The Impact of the Disclosure in the Annual Report on the Decisions of Investors of Listed Companies in the Stock Exchange of Thailand

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Abstract
This research aims to examine the impact of the disclosure in the annual report with regards to the abnormal returns and the cumulative abnormal returns of the companies listed in the Stock Exchange of Thailand. The sample for this research are 230 of the listed companies in the Stock Exchange of Thailand between the year 2013 and 2017. Adopted in the data analysis are the Chow test for the analysis on split data sets and the multiple regression analysis. The analysis of the data set split into a group containing companies with low book value per share and the other group containing companies with high book value per share finds that the auditor's report, the investment in subsidiaries and associated companies, the corporate governance, the current ratio, the quick ratio, the operating profit margin, the return on asset ratio, the return on equity ratio, the interest coverage ratio, the dividend payout ratio, the debt to equity ratio affect the abnormal returns and the cumulative abnormal returns in different ways. It is also found that the relationship between the information disclosed in the annual report, the abnormal returns as well as the cumulative abnormal returns, and the consequent decisions of investors differs between firms with high book value per share and those with low book value per share.
Keywords: Information Disclosure, Annual Report, Investors, Abnormal Returns, Financial Statement

Introduction
Information disclosure in a firm's annual report, which contains the firm's financial health, performance, and cash flow, is intended for readers of the financial statement to have accurate and complete information that is sufficient for them to make decisions (Walden & Schwartz, 1997) as well as to evaluate the performance of the firm's executives (ZarZeski, 1996). Most firms disclose good news (Lang & Lumdholm, 1993) that benefits the investors (Ratanajongkol, 2006). In studying the value of disclosing information in the annual report, the past research had applied the ideas and theories in finance to explain the events, from which the future events are forecast, and to prove that the information disclosure in the annual report has values for decision-making. The studies include the examination of the relationship that is observable and measurable, such as the response of a stock price to the investors using the information in the annual report to make the investment decisions on the stock (Leventis & Wetman, 2004). Few is the examination of the effect of information disclosure in the annual report on the decisions made by investors in the capital market of developing countries. However, this kind of examination should benefit the developing countries that want to raise funds from abroad. The results may be used to determine the accounting practice and the practice of information disclosure in ways that the disclosed information is accurate and appropriate. This may be particularly true for the Stock Exchange of Thailand, a developing capital market that sees the importance of information disclosure in the annual report, which investors may utilize in their decision-making.

Therefore, the author is interested in studying the effect of the information disclosure in the annual report on the decision-making of investors. The effect is measured by the abnormal returns and the cumulative abnormal returns, with the differences between industries or sectors controlled by variables such as the firm size and the market price per profit. Not only does this study indicate the effect on the investors in Thailand's capital market, but this study also examines the differences by characters of the business as determined by the book value per share. This is done by splitting the sample at the median into two groups: the firms with a low book value per share and the firms with a high book value per share. This study should provide evidence on the value of the information disclosure in the annual report. It should also be useful in explaining the events in Thailand's capital market, and should enable the readers of financial statements to correctly analyze the information as well as the related agencies to develop and improve the accounting standard, the financial reporting standard, and the auditing standard, such that they keep up with the business model and reflect the firm's financial health and performance. It should then help the firms disclose important information that would benefit the readers of the financial statements, especially the investors.

Research Objectives

1. To study the effect of information disclosure in the annual report on the abnormal returns and the cumulative abnormal returns of the firms registered in the Stock Exchange of Thailand.
2. To study the effect of information disclosure in the annual report on the abnormal returns and the cumulative abnormal returns among firms with different book values per share.

Literature Review

The disclosure of information in the annual report is a way to accurately, completely, and sufficiently disseminate the information and news to shareholders and other related individuals, so that they can clearly read and analyze the information. This research has reviewed the literature - both in terms of related theories and related research articles.

