is always in the state of "adverse selection", it will not be conducive to the valuation of assets, rational potential buyers will discount the assets, resulting in a "lemon market". In this situation, the owners of good assets will actively transmit information to the market and investors in order to distinguish their assets from inferior assets, and information transmission is mainly realized through accounting information disclosure. Lorraine et al.(2004) studies the accounting information disclosure of large enterprises in the United Kingdom, and tests whether the accounting information will affect the performance of enterprises in the next month. The results show that the disclosure of accounting information has little impact on the performance of enterprises. Based on the incomplete contract theory, Rahman (2002) studies the influence of accounting information quality on enterprise value and governance by using Singapore market data. The results show that the higher the quality of accounting information, the higher the enterprise performance and enterprise value. Brammer and Pavelin (2008) takes British enterprises as the research sample, the results show that the larger the scale and the lower the debt, the more likely the enterprises will be voluntary information disclosure, and the quality of accounting information disclosure is positively related to corporate performance. Cornaggia et al.(2015) shows that true and reliable accounting information can effectively alleviate the problem of financing constraints caused by asymmetric information between enterprises and external capital, and then improve the performance of enterprises. Based on the above theoretical mechanism and practical analysis, this paper puts forward the hypothesis:

H1: the quality of accounting information of listed companies has a significant positive impact on corporate performance.

H2: the quality of accounting information of listed companies has no significant effect on corporate performance.

3. Research Methodology

3.1 Data Collection

This paper takes Shanghai and Shenzhen A-share listed companies from 2005 to 2019 as research samples, excluding financial listed companies, * ST, ST companies and companies with lack of data. In order to reduce the interference of extreme values to the results, this paper deals with all variables except virtual variables with 1% quantile Winsorize at both left and right ends. Finally, 3460 companies are obtained, and a total of 29954 samples are obtained. The research data come from Wind information and CSMAR database, and there are also the data that the author collates manually.

3.2 Variables Explanation

(1) The interpreted variable. The explained variable in this article is enterprise Performance, named *Perf*. The main indicators often used to measure corporate ormanance are return on assets (*ROA*), return on equity (*ROE*), net cash flow generated by operating activities (*CFO*) and TobinQ. Based on the need of the overall profitability of the enterprise, the return on assets (*ROA*) is selected as the performance evaluation index, and the net profit is divided by the annual average total assets.

(2) Core explanatory variables. The core explanatory variable of this paper is the quality of accounting information, named *DA*. In this paper, the modified Jones model is used to calculate the operational accrued profit of the

enterprise, and the quality of accounting information is measured. The specific calculation model is as follows:

$$TA_{i,t} / A_{i,t-1} = \alpha_0 / A_{i,t-1} + \alpha_1 (\Delta REV_{i,t} - \Delta REC_{i,t}) / A_{i,t-1} + \alpha_2 PPE_{i,t} / A_{i,t-1} + \varepsilon_{i,t} \quad (1)$$

In the model (1), the variable subscript i represents the company, t is the time, TA is the accrued profit, the difference between the company's operating profit and the cash flow of the operating activities, A_n is the total assets of the company at the end of the company, ΔREV is the change of the company's operating income, ΔREC is the change of the company's accounts receivable, PPE is the net fixed assets of the company, ε is the residual item of the regression model, and the opposite of its absolute value is DA .

