Accounting Quality of U.S. Listed Chinese Enterprises: Disclosure Level of State-Owned and Non-State-Owned Enterprises

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Abstract: This proposal is commissioned to discuss U.S.s the differences in the disclosure level of U.S. listed Chinese state-owned enterprises (SOEs) and the U.S.-listed Chinese Non-state-owned (Non-SOEs) enterprises. Topics include introduction, objective, importance, test process and conclusion. During the past two decades, the economy of China went through rapid growth, providing Chinses enterprises a solid basement to develop. With the goal of obtaining funds for further expansion and staying competitive in the international market, more Chinese enterprises choose to go public in the U.S. The disclosure level of Chinese enterprises plays an essential role in the decision-making of foreign investors. Whether owned by the Chinese government makes investors view disclosure levels differently since Chinese SOE exists as a special type of business. From the test and analysis, no obvious differences exist between the disclosure levels of SOE and Non-SOE.

Keywords: quality of accounting information disclosure, U.S. listed Chinese enterprises, Non-SOE, SOE.

1.   Introduction

As the economic developing rapidly these days, plenty of Chinese enterprises choose to go public in U.S. securities market. And according to China's special political system and policy guidelines, there is a special category of enterprises called SOE (SOEs) among all these enterprises. The Chinese government has imposed stricter regulations on these companies to avoid the risk of corruption and higher requirements for their accounting disclosure. This paper is mainly focused on the differences in accounting disclosures between U.S.-listed Chinese SOE and U.S.-listed non-SOE.

In this paper, we examine the accounting disclosure level of SOE and private enterprises through their financial reports. Firstly, we examine the management structure of enterprise, as managers are playing completely different roles in SOE and non-SOE, which could cause different impact on ac-

counting disclosure. Secondly, we analyze the level of voluntary disclosure of SOE and other enterprises. The Chinese government has specifically established a series of required disclosures for SOE that are required to be disclosed, while for non-SOE, these are content of voluntary disclosure and they may choose not to disclose. However, as for some sensitive information, the Chinese government also has policies that require SOE to keep them confidential, while in the other hand, private enterprises may be more comfortable disclosing such information to attract investment. The special characteristic of SOE could lead to the differences of voluntary disclosure between SOE and non-SOE.

Considering that Chinese government has a very strong influence on the management structure and accounting disclosure of SOE, we predict that SOE and non-SOE will have some specific differences in management structures, and they will have significant difference in voluntary disclosures.

To analyze the accounting disclosure level of SOE and non-SOE, we construct a sample of SOE and non-SOE listed in U.S. We wanted to select a representative sample for our analysis, so we chose the typical SOE in the transportation, communication, energy and insurance industries. As for the non-state-owned enterprise, we select the e-commerce, social media, streaming media, electronic vehicle and education industries. We noticed that although most of these enterprises have a short history of development, but they all on a rapidly rising trend in the past two decades.

Using data from 20 enterprises over the period 2017 to 2021, we test the impact on disclosure level which caused by management structure of enterprises through adopting the theory and formula in "Ownership Structure and Disclosure Quality: Case of Iran" as our testing method [1]. We find that the average score of state-owned enterprise is around 5.51 and the average score of non-state-owned enterprise is around 5.28, which indicates that the difference based on the measurement of the influence of government ownership and management ownership is minor.

We test the level of voluntary disclosure of SOE and non-SOE based on the DSCORE method of Christine A Bostan [2]. After scoring and ranking of disclosure levels based on the amount of voluntary disclosure provided by companies in their annual reports, we find that the average DSCORE of SOE is around 67.87%, and the average DSCORE of other enterprises is around 63.01%. The result shows U.S. that the difference in voluntary disclosure level of SOE and non-SOE is also small.

We also noticed that both SOE and non-SOE' voluntary disclosure have the following common issues. 1)Barriers to entry are rarely discussed; 2) Average compensation per employee are almost not discussed; 3) financial forecasts are extremely rare. The existence of the common issues reflects the differences between Chinese regulation rules and U.S. regulation rules. As companies based in China, no matter SOE or other enterprises, mainly complete the financial reports by following the requirement of Chinses regulation department. When they prepare the reports as U.S. listed companies, they used to transfer the Chinese version into a U.S. version without adding information that U.S. investors are interested in.

