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Abnormal Returns in Corporate Action:

The case of Indonesia and Taiwan

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***Abstract*—The rapid numbers of corporate action which is known as mergers and acquisitions (M&A) in Asian market for the past three decades is growing tremendously. The two actions are widely used as a means to pursue strategic targets – for example to maintain stable growth and to gain strong power to control the market. This study investigates abnormal return to shareholders of bidder firms around the announcement day for Indonesia and Taiwan. Using a sample of 160 corporate action M&A, the study found that the stock market responses positively to the two corporate actions. The evidence shows that there are expected cumulative abnormal returns in two different event windows: a two-day window and a three-day window. Investor is found in favour of M&A information. However, non-financial sector is experiencing higher abnormal return compares to the financial sector. The study suggests that the market is trying to reap the maximum benefits from M&A announcement and justify the strategy as an optimistic way to deal with any dynamic changes in the industry. The market has been identified as having its semi-strong form in which every information is well-reflected at the equilibrium price. Henceforth, non-organic growth strategy may be highly recommended to Indonesia and Taiwan managers especially to those who are coming from non-financial sectors.**

JEL classification: G14, G15, G34

Keywords—mergers and acquisitions, stock market, abnormal returns, efficient market

I. INTRODUCTION

The most popular corporate action - mergers and acquisitions (M&A) has expanded tremendously for the past three decades, not only in developed but also in developing market. Many companies around the globe are using the strategy to pursue their strategic growth for example gaining stronger power to control the market or lowering competition level within industry. Instead of growing in an organic way, most company choose M&A in order to achieve their growth targets in non-organic platform. This is sound interesting since some companies are unable to improve their overall performance after the action took place. Using Canadian stock market, Andre et al. [1] explained that the acquirers significantly underperform over the three-year post event period. The study also identified that cross-border M&A deals perform poorly in the long run. This is not only due to some principle matters for example different business orientation or risk preferences but also in terms of technical matters.

Similarly, Trillas [2] confirms a paradox that abnormal return is absence in the case of 12 large acquisitions by European telecommunications firms. Some problems such as control over management, political intervention and corporate governance problems are significant in lowering the overall performance. Capron and Pistre [3] confirms that although the acquirer has received resources from the target but it still unable to drive their financial performance to the higher stage. Market expansion as a result of marketing synergy is found to be unsuccessful in boosting the overall performance. Up to this point, companies are failed in gaining better control through M&A.

As compares to another developed market, M&A still popular among scholars. In developed economy, free cash flow theory is often used to explain the reason for company to grow in non-organic ways [4]. In Indonesia, from 1996 to 2018, most of M&A are done to prolong company's diversification strategy. This might generate higher total gains. As stated in previous study, the trends of engaging in conglomeration is very popular among domestic investors. For example, acquisitions of financial institution are happening because the holding company needs to acquire the source of financial resources over long term period. Thus by having their own financial institution, the acquirer will have special access to the source of long term financial resources.

In our opinion, the lack of extensive study in M&A especially for developing market may be due to three reasons. First, unlike developed markets, M&A deals are mostly targeting market power as the primary objective. Second, there are relatively small economies of scale and scope in emerging market. This is giving the limitation for M&A transaction in country such as Indonesia and Taiwan. And thirdly, M&A is understood as ways to create synergy. Thus, for state-owned enterprise, M&A may be used as means to perform future synergy. However, as the two nations experience higher economic growth for the past five years, both have caught the attention of investors and scholars [5].

In this research, we investigate abnormal returns to stockholders for acquirer company around the day of M&A announcement in Indonesia and Taiwan. The analysis is based on a sample of 160 corporate action in M&A over six years (2010 to 2015). The study found that for emerging markets, there is positive response to announcement of M&A. On average, stockholders of the acquirer gain 0.82% in a two-day window (0,+1) and 1.82% in a three-day window (-1,+1). Moreover, an abnormal return one day before the announcement day of the action is 0.54% and statistically significant different from zero at 1% level.

The reminder of the paper is organized as follows: Section two address concepts and hypotheses development, focusing on two great themes M&A and abnormal returns. Section three discuss the data and methodology used in the study. Section four provides explanation on findings and discussion while section five discusses conclusions, limitations of the study and implications for investors and managers. The study enclosed with new direction for further study.

II. Concept and Hypothesis Development

A. Mergers and Acquisitions

For many study, this study found that the terms mergers and acquisition are used interchangeably. To some scholar [6], the difference between mergers and acquisitions may not actually matter, specifically upon the basic concepts. The reason is because the net result of the action is mostly the same in which two or more companies that previously separate company operate as one entity – right after the contract has been successfully sealed.

Now as the study refers to the recent theory, an M&A normally deals with the power to make any vital decision. In Indonesia and Taiwan, a company which owns more than 25% of the ownership may subject to become the majority holders. Conceptually, those companies will be named as controlling interest party. The controlling interest is a means that a shareholder has control over a large block of voting rights, ranging from strategic matters to managerial policy. In reality, a controlling party may be far less than that of the sole ownership company when the stockholder is dispersed.

