STOCK SPLIT AND ORDER COMPOSITION: EVIDENCE FROM INDONESIA

BY

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A research paper submitted in partial fulfillment of the requirements for the degree of Master of Science in Finance

Kulliyyah of Economics and Management Science
International Islamic University Malaysia

AUGUST 2010

ABSTRACT

The purpose of this study is to observe split effects surrounding split announcements. This study examines the splitting firms in Indonesia Stock Exchange for the period 1999 – 2008 while taking into account the wider split size from 2 for 1 until 10 for 1 split size. This study applies trading intensity as a proxy for liquidity effect. The result of this study indicated that there is higher liquidity of smallest trade size after split for all split size categories. This implies that small investors are attracted by lower price after split. Also, this study examines trading composition by computing the number of small buy and small sell order surrounding split announcement. Examination of trading composition aims to disentangle the signaling and liquidity effect surrounding the split events. Furthermore, this study finds that small buy order dominated after split trading activities which also imply liquidity enhancement. An interesting pattern exhibited by order composition of 2 for 1 split size shows that, small buy order significantly dominates the small sell order before split. This might indicate that 2 for 1 before split is driven by signaling effect, while 2 for 1 after split is partly driven by liquidity effect.

ملخص البحث

يحاول هذالبحث لمراقب أثار الانقسام المحيط من إعلانات الانقسام. وهذا البحث يدرس تقسيم الشركات فى إندونيسيا للأوراق المالى فى إطارافتر من 1999 - 2008 ويأخذ فى الإعتبار حجم الانقسام على نطاق أوسع فى الفترة من 2 الى 1 حتى 10 – 1 حجم الإنقسام. هذا البحث ينطبق كثاف التداول على أنه وكيل من تأثير السيول. هذاالبحث يبيّن أن هناك سيول متزايد من أصغر حجم إلى التجار بعد تقسيم لجميع فئات حجم الانقسام. وهو يعنى أن ينجذب صغار المشتثمرين من انخفاض الأسعار بعد انقسام. وفى هذا البحث أيضا تكوين التداول من خلال حساب عدد من شراء الصغير البغي بيعه المحيط بتقسيم الإعلان. ودراسة التكوين التجارى يهدف إلى فصل إشارة وتأثير السيول المحيط وتقسيم الإحداث وعلاوة على ذلك, يشير الدراس إلى أن هذا النظام شراء الصغير يهين على الأنشطة التجارية بعد تقسيمها التى تنطوى أيضا على تعزيز السيول للإهتمام الذى أظهره أجل تكوين 2 ليقسم جحم 1 ممايدل على أن النظام يسيطر على شراء الصغير إلى حد كبير من أجل بيع صغير قبل التقسيم, وقد يشير هذا إلى أن حجم انقسام 2 إلى 1 قبل أن يتم التقسيم مدفوعا من قبل مايشير إلى تأثير, وفى حين أن 2 إلى 1 بعد انقسام هو جزئي من تأثير السيول.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a research paper for the degree of Master of Science in Finance.

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Dean, Kulliyyah of Economics
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DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Eka Siskawati

Signature............................ Date 23-8-2010

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To

Benny Amir,
and Dzaky Ramadhan Amir

ACKNOWLEDGEMENTS

Alhamdulillahirabbil'alamin, all praises is for Allah who guides me for the completion my Master degree in spite of many constraints. May the blessing of Allah Sub'hanahu wa Ta'ala be upon our beloved Prophet Muhammad Sallallahu'alaihi wa Sallam, his families, companions, and all those who follow his path till the day of accountability.

First and foremost, my appreciation goes to my supervisor Prof. Dato' Dr.Mohammad Azmi Omar, for his guidance, patience, and valuable advises and comments for the completion research paper. I also would like to express my endless gratitude to all my lectures at KENMS IIUM, Prof. Dr.Kameel Mydin Meera, Dr. Hassanuddeen Abdul Azis, Dr.Moussa Larbani, and Dr. Siti Salwani.