(3) Control variables. In fact, the performance of an enterprise does not depend entirely on the quality of accounting information, but also affected by other factors, including the internal control of the enterprise and the constraints of the external environment. Enterprise size, financial leverage, enterprise growth, corporate governance level, equity balance, management shareholding ratio and the nature of enterprise ownership will affect enterprise performance. In this paper, these factors are used as control variables. It is considered that the smaller the size of the enterprise, the easier it is to obtain excess income and the better the performance of the enterprise (Sterck, 2018). In this paper, the size of the enterprise is measured by the natural logarithm of the annual total assets, named *Size*. According to the extended MM theory, it is considered that the level of corporate debt has a significant impact on the performance of enterprises (Kaplan and Reishus, 1990). This paper selects the total debt divided by the total capital as the financial leverage index, named *Lev*. There is no doubt that enterprise performance is closely related to the growth of enterprises (Guellec and Bruno, 2003). In this paper, the growth rate of main business income is used to measure the growth of enterprises, which is named *Growth*. The level of corporate governance is named *IC*, which is the internal control index of listed companies in China issued by Dibo Company. The degree of equity balance is the proportion of the second to the fifth largest shareholders, divided by the proportion of the largest shareholders, named *Balance*. The proportion of management shareholding is divided by the total share capital of the management shareholding data, which is named *Mshare*. The impact of enterprise ownership on enterprise performance is also investigated in this paper. In this paper, the virtual variable is used, named *Gov*, if it is a state-owned enterprise, the value is 1, otherwise it is 0. The details of the control variables are shown in Table 1.

Table 1. Definition of control variables

Symbol	Definition
$Size_{i,t}$	Natural logarithm of total assets
$Lev_{i,t}$	Total liability / total assets
$Growth_{i,t}$	The growth rate of income from the main business of an enterprise
$IC_{i,t}$	Dibo internal control index
$Balancel_{i,t}$	The sum of the proportion of the second to five major shareholders divided by the first largest shareholder
$Mshare_{i,t}$	Management shareholding data divided by total equity
$Gov_{i,t}$	For state-owned enterprise, the value is 1, otherwise it is 0

3.3 Estimation Model

In order to analyze the internal mechanism of accounting information quality affecting corporate performance and test whether the improvement of accounting information quality can effectively improve corporate performance, this paper constructs a regression model of accounting information quality and corporate performance of listed companies to test assumptions H1 and H2, and controls the industry effect and annual effect.

$$Perf_{i,t} = \beta_0 + \beta_1 DA_{i,t} + \beta_2 Size_{i,t} + \beta_3 Lev_{i,t} + \beta_4 Growth_{i,t} + \beta_5 IC_{i,t} + \beta_6 Balance_{i,t} + \beta_7 Mshare_{i,t} + \beta_8 Gov_{i,t} + Industry Dummy + Year Dummy + \varepsilon_{i,t} \quad (2)$$

In the model (2), i represents the company, t represents the year, $Perf$ is the enterprise performance, DA is the

accounting information quality, *Size* is the enterprise size, *Lev* is the enterprise debt structure, *Growth* is the enterprise growth, *IC* is the corporate governance level, *Balance* is the company equity system, *Mshare* is the management shareholding ratio, *Gov* is the enterprise ownership nature, ε is the random disturbance. When the regression coefficient β_j is significant, H1 is right. On the contrary, H2 is valid.

4. Empirical Tests and Results

4.1 Descriptive Statistics

Table 2 shows the descriptive statistics of the main variables. Through the minimum value, maximum value and standard deviation of each variable, we can see that the gap between the size, growth, equity balance and asset-liability ratio of listed companies in China is relatively large, and the standard deviation of enterprise performance, accounting information quality, governance level and management shareholding ratio is small and relatively stable. The average value of enterprise performance and accounting information quality is 0.038 and 0.059 respectively, which indicates that the accounting information quality and enterprise performance of listed companies in China are still at the overall low level.

Table 2. Descriptive statistics of variables

Variable	Obs	Mean	Std.Dev	Min	Max
<i>Perf</i>	29954	0.038	0.065	-0.415	0.245
<i>DA</i>	29954	0.059	0.061	0.000	0.562
<i>Size</i>	29954	22.052	1.277	19.236	26.395
<i>Lev</i>	29954	0.448	0.206	0.027	0.991
<i>Growth</i>	29954	0.186	0.465	-0.737	4.806
<i>IC</i>	29954	6.490	0.161	2.194	6.904
<i>Balance</i>	29954	0.676	0.595	0.007	2.961
<i>Mshare</i>	29954	0.110	0.187	0.000	0.709
<i>Gov</i>	29954	0.427	0.495	0.000	1.000

Note: The data comes from Wind and CSMAR databases. (Note 1, Note 2)

4.2 Correlation Test

Before the empirical analysis, this paper carries on the Pearson correlation analysis to the variables involved in the model. From the results of Pearson correlation test shown in Table 3, it can be seen that there is a significant positive correlation between accounting information quality and corporate performance, indicating that improving the quality of accounting information of listed companies can have a positive impact on corporate performance.

