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RESEARCH ARTICLE

Earnings Management through Accretive Share Buyback and Share Price Return

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Abstract

This study examines the relationship between earnings management through accretive share buyback and share price return of 220 Malaysian listed firms from year 2001 to 2008. The objective of this study is to determine the market behavior on those firms that made good earnings news announcement through accretive share buyback. The 5 days Cumulative Abnormal Return (CAR) result shows that these firms earn positive share price return immediately after the earnings announcement day. Further, the regression result reports on the existence of positive effect of accretive share buyback on share price return. Basically, firms which announce good earnings news by meeting or beating EPS forecast through accretive share buyback earn positive share price return. In sum, investors reward firms that made positive earnings surprises or good earnings news. The good earnings news announcement is a challenge for firms in the capital market for a positive financial health and future prospect. Earnings management through accretive share buyback plays a role to achieve the good earnings news. This paper contributes on the market behavior or investors reaction on firms that deliver good earnings news through accretive share buyback.

Keywords: Accretive share buyback, Earnings management, Cumulative Abnormal Return.

Introduction

Why do firms involve in earnings management? Earnings are an important metrics to measure the firm performance. For outsiders' of the firm key metrics are earnings relative to cash flows as earnings provide more information on firm value[1]. Thus, reporting the desired earnings (earnings per share – EPS) that hit the earnings benchmarksis an essential goal to firm future directions. Seetharaman and Raj [2] quoted that EPS is an investment tools to measure the short or long-term firm performance which systematically quantify the firms' financial health and prospect.If firm announces bad news such as negative or reduced earnings, lesser will be the return from the firm's share prices around the earnings announcement date. This shows a mechanical relationship between net income and share prices [3]. Further, Graham et al. [1] reported firms that meet the earnings benchmark (targets) builds credibility in the financial market and avoids negative effects to share prices. Earnings benchmark is the earnings per share forecasted by the financial analysts, meeting or beating the earnings benchmarks means that the actual (reported) earnings per share either meets or beats the earnings per share forecast. Those firms with reported EPS that meets or beats the EPS forecast makes a positive or good earnings news announcement to the market in return for positive share prices reward from investors. The missed earnings target firms willing to manage earnings as to avoid severe investors' reaction for the negative earnings news. Generally, to avoid the negative market reaction that penalizes the firms' share prices, firms involve in earnings management to reverse the negative earnings news announcement in the market. Hribar, Jenkins and Johnson [4] identified that the investors do not favorably price firms that practiced earnings management through share buyback to meet or beat EPS forecast. However, the authors found that the EPS management through share buyback potentially avoids the firm from large negative share price reaction.

Previous studies found that investor reward firms that made positive earnings announcement news for achieving the earnings benchmarks targets. Some firms reversed the bad (negative) news by engaging in earnings management as a strategy to avoid negative share price reaction for underperforming earnings results. Thus, the outcome of involving in earnings management, assist the firms to earn positive share prices from investors. There are numerous earnings management studies in Malaysia, butthere is a need to investigate on the outcome of earnings management practices specifically in share price reaction.Therefore, it is important to investigate on the post effect of earnings management practices to meet or beat EPS forecast (good earningsnews) whether the investors reward or penalize these firms after the earnings announcement day.Further, the outcome of this studyreveals on the advantage of firms engaging in accretive share buyback.Thus,this study examines whether firms that announce positive or good earnings news through accretive share buyback earn positiveshareprice return?

This study finds that the existence of positive relationship between accretive share buyback and shareprice return. Firms that engage in earnings management through accretive share buyback to meet or beat EPS forecastreceive positive share price return from investors. This result is consistent with previous studies from developed countries that market reacts positively for firms that made positive earnings results announcement through earnings management. Thus, firms that announce positive earnings news either through a successful earnings performance results or through earnings management to meet or beat EPS forecast gain positive share price return. The investors measure the firm performance and financial health through the announcement of positive earnings results. Market behavior action or investors reaction is positively associated with earnings news made by the firms.This study contributes that firms which engage in accretive share buyback to hit the earnings targets or EPS forecast receive positive share price return. This reflects thatwisely usedearnings management complements the firm with positive share price return. This is an efficient earnings management which contributes to earn a positive share price return.

The paper is organized as follows. Section 2 gives a brief review of literature dealing with earnings management through accretive share buyback and share price return as relevant to this study. Section 3 addresses the methodology; section 4 presents the results and analysis; and section 5addresses the conclusion for this study.