Returns from the investment in stocks are composed of returns in one or more ways, which include: (Sinkey, 2002)

1. Yield is the cash flow or the income earned by the investors during the investment period, and it can be in the form of cash, dividends, or interests.
2. Capital gain (or loss) is the profit (or loss) incurred from the sale of the securities at a price higher (or lower) than the purchase price, or the so-called the change in price of securities.

The hypothesis of the capital market efficiency indicates that the stock price sold in the market has reflected all related information (Pope & Inyangete, 1992). The investors consider whether any factors would affect the cash flow they expect to earn in the future. It can then be said that the stock price at any moment in time has reflected all the news and information such as the firm's performance, the industry's competition, the business opportunities, and the economic conditions. The efficient market can be categorized into three levels (Brigham & Houston, 2013). They are: (1) the weak form of market efficiency, (2) the semi-strong form of market efficiency, and (3) the strong form of market efficiency. It is assumed here that the Stock Exchange of Thailand has a semi-strong form of capital market efficiency, where current stock prices reflect the information that has been disclosed to the public. In other words, when there is a disclosure of information, the stock prices will respond to such disclosure. This research adopts Sharp's capital market model (1964) in its explanation of the responses by the stock prices.

Information disclosure in the annual report A greater tendency can be seen of information disclosure via the annual report because such disclosure allows the readers of information to know about the financial health, the performance, and the direction as well as the future policies of the businesses. This research studies the information disclosed via the annual report, including the auditor's report, which is highly important to the investors (Leventis & Wetman, 2004), and the information regarding relevant individuals or businesses, which builds confidence among investors (Walden & Schwartz, 1997). Firms that are well monitored, professionally managed, and well-founded tend to produce a more credible financial report, which generates more values for the firms (Gruszczynski, 2006). Where every business has the goal of generating greatest profits to answer to the shareholders, the information of operating profit margin is very useful for the investors (Kallunki, Martikainen, & Martikainen, 1998). Walden and Schwartz (1997) posits that the information disclosure in the annual report signals profits and cash flows of the firm; therefore, a greater profit potential and a good financial liquidity of a firm shall help the firm move forward in their business (Fohlin,1998), and such is a factor that investors consider in their decision-making (Rajgopal, Venkatachalam, & Jiambalvo, 1999). Investors may also expect the profit-making capability and the future stock returns (Begley and Fischer, 1998), and information disclosure regarding the financial policies, including the interest coverage ratio, the dividend payout ratio, and the debt to equity ratio, is a factor that may explain the decisions made by the investors (Alfraih & Alamezi, 2012; Lev & Zarowin, 1999).

Research Methodology

The population consists of 541 registered companies in the Stock Exchange of Thailand in eight industrial sectors (Stock Exchange of Thailand, 2017). The sample size calculated by the researcher using Yamane's method is 230 firms. The sample is selected using the stratified method, so that every industrial sector is represented. Data are collected from the Stock Exchange of Thailand's SET SMART database in a five-year period from 2013 to 2017. The hypothesis testing is applied on subgroups of data using Chow test and the multiple regression analysis.

Variables and measurements used in the research are as follows.

1. Investor's decisions are measured by:

1.1 Abnormal returns is calculated using Sharp's capital market model (1964).

$$AR_{it} = R_{it} - E(R_{it})$$

where AR_{it} = Abnormal returns of firm i at time t

R_{it} = Actual returns of firm i at time t

$E(R_{it})$ = Expected returns of firm i at time t

1.2 Cumulative abnormal returns from day -15 to day +15 ($CAR_{(-15, +15)}$) is calculated as:

$$CAR_{it\,(p,\,q)} = \sum_{t=p}^{q} AR_{it}$$

where $CAR_{it\,(p,\,q)}$ = Cumulative abnormal returns of firm i from day p to day q

AR_{it} = Abnormal returns of firm i at time t

2. The factor regarding the auditor's report is measured by the number of days from the day that the account is closed at year's end to the day that the financial statement is submitted to the Stock Exchange of Thailand.