2. Main Objective

In the background of rapid economic development in these years, a lot of Chinese enterprises are listed in the U.S. securities market to obtain a higher rate of return on capital. Although according to the requirements of the SEC of the U.S., companies listed in the United States need to disclose their information according to the corresponding disclosure standards, there are still some differences in the disclosure of companies in different industries, even among companies in the same industry. In addition to the disclosure differences between local American enterprises and American-listed Chinese enterprises that are often compared, this paper believes that there are also some differences in disclosure between two different types of Chinese enterprises, SOE and non-SOE.

China's SOE are legal persons that are funded by the state and whose capital is owned or controlled by the state. They are enterprises owned by the whole people, whose essence is that the means of production are owned by the whole people. There are some differences between state-owned and

private enterprises in terms of property rights mechanism, competition mechanism and power mechanism, which are directly related to the daily operation and management of enterprises [3]. However, most of these differences originate from the particularity of SOE. There are three main particularities of China's SOE:

1. The business objectives of SOE are special [4]. The business purpose of general private enterprises is to make profits, but SOE are public welfare. They are usually set up to achieve the goal of national economic supervision.

2. The task of SOE is special [4]. Almost all SOE operate some businesses related to national traffic facilities or national defense security and other infrastructure constructed by the state. They can't give up these important tasks just like non-SOE in order to make profits.

3. The managers of SOE have their own characteristics [4]. The managers of SOE are essentially national staff, so people's assessment of them is different from that of general private enterprises. We should not only evaluate from the perspective of enterprise interests, but also whether the interests of the people have been safeguarded.

Generally, due to the special nature of China's SOE, they have a higher credit rating than private enterprises. Investors are more willing to believe that a company controlled by the government has a higher reputation. Therefore, SOE are also easier to carry out financing activities. In contrast, private enterprises need to disclose more accurate, effective and complete information to gain the trust of investors, and help investors consider whether to invest in these companies. On the contrary, due to the connection with the government, SOE may have stricter standards and be subject to stricter control. For example, Chinese SOE has eight relevant regulations, and they need to conduct regular economic responsibility audits. Therefore, it may also cause SOE to disclose more information. Because there are many differences between state-owned and private enterprises in China, the purpose of this paper is to explore whether these differences lead to different disclosure results and which differences lead to different disclosure contents.

3. Importance

3.1. The Importance of Studying the Quality of Corporate Accounting Information Disclosure

The quality of corporate accounting information disclosure plays a vital role in the survival of the enterprise itself, the investment market, and the investment choices of investors. From the perspective of the enterprise, the disclosure of accounting information enables the operation and development of the enterprise to operate in a more transparent environment. To maintain the economic distribution within the enterprise and improve the overall work quality and efficiency of the enterprise's employees [5]. From the perspective of the investment market, corporate accounting information disclosure, as the focus of supervision, has become a bridge for information exchange between investors and managers through the Internet, making information more symmetrical and the capital market operation more efficient and efficient standardized. From the perspectives of corporate shareholders and investors, the profit or loss brought about by corporate operations is closely related to corporate shareholders' profits. Fair and transparent disclosure of accounting information can not only help shareholders better understand the overall situation of the company to maintain their economic level, and making the right decisions can also help market investors who are still in the wait-and-see stage to reasonably make the company's future market and profit forecasts to decide whether to invest. From the perspective of project sponsors and corporate executives, high-quality accounting information disclosure can help project sponsors and corporate executives communicate efficiently and make specific and effective directional changes and detailed rectifications for projects based on actual conditions. To maximize the interests of individuals and enterprises and significantly reduce the agency costs of enterprises.

In the meantime, under the framework of the continuous update and development of the Internet, the government and society have put forward higher requirements for the updated speed and quality of accounting information disclosure [6]. The real-time accounting information disclosure under this diversified and three-dimensional framework intuitiveness is also constantly under scrutiny because users of accounting information often need to obtain this information in the first place and make corresponding essential decisions. At the same time, with the development of accounting information networks, investors' confidence will be quickly reflected on the Internet platform. If negative emotions arise, negative information about the company can also be transmitted through the Internet platform, reducing the risk of stock market collapse.