Currently, there is no literature that can provide information to verify the action in terms of controlling interest for the target company. As this study refers to Moeller et al. [7], mergers and acquisitions can be defined as a corporate action in which the acquirer increases its holdings to more than 25%. With this concept, we define the deals with the following three definitions. First, an M&A must taken place when all assets of a company are acquired. Secondly, the acquirer must have more than 25% shares of ownership but less than 100% of the target company's stock. Thirdly, two or more business entity combine or 100% of the shares of a public company is acquired.

B. Abnormal Returns

Former studies on Mergers and Acquisitions rely on the evidence in which the action successfully creates value for shareholders using short-term event studies. This is to reflects the value creation or destruction from M&A. This is why Hackbarth and Morellec stated that the short-term event studies only show whether researchers can identify the different effects for acquirers than of the targeting company [8].

In regards of the value creation, some former studies found that target's stockholders receive abnormal returns of 20% to 30% around the time of announcement [9,10]. The median abnormal return in the (-1, +1) period is 18.4%. However, positive significant return is found consistently with studies from earlier time periods.

In 2005, Moeller et al. [11] success in documenting the evidence of abnormal return around the announcement date. For a three-day window, cumulative abnormal return for the acquiring firm shareholders is slightly positive for every year except for 2 out of 22 years analyzed. Furthermore, the abnormal return synergy benefit is slightly positive. This is in line with synergistic theory. The previous facts highlighted that the event study method on acquirer gains is mixed.

As opposed to the previous conclusion, Morck et al. [12] find that from 326 US M&A during 1975-1987, the acquiring firms' shareholder are experiencing a predominantly negative return during the announcement period. Bradley et al. [13] report that the acquirers' firm shareholders receive less than a 1% gain. Moreover, Gaughan [14] post that in terms of wealth matters, the acquirer shareholders are experiencing negative return around the time of announcement.

Given the pro and contra of the findings especially from the acquirer's point of view, there is a classical debate on the critics on how to evaluate the wealth effects of the action. Some contend that the corporate M&A actions are more likely long-term strategic investment and yet cannot be evaluated using short-term event studies. In the other hands, followers of event studies argue that the market initial reaction is a good predictor of the actual long-run performances [15].

As we recall the current financial management literature, the price of stock may be considered as present value of discounted future free cash flow. Now, given that expected higher economic growth of Indonesia and Taiwan leads to higher free cash flows, the study examines whether there are statistically significant positive abnormal returns for M&A. The following hypothesis is developed:

H1: there is a positive abnormal return along the announcement period for acquirer firms.

Most of former studies exclude the financial sector in the examination of the model due to their special accounting data structure [8,16]. Small research has been done to empirically assess whether there are any cumulative abnormal return differences between non-financial and financial sector industry. With regards to this concern, financial sector may experience higher risk around the announcement date since M&A might reflects the major changes in the ownership, thus creating uncertainty to investors and customer. Consequently, the market reaction to this corporate action should be less pronounced than that the other sector. The following hypothesis is developed:

H2: Valuation effects of M&A for financial sector industry are lower than in non-financial sector

III. Data and Methodology

A. Data

Three sets of data are used to calculate abnormal returns and to examine the effects of the acquirer firms for M&A deals. The dataset includes descriptions and records of the action, daily stock price and market index for Indonesia and Taiwan, ranging from 2010 to 2015. Table 1 provides distribution of M&A deals by year.

TABLE I. DISTRIBUTION OF M&A

Market	2010	2011	2012	2013	2014	2015	Total	%
Indonesia	8	6	12	9	8	14	57	36%
Taiwan	12	24	22	14	16	15	103	64%
Total	20	30	34	23	24	29	160	

The study applies four sampling criteria: (1) the transaction or deal is competed, (2) the acquirer are registered in the stock exchange market, (3) the method of payment is disclosed, and (4) the acquirer is a public listed company. As a result, Table 1 provides a description of the action by year for Indonesia and Taiwan.

B. Methodology

The study use event study method to examine the abnormal return around the announcement date. The method begins with identifying the event window for each deal. This study follows Krivin et al. [17] who point out that the event window length may be related to the period of observation. In order to examine the sensitivity of the transaction, the study apply different event window lengths. The study then reports daily abnormal returns from day -2 to day +2 and cumulative abnormal returns on windows (0, +1), (-1, +1) and (-2, +2).