Literature Review

Earnings Management

Earnings management is an activity engaged by the firm at the discretion of the managers to adjust the earnings results that ultimately alters the reported earnings per share (EPS). Healy and Wahlen [6] reported that "earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers". According to Healy and Wahlen [6] there are several earnings management methods ranging from accounting methods manipulations to real activities manipulation at the managers' discretion or judgment.Graham et al. [1] documented that managers prefer real activities manipulation to accounting method manipulations (accrual manipulations) although real activities manipulation is more expensive than the accrual manipulations. The real activities manipulation has direct effect to firm's cash flow activities. Roy chowdhury [7] stated that "real activities manipulation as departures from normal operational practices, motivated by the managers' desire to misled at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations". Firms used earnings management mostly the real activities manipulation to meet or beat the earning targets as a strategy to avoid the consequences of decrease in share prices [1]. Thus, this study adopts the real activities manipulations as the earnings management device to determine the share prices return from the post-effect of earnings management engagement through the expensive activity. Hribar et al. [4] reported that share buyback is used as an earnings management device to meet or beat the EPS forecast and this particular share buyback is known as accretive share buyback. This accretive share buyback is one of the real activity manipulationswith direct cash flows consequences.

Share Buyback

Share buyback is one of the firm activities to purchase their own outstanding shares. There are a few types of share buyback activities; open market buyback, tender offer, Dutch auction and private negotiations buyback. Dittmar [8] who has investigated on why do firms buyback shares identified that “firms buyback shares to take advantage of potential undervaluation, to distribute excess capital to alter leverage ratio, fend off take overs and counter the dilution effects of stock options”. There are numerous studies investigated on share buyback over the years but [4] identified share buyback as earnings management tool to hit the earnings (EPS) target. This share buyback is known as accretive share buyback. When the actual EPS is more than 1 cent compared to pre-buyback EPS, that share buyback is an earnings management device known as accretive share buyback.

In Malaysia, share buyback started in year 1999 as one of the recovering strategy from Asian financial crisis in year 1997. In accordance with Section 67A Companies Act 1967 in Malaysia, only the listed firms are allowed to buyback their outstanding shares under the open market buyback method. Since then, listed firms in Malaysia overwhelmingly used share buyback as part of their financial activity in the capital market.Apart from Malaysian studies on share buyback, Chandren and Nadarajan [9] studied on accretive share buyback practices in Malaysia. The authors identified that there were growing trend for accretive share buyback practices, whereby in year 2001, 33 percent of firms engaged in accretive share buyback from the total of share buyback firms and in year 2008, 55 percent firms engaged in accretive share buyback from the total of share buyback firms which amounting to more than RM6billion over a period of 8 years. Thus, the growing trend of accretive share buybackto meet or beat EPF forecast should have a hidden benefit for a positive share return.

Share Price Return and Earnings Management

Sare, Akuoko and Esumanba [10] reported that positive earnings surprises news is important for the investors investment decision making. Investors with value maximizing values expects for positive earnings surprises news. The positive earnings surprises news is when the reported EPS meets or beats the EPS forecast. To avoid severe market reaction from investors, the managers of the firms manages earnings to meet or beat EPS forecast [1]. Kasznik and McNicholas [11] found firms are priced higher by investors for meeting or beating earnings expectations or forecast. They claim that firms that meet earnings forecast consistently attain a higher share price return from the market. Surprisingly, these shows how important to meet earnings expectation till today in return for positive share price return. Further, Kinney, Burgstahler and Martin [12] found that announcement of negative earnings surprise with a small negative differences between the earnings forecast with reported earnings faced with large negative sharereturns. Similarly, the opposite announcement of positive earnings surpriseswith small positive differences between the earnings forecast with reported earnings awarded with large positiveshare returns from the market. This reflects on the importance of announcing good earnings news to market in return for positive share returns. In addition, Graham et al. [1] reported that firm needs to announce positive earnings surprises either to maintain or increase its share prices as it needs to build credibility in share market. Bhojraj, Hribar and Picconi [13] reported that firms that managed earnings to hit EPS forecast gained from the short-term share price return relative to firms missed the EPS forecast. As a consequence, managers of the firm engage in earnings management to avoid negative earnings surprises. With these, it is hypothesized that the accretive share buyback and share price return are positively associated.

