Management Accounting Practices and Market Performance of the Chinese Listed Companies

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In the recent years, the fast growing capital markets in China have attracted the world's attention. Although there have been some previous studies to investigate the operation of these capital markets, there is very little research, if any, to study the relationship between the market performance of the Chinese listed companies and the adoption of the so-called "Chinese-style" or "Western-style" management accounting systems. This paper tries to explore this area. There are five sections in this paper: introduction, design of the research study, empirical results, discussion of the results, and implications for future research.

INTRODUCTION

As far as in the year 1978 when China first introduced the twin policies of "economic reform" and "open to the outside world", all aspects of the Chinese socio-economic systems have changed considerably. Such in consequence have created a need for management accounting practices in Chinese state-owned enterprises. In the past, accounting researchers have undertaken various studies related to the development of an effective Chinese system of management accounting. Most researchers referred to the West for benchmark models for management accounting systems in China.

On the other side, the fast-growing capital market in China in the recent years has attracted the world's attention. China has now established two major stock exchanges in Shanghai and Shenzhen. These two stock exchanges are well received by the public and expected to increase their size dramatically in the future (as currently the Gross Domestic Product of China has been growing at 9% annually and there is a tremendous need to raise capital to sustain the growth). In this regard, more and more state-owned enterprises are eager to be listed and traded on stock exchanges for fundraising. In addition, some state-owned enterprises go 'international' and to be listed overseas, such as to be listed on stock exchanges in Hong Kong and New York. In preparation for listing, companies would most likely undergo some forms of reorganization (including reforms in management accounting systems) to satisfy regulatory requirements and to improve their position in the capital market. It would be interesting and important (academically and practically to managers) to study the adoption of management accounting systems from the pre- and post-listing perspective.

This paper is to examine the relationship between the adoption of management accounting systems (MAS) by the Chinese state-owned enterprises before and after listing, and the market performance of these enterprises. Management accounting systems refer to the use of various management accounting concepts, methods and techniques such as costing methods, responsibility accounting practices, and capital budgeting models. These concepts and techniques are used by managers to manage their enterprises for control, planning and decision-making purposes. In this study, the pre-listing period refers to the first year of listing, and the post-listing period refers to the period after the first listing year. This definition of pre-listing and post-listing periods is on the assumption that since the state-owned enterprises have to undergo certain forms of reorganization (including reforms in management accounting systems) for the listing purpose, the operation in the first year would not be stable. However, after one year of adoption of the MAS, the enterprises would experience the effects of the MAS.

DESIGN OF THE STUDY

The post-listing performance of initial public offering (IPO) firms has been studied by various researchers. For example, Bharat and Omesh (1994) investigated the change in operating performance of firms as they made the transition from private to public ownership. A significant decline in operating performance subsequent to the IPO was found. In addition, there was a significant positive relationship between post-IPO operating performance and equity retention by the original entrepreneurs, but no relationship between post-IPO operating performance and the level of initial underpricing. Post-listing declines in the market-to-book ratio, price-earning ratio, and earning per share were also documented.

Regarding research on management accounting in China, Scapens and Meng (1993) focused on the issue of responsibility accounting. In a study about the implementation of management accounting systems in the U.K. health industry, Lapsley (1994) also showed great interest in the responsibility accounting systems.

Budgeting is another key issue in management accounting, which attracts the attention of many accounting researchers over the last decades. Budgetary participation is identified as a factor that can affect the effectiveness of management accounting systems (Brownell, 1982; Nissim, 1990).

Investment appraisal or capital budgeting is another key topic in management accounting. Prior research was undertaken on the difference between adopting complex appraisal techniques and the simple ones (Klammer, Koch and Wilner, 1991; Collier and Gregory, 1995).

Costing method is another important management accounting topic. To compare the effectiveness of different costing methods is controversial, but it is generally suggested that costing methods are related to pricing policies which in turn affect profitability of firms (Mongin, 1992).

It is believed that management accounting systems and market performance of the listed companies are interrelated. Effective MAS would improve corporate performance in the short run or in the long run. As effective management accounting systems could help managers to achieve the corporate goals (e.g., to maximize the earnings and to increase the net wealth of the enterprises), it is hypothesized that the market would respond positively. In this study, corporate performance is measured by the price/earnings ratio, the price/assets ratio and the price/liabilities ratio. In this study, MAS is considered having an improvement if the Chinese enterprise has changed from Chinese-style management accounting practices to Western-style management accounting practices. In this study, Chinese-style practices are also called "non-international practices", and Western-style practices are also called "international practices".

The Taiwan Economic Journal Mainland China Database is the main data source for corporate performance in this study. Stock exchanges, financial newspapers and other regulatory bodies in China are also used as references. To gather information regarding the adoption of different management accounting systems, questionnaires were sent to Chinese listed companies for their completion. Four management accounting issues are identified as being increasingly important to China and chosen as the focus of this study. The four issues are:

(1) Costing method (absorption costing versus direct costing)
(2) Budgeting system (participative versus non-participative budgeting)
(3) Responsibility accounting practices (adoption versus non-adoption)
(4) Investment appraisal method (time value of money considered versus not considered)

In summary, there are four possible situations:

Situations	Pre-listing Period	Post-listing Period	Impact on the MAS of the firm
(1)	NIP	IP	Improved
(2)	NIP	NIP	No Change
(3)	IP	IP	No Change
(4)	IP	NIP	Worse Off