3. The factor regarding related individuals and businesses is measured by scores as follows.

3.1 Investment in subsidiaries and associated companies is scored in total of six (6) points. One point is given for the disclosure of each of the following items: (1) investment capital by the cost method, (2) investment capital by the equity method, (3) percentage of share-holding, (4) types of businesses of subsidiaries and associated companies in which investment is made, (5) relationship of related businesses, and (6) countries where companies are registered.

3.2 Loans are scored in total of three (3) points. One point is given for the disclosure of each of the following items: (1) the remaining loan amount, (2) the paid interest, and (3) the lending conditions.

4. Corporate governance is scored in total of three (3) points. One point is given for the disclosure of each of the following items: 4.1 the meetings of the auditing committee, 4.2 the trainings of the auditing committee, and 4.3 the number of the auditing committee members.

5. Financial liquidity is measured by:

5.1 Liquidity ratio = Current assets/Current liabilities

5.2 Quick ratio = (Cash + Short-term investment + Account receivables and notes receivables)/Current liabilities

6. Profitability potentials are measured by:

6.1 Ratio of operating profits and sales = Operating profits/Net sales

6.2 Ratio of returns and assets = Net profits/Total assets

6.3 Return on equity ratio = Net profits/Shareholders' equities

7. Financial policy is measured by:

7.1 Interest coverage ratio = Operating profit margin/Paid interest

7.2 Dividend payout ratio = Dividends/Net profits

7.3 Debt to equity ratio = Total liabilities/Shareholders' equities

8. Firm size is measured by the firm's registered capital.

9. Market price per profit is measured by market price of the stock/net profit per share.

10. The book value per share is measured by (total assets - total liabilities)/Total number of common shares that have been issued and paid up.

11. The analyses of the sub-samples are done using the following Chow test's formula.

$$F(df_1, df_2) = \frac{[SSE_{total} - (SSE_{Group1} + SSE_{Group2})] / df_1}{(SSE_{Group1} + SSE_{Group2}) / df_2}$$

where df_1 = Number of independent variables +1

df_2 = (Number of observations in sub-sample 1 + Number of observations in sub-sample 2) - (2* (Number of independent variables + 1))

Research Results and Discussions

Auditor's report: The analysis of all observations finds that the auditor's report has a positive effect on the abnormal returns and the cumulative abnormal returns as the auditor's report includes comments of the auditors on the accuracy of the audited financial statement. The finding shows that the disclosure of the auditor's report in the annual report presents useful information, which investors can utilize in making their investment decisions (ZarZeski, 1996). The analyses of the sub-samples show that among firms with low book value per share the auditor's report positively affects the abnormal returns. Such finding reflects good news (Bamber, Bamber & Schoderber, 1993), where investors are confident of the comments made by the auditors. However, the auditor's report does not affect the cumulative abnormal returns, possibly because when extending the test period of the cumulative abnormal returns to the period between date -15 and date +15, investors do not utilize the information from the auditor's report in making investment decisions. Moreover, among firms with high book value per share, it is found that the auditor's report has a positive impact on the cumulative abnormal returns but not on the abnormal returns, maybe because the investors do not give much weight to this item as compared to other information when making investment decisions.

Investments in subsidiaries and associated companies: The analysis of all observations together finds that the investments in subsidiaries and associated companies have a positive impact on the abnormal returns and the cumulative abnormal returns. The analyses of the sub-samples find that among firms with low book value per share investments in subsidiaries and associated companies affect the abnormal returns and the cumulative abnormal returns. The disclosure of information regarding related individuals or businesses may generate confidence among the readers of financial statements, and is deemed valuable and useful to investors (Haw, Qi, & Wu, 2001). Among firms with higher book value per share, however, investments in subsidiaries and associated companies have impact on neither abnormal returns nor cumulative abnormal returns, possibly because the information on investments in subsidiaries and associated companies is not highly important.

Loans: In the analyses of all observations and the sub-samples, it is found that loans have no impact on the abnormal returns or the cumulative abnormal returns. The finding indicates that disclosure of information on loans is not an important factor considered by investors when making investment decisions, maybe because loans present a normal operation in any business.