Special thanks to all my friends and colleagues, who are very prominent for me, for their supports, ideas and help. Especially to Sr. Fanny Rizkiyani, Br. Hidayatul Ihsan, Sr. Gustina, Br. Rahmat Hero, Sr. Tika, Sr. Jessica Anthony, Sr. Nita, Sr. Anda, Sr. Tini and all members of Saffiyah Complex Block P.G. for all members of ISEFID, members of PPI-IIUM, Sr.Norma, Sr. Suriawati and all members of KENMS administration staffs.

I am greatly indebted and appreciate very much to my beloved parents and my mother-in-law for their patience, prayers and encouragements that are very important to me in accomplishing my study. To my dearest brother, a very big thank for your support.

My sincere to my beloved husband, Benny Amir that had been giving me a big space to reach my dreams, thank you so much for your understanding, sacrifices, encouragements and prayers. To my beloved son, Dzaky Ramadhan Amir, who has been very understood at his age, thank you so much for your patience that giving me power to finish my study.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

The purpose of this study is to provide empirical evidences of stock split effect in small level of investors in Indonesian market. The underlying hypotheses are trading range hypothesis, signaling hypothesis and liquidity hypotheses. These hypotheses conflicts with each other towards explaining the split effect. Previous studies found that, there is an increasing volume after split announcement which means that, demand for splitting stock increases after split. The increasing demand of stock after spliting is explained by researchers as either liquidity effect (e.g. Schultz (2000), Mishra (2007), Mohanti and Moon (2007)) or signaling effect (e.g. Pilotte (1997), Ariff et al (2004)).

Trading range hypothesis, suggests that stock split increases the number of outstanding shares, thereby, broaden the ownership base while decreasing the stock price into the range that small investors can purchase round-lot stocks (Baker and Gallager, 1980). Liquidity hypothesis suggests that, splitting will cause stock prices to fall into some preferred trading range (Baker and Gallager, 1980). The lower price after splitting attracts new investors to purchase the stock and simultaneously increases the stock demand. This will benefit small investors who prefer to purchase stocks but cannot afford to do so when the share price was high. In addition, signaling hypothesis states that, stock splits convey signals about favorable firm. Managers use stock splits to convey favorable information to investors. McNichols and Dravid (1990) assert that manager uses split to inform the firm's future earnings by choosing the split factor.

Stock split is a cosmetic approach designed to cut the firm's pie into more pieces, in such a way that, it does not affect the firm's future cashflows. Theoretically, shareholders do not benefit from split execution, because it does not change investor's ownership. Likewise, management does not benefit from split execution, due to some significant administration cost associated with stock split. Up till now, managers keep splitting the stock either to increase stock liquidity or to signal firm's favorable information.

Recent studies such as Desai, Nimalendran and Venkataraman (1998), Lyroudi and Dasilas (2006), Mishra (2007) and Mohanti and Moon (2007) empirically indicated that split events enhance liquidity. Furthermore, Yague and Gomez-Sala (2005) found that, there is a change in trading composition after split, whereby small trades from retail investor are more active in trading, especially in larger stock split.

Evidence of split effect on liquidity is mixed and inconclusive, for example Lamoureux and Poon (1987) found that, there is a decrease in liquidity after split as a consequence of tax option, whereas Schultz (2000) founds that, there is an increasing liquidity after split and net buy orders are more dominant than net sell order. Although those studies were conducted in United State market, the results are different and varying. The differences in result might be attributed to the level of investor observed in each study. This is due to the fact that, management keep splitting their stock in order to increase the individual investors while decreasing institutional investors (Baker and Gallagher, 1980). For the aforementioned reason, studying split effect by focusing on a particular level of investors especially small level of investors is important.

Previous published studies on stock split that used data from Indonesian market show various result and it is very limited. For example, Sutrisno et al (2000) find that, there is a significant increase in price and spread after split. more so, trading volume significantly decreased after split, and variance and abnormal return experience insignificant changes before and after split. Furthermore, they find that there is no significant different in abnormal return before and after split. Ramantika (2001) indicated that, there is no significant change in the volume of turnover and volatility before and after split. The results imply that, stock split does not attract new investors. In a similar study, Zubaidah (2007) revealed that, there is significant different in price and in trading volume before and after split. Those studies mentioned, used trading volume as a proxy to measure liquidity and the results were not consistent each other.

