# ABSTRACT <br> By <br> Dimas Praditya <br> ANALYSIS OF FACTORS AFFECTING THE STOCK SPLIT 

## Case Study On Listed Companies In Indonesia Stock Exchange 2006-2010

## Dosen Pembimbing:

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#### Abstract

This research is to know about anything that affects the stock split on companies listed on the Stock Exchange. Each company was founded with the hope that the company can sustain its business, growing rapidly and can exist for long periods. Supporting operations require one financing for companies that have gone public by issuing shares to increase liquidity and trading perform stock splits, stock split is to break a piece of stock into n shares, price per new share after the stock split is $1 / \mathrm{n}$ of the previous price. Basically there are two types of stock splits do, which is share split up (split up) and dropped the stock split (split down). Solving stock up or split up is the decline in the nominal value per share, which resulted in increasing the number of shares outstanding. Stock split or split down fall is the increase in the nominal value per share, and reduce the number of shares outstanding. There are several theories that explain the stock split and its relation to the stock price and liquidity. Among them there are two well-known theories as literature, the signaling theory and optimal trading range theory. Signaling theory or also known as information asymmetry states that a stock split provides an informative signal to investors about the prospects for improvement in the future returns which substantially while trading range theory states that the stock split will increase the liquidity of stock trading


Keyword:Stock Split, Split Up, Split Down Singnaling Theory, Trading Range Theory

## Introduction

A company is founded with the hope that the company can sustain its business, growing rapidly and can exist for a long period of time. However, with
the passage of time the competition is increasing, so are needed that strategies that not only make the company survive, but able to make the company win the business competition.

In implementing the strategy to win the competition, a lot of obstacles facing the company, one of which is the need of funding. Enterprise resource constraints and limited access to banks for the acquisition of additional funds is a problem faced by many companies.. For that capital markets provide solutions that can be considered in terms of funding is by way of changing the status of the company from a private company into a public company through a public stock offering.

Every company is always in need of funds to finance its operations. The funds can be obtained from several sources, the first from within the company from the owners of capital, and retained earnings. While other sources of financing, which comes from outside in the form of loans / debts of the other party
. One way that a lot lately by corporate issuers in Indonesia Stock Exchange by corporate action is through a stock split (share split).

Solving the stock is a share split into n shares. New price per share after the stock split is $1 / \mathrm{n}$ of the previous price. However, the company did not change the value of the equity or fixed (Jogiyanto 1998).

With the stock split, shareholders must exchange their shares to the new shares have a nominal value lower, because if after the redemption deadline that has been set is exceeded, then the old shares with a nominal value can not be traded on an exchange. Policy stock splits do not add to the value of the company or have no economic value. In other words, a stock split does not affect the management because it does not change the value of the company and it does not also affect shareholder because wealth or the proportion of shares are same..

According to Keown, Scott, Martin, Petty, 1996 (in Rohana, 2003) some of the reasons the stock split the company managers are:

1. So that stock prices are not too high so as to increase the number of shareholders and improve the liquidity of stock tradin
2. To restore the price and size of the average trade share to a range that has been targete
3. To bring information about investment opportunities in the form of increased earnings and cash dividends

Based on the background of the above problems, the formulation of the problem under study are as follows:

1. Do stock prices influence corporate decision for the stock split?
2. Does stock trading frequency have effect on the stock split decision?
3. Does the size of the company's have impact on the stock split decision?
4. Is there a difference between the abnormal returns before and after the stock split?

## Literatur Review

## Capital Market Information

The capital market has two functions, namely economics and finance. In the economy, the stock market provides the facility to transfer funds from the owner of more funds (lenders) to those who require long term funds (borrower).With their funds, lenders expect any reward or return of the submission of the fund. As for the borrower, any outside funding can be used for business development efforts without waiting for funds from the firm's operations. Information is a critical element to the business world. Information in essence presenting information, records / images, both for the past, present and future state of the life of a company and the market effect. Information is a fundamental requirement for investors in making decisions. This decision relates to the selection of the most profitable investment portfolio with a certain level of risk. Information can reduce uncertainty (uncertainty), so the decision is expected to be in accordance with the objectives to be achieved. In addition, useful information to anticipate all possibilities that may occur in the future. Therefore, the complete, relevant, accurate and timely information is required by the investor.

## Stock Split

Stock splits or stock split is a corporate action used to do a company. Simply putting, a stock split means a share split into n shares. Stock split resulted in the increase in the number of shares outstanding in the absence of a share purchase transaction that changes the amount of capital. Price per shares shares after the stock split is split factor. Stock split is an activity of a share split into n shares, where the price per new shares after the stock split is $1 / \mathrm{n}$ of the stock per share previously. (Jogiyanto, 1998).

