Stock Split Policy on Signal and Liquidity Motive with Implications to Retail Investor

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Abstract: ***Indonesian society who participates in the capital market is still low. The purpose of study specifically to determine signaling hypothesis validity and trading range, which expected with a positive reaction from a market to stock split action can increasing investor base who participating in the capital market, thus increasing community who turned on Indonesia Stock Exchange (BEI) which in turn will increase the role of capital market in Indonesia in order to expand financial access for community this is in line with financial inclusion program. This study uses data 25 companies stock which stock split with event window during 11 days that are 5 days before and 5 days after stock split that occurred during 2007-2012 in IDX. The method used in this study were using paired sample T-test. Changes on the trading volume activity show more liquid stocks, as well as an increase in bid-ask spreads (proxy from retail investors increased) after stock split event proved that stock split policy can expand retail investor base.***

Keywords: Stock split, retail investor**.**

1. Introduction

Majority, Indonesian society characteristic as "Saving Community" has not become "Investment Community" this is evident from banking customers quantity, where 9 big banks alone had 82.872 million customers in March 2011 (source: Infobank Research Bureau), while investors number at capital market about 1 million and special stock only 340,000 investors per june 2012 (source: KSEI, investors number). Community participation at Indonesian Capital Market much lower compared with Singapore which only has population about seven million, but investors number reached four million, whereas Indonesia population has reached 237.641 million (Source: SUPAS 2005). Actually, from stock returns revenue (gain + yield) more attractive than highest deposit rate that only 6.05% for 12 bl deposits (BI, Banking Statistics 2011).

Government through Bapepam LK certainly working hard in order to expand investor base with socialization and literacy provision including financial inclusion facilitation or providing widest access to community in dealing with financial institutions including capital markets. Bapepam LK encourage corporation efforts (emiten) which can be implication broaden investor base, example the emiten through corporate actions perform stock split that stock prices affordable by retail investors, which expected to expand investor base. According to Scott, Martin, Petty, Keown (1999) that stock split action expected to benefit, among other: a) that stock not too expensive so as to increase shareholder number and increasing stock trading liquidity; b) to restore price and trade size of stock average to targeted range, and c) to carry information about investment opportunities form are increased profit (gain) and cash dividends.

Martin Abrahamson and Robert Kalström (2009), that stock split action tends to be a government tool to optimize stock price to level the expanding owner base as lower prices expected to attract more individual investors, that are individual investors capable of a lot rounds, so that shareholders number increased as reported by Lamoureux and Poon (1987). However, Brennan and Copeland (1988) states that: "Contrary with cosmetics view, that stock split it will increase demand for shares among small investors, which in turn will increase stock liquidity and it may raise prices". Question Is it true that stock splits increase liquidity or not yet fully answered. Despite these facts, common stock split, shows that there are some effects resulting from stock split (Gorkittisunthorn et al. 2006). Further impact value related to announcement date and later date (ex-date).

Ji-Chai Lin, Ajai K. Singh, and Wen Yu (2008) launch some opinions the management often suggest that a stock split intended to attract more investors and stock liquidity increasing (Dolley (1933), Baker and Gallagher (1980), and Baker and Powell (1993). Muscarella and Vetsuypens (1996) find evidence arguments supporting liquidity increased. Similarly, Amihud, Mendelson and Uno (1999) showed that, in Japan, investor base and stock liquidity increases significantly when the company reduced its minimum trading unit (that is, shares number in the lot). However, many studies have questioned whether liquidity increases according to stock split. In fact, Copeland (1979), Conroy, Harris and Benet (1990), Easley, O'Hara and Saar (2001), and Gray, Smith and Whaley (2003) show that stock split makes stock price level lower than increasing stock liquidity and raise bid-ask spread. Similarly, Copeland (1979) and Lamoureux and Poon (1987) found that shares decreased turnover after stock split, which makes them suspect that "stock split induces decrease liquidity permanent".