Methodology

The population of this study is taken from the share buyback companies listed on Bursa Malaysia from year 2001 to 2008. A total of 220 firms engaged in accretive share buyback that managed to meet or beat EPS forecast. Hribar ‘s model is used to determine the accretive share buyback that is when the difference between reported (post-buyback) EPS and pre-buyback EPS is more than 1 cent.The share prices and composite index for this study is obtained from DataStream Database. The control variables used for this study are Beta:the market risk estimated using market model of the samples over the preceding 100 days,BTM ratio(BTM):Book-to-Market Ratio of last year, firm size (FS):Logarithm of market capitalization of last year, earnings per share (EPS): equals 1 for firms with positive EPS and 0 otherwise.

This study conducted Z-score test to observe whether there is an announcement effects on the share prices around the 5 days event study after the earnings announcement date.The reason to employ 5 surrounding event days (-2 day, -1 day, event day, 2 day, 1 day) is because within the two days after the earnings announcement date (event day) gives direct impact to abnormal share return. Moreover, short window event study is more suitable and relevant to determine the price effects to market reaction from the impact of earnings announcement. The event day for this study is the day that the firm made the earnings announcements date of the annual audited accounts, available at Bursa Malaysia websites. The relationship between earnings management through accretive share buyback and abnormal share return is examined by determining the cumulative abnormal return (CAR) (0 to 2 day) the dependent variable from the 3 days event study similar to [4] and the accretive share buyback in volume of shares (BUYVOLUME) is the independent variable including the control variables.The regression model as follows:

CAR i = β0 + β1 BUYVOLUME i + β2 Beta i +β3 BTM i + β4 FS i +β5 EPS i +ε i

Results and Discussion

Descriptive Statistics

Table 1: Descriptive statistics for 220 accretive share buyback

	Mean	Median	Std Dev	Min	Max	Percentiles	
						Low	High
Accretive Share Buyback (Buy-Volume) (Volume Mil.)	7.152	1.765	17.346	0.001	151.825	0.716	5.807
CAR (0 to 2 days)	0.0081	0.0100	0.049	-0.24	0.16	-0.010	0.030
Beta	0.131	0.105	0.123	-0.020	1.040	0.046	0.180
BTM	3.138	2.234	3.037	0.110	21.750	1.451	3.718
FS	18.886	18.687	1.386	15.660	24.360	17.979	19.738
EPS	0.9818	1.000	0.1339	0	1.000	1.000	1.000

Table 1 presents the descriptive statistics for this study. The variance between the mean and median for accretive share buyback volumes are large with 7.152 for mean and 1.765 for median, thus, it has been transformed into logarithm volume. After transforming the accretive share buyback volume into logarithm volume the mean is 14.891 and median is 15.The study result reports the mean of CAR (0 to 2 day) of 0.8 percent (0.008). This reflects a positive cumulative abnormal return after the earnings announcement dates of the accretive share buyback firms that meet or beat EPS forecast.Before reviewing the correlation and regression results, this study conducted Z-score test for 220 accretive buyback firms that meet or beat EPS forecast (the good earnings news) in order to observe whether there is an announcement effects around the 5 days event study. This Z-score test results are shown in Table 2. The table tabulates the average abnormal return (AAR) and cumulative abnormal return (CAR) from -2 day to 2 day surrounding the 5 days window event. From the Market Model the AAR reported significant return of 0.11 percent and the Z-score of 2.264 with a p-value of 0.02 Day 1. On Day 2, AAR reported a return of 0.10 percent and the Z-score of 1.987 with a significant p-value of 0.04. Surprisingly, higher return is reported immediately after the earnings announcement, Day 1 compared to Day 2 return. This reflects that the investors closely monitor the firms' earnings announcement results and immediate action undertaken upon seeing the results. The CAR made a significant total return of 0.21% with a p-value of 0.10. This shows that there is a significant positive market reaction immediately after the firms made positive earnings surprises on the announcement day. The positive return of AAR and CAR immediately after the earnings announcement day strongly indicates that investors reward firms that announced positive earnings results.

Table 2: Cumulative abnormal return surrounding 2 days of earnings announcement

Market Model (MM)

Day	AAR	Z-score	p-value	CARZ-score	p-value
-2	-0.25%	-5.696	2.00	-0.25%-1.497	1.86
-1	0.02%	0.336	0.73	-0.23%-1.333	1.81
0	0.06%	1.109	0.26	0.00%0.219	0.82
1	0.11%	2.264	0.02**	0.11%0.972	0.33
2	0.10%	1.987	0.04**	0.21 %1.640	0.10*

*Denotes significance of < 0.10, ** denotes significance at a probability of <0.05.

