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## International Journal of Engineering Technology Research & Management

### THE STOCK MARKET REACTION TO MERGER AND ACQUISITION ANNOUNCEMENTS

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#### ABSTRACT

The purpose of this study is to examine the interests of shareholders in mergers and acquisitions (M&A) by assessing the effect of the M&A announcement on the stock return of companies. The study not only evaluated the individual effects of the M&A announcement on the abnormal return of the purchasing company, but also considers other factors affecting abnormal returns such as payment method and reference price. The results obtained after a sample study of 153 M&A transactions in the Vietnamese market showed that M&A announcement did not have a significant effect on abnormal return of acquirers, regardless of the difference in payment method and reference price. Although the test results were not statistically significant for buying companies, the results from this study are consistent with many precursor studies. The study also offers a few recommendations to improve the efficiency of the M&A market in Vietnam.

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#### LITERATURE REVIEW

Mergers and acquisitions (M&A) is an important business decision driven by many different motives and those motivations all come from the benefits of M&A such as improving financial status, strengthening consolidating market position, minimizing short-term costs, taking advantage of long-term scale.

##### *Empirical review of the impacts of M&A announcement on stock return*

Franks (1977) has shown that shareholders of acquired firms saw a 26% increase in profits compared to pre-mergers and acquisitions while this figure for the shares in the acquiring company were much less and were not significant. Overall, however, all parties enjoyed positive values. This result is considered plausible and is repeated in the following studies with similar or other methods such as Bradley, Desai and Kim (1988), Franks, Harris and Titman (1991), Healy, Palepu and Ruback (1992). The event period for market reaction mentioned in Franks's research is about at least 3 months prior to the announcement of the merger. Franks' model required a long-term observation, whereas today, financial markets respond very quickly to new information. Many later scholars have attempted to evaluate over a shorter period of time a few days before and after the publication date.

In a small number of M&A studies in emerging Asian markets, it has been discovered that there is a difference in M&A activities between developing markets and developed markets. For investors in emerging Asian markets, the announcement of M&A transactions is considered good news for businesses. The dramatic increase in the daily abnormal return (AR) before the official announcement of the M&A transaction shows that insider trading exists to gain benefits through the leaked information.

***Empirical review of effect of M&A payment method on stock return***

Choosing a payment method is an important step in the M&A process. Commonly used payment methods are cash, stock exchange, and a combination of cash and stock payments.

The payment method has been suggested as the factor affecting the abnormal profitability of post-mergers and acquisitions, as this factor contains a lot of information related to M&A transaction such as the M&A motives (Harford et al., 2012), M&A resistance (Grossman and Hart, 1980), and overvalued stock price (Shleifer and Vishny, 2003). Travlos and N.G. (1987) analyzed a number of purchasing companies from 1972 to 1981 and divided the sample into three payment groups, including cash, stocks, both cash and stocks. His research concludes that returns on shares in cash-financed mergers represent a significantly more abnormal return than firms that procure equity financing. Shareholders of acquirers face a large loss when the acquisitions are paid for by pure securities.

***Empirical review of anchoring effect on stock return***

There are many studies on the influence of stock prices in the past to influence investors' assessment and valuation of stocks, specifically the 52-week high index, which is the highest closing price within one trading year of the security. Investors can use the difference between the current price of the stock and the 52-week high price as a reference point in making investment decisions. Geogre and Hwang (2004) argued that when the price of a stock is near the 54-week high price, that is, the market is getting good news about that stock, and the level of investor's underreact to good news will stay high. Specifically, when the stock price is near the 52-week high, investors are more likely to judge that the stock is being overvalued and when there is new information, the abnormal return of the stock will not change a lot, even if it was good news or bad news. Conversely, when the stock price is far from the 52-week high, investors will perceive that the stock is more likely to be undervalued, so it can be said that the impact of new information like M&A announcement can cause stock prices to fluctuate stronger than expected, abnormal return at a high level (Ma et al, 2019). In addition, Li and Yu (2012) found that investors use the Dow 52-week high as anchoring for investment decisions, and it is more effective in regression models for calculate the stock price more than historical high index.

