DETECTION OF CREATIVE ACCOUNTING IN FINANCIAL STATEMENTS BY MODEL THE CASE STUDY OF COMPANIES LISTED ON THE STOCK EXCHANGE OF THAILAND

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Abstract

The objectives of this study were to detection and test efficiency the creative Accounting in Financial Statements by the Beneish model, 1999, of listed Companies in The Stock exchange of Thailand. The sample groups used in this study are the six listed companies which SEC, Securities and Exchange Commission, Thailand incriminate to transgress of Creative Accounting in Financial Statements as at 31 December 2003 to 2011 respectively, and eighty and one listed companies in the same industry with the former company, not include the firms which are in a rehabilitation group and also the business without financial statement as at 31 December 2003 to 2011. The samples are analyzed the financial ratio and the indexes of the Beneish model, 1999 by using Mean, Standard Division and Median.

The results of the study showed that the financial characteristic of the creative accounting enterprise is consistent with the model. The financial characteristics are smaller in terms total asset, Liquidity and Leverage than their counterparts. Videlicet, smaller size, sales, market value, Working Capital to Total Asset, *Current Ratio and Total Debt to Total Assets than their counterparts. Moreover, they are also less profitable and more levered. On the other hand, the sales growth is larger than the firms which are not Creative Accounting in Financial Statements.*

As for the indexes of model, they are four indexes can indicate the creative Accounting in Financial Statements, days Sales in Receivables Index, Gross Margin Index, Asset Quality Index and Sales Growth Index. There is only one index cannot indicate the creative Accounting in Financial Statements is Accruals to Total Assets.

Keyword: Detection, Creative Accounting, Financial Statements, The Stock Exchange of Thailand

1. Background

During the period of bear economy, turnovers of many companies have gone down. The turnovers of prosperities and assets are to lower operating incomes. The operations have taken longer time to sell its products and also save money. The debtors delay the default and the debts are eventually accumulated. The illiquid flow of cash has the negative effects on the financial budgets. These phenomena in the financial budgets reflect strengthens and weaknesses of the financial status, performances and flow of cash in the operations. Many companies have been developing the strategies to effectively manage their financial budgets to meet the preferences of the executives by undergoing the gap between the accounting standards and regulations.

Generally, the refurbishment of financial statements can be done through the accounting techniques which probably build either positive or negative image. The company executives are normally under pressure to make profits from the stock market and ensure the positive value of shared price. Using the accounting techniques can be changeable under the control of the company executives to receive their expectation or earnings management. Sometimes, the accounting techniques are not appropriately used to tackle the financial problems or are too conservative such as the fast-making-profit accounting technique

Although associated business details in the main accounting revealed on the financial statements in relation to business activities, some of financial details are subtracted from the business details. Practically, the conditions of managing financial statements do not only depend on the numeric factors such as percentage of the stock ownership; instead, the conditions depend on other substances such as the power or influence of the business management. The substances cannot be easily estimated in the practice. Especially, the companies which have subsidiaries or associates and other transactions or debts, the financial statements are likely to be performed through the subsidiaries or associates by 3-4 levels in order to avoid the subtraction/overlaps of the financial details.

To avoid the solidarity of the financial statements, the companies are likely to report account fraudulent compared to other industries.

Financial or administrative corruption cannot be easily detected. The stock market value would has already dropped before the corruption being detected. Due to the companies' executives actually realized the financial statements before the investors, the investors need to perceive the potentiality of the financial analysis and detect the warning signs to indicate the changes in the companies even do not really reflect the companies' the stock market value or financial status.

From the above reasons, the model of Beneish in 1999 was used to study the creative accounting to detect the financial problems.

2. Objective

The study aimed to investigate the warning signals for the creative accounting of the companies which were registered in the Stock Exchange of Thailand by using the model of Beneish in 1999.