Corporate governance: The analysis of all observations finds that corporate governance has a positive effect on the abnormal returns and the cumulative abnormal returns. In the analyses of the sub-samples, it is found that among firms with lower book value per share, corporate governance affects the abnormal returns and the cumulative abnormal returns. Specifically, good corporate governance and professionalism in the firm's management contribute to the credibility of the financial report and add values to the firms (Gruszczynski, 2006). For firms with higher book value per share, however, it is found that good corporate governance has no impact on the abnormal returns or the cumulative abnormal returns.

Current ratio: The analysis of all observations finds that the current ratio has a positive effect on the abnormal returns and the cumulative abnormal returns. In the analyses of the sub-samples, it is found that among firms with lower book value per share the current ratio has an effect on the abnormal returns and the cumulative abnormal returns, as the current ratio reflects a firm's ability to pay off its short-term debts (Camfferman & Cooks, 2000). Such result shows that the firm's ability to effectively turn current assets into cash in order to pay off short-term debts affects the investors' decisions to invest in the stock. For firms with high book value per share, the current ratio is found to have no impact on the abnormal returns or the cumulative abnormal returns, possibly because the borrowing for the purpose of adding to the liquidity rarely happens.

Quick ratio: The analysis of all observations finds that the quick ratio has a positive effect on the abnormal returns and the cumulative abnormal returns. In the analyses of the sub-samples, it is found that among firms with lower book value per share the quick ratio affects the abnormal returns and the cumulative abnormal returns. This result suggests that these firms have sufficient liquidity to pay off their short-term debts in time. As for the analyses for firms with high book value per share, it is found that the quick ratio has no impact on the abnormal returns or the cumulative abnormal returns, possibly because the firms with high book value per share often have low liquidity and do not manage the cash very effectively.

Operating profit margin ratio: The analysis of all observations shows that the operating profit margin ratio has a positive effect on the abnormal returns and the cumulative abnormal returns. The analyses of the sub-samples show that in firms either with low or high book value per share, the operating profit margin ratio affects the abnormal returns and the cumulative abnormal returns. The result indicates that effective management of the firm contributes positively to the firm's wealth. The operating profit margin ratio is a useful piece of information for the investors to make decisions on the stock investment (Kallunkiet al., 1998). This is consistent with the work by Rajgopal, Venkatachalam & Jiambalvo (1999) which finds that having high profitability potentials is the factor that investors consider when making decisions.

Return on asset ratio: The analysis of all observations shows that the return on asset ratio has a positive effect on the abnormal returns and the cumulative abnormal returns. The analyses of the sub-samples of firms with different book values per share find that the return on asset ratio affects the abnormal returns on the cumulative abnormal returns, where the investors in Thailand utilize the information of return on asset ratio in their decisions to invest, and show that the information disclosed in the annual report is valuable and useful to the investors (Kilpatrick & Wilburn, 2006).

Return on equity ratio: The analysis of all observations show that the return on equity ratio has a positive effect on the abnormal returns and the cumulative abnormal returns. The analyses of the sub-samples of firms find that among firms with high book value per share the return on equity ratio exhibits an effect on the abnormal returns and the cumulative abnormal returns. Similarly, previous research has pointed out that the return on equity ratio has been used as an indicator of the firm's ability to make profits in making the investment decisions (Mondy, Noe, & Premeaux, 2002). For the analysis of firms with low book value per share, it is found that the return on equity ratio has no impact on the abnormal returns and the cumulative abnormal returns, possibly because investors give more weights to other information.

Interest coverage ratio: The analysis of all observations show that the interest coverage ratio has a positive effect on the abnormal returns and the cumulative abnormal returns. The analyses of the sub-samples find that among firms with low book value per share the interest coverage ratio affects the abnormal returns and the cumulative abnormal returns. For firms with high book value per share, the interest coverage ratio has an effect on the abnormal returns but no effect on the cumulative abnormal returns. As the interest coverage ratio indicates the business's ability to pay the loan interest, it is the factor that may explain the decisions made by the investors (Alfraih & Alamezi, 2012; Lev & Zarowin, 1999).