Stock split is an event that causes a change in the nominal value of the shares, the market value of shares and the number of shares outstanding. Because of that stock splits can be categorized as an event or information that may affect the value of the company's securities or investment decisions investors. So the decision to split the stock must be announced in accordance with the provisions of Securities and Exchange Commission on the community through announcements on the exchange or advertising in some newspaper published in Indonesia

## Stock Split Type

Basically there are two types of stock splits down, which is share split up (split up) and dropped the stock split (split down)

## Split Down

Solving the stock goes up or split up is a decrease par value per share, which resulted in increasing the number of shares outstanding. For example, 2: 1, 3: 1, 4 : 1 and others.

## Split Up

Stock split or split down fall is the increase in the nominal value per share, and reduce the number of shares outstanding. For example, stock splits with a split factor $1: 2,1: 3,1: 4$ and others.

## Motivation Theory of Stock Split

There are several theories that explain the stock split and its relation to the stock price and liquidity. Among them there are two well-known theories as literature, the signaling theory and optimal trading range theory

Signaling theory is also known as information asymmetry states that a stock split provides an informative signal to investors about the prospects for improvement in the future return is substantial.

Trading range theory states that the stock split will increase the liquidity of stock trading. According to theory, the share price that is too high (over price) will lead to less active stocks which are traded. With the stock split, the stock price becomes too high so it will be make more and more investors are able to trade.

## Overview of Previous Reserch.

The results of previous research that supports and does not support trading range theory and Signaling theory, among others:

1. Mc. Gough (in Sukardi, 2003) suggests the benefits of the stock split is a decrease in the share price which further adds to the appeal to have the shares so as to make the stock more liquid to be traded and changed the odd lot investors be investors round lots. Aad lot is a condition in which investors buy stocks under 500 sheets ( 1 lot) round lot while investors are investors who buy shares of a minimum of 500 pieces ( 1 lot).
2. Ikenberry et al. (in Rohana, 2003) states that a stock split resulted in the realignment of the stock price at the lower range. Survey conducted Baker and Gallagher, 1980 and Rozef, 1998 (in Rohana, 2003) shows that managers tend to mention this liquidity reasons as motivation activities stock split.
3. Grinblatt (1984); Lakonishok and Lev (1987) (in Retno Miliasih, 2000) suggests that managers use stock splits corporate issuers to submit information lucrative market
4. Research Retno Miliasih (2000) stated that the announcement of a stock split does not result in increase in earnings in the period after the occurrence of a stock split and before the stock split, the abnormal return and the market reaction shown by the market return that does not indicate there is a positive correlation with the change in earnings in around split announcement stock
5. Research conducted Rohana, Jeannet and Mukhlasin (2003) find that stock prices associated with stock split the company's decision, and no significant difference in earnings before and after the stock split stock split.
6. Research (Kurniawati, 2003) indicated the presence of significant abnormal returns around the announcement date of the stock split. Abnormal return indicates that the stock split announcement contains information that market participants which were responded by JSE.

## Research hypothesis

## Hypothesis One

Trading range theory states that the management of the stock split is driven by the behavior of market practitioners which are consistent with the notion that the stock split to keep the stock price is not too expensive, which limits the stock split because the optimal price for the shares and to increase the purchasing power that investors remain many people who want buy-sell it, which in turn will increase shareholder liquidity.Trading range theory states that the stock split will increase the liquidity of stock trading.Thus, if the stock price is quite expensive, it would take a stock split policy. Due to a lower stock price, it would attract medium and small investors to invest. Thereby increasing the ability of the stock to be traded at any time and increase liquidity. It is clear that policy tends to the stock split was taken at a high price. The higher the stock price, tends to be lower, so that the sale of shares is back to optimal. Based on the explanation above, then is compiled the first hypothesis.

## Ha1: Stocks positive influence the company's decision to split the stock.

## Hypothesis Two

According to Trading range theory that the stock split will increase the liquidity of stock trading. According to the teory, the share price is too high (over price) will lead to less active stocks which are traded. With the stock split, the stock price becomes too high so it will be more and more investors are able to trade. This condition leads to the increasing number of shares traded and the number of shareholders.

## Ha2: The frequency stock trading negative effect on the company's decision to split the stock.

## Third Hypothesis

The company's growth is directly proportional to the size of the company, so the faster the growth of the company, the greater the size of the company. Large companies are generally known to the public, so that information about the company's prospects are easier to obtain than small investors The size of a company can be determined by several things, among others, by total assets, total sales, average sales and average total assets. In relation to total assets, if the company has total assets greater then it shows that the company has reached a stage of maturity. Carter et al (1998) in Misnen (2004), Helen (2005) stated that the large size of the company makes a lot of investors interested in investing in the company. So that will have an impact on the company's stock price high, making the company the stock split. So it can be made the hypothesis

## Ha3: Firm size positively impacts the stock split decision

## Fourth Hypothesis

Signaling theory states that a stock split provides an informative signal to investors about the prospects for improvement in the future return is substantial. This theory states that a stock split to provide information to investors about the prospects of increased future substantial return (So the impact of the stock split is what gave rise to the appeal, which, according to theory, it is seen as a stock split
transaction that assesses cosmetics that investors are not getting better. So, if the market reacts to the announcement of the stock split, the reaction is not solely due to the stock split information that has no economic value but because knowing the future prospects of the company.