Baker and Gallager (1980) explored the management opinions about split execution, and their findings showed that, management is more concern about individual investor than institutional investor. In addition, management intention to split the stock is to avoid larger claiming and larger proportion of trading volume from institutional investors. Several studies support the findings that small investors are more active in purchasing post split stock, (see Kryzanowsky and Zhang (1996), Schultz (2000), Dennis (2003) and Yague and Gomez-Sala (2005)). To the best knowledge of the author, there is no published work on Indonesian market regarding stock split with specific concern about small level of investor.

1.2 PROBLEM STATEMENT

Lower price after splits attracts small investors that prefer lower share price to the higher one. Increasing the number of small investors changes ownership structure after split. Desai, Nimalendran and Venkataraman (1998) indicated that, there is an increase in both noise and informed traders after split announcements. Yague and Gomez-Sala (2005) argued that, there is a change in trading composition following splitting announcement, whereby, small trades from retail investor increase significantly especially in the larger stock split.

Furthermore, if lower price after split attracts new small investors, what type of order can they then perform? Kryzanowsky and Zhang (1996), Schultz (2000), Dennis (2003) and Yague and Gomez-Sala (2005) support that, increasing small investors perform buy orders following split which is consistent with traditional explanation that splits are used to increase liquidity.

Past studies about stock split that used data from Indonesian market shows divers results. For example, Sutrisno et al (2000), Ramantika (2001), Zubaidah (2007) use trading volume at all level of investors as a proxy to measure liquidity but the results were not consistent with each other. The current study defer from the previous study in the sense that, it tests split effect in small level of investor in Indonesian market.

Thus, this study aims to answer the following questions: (i) Is there any trading intensity increases after split, (ii) Is there any dominant in buy order after 2 for 1 split compared to small sell order, (iii) Is there any dominant in buy order after 4 for 1 split compare to small sell order, (iv) Is there any dominant in buy order after 5 for 1 split compare to small sell order, (v) Is there any dominant in buy order after 10 for 1 split compared small sell order. Based on this background, this study put forward the following hypotheses:

1. H01: there is no increasing trading intensity in small round-lot after split

   Ha1: alternative hypothesis that there is an increase in trading intensity in small round-lot.

2. H02: there is no positive net buy order after 2 for 1 split in small round-lot

   Ha2: there is positive net buy order after 2 for 1 split in small round-lot.

3. H03: there is no positive net buy order after 4 for 1 split in small round-lot,

   Ha3: there is positive net buy order after 4 for 1 split in small round-lot.

4. H04: there is no positive net buy order after 5 for 1 split in small round-lot,

   Ha4: there is positive net buy order after 5 for 1 split in small round-lot.

5. H05: there is no positive net buy order after 10 for 1 split in small round-lot,

   Ha5: there is positive net buy order after 10 for 1 split in small round-lot.

1.3 OBJECTIVE OF THE RESEARCH

The primary objectives of this study are (i) investigate the trading intensity after split in 2for1, 4for1, 5 for 1 and 10 for 1 split size factor in Indonesian market, (ii) to observe the small buy and small sell order after split announcement in 2for1 split size factor, (iii) to observe the small buy and small sell order after split announcement in 4for1 split size factor, (iv) to observe the small buy and small sell order after split announcement in 5 for 1 split size factor, and (v) to observe the small buy and small sell order after split announcement in 10 for 1 split size factor.

1.4 SIGNIFICANT OF THE STUDY

On completion of this study, it is expected to contribute to the existing literature in several ways. Firstly, this study provides an updated analysis on the split effect in small level of investors in Indonesian market. No study on stock split that focused on small level of investors has been found regarding Indonesian market. Therefore, this study is expected to provide valuable empirical insight about split effect in Indonesian market.

Secondly, this study highlighted the split effect in split size factor. The result provides valuables information for firms that intend to split the stock, that market reaction is dependent on the split size factor. Given the administrative cost associate with split execution, decision to announce split factor sometimes result to market reaction that was not anticipated by the management expectation.

Thirdly, this study further shows that, capital market is not a semi-strong form of Efficient Market Hypothesis and there is a possibility that investors overvaluing the splitting companies especially at the smallest split size factor. Lastly, this study uses a wider range of split size, in order to disentangle between liquidity enhancement and signaling enhancement surrounding split execution.