From the correlation test between enterprise performance and control variables, there is a significant positive correlation between enterprise performance and company size, corporate growth, corporate governance level and management shareholding ratio, indicating that the above indicators can promote corporate performance. However, the correlation coefficient between corporate performance and debt structure is -0.351, and it is significant at 1% significant level, which indicates that the increase of debt ratio of listed companies will have a negative impact on corporate performance. The most important thing is that the effect of multiple collinearity on the results can be ignored because the absolute value of the correlation coefficient between the variables is basically less than 0.5 and is significant at the 1% significant level.

Table 3. Correlation analysis of variables

	<i>Perf</i>	<i>DA</i>	<i>Size</i>	<i>Lev</i>	<i>Growth</i>	<i>IC</i>
<i>Perf</i>	1.000					
<i>DA</i>	0.151***	1.000				
<i>Size</i>	0.045***	-0.053***	1.000			
<i>Lev</i>	-0.351***	0.113***	0.430***	1.000		
<i>Growth</i>	0.223***	0.118**	0.059***	0.032***	1.000	
<i>IC</i>	0.399***	-0.027***	0.190***	-0.026***	0.158***	1.000
<i>Balance</i>	0.001	0.019***	-0.091***	-0.136***	0.042***	-0.055***
<i>Mshare</i>	0.140***	-0.002	-0.252**	-0.322***	0.048***	-0.011*
<i>Gov</i>	-0.065***	-0.057***	0.278***	0.272***	-0.050***	0.081***
	<i>Balance</i>	<i>Mshare</i>	<i>Gov</i>			
<i>Balance</i>	1.000					
<i>Mshare</i>	0.266***	1.000				
<i>Gov</i>	-0.283***	-0.475***	1.000			

Note: *, **, * Statistical significance at the 10%, 5% and 1% levels, respectively.

4.3 Regression Analysis

Combined with the model established earlier, this paper first carries on the overall regression analysis to the research sample, and then carries on the group regression analysis according to the enterprise ownership nature. Table 4 gives the estimated results of global regression analysis and group regression analysis.

(1) Analysis of overall regression results

It can be seen from table 4 that the parameter estimate of the influence of accounting information quality (*DA*) on enterprise Performance (*Perf*) is 0.085, which is significant at 1% significant level, indicating that the quality of accounting information is helpful to promote the improvement of enterprise performance in the statistical sense, and the hypothesis that government subsidy can promote the improvement of enterprise performance has been verified. This shows that after controlling the size of the company, debt structure, growth, corporate governance level, equity balance, management shareholding ratio, the nature of enterprise ownership, industry effect and annual effect and other factors, listed companies can improve the quality of accounting information on the whole. In addition, through the analysis of the regression results of control variables, it can be seen that enterprise *Size* (*Size*), enterprise *Growth* (*Growth*), corporate governance level (*IC*) and equity balance (*Balance*) play a positive role in promoting enterprise performance; asset-liability ratio (*Lev*) has a significant negative correlation with corporate performance, that is, the greater the enterprise risk, the higher the asset-liability ratio, the worse the enterprise performance. However, the proportion of management shareholding (*Mshare*) has no significant impact on corporate performance.