## HA4: There are differences in abnormal stock returns before and after the stock split.

## Research Method

## Type of Research

Type of research is the study of event study. Jogiyanto (1998:318) stated that the study of events (event study) "is a study that studied the market reaction to an event (event) whose information is published as an announcement." Event studies can be used to test the information content (information content) of the announcement

## Population and Research Sample

Population is the whole aspect of the study (Arikunto, 1998:115). The population of the study was overall a publicly traded company listed on the Stock Exchange Indonesia during years 2006-2010, from recent data obtained 393 companies listed on the Stock Exchange

Sampling technique in this study were taken by using purposive sampling. Method:

1. The company stock split on year 2006-2010
2. Companies that do not do a stock split in the year 2006-2010 being in the same industry to companies that perform stock split
3. Companies that have the data needed to complete the study.
4. Companies that do not conduct other corporate actions during the observation period (event window), such as a rights issue, warrants, additional shares, the announcement of dividend, bonus shares, and mergers.
5. Companies that have only a policy of the stock split as much as once a year.
6. Companies that have only a policy of solving up or solving share split-up on the shares circulation. What is meant by breaking up (split-up) is a stock split with a ratio of decrease in par value per share, which will result in increasing the number of shares outstanding.

## Research period

Observation period (event window) in the study is taken for 15 days around the announcement date, ie 7 days prior to the split announcement date shares (pre event window), when the announcement of a stock split 1 day (event date), and 7 days after the date of split announcement shares (post event period).

## Types and Sources of Data

Sources of data in this study comes from secondary data (secondary data), the research data obtained by researchers indirectly (through an intermediary medium) or are the data obtained and recorded by others (Indriantoro And Supomo, 2002:147)

## Result

## Descriptive Statistics

The results of the descriptive statistics of the variables used in the study are

## Table

## Descriptive Statistics

| Variable | Minimum | Maximum | Mean | Std. <br> Deviation |
| :--- | :--- | :--- | :--- | :--- |
| Price | 25 | 110,000 | $3,634.18$ | $12,405.606$ |
| Frecuency | 1 | 559,655 | $16,387.04$ | $49,738.079$ |
| Size | 10.150 | 13.315 | 11.779 | 0.634 |

Based on Table descriptive statistics of the price variable produces a minimum value of 25 rupiah, the maximum value of 110,000 rupiah, with an average and standard deviation of 3634 rupiah and 12,405 rupiah. Standard deviation value is greater than the average value which showed a high variability of the sample firm's stock price.

Firm size (SIZE) of the study sample was measured using logarithm (log) of total assets. The test results yield a minimum value of 10.15 minimum value, maximum value of 13.315 , with an average and standard deviation of 11.779 and 0.634 .

## LogitRegression Testing

Testing the Hypothesis I, II, and III aims to demonstrate the effect of the stock price, stock trading frequency, and size of the company against the company's decision split shares (stock split). Testing the hypothesis conducted used logit regression with $\alpha=5 \%$.Test the feasibility of the regression model.The test results using the Hosmer and Lemeshow test are shown in the following table.

Table
Hosmer and Lemeshow Test

| Step | Chi-square | df | Sig. |
| :--- | :--- | :--- | :--- |
| 1 | 5.771 | 8 | 0.673 |

Based on the results in Table the test showed the value of Chi-square of 5771 with significance (p) of 0.673 . Based on these results, because the significance value greater than 0.05 , then the model can be inferred that is able to accurately predict the value of his observations.

Assessing the overall model (overall model fit). The next step is to test the overall model (overall model fit). Testing is done by comparing the values between -2 Log Likelihood (-2LL) at baseline (Block Number $=0$ ) with a value of -2 Log Likelihood ( $-2 L L$ ) at the end (Block Number $=1$ ). The following table shows the comparison between the-2LL-2LL beginning with the end.