Ironically, the cumulative abnormal return (CAR) of 0.21 percent returns over the 0 to 2 days in this study, explains a shift in position from negative return to positive return after the accretive share buyback firms made its annual earnings announcement. The result of this study coincides with the study done by [5], where the listed firms in Malaysia made a positive cumulative return of 0.26 percent from CAR 0 to 2 days event window. According to Wong, Lim and Chong[5] it is common for CAR results to be lower than 1% in Malaysia which is similar to countries like United Kingdom and Hong Kong compared to United States firms which reports a higher CAR results.

Table 3: Correlations of CAR (0 to 2 days)

	CAR (0 to 2 days)	Buy Volume (ACCSB)	Beta	BTM	FS	EPS
N	220	220	220	220	220	220
CAR	1	.284**	-.049	.114*	.111*	.175**
Buy volume	-	1	-.053	.008	.069	-.008
Beta	-	-	1	-.037	.244**	.075
BTM	-	-	-	1	-.439**	.013
FS	-	-	-	-	1	.089
EPS	-	-	-	-	-	1

** Significant at 0.01 level ; * Significant at 0.05 level

The correlations for cumulative abnormal return (CAR) and accretive share buyback-ACCSB (Buy Volume) are at 0.284 (significant at the 1% level), refer to Table 3. This shows that CAR and ACCSB are positively correlated. Thus, investors reward positively for firms that made positive earnings result announcement. As these firms made positive earnings surprises announcements through accretive share buyback (earnings management proxy) to meet or beat EPS forecast in return for positive abnormal share return. Overall the results indicate that these firms attain positive market reactions.

Table 4: Regression Results of the Cumulative Abnormal Return (CAR)

Dependent variable: Cumulative Abnormal Return (CAR) : No of firms :220			
Independent Variable	**Coefficients**	**t**	**VIF**
Accretive Share Buyback (Buy Volume)	0.267	4.206**	1.013
Control Variables			
Beta	-0.085	-1.291	1.079
Book to Market Ratio (BTM)	0.186	2.634**	1.254
Firm Size (FS)	0.181	2.469*	1.348
Earnings per share (EPS)	0.165	2.593**	1.014
F-statistic: 7.552** ; R-squared : 0.150; Adjusted R-squared: 0.130			

** Significant at 0.01 level ; * Significant at 0.05 level

The R-squared is 0.150 and adjusted R-squared is 0.130 with F-statistics of 7.552 with a significant level of 1% in Table 4. This study found a strong positive coefficient of 0.267 with t-value of 4.206 associated with cumulative abnormal return (CAR) and accretive share buyback which is significant at the 1% level. This shows that 1 percent increase in accretive share buyback volume increases cumulative abnormal return value by 0.267. This finding suggests that the announcement of positive earnings surprises result by the firms, give a positive impression to the investors to reward the firms with positive shareprice return. Specifically, firms manage EPS (meet or beat EPS forecast) through earnings managementtake advantage of short-term positive abnormal share return [13].

Consistently, this study finds that investors reward firms with positive share price return for firms that meet or beat EPS forecast through accretive share buyback.

From the result, CAR (0 to 2 days) are positive related to firm size (FS) at coefficient of 0.181 (5% significance level), book to market ratio (BTM) at coefficient of 0.186 (1% significance level) and earnings per share at coefficient of 0.165 (1% significance level). Results are similar to Hribar et al. [4] study found positive relationship between firm size and cumulative abnormal return. The study reported high BTM firms produce positive share returns which is similar to [14] findings. As expected, the results show that positive EPS gave positive abnormal share return [3]. Based from Hribar et al. [4] study, it is expected for beta to be negatively related to abnormal share return. However, the results are insignificant.

Conclusion

Firms that missed or failed to meet or beat EPS forecast announce negative earnings surprises (bad earnings news) which lead to underpricing of firms share prices [1]. On the other hand, firms that made positive earnings surprises (good earnings news) announcement achieve credibility with the market and increase their share prices. Therefore, EPS is managed as a remedy to avoid severe market penalty.The short event window study (0 to 2 days) result shows that firms used accretive share buyback to manage EPS earn positive share price return. Consistently, this finding reveals that firms have earn a positive return of 0.21 % from 1stday to 2ndday after the earnings announcement day. This positive association between share price return and earnings management through accretive share buyback reflects that investors reward positive share price to firms that deliver good earnings news. These firms portray good financial image in the capital market as the investors build confidence with the firms' future growth.

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