Maria Mercedes Miranda (2005), states that proponents trading theory range which stock split means realign share prices to a preferred price range, which can increase liquidity and stock marketabiliti. This theory also supported by managements surveyed by Baker and Gallagher (1980) and Baker and Powell (1993), Management believes that lowering stock price (by stock split), make their shares more affordable to small investors and hence broaden shareholder base. Lakonishok and Lev (1987) found that companies which perform stock split, where the share price run-up before and after stock split announcement comparable to average stock price other companies in industry. A lower stock prices also increase trading liquidity by increasing shares number traded and changed odd-lot holders to round-lot holders. D'Mello, Tawatnuntachai and Yemen (2003) found that companies which perform stock split to make next SEO more valuable to individual investors who are interested in a low price. Trading range hypothesis and liquidity/hypotheses marketing are not mutually exclusive to explain. Individuals may have a preference for a specific trading range since higher liquidity on price range.

On the other hand stock split action activity provide a signal about company performance improved, then investors perceive that stock split will affect shares profit rate. This will attract investors to buy stocks that performed solving to expect a high return, because there is signal as information or good news contained in stock split information. Isil Sevilay Yilmaz (2003) said many empirical studies indicate that stock split decisions have a significant effect to firm value and shareholder return increased by announcement and stock split. Signal hypothesis proponents primarily argues that there is information asymmetry between management and shareholders. They claim that stock split will reduce asymmetry information, because stock split action can convey information about company's prospects.

Maria Mercedes Miranda (2005), said many previous studies document that investors reacted positively to stock split announcement shows that there are benefits associated with stocks split. Grinblatt, Masulis and Titman (1984), reported abnormal return announcement period which significant about 3% for companies which perform stock split action. McNichols and Dravid (1990) concluded that stock split disclose information about future dividends and earning changes. Additionally, Ikenberry, Rankine and Stice (1996) and Desai and Jain (1997) found that stocks split corporate actors experienced excess returns (abnormal returns) are significant in the long time. Appear in financial literature to explain the positive abnormal return on stock split announcement that are signaling theory and trading range theory. Signaling theory posits that a stock split to disclose information favorable future. Asquith, Healey and Palepu (1989) stated that management announced stock split to reveal future earnings information. Brennan and Hughes (1991) and Schultz (1999) shows that since stock split reduces stock price resulting higher commission costs per share, they attract more attention from stock analysts. Because stock analysts primary role to produce information, more specific company information revealed after stock split announcement. Desai and Jain (1997) found that most of stock split actors company increase cash dividend after announcement. They conclude that stock splits convey information about short-term growth in cash dividends.

Fama, Fisher, Jensen, and Roll (1969), or abbreviated FFJR indicates that stock split provides future cash flows signal and market reaction to stock split are reaction implies a dividend increase. This means that market should react by increasing stock split price announcement in accordance expected future dividends. Grinblatt et al. (1984) found that increasing shareholder value and two-day average, CAR (Cumulative Abnormal Return) around stock split announcement is about +3.3%. Where positive abnormal return reflects that some information relating to expected profits in future cash flows. Martin Abrahamson and Robert Kalström (2009) study results confirm positive abnormal returns around stock split announcement and stock dividends. In addition, finding evidence ownership structure changes and shareholders number. Then study results show decreased evidence of ownership concentration stock split effect, which implies a more dispersed ownership structure.

Two main motive in stock split action that signaling and liquidity motives. After stock split action activities, outstanding shares number will increase as many as depends on the split factor, however, the proportion of shareholder ownership has not changed, however, shareholder ownership proportion has not changed, and company cash flows also not changed or not affected by stock split action but markets react positively to stock split action announcement. The condition was interesting to do studies related to signaling and liquidity around action and its implications for stock splits investor base increasing.

The purpose of this study to examine and hypothesis analyze about signal and share liquidity increased of companies that stock split perform. In particular, this study aims to determine signaling hypothesis validity and trading range (the trading range hypothesis), which is expected by positive reaction of market to stock split action can increase investor base who participating on the capital markets, to increase community who turned in Indonesia stock exchange (IDX), which in turn will increase the role of capital market in Indonesia in order to expand financial access for community.

2. Literature

Stock Split Theory

Maria Mercedes Miranda (2005), stock split is puzzling phenomenon. After stock split, share number outstanding increases, but company's cash flow not affected. Each proportionate shareholder shareholding remains and other classes claims of shareholders does not change, however market reacted positively to stock split announcement. Two theories, signalling theory and trading range theory has emerged in financial literature as leading explanation for stock split.