As mentioned above, the quality of corporate accounting information disclosure is paramount. Because of it, this article will discuss the practical issues of the accounting information disclosure quality of SOEs and non-SOEs listed in the United States based on this.

3.2. Realistic Needs to Study the Quality of Accounting Information Disclosure of State-owned and Non-SOE Listed in the United States

Since Brilliance Auto was listed on the New York Stock Exchange in 1992, as of March 2021, the number of Chinese companies in the United States has far exceeded 500, but about 210 of them have been delisted. The SEC released the ninth batch of the pre-delisting list of Chinese concept stocks, and there are more than 150 Chinese concept stocks on the pre-delisting list. In the past 30 years, the first climax occurred before 2000. Large SOEs represented by China Eastern Airlines and China Mobile went public in the United States. They then fell into a trough due to the Mexican financial crisis and the Fed's interest rate hike. The second peak of Chinese companies listing in the U.S. came with the rise of the Internet economy and the new economy and fell into a trough due to the bursting of the global internet bubble. The third peak of Chinese companies listing in the U.S. followed the global economic recovery after the financial crisis. In addition, the U.S. government relaxed the threshold for listing SMEs, which accelerated the wave. However, in 2011, due to the outbreak of the crisis of confidence, the wave quickly fell to a low point again and even spread to the capital markets of Europe and Canada, and many SMEs in the United States fell to 1-2 dollars. In the following years, on the one hand, due to the differences in legal systems, accounting systems, and external supervision between China and the United States, PCAOB and SEC have increasingly stringent audit requirements for Chinese concept stocks. At the same time, Chinese-listed companies in the United States have always existed has inherent flaws. On the other hand, the domestic capital market has maintained a positive and rising trend, starkly contrasting Wall Street's overall underestimation of Chinese concept stocks. At the same time, the malicious hunting of short sellers must be considered. These factors make Chinese concept stocks face enormous risks. Market confidence is also in a volatile phase. This imposes a more significant burden on the companies themselves and puts tremendous pressure on Chinese companies to invest in the U.S. investment market, making investors more uncertain. At the same time, the Chinese concept stocks are divided into Chinese SOEs and non-SOEs. Due to the unique nature of Chinese SOEs, their decision-making will be subject to government intervention. More importantly, investors in the United States cannot go to China to investigate the company, and they do not understand the operating system of Chinese SOEs, which is likely to be a key factor affecting the consumer confidence of some investors.

As mentioned above, we will conduct quantitative research on relevant data of Chinese SOEs listed in the United States and Chinese non-SOEs listed in the United States from the perspective of the quality of corporate accounting information disclosure in this article. Calculate and compare whether there are differences in the quality of accounting information disclosure between SOEs and non-SOEs, and hope that the results can provide practical help for Chinese companies listed in the United

States, the investment market of Chinese companies listed in the United States, and domestic and foreign investors in Chinese concept stocks.

4. Test Process

4.1. Sample Selection

For the sample selection, we want to select the representative U.S. listed Chinses enterprises in various industries no matter for state-owned or non-state-owned. Based on such a principle, we aim at the transportation, energy, communication, and insurance industries for SOE. The most important reason we chose those industries is that most of them are related to infrastructure in China. Those enterprises do not only aim to make profit but also are responsible for providing basic livelihoods for Chinese citizens. Thus, their financial decisions are influenced by Chinses government too. Those SOE are the typical type for disclosure level analysis. For the non-SOE, we targeted the e-commerce, social media, streaming media, electronic vehicle, and education industries. Most enterprises in these industries are founded after 2000 and have a short history of development. These industries were all on a raising trend in the past two decades. We think the economic development of China provides a basement for the success of these enterprises. In other words, their financial reports reflect the economic environment in China Also, in the U.S. stock market, investors favored these industries, which means enterprises in these industries offer financial reports that satisfy U.S. regulations. Therefore, non-SOE in these industries is valuable for us to understand our research topic.

Due to the time limitation, we choose ten SOE and ten Non-SOE to analyze. Table 1 below shows the list of SOE and Table 2 shows the list of non-SOE.

Table 1: The list of SOE.

Industry:	
Transportation:	China Eastern Airline
	GUANGSHEN Railway Co. Ltd
	China Southern Airline
Communication:	China Telecom
	China Mobile
	China Unicom
Energy:	China Petrochemical Corporation
	China National Petroleum Corporation
	Aluminum Corporation of China Limited
Insurance:	China Life Insurance

Table 2: The list of non-SOE.

