## THE TRADING FACTORS, RISK BASED FACTOR AND FIRM CHARACTERISTICS AS DETERMINANTS OF LQ45 FIRM STOCK RETURNS LISTED IN INDONESIA STOCK EXCHANGE



Undergraduate Thesis NANDYA SARAH UTAMI 01011281419116 Management

Proposed as a Requirement to Achieve Bachelor Degree of Economic

MINISTRY OF RESEARCH, TECHNOLOGY AND HIGHER EDUCATION SRIWIJAYA UNIVERSITY ECONOMIC FACULTY 2018

## LEMBAR PERSETUJUAN UJIAN KOMPREHENSIF THE TRADING FACTORS, RISK BASED FACTOR AND FIRM CHARACTERISTICS AS DETERMINANTS OF LQ45 FIRM STOCK RETURNS LISTED IN INDONESIA STOCK EXCHANGE

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Is true that original. There is no citation of other research which is not mentioned the sources in this research. I made this statement truly and if there is inconsistent statement later, I am willing to revoked the predicate of bachelor's degree.



### PREFACE

Praise to Allah SWT because His mercy and blessing this thesis can be accomplished properly. This research entitled **The Trading Factors, Risk Based Factor and Firm Characteristics as Determinants of LQ45 Firm Stock Returns Listed in Indonesia Stock Exchange** as a requirement to achieve Bachelor Degree of economic in University of Sriwijaya is successfully done.

LQ45 is a blue chip stock that exist in Indonesia. They consist of 45 firms that fullfill several requirements to be chosen as blue chip stock. After the requirements fullfilled there will be eveluation each period. This evaluation of determining firms that included in LQ45 stock is conducted every six months, especially every February and August each year. LQ45 firms is somehow he most consistent firms in publishing their financial report with a good financial performance each year. LQ45 firms have higher capitalization than other firms outside LQ45 stock index. Therefore investors are get interested to invest in LQ45 firms. Resulted to consistent return gained by investors.

Investment will gain return for investors. Especially if they invest in liquid stock like LQ45, the return might be high. However there are several factors that may affect stock returns. Five of them are stock trading volume, bid-ask spread, beta stock, firm characteristics and market to book value. The research explains how these factors influence stock return in blue chip stock such LQ45. More than that, this research will measure which factors mostly influence stock return and should be considered by investors before they decided an investment regardless short or long term investment they want to conduct.

In this research, the researcher analyze the factors using several references of investment concept. The data is supported by secondary data from IDX and yahoo finance website.

This thesis is still far from perfect but hopefully this thesis can give significant contribution to investment practical and reference for academic purpose in the future.

Finally writer say that you, hopefully this thesis will be usefull for all of us, especially academic life in University of Sriwijaya.

Inderalaya, 10 March 2018

Nandya Sarah Utami

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- 7. Drs. Zakaria Wahab, M.B.A, Head of management department economic faculty University of Sriwijaya.
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Inderalaya, February 2018

Nandya Sarah Utami

### ABSTRACT

### THE TRADING FACTORS, RISK BASED FACTOR AND FIRM CHARACTERISTICS AS DETERMINANTS OF LQ45 FIRM STOCK RETURNS LISTED IN INDONESIA STOCK EXCHANGE

By:

Nandya Sarah Utami

This research aims to analyze whether trading factors, risk based factor and firm characteristics influence LQ45 firm stock returns that are listed in Indonesia Stock Exchange. This research use sample of LQ45 firms in Indonesia Stock Exchange. The data chosen is time series from 2013-2016. The variable used in this research consist of dependent and independent variables. Dependent variable in this research is firm stock returns and the independent variables are trading volume, bid-ask spread, beta, firm size and market to book value (MBV). This research use multiple regression analysis using software SPSS 23 to analyze the relation of independent variables to dependent variable. As the result, out of 5 independent variables there are 4 independent variables that positively and significantly influence firm stock return. They are consist of trading volume, bidask spread, beta and market to book value (MBV). Meanwhile firm size doesn't influence firm stock returns significantly.

Keywords: stock return, trading volume, bid-ask spread, beta, firm size, mbv

Inderalaya, 7 March 2018

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## Rhetorique Public Speaking Training

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September 2014- now

Content Development

✓ Content development responsible for all materials and content of training or coaching clinic. Together with 3 members we work in a team to fulfil demand from each public speaking training

Sriwijaya Accounting and Business Conference (SEABC) November 2017 Master of Ceremony

- ✓ SEABC is annual agenda in Sriwijaya University that is participated by international academic
- ✓ Master of Ceremony is required to speak fluently in english and practice technique of MC

### **Youth Revolution Fest**

Judge of speech competition

- ✓ This is participated by 35 universities and senior high schools students from South Sumatra Province
- ✓ Together with professional and lecturer I work in team to determine competencies of speech