Signalling Theory

Signalling theory developed in economic and finance to ccount the fact that insider companies generally have better information and faster relates to current conditions and company outlook than outside investor. Asymmetric information emergence difficult for investors to assess objectively related to company quality, so there is investor preference evenly give low ratings to all company shares (called poling equilibirium), for companies that have good and bad assessment included in the same pool William L. Megginson (1995). Therefore, management motivated to convey good information (good news) about company's condition to investor in order to attract them for invest in the company.

Information submission such as stock split event as a good signal or optimistic expectations to investors, about good prospect that can be able to increase investor prosperity. Not all companies can perform stock split, unless company has a good performance, because company in a stock split shall bear all costs arising from the moment, Brennan & Hughes, (1991) stock split contain costs to be borne by company.

Maria Mercedes Miranda (2005), that signaling theory where companies do stock splits to convey favorable private information about their current value. Find positive abnormal return around stock split announcement will be consistent with this hypothesis. Fama, Fisher, Jensen, and Roll (1969), research on the company that announced stock split during period 1927 to 1959. They found that company's stock split increased cash dividend after announcement. More than 72% of firms in their cash sample to pay higher dividends in the following year for announcement rather than average security listed on New York Stock Exchange. Their study support notion that stock split promptly disclose information about an increase in cash dividend. Fama et al. (1969) also found abnormal return around stock split event, indicates that market considers stock split information is a good information because announcement overcome to uncertainty increases cash dividend.

Grinblatt, Masulis, and Titman (1984) in Maria Mercedes Miranda (2005) argued that previous studies (Fama et al, 1969; Bar-Yosef and Brown, 1977) may not accurately reflecting effect of stock split announcement, because they are using monthly, instead of daily data. Also, both Fama et al. (1969) and Bar-Yosef and Brown (1977) did not control potential effect of other information such as mergers, earnings, and dividend release around stock split announcement. To correct this problem, Grinblatt et al. (1984) examine specific subsample existing stock split announcements were made on another stock split announcement date (obtained from CRSP) and two days after declaration date. They found the results are consistent with previous literature (Fama et al, 1969;. Bar-Yosef and Brown, 1977) that stock split firms experience abnormal return during announcement period. In particular, they found an increase shareholder wealth mean of 3.9% in two days surrounding stock split announcement. This is a significant positive effect from announcement, led them to hypothesize that information about company revenue future signal or equity value through stock split decision.

Furthermore Asquith, Healy and Palepu (1989) studied a sample of 121 firms that announced stock split on 1970 to 1980 who have never paid cash dividend before stock split announcement date, majority sample (81%) did not pay cash dividend during five years period after stock split and only 9% from their total sample begin cash dividend within one year after announcement. However, the same sample companies had unusual income growth for several years before stock split announcement and profit improvement continued for at least four years after announcement. Therefore, Asquith et al. (1989) concluded that stock split announcement reveals information about future earning, rather than future cash flow. Brennan and Copeland (1988) expand research stock split behavior with model where stock split serves as management personal information signal because stock trading costs depend on share price. They use Ross argument (1977) that for a signal to be valid, it must be expensive to replicate.

Brennan and Copeland (1988) signaling theory rests on assumption that stock split is expensive because fixed cost element of brokerage commission increase trading cost per share from stock low price. In addition, investors who previously had many rounds will pay higher fees after stock split announcement. Therefore, management will trade off benefit obtained from increase company's share price with an increase transaction cost. Management observes true value from company's cash flow choosing target price, which defined as stock price before announcement divided by split factor.

Empirical evidence support their model predictions that trade costs increase after announcement. Furthermore, they found that re-announcement period significantly related to shares number outstanding stock following stock split, show that shares number which will result after stock split supplying useful signal to investor about management personal information.

Based on signaling theory, that stock split will give positive signal to investor. Although stock split lacked for quite expensive cost, then only company with a good prospect that can do it. Good prospect expected to provide a big return in the future, so market will react positively from stock split positive signal, because market assumes that company has good prospects in the future. Thus, stock split can be used as an attempt to be attractive for investors to participate in the capital market.

Trading Range Theory

Management motivation carry out stock split in addition to providing signal the good news, also associated with marketing and liquidity motives. The market behavior which consistent with assumption that stock split can save stock prices are not too expensive, where stock split increases investor purchasing power to trade stock split, which in turn will increase stock trading liquidity. According to trading range theory, stock split used as tool for reorganize stock price at desired price range making it possible for investor to buy significant amounts.