**DATA SAMPLE**

The authors extract the list of M&A events in Vietnam from the Refinitiv Ekion Database. The input data of the study are the securities prices of firms in mergers and acquisitions, so only the transactions with acquirer companies are listed on 2 major stock exchanges in Vietnam, the Ho Chi Minh Stock Exchange (HOSE) and Hanoi Stock Exchange (HNX) are selected. The selected events happened in 10-year period from the 1<sup>st</sup> of January 2010 to the 31<sup>st</sup> of December 2019. The authors also exclude the M&A events in the sample when an M&A is initiated by multiple acquirers. This sample selection procedure resulted in the sample of 153 M&A deals.

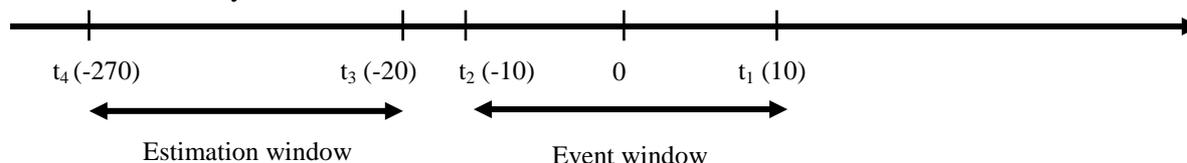
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### METHODOLOGY

#### Event study method

For the purpose of finding answers about the impact of M&A information on stock return, the topic will use event study method.



#### Announcement

In this study, abnormal return will be used to measure the effect of M&A announcement of stock price. The concept of abnormal return implies that at any time, the actual return of a stock contains two different components, the expected (normal) return and the unexpected (abnormal) return:

$$AR_{i,t} = R_{i,t} - r_{i,t}$$

- The actual returns of stock or market are calculated based on the formula:

$$R_{i,t} = \frac{P_t - P_{t-1}}{P_{t-1}}$$

Where:

$R_{i,t}$  is the actual return of stock or the market portfolio at time t

$P_t$  is the closing price of stock or the market portfolio at time t

- The authors use the market model to determine normal rate of return:

$$r_{i,t} = \alpha_i + \beta_i r_{m,t} + \varepsilon_i$$

Where:

$r_{i,t}$  is the estimated stock return of company i at day t

$\alpha_i$  and  $\beta_i$  are estimated coefficients under the E-GARCH method over the estimation period (t = -270 to t = -20)

$\varepsilon_i$  is the error term

$r_{m,t}$  is the market portfolio return at day t, within the scope of the study, the author will consider the impact of M&A transactions announcement for companies in Vietnam market, the VN-Index will be used as the market portfolio

### CONCLUSION

Through research on reaction of stock price when M&A information is published, based on a sample of 153 observable cases in the period 2010-2019 combined with event study method, the research has checked and cannot reject the hypothesis  $H_0$ : The cumulative average abnormal return of acquirer stock in the event window are equal to zero, the CAAR of the acquirer companies showed an insignificant reaction to the M&A information.

Besides, the market's expectation of profit from M&A when there is a difference in payment method and reference price factor are also considered in this topic. For the payment method, the results are not as expected by the author that the market recognized a positive impact of M&A in cash payment on shares of the acquirer, while M&A stock payments have a negative impact. The study found that there was no significant effect of cash or stock payments on abnormal returns of acquirers. Similar

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result in the case of the study of the near and far difference between the 52-week high price and the actual price of the stock, the study found no significant abnormal return for both groups of firms. Based on the above research results, the topic has also given a number of policy implications to improve the efficiency of M&A activities in Vietnam, focusing on the following main contents:

- Building information control channels to increase information transparency in the market.
- Improving the quality of the consulting services and supporting M&A activities of the companies in the market.
- Develop a mechanism to check the valuation and determine the rate of share exchange between the parties participating in M&A making payment in shares.

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