## Table

## Comparison of value-2LL-2LL Beginning With Top End

| -2LL | Nilai |
| :--- | :--- |
| 1. Beggining (blok 0) | 140,304 |
| 2. End (blok 1) | 111,659 |

Based on Table 4.4, the initial value of-2LL amounted to 140.304. After three independent variables were included the value of the end-2LL decreased to Rp 111.659. A Decereased likelihood (-2LL) shows the hypothesized model was The coefficient of determination (R2)

The results of calculation of the value of Nagelkerke R Square is shown i.
Table

## Nagelkerke R Square

| Step | $-2 \quad$ Log <br> likelihood | Cox \& Snell <br> R Square | Nagelkerke <br> R Square |
| :--- | :--- | :--- | :--- |


| 1 | 111.659 | 0.119 | 0.230 |
| :--- | :--- | :--- | :--- |

Based on Table 4.5, the value of Nagelkerke R Square which is generated is equal to 0.230 , which means that the variability of the dependent variable explained by the independent variable is equal to $23 \%$, while the remaining $77 \%$ is explained by other variables outside the model study

## Hypothesis Test Results

1Test Results Hypothesis I, II, and III
Test results for Hypothesis I, II, and III using logistic regression are presented .

## Table

## Logistic Regression Test Results

| Variable | B | S.E. | Wald | Sig. (p) | Description |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Price | 1.442 | 0.379 | 14.509 | 0.000 | Significant |
| Frecuency | 0.683 | 0.249 | 7.510 | 0.006 | Significant |
| SIZE | -0.612 | 0.456 | 1.799 | 0.180 | Not significant |
| Constant | -1.459 | 4.594 | 0.101 | 0.751 | - |

$\mathrm{SS}=-1.459+1.442+0.683$ Freq PRICE SIZE -0.612

## 1.Hypothesis Test Results I

Tests on the stock price variable (PRICE) produces regression coefficient 1.442 with an error rate prediction (p) at $0 \%$. Based on these results because the error rate prediction is $<\alpha$ then the hypothesis I successfully received. 2. Hypothesis Test Results II

Tests on stock trading frequency variable (frequency) produces regression coefficient 0.683 with an error rate prediction (p) of $0.6 \%$. Based on these results because the error rate prediction $<\alpha$ then Hypothesis II successfully received. 3. Hypothesis Test Results III

Tests on firm size variable (SIZE) produces regression coefficient -0.612 with an error rate prediction (p) of $18 \%$. Based on these results because the error rate prediction is $>\alpha$ then the hypothesis is rejected III.

## Test Results Hypothesis IV

Test results using Kolmogorov Smirnov One Sample Test with $\alpha=5 \%$ is preseted in the table

Normality Test Results

| Description | Return <br> Before | Return |
| :---: | :--- | :--- |
| After |  |  | N | Nolmogorov-Smirnov Z |
| :--- |
| Asymp. Sig. (2-tailed) |
| 0.921 |

Based on these results it can be concluded that the data were normally distributed so that the testing of hypotheses performed using paired sample t-test. The test results are presented in the following table.

Table
Paired Sample t-Test Against Stock Return

| Description |  | Pair 1 <br> Return Before - Return After |
| :---: | :---: | :---: |
|  |  |  |
| Paired <br> Differences | Mean | -0.03182452 |
|  | Std. Deviation | 0.54405721 |
|  | Std. Error Mean | 0.03989221 |
|  | 95\% Confidence Lower Interval of the Difference | -0.11052666 |
|  | Upper | 0.04687763 |
| t |  | -0.798 |
| df |  | 185 |
| Sig. (2-tailed) |  | 0.426 |

Test results for differences before and after the return period of the stock split in Table 4.8 produces $t$-Calculate the value of -0.798 with an error rate prediction (p) of 0.426 . Based on these results, because the prediction error rate is greater than $\alpha$ then the hypothesis is rejected IV.

## Conclusions

Based on the analysis in the previous section, the conclusions that can be drawn from this research are:

1. Based on testing of hypothesis I, this study was able to prove the existence of significant influence stock prices to the company's decision to carry out a stock split.The direction of the positive influence suggests that if here
are higher stock prices, it will cause companies are increasingly motivated to do a stock split.
2. Based on the testing of Hypothesis II, the study was able to prove the existence of a significant effect on the frequency of trading in shares the company's decision to conduct a stock split. Test results showing the direction of the positive influence also suggests that the policy stock split is expected to have an impact on the stock price declines.
3. Based on the testing of Hypothesis III, the study was not able to prove the existence of a significant effect of firm size on the company's decision to conduct a stock split. The difference in the results of this study with the preliminary study showed that the price factor is still the manager of the main considerations in making the decision to do a stock split.
4. Based on the results of testing of hypothesis IV, this study failed to prove the existence of differences in return the company before and after the stock split. no significant difference in the company's stock return in the period before and after the stock split.

## Implications for Further Research

With the limitations of this study, implications for further research are:

1. Future studies could be developed by incorporating variables Trading Volume Activity (TVA). With the included variables it also expected to know whether the stock split events also affect the liquidity of stocks changes the sample firms.
2. For further research, if possible it needs to use the return correction in the calculation process. The use of return that has been corrected is expected to reduce bias the analysis of the company's shares which are not daily sample transaction.

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