Dividend payout ratio: The analysis of all observations shows that the dividend payout ratio has a positive effect on the abnormal returns and the cumulative abnormal returns. The analyses of the sub-samples find that among firms with low book value per share the dividend payout ratio affects the abnormal returns and the cumulative abnormal returns. Such finding indicates that the announcement of dividend payouts can be construed as being good news, being useful, and showing the good performance, whereby investors can expect the future stock returns (Begley & Fischer, 1998). As for the firms with high book value per share, the dividend payout ratio does not affect the abnormal returns or the cumulative abnormal returns, possibly because investors care more about long-term than short-term returns.

Debt to equity ratio: The analysis of all observations shows that the debt to equity ratio has a negative impact on the abnormal returns and the cumulative abnormal returns. The analyses of the sub-samples find that among firms with high book value per share the debt to equity ratio negatively affects the abnormal returns and the cumulative abnormal returns. The study indicates that the higher the debt to equity ratio, the less investors would decide to invest in the stock. As for firms with low book value per share, the debt to equity ratio has no effect on the abnormal returns or the cumulative abnormal returns, possibly because their trade volumes may be low and investors only care about the debt to equity ratio for firms with high book value per share.

Conclusion

An examination of impacts of information disclosure in the annual report of firms registered in the Stock Exchange of Thailand on the decisions made by investors has its own value and importance. The impacts lie in the ability of readers of financial statements to obtain accurate, complete, and sufficient information for decision-making, especially decisions in regards to stock investments. This research adopts the technique of Chow test in testing the moderator variable. A limitation present in this research is that the sample has been split only to two groups. In future research, the sample may be split according to profits or trends of returns, such that information disclosure in the annual report, which may affect investors' decisions, can be further tested, and that the statistical and the testing methodology of the split samples may be altered.

Table 1 Impact of information disclosure in the annual report on investors' decisions

		Abnormal returns			**Cumulative abnormal returns**		
		All observations	**Book value per share**		**All observations**	**Book value per share**	
			Low	**High**		**Low**	**High**
REPORT	β	0.047	0.050	0.052	0.051	0.040	0.085
	Sig.	0.007**	0.033*	0.137	0.003***	0.094	0.016*
INVEST	β	0.054	0.068	0.035	0.041	0.048	0.034
	Sig.	0.002**	0.004*	0.310	0.017*	0.043*	0.333
BROWING	β	-0.001	0.015	-0.021	0.003	0.015	-0.011
	Sig.	0.940	0.502	0.526	0.838	0.511	0.757
CG	β	0.055	0.070	0.023	0.055	0.077	0.010
	Sig.	0.001***	0.003**	0.501	0.001***	0.001***	0.768
CURRENT	β	0.049	0.066	0.045	0.038	0.061	0.023
	Sig.	0.006**	0.008**	0.195	0.035*	0.016*	0.508
QICK	β	0.047	0.059	0.029	0.036	0.057	0.004
	Sig.	0.009**	0.021**	0.404	0.042*	0.031*	0.915
EARN	β	0.309	0.258	0.172	0.327	0.271	0.185
	Sig.	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***
EASSET	β	0.226	0.223	0.306	0.220	0.207	0.322
	Sig.	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***
EQUITY	β	0.075	0.034	0.210	0.051	0.020	0.168
		0.002**	0.242	0.000***	0.041*	0.491	0.003**
INTEREST	β	0.068	0.091	0.164	0.082	0.112	0.131
	Sig.	0.009**	0.002**	0.019*	0.002***	0.000***	0.065
DIVIDEND	β	0.084	0.110	0.017	0.126	0.149	0.063
	Sig.	0.003*	0.005**	0.709	0.000***	0.000***	0.170
DE	β	-0.084	-0.031	-0.308	-0.066	-0.033	-0.216
	Sig.	0.000***	0.241	0.000**	0.005**	0.229	0.001***