3. Relevant theory and research

Creative accounting was developed in the 19th century and later widely used. After the administration separated from the business ownership, the company executives were under pressure to show the outcomes of the business process and a lack of standards to guarantee the circumstances or details of new business. In the case of the value estimation, laws of accounting have a lack of transparency, flexibility and are not associated with the accounting agreement among stakeholders. From above reasons, the financial statements being created by the company's executives were to distort the reality of administrative outcomes and the financial positions of the company. The idea of creative accounting in current years has been initiated from the idea of earning management which was developed from the idea of income smoothing.

Beidlemen (1973) (cited in Ahmed (2004)) mentioned that income smoothing is as the action that intends to receive income volatility at normal level. The action is performed by the company's executives to lower the changes in the abnormal received income regarding the scope of accounting principles and administrations.

Hearly and Wahlen (1998) stated that earning management depends on the consideration of the company's executives regarding the financial details in order to adjust the financial reports. When the returns of all executives are dependent on figures shown in the accounting report, all stakeholders can misunderstand the economic position of the company or earning management.

Mulford and Comiskey (1996) referred by Worasak Thummanont (2000) grouped creative figures in financial budget into 5 groups including 1) aggressive accounting 2) earnings management 3) income smoothing 4) fraudulent financial reporting and 5) creative accounting practices. Types of creative accounting are 1) early detection 2) Setting the expenses as aggressive costs and expansive amortization policies 3) fraudulent financial reporting 4) creative accounting practices 5) the problem of cash flow report.

Schilit (1993) referred by Kanokwan Kitssmat et al. (1996) stated that frauds in the financial statement can be classified as 1) recognition of future income 2) delusive income 3) Profit made from a single detail 4) delay expenditures 5) unsettle debts 6) deferring the current income for future and 7) future expenses recorded as present

Center for Financial Research and Analysis (CFRA), which is a financial research center in America, found that accounting activities can be categorized into 7 types including 1) pre-recording income 2) fake income records 3) increasing profit from occurred once 4) moving current expenses to future or back 5) wrongly or not recording debts being settled 6) moving current income to the future 7) moving back future expenses to current expenses. From these seven strategies, only 2 strategies as the main accounting strategies are; increasing current profits by increasing income and profit; decreasing current expenditures and current profits to increase the future profits by reducing income and increasing current expenses (Thailand Securities Institute, the Stock Exchange of Thailand, 2007)

Relevant Research

The study of Pravit Thantrajint (2000) on financial statements to detect the business warning signals. The study intended to study qualitative and quantitative factors related to financial statements and to study ratios that affect the financial status in each group. The study found that qualitative data from auditors and notes of financial statements can be used as the business warning signals whereas quantitative data from all companies can provide the warning signals at 90% of conference level, including ratios of attained profit to total assets, total debt to total asset, the ratio of cash flow to current liabilities, and debt to equity shares. When the companies were separately analyzed, the financial ratios with 90 % of the confidence level were found to provide a warning signal regarding different business, for example, return on asset was for the printing companies, ratio of attained incomes to total assets was for companies about construction materials and gross profit margin on sales was for the real estate group. Financial ratios could not be as warning signals for a group of financial companies.

Chang andf Tseng (2006) studied the capacity to estimate the possibility of financial corruption. In the Statements on Auditing Standards (SAS) No.82 mentioned risk factors of financial corruption and assigned auditors to assess related risk factors of financial corruption in order to design the appropriate monitoring form by recruiting 45 fraud engagements and 206 non-fraud engagements from top 20 auditing companies in Taiwan. Data were retrospectively collected between 1994 and 2004 and questionnaire was also exercised to study 37 risk factors mentioned in Professional Standards (AU 316). The AU 316 was used in the decision making process of all auditors or other stakeholders to answer the questionnaire. Logistic regression model was also used in the study. The study found that the Statement on Auditing Standards (SAS) No. 82 was better used for the decision being made by auditors for the risk factor measurement in relation to the financial corruption than the use of Profession Standards (AU 316).