Maria Mercedes Miranda (2005), that trading range theory proponents who divide realign price per share to preferred price range. This price range preferred primarily justified on the basis that increases marketing and liquidity. According to Ikenberry, Rankine, and Stice (1996) trading range may also arise for other reasons, including managements desire to increase ownership by individual investor (Lakonishok and Lev, 1987) and desire by companies to control relative tick size where they trade stocks (Anshuman and Kalay, 1994; Angel, 1997; Shultz, 2000). Lakonishok and Lev (1987) suggests that there is an ideal range where companies prefer to trade their shares. The range is chosen to be comparable with industry average stock price. Because stock split company experienced remarkable growth in earning and dividend, their share prices rise beyond usual trading range. Therefore, management decided perform stock split to restore affordable stock price, thereby increasing trading liquidity.

Trading range stock split hypothesis was also supported by survey research base, based on survey to chief financial officer at company listed in New York Stock Exchange, Baker and Gallagher (1980) reported that approximately 65 percent of financial executives agree the stock split is a useful tool to lower stock prices. As a result, lower prices regarded as an attraction for investors, ownership broaden base. In Baker study and Powell management survey (1993) from 251 companies NYSE Amex and issuing stock splits between 1988 and 1990. They conclude that most important motive from stock split to move stock price to a better trading range, while second most important motive to improve trading liquidity.

Stock Price, Abnormal Return and Stock Trading Volume

Investor motivation buy stocks also expect stock prices to rise so that investment value embedded will also rise. For that investors require information relating to stock price formation in decision to sell or shares purchase (Lorie et. al within Sutrisno et. al, 2000).

Abnormal return (Jogiyanto, 2010) represent difference between actual return with normal return (expectation return). Normal return is expectation return (return expected by investor). In abnormal return calculating on this study used market adjusted model which assumes that best estimator to estimating stock return is market index return. By using model equation: ARit = Rit - Rmt. Where Rmt = market return, which calculated by formula: RMT = (IHSGt - IHSGt-1)/IHSGt-1.

Robert Ang, (1997) Trading volume is measure certain stock volume traded at given time. Most trading volume indicates easy of stock trading. Easier stock traded then stock more liquid. Stock trading volume development reflects strength between supply and demand which are manifestation from investor behavior.

Retail Investor

Stock split impact to stock more liquid and expected to attract retail investor. Ji-Chai Lin, Ajai K. Singh, and Wen Yu (2008), reveals some study result that stock split intended to attract more investors and boost stock liquidity (Dolley (1933), Baker and Gallagher (1980), and Baker and Powell (1993). Muscarella and Vetsuypens (1996) find evidence supporting increased liquidity argument (nor, Amihud, Mendelson and Uno, 1999) showed that, in Japan, corporate investor base and stock liquidity increased. Stock split attract new investor (Lamoureux and Poon, 1987), Maloney and Mulherin (1992), and Mukherji, Kim and Walker (1997), shareholder number average significantly increased from 20.646 before stock split to 24.982 after stock split.

Investor base expansion in this study used proxy bid-ask spread. Composition from spread to determine importance degree of information asymmetry cost, order processing cost and stock inventory control cost (William L. Megginson (1995). Bid-ask spread economic compensation given to market maker for encourage them it would provide liquidity services. Retail investor usually trading stock in small quantities on regular basis, so will lead to high transaction cost. Bid-ask spread is transaction cost for investor then increase bid-ask spread indicates an increase retail investor number.

3. Method

Event study method is widely used to test market reaction from event or announcement, including stock split announcement (Jogiyanto, 2010). Windows period during 11 days occurrence event and influence that is testing based on five days observation before stock split announcement date, when stock split announcement and five days after stock split announcement date. Window period selection, in order to capture event intact and to avoid confounded event if use over window period too long (Jogiyanto, 2010).

Data used in this study are time series, observed data for certain period to research object. The above secondary data sourced from PT. Icamel data for 2007-2012, www.idx.co.id, and other sources. Samples must comply criteria used in this study: a) a) Company listed at BEI during years 2007-2012; b) Company only perform stock split; c) Company does not undertake other corporate action, and d) Complete data are available. Data analysis performed in this study aimed to analyze differences in stock price, abnormal return, trading volume and bid-ask spread on period before and after stock split announcement. Data analysis in this study using SPSS software.