*significant at five-percent significance level; **significant at 1-percent significance level; ***significant at 0.1-percent significance level, where (1) REPORT = auditor's report, (2) INVEST = investments in subsidiaries or associated companies, (3) BROWING = loans (4) CG = corporate governance, (5) CURRENT = current ratio, (6) QICK = quick ratio, (7) EARN = operating profit margin ratio, (8) EASSET = return on asset ratio, (9) EQUITY = return on equity ratio, (10) INTEREST = interest coverage ratio, (11) DIVIDEND = dividend payout ratio, and (12) DE = debt to equity ratio

References

Alfraih, M. & Alanezi, F. 2012. "The effectiveness of the joint auditors requirement in promoting corporate disclosure quality." **Arab Journal of Administrative Sciences** 19 (2): 245-270.

Bamber, E., Bamber, L., & Schoderber, M. 1993. "Audit structure and other determinants of audit report lag: An empirical analysis." **Auditing: A Journal of Practice & Theory** 12 (1): 23-30.

Begley, J. & Fischer, P. 1998. "Is there information in an earnings announcement delay?." **Review of Accounting Studies** 3 (4): 347-363.

Brigham, E. & Houston, J. 2013. **Fundamentals of financial management.** 13rd ed. Boston: McGraw-Hill.

Camfferman, K & Cooks T. 2000. "An analysis of disclosure in the annual report of U.K. and Dutch companies." **Journal of International Accounting Research** 1 (1): 3-31

Fohlin, C. 1998**.** "Relationship banking, liquidity and investment in the German industrialization." **The Journal of Finance** 35 (1): 1,737-1,749.

Gruszczynski, M. 2006. "Corporate governance and financial performance of companies in Poland." **International Advances in Economic Research** 126 (2): 251-259.

Haw, I., Qi, D. & Wu, W. 2001. "The nature of information in accruals and cash flows in an emerging capital market: The case of china." **The international journal of accounting** 36 (4): 391-406.

Kallunki, J. P., Martikainen, M., & Martikainen, T. 1998. "Accounting income, income components and market to book equity ratios." **International Journal of Accounting** 33 (3): 359-375.

Kilpatrick, B. & Wiburn, N. 2006. "Off balance sheet financial and operation lease: Impact on lessee financial ratios." **RMA Journal** 89 (4): 80-87.

Lang, M. & Lundholm, R. 1993. "Cross sectional determinants of analyst rating of corporate disclosures." **Journal of Accounting Research** 31 (2): 246-271.

Lev, B. & Zarowin, P. 1999. "The boundaries of financial reporting and how to extend them." **Journal of Accounting Research** 37 (2): 353-385.

Leventis, S. & Wetman, P. 2004. "Timeliness of financial reporting applicability of disclosure theories in an emerging capital market." **Accounting and Business Research** 34 (1): 43-56.

Mondy, W., Noe, R. & Premeaux, S. 2002. **Human resource management**. 8th ed. New Jersey: Prentice-Hall.

Pope, P., & Inyangete, C. 1992. "Differential information, the variability of UK stock returns, and earnings announcements." **Journal of Business Finance & Accounting** 19 (4): 603-623.

Rajgopal, S., Venkatachalam, M. & Jiambalvo, J. 1999. **Is institutional ownership associated with earnings management and the extent to which stock prices reflect future earning?**. California: Stanford University.

Ratanajongkol. 2006**. "**Corporate social reporting in Thailand" **Qualitative Research in Accounting & Management** 3 (1): 67-83.

Sinkey, J. 2002. **Commercial bank financial management in the financial service industry.** 6th ed. New Jersey: Prentice-Hall.

Walden, W. & Schwartz, B. 1997. "Environmental disclosures and public policy pressure." **Journal of Accounting and Public policy** 16 (2): 125-154.

ZarZeski, M. 1996. "Spontaneous harmonization effects culture and market forces on accounting disclosure practices." **Accounting Horizons** 10 (1): 18-37.

Stock Exchange of Thailand. 2017. **Names of Registered Companies in the Stock Exchange of Thailand.** Retrieved from www.set.or.th.