1.5 STRUCTURE OF THE STUDY

This study is divided into five chapters. **Chapter one** elaborates the motivation of this study, describes objective of the study and detail hypotheses. **Chapter two** begins with stock split definitions, reviews literatures on stock split and brief explanation on trading range hypothesis, signaling hypothesis and liquidity hypothesis, and discusses the stock split studies in Indonesian market. Section 2.oooo discusses about investor classification and small investor definition for this study is presented. The last section is a discussion about order composition after split and the gap in the literature to be filled by this study.

Chapter three focuses on data and methodology used in this study. First section elaborates data and sample use in this study. Next section describes the proxy used to measure split effect, and formula used to test statistical differences surrounding split announcement. The following section describes the methodology to measure small buy and small sell and formula used to test statistical differences.

Chapter four focuses on the presentation of empirical results and finding of this study. The first section presents trading intensity and comparison between before and after split announcement. Next section presents small buy and small sell order surrounding split announcements, the presentation of results are partitioned into split size factors.

Chapter five summarizes the finding of this study. First section begins with the main findings of this study. The following section discusses implication of the finding. And the last section is suggestion for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Indonesia stock exchange (IDX) is an emerging stock market located in Jakarta. The market are growing and records increasing trading value from Rp 147,880 billion in 1999 (IDX Fact book, 2006) to Rp 1,064,528 billion in 2008 (IDX Fact book, 2009). Indonesian market is an order driven market. Trading system uses *Jakarta Automatic Trading System* (JATS) which was firstly used in 1995. The shares traded uses a trading unit called as round lot, and one round lot is equivalent to 500 shares. Transaction cost is based on trading value, and minimum transaction cost stipulated by IDX committee is 0.03% from trading value.

Previous studies in stock split that used data from Indonesian market show various results (e.g. Sutrisno et al (2000), Ramantika (2001), Zubaidah (2007)). This chapter reviews previous literatures in stock split and identifies the gap.

This chapter consists of; section 2.1 which reviews definition of stock split and type of stock split, section 2.2 reviews stock split hypotheses namely; trading range hypothesis, signaling hypothesis and liquidity hypothesis, section 2.3 discusses studies related to stock split in Indonesia, section 2.4 discusses investor classification, and section 2.5 discusses studies that analyses order composition after split.

2.2 DEFINITION OF STOCK SPLIT

If the market price of a firm's stock increases in value whereby investors considered it to be too expensive, the firm may resort to what is called stock split. Stock split means to increase the number of outstanding stocks while lead to the decreasing of price per share. The purpose of a stock split is to reduce substantially the market price of the company's common stock, with the intent of making it more affordable to investors (Williams et al, 2010).

Edwards et al (1993) define a stock split as a distribution of 100% or more of additional shares of the issuing corporation's stock accompanied by a corresponding reduction in the par value per share. The corporation receives no asset in this transaction. The purpose of a stock split is to effect a large reduction in the market price per share of the outstanding stock. For instance, a two-for-one split doubles the number of outstanding shares while a three-for-one split triples the number of shares, and so on.

According to Hartman et al (2000), when a company records share distributions as a stock split, the characteristics for each share of stock are changed proportionately, but the dollar amount for all equity accounts are unaffected. Moreover, they explain that, the primary reason for stock splits is to reduce the market value per share, presumably in an effort to make the stock more marketable.

Generally, there are two kinds of stock splits, namely: stock split-up and stock split-down. Stock split-up is a split execution to reduce market value per share and which consequently leads to an increasing number of stock outstanding. For example 2 for 1 split size, 3 for 1 split size and so on. 2 for 1 split size means two new shares (after split) can be changed to one old share (before split). 3 for 1 split size means three new shares (after split) can be changed to one old share (before split). Stock split-down on the other can also be referred to as reverse split indicates a split execution that results in increasing the market value per share while reduces the number of outstanding shares. The decision of stock split-down is generally to disguise a falling stock market price. Examples of stock split-down are 1 for 2 split, 1 for 3 split and so on. 1 for 2 split means one new share (after split) can be changed for two old shares (before split). 1 for 3 split means one new share (after split) can be changed for three old shares (before split).