Beneish (1999) studied the warning signals that affected the creative accounting by selecting samples as companies where the financial details were reported in the Compustat between 1982 and 1992. Samples were categorized into 2 groups, as followed:

1. 74 Companies were forced to follow the Accounting and Auditing Enforcement Releases (AAERS) and also accused by the press about creative accounting.
2. Other 2,332 companies with the similar business reported no creative accounting and were classified into two parts.
2.1 Comparing the financial characteristics between the companies with creative accounting and without creative accounting by analyzing the ratios to differentiate these companies from each other.
2.2 Quantitative variables were analyzed to detect the warning signals of the creative accounting and the probability of the occurrence of creative accounting being created by comparing two years
From the analysis, five warning signals of creative accounting were:

1. Days Sales in Receivables Index
2. Gross Margin Index
3. Asset Quality Index
4. Sales Growth Index
5. Accruals to Total Assets

Due to the increase in profits, quality of assets and growth among the accused companies of making the creative accounting, the estimated values of the five indexes were higher than other indexes in the companies without being accused.

The following indexes were not related to the warning signals of the creative accounting but rather managing the profitability. These indexes were:

1. Depreciation Index
2. Sales General and Administrative expenses index
3. Leverage Index

Lobo and Zhou (2001) studied the relationships between the quality of the disclosed information and earnings management. The disclosed information was rated by using the Corporate Information Committee (CIC) of the Association for Investment Management and Research between 1990 and 1995. The disclosed information was rated as an average score. Information was disclosed by 40-50% in the annual reports, 30-40% in quarterly reports, 20-30% in investors' reports.

In order to measure the profitability management, the model of Dechow, Soland and Sweeny (1995) was used to estimate discretionary accruals. If higher coefficient was found, higher profits could be made. From the study, qualified companies which less disclosed its information could make higher profit than those with highly disclosed information.

Persons (1995) (Cited in Piraporn, 2010:26) studied the use of financial information to indicate the corruption in financial reports. Samples between the year 1974 and 1990 were divided into two main groups including a group of companies which corrupted in financial reports and another is a group of companies which did not in. Among these companies, 54% were in between 1981 and 1985. The study was to match financial information between companies with financial corruption and those without regarding the similar business and within the year. The study found that 206 companies reported similar business environment and policies and 200 companies reported the use of fiscal budget 1 year before the actual year of financial corruption. The study used analytic method called stepwise-logistic models to classify financial ratios: (1) Financial Leverage (2) Profitability (3) Asset Composition (4) อัLiquidity (5) Capital Turnover and (6) Firm Size. By considering the total assets, the study found that Financial Leverage, Asset Compositionม อัCapital Turnover and Size were main factors associated to the corruption in financial reports, significant at 97% level (p=0.1).

4. Methodology

In the study samples were categorized into two groups including a group of accused companies of making creative accounting in case of making a fake financial statements and lately submitting financial reports and those were registered at the Office of the Securities and Exchange Commission. Six accused registered companies were selected. Another group included 81 companies from those with creative accounting.

Data Collection

Two secondary databases were used in this study including:

1. Financial database from registered companies which were condemned for the financial creation as well as financial information from other companies with business types in the Sock Exchange of Thailand
2. Journals, books, articles, references, research paper, report and other relevant written material

Data Analysis and Statistical Tools

Data collected from the two sample groups were divided into two main categories.

1. Financial ratios of the model of Beneish in 1999 included:

1.1 Size

1.1.1 Total Asset

1.1.2 Sales

1.1.3 Market Value

1.2 Liquidity and Leverage

1.2.1 Working Capital to Total Asset)

1.2.2 Current Ratio)

1.2.3 Total Debt to Total Assets

1.3 Profitability and Growth

1.3.1 Return on Asset

1.3.2 Sales Growth

2. Index in the model of Beneish in 1999 included:

2.1 Days Sales in Receivables Index

2.2 Gross Margin Index

2.3 Asset Quality Index

2.4 Sales Growth Index

2.5 Accruals to Total Assets

2.6 Depreciation Index

2.7 Sales General and Administrative expenses index

2.8 Leverage Index

Collected variable from all registered companies were used for the comparison of financial creation between the registered companies which were condemned for the financial creation, and other industries with similar business by exercising the statistical formula as followed:

The mean value or average is a total of values of all information divided by number of population as following

$$\text{Average} = \frac{\sum Xi}{N}$$

Where Xi = Value of element i

N = Number of elements in a set

2. The median is the middle value of all information which separate information into two parts equally.

5. Discussion

From this study, six registered companies in the Stock Exchange of Thailand, including ROYNET, BSI, PICNIC, DAIDO, CIRKIT and POWER, were found to be accused about the financial creation between 2003 and 2011.The financial positions of these companies in comparison with other industries were as followed.

- Two accused companies (33.33%) reported higher assets and properties than other industries regarding the similar business. Four companies (66.67%) reported to have to less assets and properties.
- Only one accused company (16.67%) reported to higher sales than other industries and five companies (83.33%) reported lower.
- One accused company (16.67%) had higher the market value than other industries and five (83.33%) reported lower.
- One accused company (16.67%) reported higher equity capital to asset than other industries and five companies (83.33%) reported lower.
- One of six accused companies (16.67%) reported higher current ratio than other industries and five (83.33%) reported lower current ratio than other industries regarding the similar business.
- Three out of six accused companies (50%) reported higher debt to total asset ratio than other industries and other three reported lower.
- All six accused companies (100%) reported higher return on assets than other industries regarding similar business.
- Four out of six accused companies (66.67%) reported higher the rate of sales growth than other industries and two accused companies (33.33%) reported lower.

To conclude the financial characteristics of the six accused companies were relatively small, the companies reported smaller total assets, total sales rate and market value than other industries with similar business. The companies reported lower market liquidity and smaller leverage which mean as having lower equity capital to asset, current ratio and profitability but the companies reported higher the growth than other industries.

Index for detecting the warning signal for the financial creation of the accused companies in comparison to other industries regarding similarity of business, the study found that:

- Three accused companies (50%) reported higher days sales in receivable index than other industries and other three reported lower.
- Two accused companies (33.33%) reported higher gross margin index than other industries and four (66.67%) reported lower.
- One accused company (16.67%) reported higher asset quality index than other industries and five (83.33%) reported lower.
- Two out of six accused companies (33.33%) reported higher sales growth index than other industries and four (66.67%) reported lower.
- Two out of six accused companies (33.33%) reported higher accruals to total assets than other industries and four (66.67%) reported lower

However, a group of accused companied about the financial creation reported the four essential indexes of warning signals for financial creation including Days Sales in Receivable Index, Gross Margin Index, Asset Quality Index and Sales Growth Index. The value of Accruals to Total Index cannot be the warning signal of financial creation.

6. Conclusion

Overall, 64.59% of the financial information from the registered companies which reported the creative accounting followed the model of warning signals. With regard to the financial basis, the registered companies had small size, low liquidity and small capital structure and leaded to achieve smaller total sales, market value, working capital to total asset, current ratio and total debt to total assets as well as lower profitability but higher growth than other companies with similar business.

Four indexes, which can be used to warn the occurrence of the creative accounting, are days sales in receivables index, gross margin index, asset quality index and sales growth. Accruals to total assets is only one index that cannot be used due to the accruals to total assets is not being considered to make the creative income or expenditure.

To conclude that the warning signals of the creative accounting are days sales in receivables index, gross margin index, asset quality index and sales growth while accruals to total assets is not.

From the literature review, other factors, such as reports of accountants, are also important to be the warning signals of the creative accounting. So, information users or investors should consider other information in relation to the quality of financial information.

7. Future research

1. Including more related qualitative and quantitative dimensions to detect warning signals to be more reliable.
2. Comparing between financial characteristics or the index of warning signals and a group of companies with similar business types and sizes to define more associating factors that affect the creative accounting
3. Studying the accounting creation using other accounting models would be needed in order to compare the results and its limitations with the model of Beneish in 1999.

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9. Brief biography of each author

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