Industry:	
E-commerce:	Alibaba Group
	JD
	PDD
Social Media:	RENREN
	Baidu
	Netease
Streaming entertainment:	iQIYI
	Bilibili
Electronic vehicle:	NIO
Education:	New Oriental Education & Technology Group

4.2. Test Methods

4.2.1. First Method

To find out whether there are differences between disclosure levels between SOE and non-SOE, the first step we adopted is to discuss what elements might cause the variety. The most obvious one is the management structure of enterprises. Because managers play totally different roles in SOE and non-SOE. In non-SOE, shareholders, board of directors, and managers engage in the decision-making process of the entire business. Their goal is to maximize profit. However, even SOE build the same structure in the managerial level, the leaders who have the power to make business decisions need to follow the instruction of the government. Besides, most SOE have strong connections with the local and central government since the leaders used to be government officials. They always set business strategies according to the government's economic policies, but not for creating profits.

The direct way to test whether the management of enterprises affects the disclosure level is to measure the influence of government ownership and management ownership. As a result, we adopted the theory and formula in "Ownership Structure and Disclosure Quality: Case of Iran" as our testing method [1]. According to the article, government ownership would benefit the disclosure level because governmental shareholders are more motivated to supervise the disclosure processes of a firms. Therefore, state and national shareholders would raise firm's disclosure level. On the other hand, enterprises that have very high management ownership have lower disclosure because managers would make the financial reports represent their own expected results. Thus, they use the information that is easy to obtain to maximize their desirability and will not like to disclose the information properly and comprehensively [1]. Based on such a theory, we used the formula below to calculate the disclosure level of the sample. To use this formula, we need to reference the data which involved in pooled data regression model. (see Table 3)

Table 3: Pooled data regression model.

Variables	Coefficient
C	95/30
Governmental ownership	2/12
Managerial ownership	-16/45
Firm size	2/15

GOWN: Government ownership will be measured by the percentage of shares owned by the government to the total number of shares issued.

MOWN: Management ownership will be measured by the percentage of shares owned by the management to the total number of shares issued.

Size: logarithm of total assets for firm i in year t.

$$VDIS = \beta 0 + \beta 1 GOWN + \beta 2 MOWN + \beta 3 FSIZE$$

4.2.1.1. Data Collection

The first step is the collection of annual financial reports of sample enterprises in the past 5 or 4 years. The annual financial reports are found on the official websites of these enterprises and the U.S. Securities and Exchange Commission (SEC) website. After the first step, we have the data of firm sizes, which is from the Total Asset in the Balance sheet. To determine the percentages of government ownership and management ownership, we then conduct extra information collection. Our sources are mainly from Yahoo finance and Sina finance.

4.2.1.2. Result

The average score of SOE is around 5.51

The average score of non-SOE is around 5.28

The difference in disclosure level between SOE and non-SOE is small based on the measurement of the influence of government ownership and management ownership.

4.2.2. Second Method

Another important element that affects the disclosure level is voluntary disclosure. Voluntary disclosure is the provision of information by a company's management beyond requirements such as GAAP and SEC rules, where the information is believed to be relevant to the decision-making of users of the company's annual reports [7]. The major reason why we test the voluntary disclosure level is that voluntary disclosure means different for SOE and non-SOE. For SOE, financial information relates to economic policies and even confidential state data, so the Chinese government sets rules to limit voluntary disclosure. And Chinese SOE are supported by national finance departments, which means they have less concern about fund issues. They worry about the cost of capital less, so their willingness to voluntarily disclose is low. For the non-SOE, they would like to disclose more information beyond requirements as they want to lower the cost of capital to gather more funds. Since most of them are founded in a short time, and their major goal of going public in the U.S. is to gain funds for expansion and development.