(NIP = Non-International Practice; IP = International Practice)

If we focus on the two changing situations ("from NIP to IP" or "from IP to NIP") for each of the four individual management accounting issues, there are altogether sixteen testable scenarios. In addition, weighting factors (1 or 2 in this study) can be allocated to the four individual management accounting issues. Due to the differences of firm size, industry category, nature of products manufactured or services rendered, and other possible considerations, the importance of the individual management accounting issues could differ to different firms. As a result, fifteen weighting combinations were adopted for this study. To consider the sixteen testable scenarios and fifteen weighting combinations at the same time, 240 tests are done for this study. To apply the Wilcoxon Signed Rank Test for Paired Samples, changing from NIP to IP would have a positive sign and changing from IP to NIP would have a negative sign.

RESULTS

The signed rank test results are presented in Table 1. All results related to the price-earnings ratio are insignificant, but all results related to the price-assets ratio and the price-liabilities ratio are significant. The general results in the Chinese context are:

(1) the balance sheet based performance is responsive to management accounting practices, but the income statement based performance is not;
(2) the four MAS issues in this study are basically equally important;
(3) the changes from IP to NIP are correlated to the improved performance of the Chinese listed companies.

TABLE 1
SIGNED RANK TEST RESULTS

Weight of Each of the Four MAC Issues (1 or 2)	Test for Price-earning Ratio (all results below do not exceed the 90% confidence level)	Test for Price-assets Ratio (all results below exceed the 99% confidence level)	Test for Price-liabilities Ratio (all results below exceed the 99.5% confidence level)
1111	0.10	2.48	3.00
1112	0.10	2.48	3.00
1121	-0.17	2.63	3.15
1122	-0.17	2.63	3.15
1211	0.10	2.48	3.00
1212	0.10	2.48	3.00
1221	-0.17	2.63	3.15
1222	-0.17	2.63	3.15
2111	-0.06	2.33	2.84
2112	0.10	2.48	3.00
2121	0.10	2.48	3.00
2122	0.10	2.48	3.00
2211	-0.16	2.33	2.84
2212	0.10	2.48	3.00
2221	0.10	2.48	3.15

DISCUSSION

The results in this study suggest that there is a relationship between the market performance of the Chinese listed companies and the adoption of international or non-international management accounting practices. However, the finding is opposite to the hypothesis (i.e., the Chinese listed companies having changed their management accounting practices from international practices to non-international practices were actually the companies with improved market performance). The signed rank test results were the highest when the scenario was "all non-international practices". Although the Chinese listed companies showed tendency towards the adoption of the international practices, the tendency did not help improving their market performance. This unexpected result may be due to the following reasons.

Firstly, the Chinese managers are likely not well equipped with knowledge to master the international management accounting practices. Although they are willing to adopt the international practices, the adoption may not be very effective or efficient. Sometimes, they could come back to the easier and more traditional management accounting methods in the Chinese context, especially on those aspects where there are no government restrictions on the methods to be adopted. (In the past, the Chinese companies were under close supervision of regulatory bodies on management accounting practices. The government authority was more concerned with the output volume of a product rather than the price or the competitiveness of the product in the market for state enterprises.)

Secondly, Chinese managers may not realize the importance of participation in the budgeting process. They are used to accept instructions from superiors rather than using their own initiative to reflect their own concern. Traditional Chinese managers believe that the preparation of budgets is the business of the senior management. This is consistent with the Chinese long-established culture of top-down communication.

Moreover, financial accounting in China is effectively regulated by government bodies such as the Ministry of Finance. Companies are not free to select and adopt financial accounting methods. In China, the emphasis is on the development of financial accounting but not on management accounting, as the development of financial accounting standards is directly related to raising capital locally and overseas. The situation is reinforced by the fact that public accounting firms in China do not provide management accounting services to clients. In China, public accounting firms only provide audit services to clients. As there is no support from public accounting firms or from the accountancy professional body, the development of management accounting is further hindered. (In many countries, established management accounting professional associations exist to develop management accounting practices. In China, there is no such establishment.)

In this study, another finding is that management accounting practices are more related to the balance sheet based performance than to the income statement based performance. This is in fact consistent with the common perception that Chinese companies pay more attention on balance sheet items rather than on income statement items. It is also interesting to see that there is basically no difference in the Signed Rank Test results by using different weighting factors for the four MAS issues. In other words, the original expectation that different management accounting practices would be important to different types of firms (e.g., product costing method selection would be more important to manufacturing firms, and investment appraisal method selection would be more crucial to heavy industry firms) was not supported by the results.

IMPLICATIONS FOR FUTURE RESEARCH

The results of this study suggest that the non-international management accounting practices may be quite appropriate for the Chinese firms. As different environments have their own cultural variables, may be “the adoption of their own practices” the special way of going to success for the Chinese companies.

Regarding the implications for future research, future studies may look into those management accounting issues other than the four selected in this study. Future studies may look into the relationship between the other practices and the market performance of the Chinese companies. Future studies can change some variables for the four original issues as well. For example, activity based costing can be added for the costing method issue. Moreover, future studies may have more weighting combinations to see which practice would play a more important role.

It would also be interesting to further study why the management accounting practices influence more the balance sheet based performance than the income statement based performance. In fact, the price-earning ratio is an important performance indicator in many countries in the West.

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