Normality test using one-sample Kolmogorov-Smirnov test. Data normality to be analyzed also major assumption that must complied to test hypotheses with parametric statistic. Testing hypotheses to test stock price difference, abnormal return, TVA and the bid-ask spread on period before and after stock split. Statistical test used different test T-test. Because tested difference two related samples, then test performed different test T-test with related sample (paired sample).

4. Result and Discussion

Companies listed on BEI that perform stock-split during study period 2007-2012 amounted to 51 issuers. Of these, there are 26 listed companies did not meet criteria, because issuer perform other corporate action, so that corporate issuers to be sampled in this study were 25 corporate issuers. Test showed a statistical description as described in the table below:

Variable	N	Min.	Max.	Mean	Std.Dev
HS before	25	201.50	9754.00	1586.59	2390.34
HS after	25	205.83	9158.33	1602.34	2314.20
AAR before	25	.10	.06	.0107	.03961
AAR after	25	.13	.05	.0535	.05209
TVA before	25	.00	.16	.0160	.03432
TVA after	25	.00	.08	.0076	.01586
Bid-Ask before	25	.00	.07	.0217	.01686
Bid-Ask after	25	.27	.32	.1089	.13171

Valid N (listwise)	25

Source: SPSS Processing Results

Based on the table can be put forward: a) Stock price mean before and after event, which smaller than standard deviation indicate occur value deviation to average; b) AAR variable mean both before and after event which smaller than standard deviation indicate occur deviation from average value; c) TVA variable mean both before and after event which smaller than standard deviation indicate occur deviation from mean value; d) Bid-ask spread variable mean before event larger than standard deviation indicate smaller deviation from mean value or can be said to have been well distributed. While bid-ask spread variable mean after event smaller than standard deviation indicate that occur deviation from mean value.

Based on trading range theory, stock split used as tool to reorganize stock price at desired price range so that increasingly possible for investors to buy large quantities (Maria Mercedes Miranda, 2005). In this research, the theory does not proved. Study result proved there was no difference stock price significant on period 5 days before and 5 days after stock split announcement. The result also inconsistent with previous studies conducted by Menendez and Gomez (2003), Leung, et al (2005) and Wang, et al (2000) who proved occurrence significant stock price difference on period before and after stock split. Research conducted by Indriantoro Ewijaya and Nur (1999) concluded that stock split has negative effect to changes relative stock prices. Stock market price after stock split which expected rise exactly decreasing. This indicate that stock split will be adverse previous investor.

Study result can not prove empirically that stock split policy affect to abnormal return. Stock split turned out to make the market does not react significantly. This suggests that market participants are less able to distinguish between economically valuable information that will give an advantage or not. The result support a previous study conducted by Wang, et al (2000) and Ernie Hendrawaty (2007) which states that there has been no significant abnormal returm before and after stock split, but does not support a previous study conducted by Leung, et al (2005) and Farinha and Basilio (2006) which stated that there are very significant abnormal returns during announcement and after announcement period.

The result support research conducted by Dennis (2003) which stated there are significant differences bid-ask spread before and after stock split. Merton (1987), Mukherji, Kim and Walker (1997) found that stock split announcement positively associated with an increased investor base. Retail investors usually trade stock in small quantities on a regular basis, so it will lead to substantial transaction cost. Bid-ask spread is transaction cost for investor, then increase in the bid-ask spread indicate an increase retail investor number.

5. Conclusion

Main object in this study to test signaling theory and trading range theory hypothesis validity. This study concluded: a) Average share price during event period, found that stock split event at BEI can not prove trading range theory which states that after stock split announcement, stock price changed significantly at optimal trading range; b) AAR mean during event period, there were no differences in contrast with signaling theory which states that positive abnormal return around stock split announcement; c) TVA mean during event period there are significant differences, this support trading range theory which states that stock split event will lead to increased trading volume due to price more attractive to investor; d) Bid-Ask spread mean during event period there is significant difference support trading range theory which states that stock split event will lead to increased trading volume or increased liquidity due to price more attractive to investor, especially retail investor.

This study still has limitations: a) data availability concerning investor characteristics; b) still limited samples only 26 companies; c) method to find abnormal return using market adjusted model. Remembering these weaknesses, there is still need further research about effect and stock split motivation carried out by listed companies in order to increase investor number, especially retail investor.

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