The test method we use borrows from the DSCORE method of Christine A Bostan. The DSCORE method is designed to present a comprehensive ranking of disclosure levels. The score is based on the amount of voluntary disclosure of the annual reports that firms public [2]. To test the voluntary

disclosure level, the information in the annual report is categorized into five segments: background information, summary of historical results, key non-financial statistics, projected information, and management discussion and analysis. We used part of elements in different sections to finish our test instead of the whole list due to the time limitation. To test how each element affects voluntary disclosure level, we use a score range of 1 to5. A higher score represents a specific element that benefits voluntary disclosure. We rate picked elements of all enterprises in the sample based on our analysis and give each enterprise a score according to the Weighting algorithms. The list of elements is shown in figure 1.

I. Background Information: 5%
    i.   Statement of corporate goals or objectives
    ii.   Barriers to entry are discussed
    iii. Competitive environment
    iv. General description of the business
    v.   Principle products
    vi. Principle markets

II. Ten- or Five-Year Summary of Historical Results: 10%
    i.   Return-on-assets or sufficient information to compute return-on-assets (i.e., net income, tax rate, interest expense and total assets)
    ii.   Net profit margin or sufficient information to compute net profit margin (i.e., net income, tax rate, interest expense and sales)
    iii. Asset turnover or sufficient information to compute asset turnover (i.e., sales and total assets)
    iv. Return-on-equity or sufficient information to compute return-on-equity (i.e., net income and stockholders' equity)
    v.   Summary of sales and net income for most recent eight quarters

III. Key Non-Financial Statistics: 25%
    i.   Number of employees
    ii.   Average compensation per employee
    iii. Order backlog
    iv. Percentage of sales in products designed in the last five years
    v.   Market share
    vi. Units sold
    vii. Unit selling price
    viii. Growth in units sold

IV. Projected Information: 35%
    i.   Forecasted market share
    ii.   Cash flow forecast
    iii. Capital expenditures and/or R&D expenditure forecast
    iv. Profit forecast
    v.   Sales forecast

V. Management Discussion and Analysis: 25%
    i.   Change in sales
    ii.   Change in operating income
    iii. Change in cost of goods sold
    iv. Change in gross profit
    v.   Change in selling and administrative expenses
    vi. Change in interest expense or interest income
    vii. Change in net income
    viii. Change in inventory
    ix. Change in accounts receivable
    x.   Change in capital expenditures or R&D
    xi. Change in market share

Figure 1: The list of elements

4.2.2.1.Data Collection

Most data we need for DSCORE calculation is from the annual financial reports of sample enterprises in the past 5 or 4 years. For extra information to rate specific element, we gather it from the official websites of enterprises and online news or reports.

4.2.2.2.Result

The average score of SOE is around 67.87%
    The average score of non-SOE is around 63.01%
    The difference in disclosure level between SOE and Non-SOE does not reach a significant level, based on the measurement method of DSCORE.

5. Conclusion

In this paper, we examine the differences in accounting disclosures between U.S.-listed Chinese SOE and U.S.-listed non-SOE. As Chinese SOE are a group of companies that are particularly vulnerable to the influence of Chinese government policies, so we predict that they will have significant accounting disclosure differences from non-SOE.

Our results, however, reveal a completely different answer. Our findings are based on two methods: 1) formula from the Sahar Sepasia paper [1]; 2) DSCORE method from the Bostan paper [2], which shows that there is no significant difference between SOE and private enterprises. The government doesn't affect the disclosure level directly. And the voluntary disclosure of these two types of companies is also very similar.

From the results, we can learn that stare-owned enterprises and non-SOE have similar levels of accounting disclosure, but whether SOE' disclosure levels are really "voluntary" or are influenced by government policies requires further study. Because most of the time, the government made laws and policies to affect SOE' disclosure level, instead of using the ownership to affect certain company's disclosure level. Based on this background, we speculate that the level of actual disclosure by SOE are influenced by government policies (e.g., the eight rules made by Chinese government) that mandate SOE to disclose actual data information, and that in the absence of such policies, firms are likely to fail to disclose relevant information and to breed significant internal corruption and fraud.

We also notice that both SOE and non-SOE have the same content loss of the voluntary disclosure. We believe that this issue is because when they prepare the reports as U.S. listed companies, they used to transfer the Chinese version into a U.S. version without adding information that U.S. investors are interested in.

Due to the time constraint, this paper only preliminarily examines the differentiation of accounting disclosures between SOE and other enterprises, and we are not able to delve into the reasons behind it. Also, due to the small sample pool, the conclusions may also have a certain degree of error.

Acknowledgement

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