(2) Grouping regression results analysis

As can be seen from Table 4, the estimated value of the influence of accounting information quality (*DA*) on the performance of state-owned enterprises is 0.001, but it is not significant, indicating that the improvement of accounting information quality has no significant effect on improving the performance of state-owned enterprises. The estimated value of the influence of accounting information quality (*DA*) on the performance of non-state-owned enterprises is 0.130, which is significant at a significant level of 1 percent, indicating that the improvement of accounting information quality is conducive to improving the performance of non-state-owned enterprises. In addition, by analyzing the regression results of control variables, it can be seen that enterprise *Size* (*Size*), enterprise *Growth* (*Growth*) and corporate governance level (*IC*) all play a positive role in promoting enterprise performance, while asset-liability ratio (*Lev*) and corporate performance show a significant negative correlation between state-owned enterprises and non-state-owned enterprises. The reason why the quality of accounting information is more significant to improve the performance of non-state-owned enterprises may be that

state-owned enterprises rely too much on the government and are prone to excessive purchasing behavior, so that the operating environment and production costs of enterprises are not effectively improved.

Table 4. Regression results of models

Model	Overall regression	Group regression (state-owned)	Group regression (non-state)
Interpreted variable	<i>Perf</i>	<i>Perf</i>	<i>Perf</i>
<i>DA</i>	0.085*** (0.005)	0.001 (0.007)	0.130*** (0.007)
<i>Size</i>	0.009*** (0.001)	0.003*** (0.001)	0.013*** (0.001)
<i>Lev</i>	-0.139*** (0.003)	-0.138*** (0.004)	-0.131*** (0.004)
<i>Growth</i>	0.023*** (0.001)	0.019*** (0.001)	0.023*** (0.001)
<i>IC</i>	0.095*** (0.002)	0.068*** (0.002)	0.119*** (0.003)
<i>Balance</i>	-0.003*** (0.01)	-0.001 (0.001)	-0.003* (0.001)
<i>Mshare</i>	0.040 (0.004)	0.035 (0.032)	0.035*** (0.005)
<i>Gov</i>	-0.007*** (0.002)		
<i>Constant term</i>	-0.717*** (0.036)	-0.418*** (0.025)	-0.935*** (0.036)
<i>Industry Dummy</i>	Y	Y	Y
<i>Year Dummy</i>	Y	Y	Y
<i>Obs</i>	28192	11774	16418
<i>R²</i>	0.291	0.266	0.313

Note: t-statistics are in parentheses. *, **, ***Statistical significance at the 10%, 5% and 1% levels, respectively.

(3) Robustness test

In view of the regression results, the *TobinQ* value is used to replace the original explained variable (*Perf*) for robustness test, and the results of repeated regression analysis are about the same as those described above, and the regression results are shown in Table 5. As can be seen, the conclusions are basically consistent with the conclusions in Table 4, and the main conclusions have not changed.

Table 5. Regression estimation results of explained variables as TobinQ

Model	Overall regression	Group regression (state-owned)	Group regression (non-state)
Interpreted variable	<i>TobinQ</i>	<i>TobinQ</i>	<i>TobinQ</i>
<i>DA</i>	0.539*** (0.102)	0.421** (0.132)	0.565*** (0.142)
<i>Size</i>	-0.747*** (0.013)	-0.580*** (0.017)	-0.880*** (0.020)
<i>Lev</i>	0.356*** (0.056)	-0.141* (0.071)	0.773*** (0.082)
<i>Growth</i>	0.040*** (0.013)	0.034* (0.017)	0.022 (0.018)
<i>IC</i>	0.344*** (0.040)	0.272*** (0.045)	0.392*** (0.065)
<i>Balance</i>	0.021 (0.01)	0.004 (0.026)	0.043 (0.027)
<i>Mshare</i>	-1.069 (0.019)	-2.425*** (0.616)	-0.831*** (0.099)
<i>Gov</i>	-0.101*** (0.037)		
<i>Constant term</i>	14.40*** (0.386)	12.04*** (0.473)	15.62*** (0.613)
<i>Industry Dummy</i>	Y	Y	Y
<i>Year Dummy</i>	Y	Y	Y
<i>Obs</i>	27625	11602	16023
<i>R²</i>	0.342	0.326	0.381

Note: t-statistics are in parentheses. *, **, ***Statistical significance at the 10%, 5% and 1% levels, respectively.