2.3 STOCK SPLIT HYPOTHESES

Stock splits result to a reduction of par value and increase the number of outstanding share according to the split factor. Theoretically, investors do not benefit from split execution, splits also do not affect a corporation's future cash flow but there are some administrative that must be borne by the companies. However, explanation for the persistence of splits generally can be classified into three main hypotheses; trading range hypothesis (Baker and Gallager, 1980. Baker and Powel, (1993), signaling hypothesis (Asquith, Heal and Palepu (1989), Conroy et al (1990), McNichols and Dravid (1990), Pilotte (1997), Ariff et al (2004)), and liquidity hypothesis (as Lyroudi and Dasilas (2006), Mishra (2007), Mohanty and Moon (2007).

2.3.1. Trading Range Hypothesis

Trading range hypothesis, suggests that stock split increases the number of outstanding shares in order to broaden the ownership base and decreases the stock price into the range that make round-lot stocks affordable for small investors. Empirical studies that support trading range hypothesis includes: Baker and Gallager (1980), Baker and Powel (1993).

Baker and Gallager (1980) investigate the rational for split executions in NYSE-listed firms. They use mail questionnaires to obtain information on the stock split decision. the questionnaires were distributed to chief financial officers. Two groups are set as stock split group which consists of chief financial officers from 100 companies that issued a stock during 1978 and non-splitting group which consists of chief financial officers from 100 randomly-selected firms that issued neither stock dividends nor split during 1974 to 1978. They found that, there are four agreed opinions within the two groups of respondents. Some of the questions in the questionnaire are: stock splits make it easier for small stockholders to purchase round lots, stock splits keep a firm's stock price in an optimal price range, stock split increases the number of shareholders in the firm, and stock split makes stocks more attractive to investors. The results seem to focus on the benefits to small investor.

Their finding indicated that 65% of the respondent support the opinion that, stock split is issued to lower price and maintain the price at a better trading range that is attractive to the investors. The result is consistent with the reason why, non-splitting group did not issue a stock split. Non-splitting group perceived that, their stock price was already in an optimal range (45%) or was too low (30%). Therefore, there is no reason for them to split their stock since they would not be able to benefit from it.

Baker and Powell (1993) investigate corporate managers' reasons for supporting stock split, they investigated the trading range of firms that issued stock splits and compare whether this range differs for small split factor vs. large split factor. They administered questionnaire to chief financial officer, investor relation managers, treasurers, chairman, chief executive officers and others. They discovered some important reasons that managers undertaking a split are moving the stock price into a better trading range, improving the stock's liquidity, signaling optimistic managerial expectations about the future, and attracting more investors.

Baker and Powell (1993) found that, the preferred trading range is about $20 to $35. Also, they found that, the preferred trading range between small split and large split are different. Manager of firms with small splits expresses a lower preferred trading range and those with large splits.

2.3.2 Signaling Hypothesis

Signaling hypotheses suggest that, split could provide favorable information about improved future earnings performance. Empirical studies that support signaling hypothesis includes, Asquith, Heal and Palepu (1989), Conroy et al (1990), McNichols and Dravid (1990), Pilotte (1997), Ariff et al (2004).

Asquith, Heal and Palepu (1989) examine whether stock splits convey information about earnings. Their evidence suggests that, the market reaction to split announcements cannot be attributed to expectation of either future earnings increases or near term cash dividend increases. However, this finding is not fully accepted. Similar study conducted by Pilotte (1997), founds that, earning information conveyed by split during 1982-1989. By changing the period of study, he argues that, during 1982-1989 is a period of lower inflation and higher real economic growth that market has more optimist expectation to the split event.

Conroy et al (1990) use bid ask spreads after split of firms listed in NYSE to measure the liquidity. They find that bid ask spreads increase after split, representing a liquidity cost to investor. This liquidity cost may validate that stock split are a signal of favorable information about the firms.

McNichols and Dravid (1990) investigate whether firms signal their private information about future earnings by their choice of split factor. They document that the split factors are increasing in pre-split share price and decreasing in the pre-split