The abnormal return is then calculated from following equation:

$$AR_{it} = R_{it} - \alpha_i - \beta\ (R_{mt})$$

Where AR_{it} is abnormal return for stock i over time t, Rit is the actual return for stock i on time t. Moreover, the average aggregate abnormal return (AAR) on day t is mean value of summed abnormal returns of sample firms (N= 160):

$$AAR_t = \frac{1}{N}\sum_{i=1}^{N} AR_{it}$$

The daily abnormal returns are summed over the event window to derive the cumulative abnormal returns (CARs). We calculate the CARs as follows:

$$CAR_{i(T_1-T_2)} = \sum_{t=T_1}^{T_2} AR_{it}$$

Using the previous formula, we then calculate the average aggregate cumulative abnormal return (ACAR) as follows:

$$ACAR(T_1,T_2) = \frac{1}{N}\sum_{i=1}^{N} CAR_i(T_1,T_2)$$

We then analyze ACAR for three different windows: (0, +1), (-1, +1) and (-2, +2). Furthermore, to test the significant of ACAR, the study performs robust t-statistic and Wilcoxon z-statistic test.

IV. FINDINGS AND DISCUSSION

Table 2 reports average aggregate daily abnormal returns two days before and two days after the announcement date for M&A. The market response positively on the announcement information release. A significant positive abnormal return exists before the announcement day. Abnormal return (0.22%) on day -1 is higher than abnormal return (0.15%) on day -2. The return then constantly increases from day -2 to day 0 and reaches the highest point (0.31%) on the announcement day. After the event took place, the abnormal return increase to 0.42% on day +1 and started to decrease to 0.29% on day +2. The positive mean CARs of the three event windows, (0, +1), (-1, +1) and (-2, +2) are significant statistically at level 1%. Furthermore, consistently with the t-test for CARs for three windows, the median abnormal returns as tested by Wilcoxon Z-statistic are also significant statistically. Therefore, the study supports hypothesis one.

TABLE II. DAILY ABNORMAL RETURNS AND CARS FOR SELECTED WINDOWS

Event day	Average abnormal return (%)	t-statistic	Wilcoxon Z-statistic
-2	0.15	1.92***	1.44***
-1	0.22	3.39***	1.65***
0	0.31	2.73***	1.77***
1	0.42	3.09***	1.72***
2	0.29	1.72***	1.93***
Event window	Mean CAR (%)	t-statistic	Wilcoxon Z-statistic
(0,1)	0.92	4.40***	3.46***
(-1, +1)	1.39	5.12***	5.44***
(-2, +2)	1.68	5.62***	5.35***

The symbol of *** denote statistically significant at 1% levels, respectively.

TABLE III. DIFFERENCE BETWEEN FINANCIAL AND NON FINANCIAL SECTOR

Event day	Financial sector CAR	Non-financial CAR	Difference	t-statistic
-2	0.05	0.22	-0.17	-0.72
-1	0.24	0.14	0.10	0.22
0	-0.03	0.52	-0.55	-2.98**
1	0.74	0.44	0.30	0.78
2	0.18	0.38	-0.20	-0.24
Event window	Financial CAR	Non-financial CAR	Difference	t-statistic
(0, 1)	0.94	1.12	-0.18	-2.17**
(-1, +1)	1.22	1.34	-0.12	-2.25**
(-2, +2)	1.32	1.45	-0.13	-2.34**

The symbol ** denotes statistical significance at 5% level

From Table 3, the study found that there is a difference between daily CARs between the financial industry and non-financial industries, and statistically significant at 5% level, but only at the announcement day. Through the analyses of three different windows, the study finds that CARs in the financial industry M&A are lower than in non-financial sectors therefore the second hypothesis is not supported.

Compared to developed markets, our findings are in line with developing markets which shows that shareholders' wealth effects of acquirer company are positively increased. The study supports Firth [18] in which the study claimed that the acquirer abnormal return is dropped starting from day +2 after the announcement day. Therefore, we may conclude that

Indonesia and Taiwan market experience the same trends as what we have for Anglo-American M&A studies. The two corporate actions i.e. Mergers and acquisitions happen to be used as non-organic strategy to pursue their growth targets.

The findings are somewhat surprising since former studies stated that the evidence is not so clear especially for developing market [19]. Furthermore, some researchers conclude that it is not only about the action itself, but more to the types of acquisition that the shareholders are willing to perform. Drawing samples from 139 acquisition cases in India, the horizontal acquisition must be acknowledged as the most effective compares to the other types [20]. The idea is surely to increase the power in controlling the existing market. This study supported Chao and Ho [21], Vij [22], Boyson et al. [23].

V. CONCLUSION

Using sample from 160 mergers and acquisitions deal from Indonesia and Taiwan through the event study method, this study concludes that shareholders from acquirer company are experiencing abnormal return starting from the day -2 before announcement day. This may imply that the information relating to M&A is very important to the market. The trends are then happened until day +1 and begin to decrease at day +2. As we put the industrial sector matters in the analysis, the study failed to provide the evidence that financial sectors are experiencing higher abnormal return as compares to the non-financial sector companies, thus leaving an opportunity for further research.

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