From the results of conservatism test, it can be considered that the results of this paper on the impact of accounting information quality on corporate performance of listed companies are robust and reliable.

5. Discussion and Conclusion

Taking Shanghai and Shenzhen A-share listed companies as the research object, this paper analyzes the influence mechanism between the quality of accounting information and the performance of listed companies. The conclusions are as follows: (1) improving the quality of accounting information of listed companies can promote the performance of enterprises, which provides support for listed companies to carry out accounting information quality management behavior. (2) the improvement of accounting information quality of state-owned listed companies has no significant effect on the improvement of enterprise performance, and the improvement of accounting information quality of non-state-owned listed companies can effectively promote the improvement of enterprise performance.

Based on the conclusion of this paper, listed companies can effectively improve corporate performance by improving accounting information. Therefore, the following policy recommendations are put forward: (1) When disclosing accounting information, listed companies should actively transmit true and reliable accounting information to market investors from the long-term strategic level of enterprises, reduce the "unintentional distortion" of accounting information, so as to obtain "market premium" and promote the improvement of enterprise performance. (2) listed companies should accurately locate the ways and means to improve the quality

of accounting information according to the market demand and their own scale, capital structure and governance level, so as to promote the sustainable innovation vitality of enterprises and ensure the healthy growth and social well-being of enterprises. (3) the government should actively create a good external environment and promote the transformation of listed companies from "result rationality" to "process rationality" when disclosing the quality of accounting information, so as to pry social resources, promote enterprise innovation, improve enterprise performance and enhance the value chain.

Acknowledgements

This work was supported by Chengdu Technological University (Project No.: 2019RC023).

References

- Botosan, C. A. (1997). Disclosure level and the cost of equity capital. *Accounting Review*, 323-349.
- Brammer, S., & Pavelin, S. (2008). Factors influencing the quality of corporate environmental disclosure. *Business Strategy and the Environment*, 17(2), 120-136. <https://doi.org/10.1002/bse.506>
- Cornaggia, J., Mao, Y., Tian, X., Wolfe, B. (2015). Does banking competition affect innovation?. *Journal of Financial Economics*, 115 (1), 189-209. <https://doi.org/10.1016/j.jfineco.2014.09.001>
- Grossman, S. J., & Hart, O. D. (1980). Disclosure laws and takeover bids. *The Journal of Finance*, 35(2), 323-334. <https://doi.org/10.1111/j.1540-6261.1980.tb02161.x>
- Guellec, B. V. (2003). The impact of public R & D expenditure on business R & D. *Econ. Innov. New. Tech.* 12(3), 225-243. <https://doi.org/10.1080/10438590290004555>
- Imhoff Jr, E. A. (1992). The relation between perceived accounting quality and economic characteristics of the firm. *Journal of Accounting and Public Policy*, 11(2), 97-118. [https://doi.org/10.1016/0278-4254\(92\)90019-T](https://doi.org/10.1016/0278-4254(92)90019-T)
- Kaplan, S. N., & Reishus, D. (1990). Outside directorships and corporate performance. *J. Financ. Econ.*, 27(2), 389-410. [https://doi.org/10.1016/0304-405X\(90\)90061-4](https://doi.org/10.1016/0304-405X(90)90061-4)
- Lorraine, N., Collison, D. J., & Power, D. M. (2004). An analysis of the stock market impact of environmental performance information. *Accounting Forum*, 28(1), 7-26. <https://doi.org/10.1016/j.accfor.2004.04.002>
- Rahman, A. R. (2002). *Incomplete financial contracting, disclosure, corporate governance and firm value-with evidence from a moderate market for corporate control environment*. Social Science Electronic Publishing. <https://doi.org/10.2139/ssrn.348304>
- Sterck, O. (2018). On the economic importance of the determinants of long-term growth (No. 2018-20). Centre for the Study of African Economies, University of Oxford.

Notes

Note 1. Wind database: <https://www.wind.com.cn/>

Note 2. CSMAR database: <https://www.gtarsc.com/>

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