### Seespa English Olympic

Judge of Newscasting Competition

- ✓ This is participated by 30 universities and senior high schools students from South Sumatra Province
- ✓ Together with professional and lecturer I work in team to determine competencies of newscasting

### October 2017

October 2017

#### Organizational Experience

#### UKM Bahasa University of Sriwijaya

February 2016- 2017

Vice President

✓ I lead around 50 members of UKM Bahasa in 13 programs regarding competitions and coaching clinics of 5 divisions which consist of debate, speech, story telling, newscasting and scrabble divisions

**Ikatan Mahasiswa Manajemen (IKAMMA) Economic Faculty** March 2016-2017 Secretary

- ✓ I responsible to mantain all documents and administration letters of around 10 programs and events
- ✓ I have to cooperate with university administration for each proposals and responsibility reports

Duta Bahasa Nasional	August 2017
Favorite Best National Costume	
<ul> <li>I and my partner represent South Sumatra provinces from all around Indonesia and a National Costume then deserve free ticket</li> </ul>	achieve a title as Favorite Bes
Duta Bahasa Sumatra Selatan	May 2017
Winner	-
<ul> <li>✓ I compete with 150 participants throug UKBI, UKBA, scientific writing, presentati process before finally chosen as Duta Baha</li> </ul>	ion, interview and quarantine
Idea Debate Competition of Sumatra Level	November 2017
4th Best Speaker	
<ul> <li>I work in team and compete with 30 team</li> <li>with 5 various topics during preliminary to</li> <li>4<sup>th</sup> Best Speaker from total 60 participants</li> </ul>	ill semifinal round and achieve
Lampung Overland Varsity English Debate	October 2017
3 <sup>rd</sup> Runner Up	
✓ I work in team and compete with 32 te Sumatra through 6 debate rounds w preliminary till final round and achieve 3 <sup>rd</sup>	rith 6 various topics during
XL Future Leaders Batch 5	November 2016-now
Awardee	
<ul> <li>✓ I become one of 150 youths chosen from passing competition from 12.436 particips administration, TOEFL, GMAT, FGD and interest</li> </ul>	ants through tight selection o
Sumatra Overland Varsity English Debate (SOVED)	June 2016
3 <sup>rd</sup> Best Speaker	
<ul> <li>I work in team and compete with 30 team</li> <li>with 5 various topics during preliminary time</li> </ul>	ill semifinal round and achieve
3 <sup>rd</sup> Best Speaker from total 64 participants	

3<sup>rd</sup> Winner

✓ I presented scientific writing about small micro enterprise and answer questions from 3 judges. As the result I get the 3<sup>rd</sup> winner out of 20 participants from 3 majors in economic faculty

### **Bujang Gadis Kampus (BGK)**

October 2016

August 2015

Semifinalist

✓ I am chosen as 1 of 30 semifinalist out of 200 people from south sumatra. The selection included administration, general knowledge, culture awareness, psychological test, english test, and interview

### Debat Bahasa Indonesia

Winner

✓ I and my partner competed with around 30 teams from universities in South Sumatra. I got the first winner and represented South Sumatra to Sumatra level of Pekan Bahasa 2015 placed in Medan

### National University Debating Championship (NUDC) June 2015

3<sup>rd</sup> winner

✓ I and my partner competed with 32 teams from all universities in Kopertis II region. I got the 3<sup>rd</sup> winner and represented Kopertis II to the national level of NUDC 2015 placed in Pontianak

# National University Debating Championship (NUDC)August 2015 $6^{th}$ best speaker

✓ After 7 rounds of debate until semifinalist level I got an award as 6<sup>th</sup> best speaker from around 64 participants of novice category out of 32 provinces from all around Indonesia.

# Sec-Ionaire English Debate Competition April 2015 Winner

✓ I got the winner out of 32 teams from universities in Sumatra. The selection started from preliminary until final round which consist of 6 different topics of debate by using british parliamentary system

### Asian English Olympic (AEO)

Semifinalist

- ✓ I struggle till semifinalist level of novice category out of 100 teams from universities all around Asia.
- ✓ The selection started from preliminary round till semifinal and consist of 6 different debate topics

### **Outstanding Scholarship CIMB Niaga**

### September 2014-now

February 2015

Awardee

✓ I become one of 30 students selected out of hundreds participant from universities from all around Indonesia. The selection were TOEFL, calculation test, psychological, and interview test

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## CHAPTER I INTRODUCTION

### 1.1 Background

The capital assets pricing model (CAPM) proposed by Sharpe (1964), Lintner (1965) and Black (1972) argues that the market portfolio is the only factor underlying security returns. However, the arbitrage pricing theory (APT) originated by Ross (1976) challenges that a multi-factor generating process determines the stock return. Ross (1976) does not define the factors underlying stock returns. Recently, Fama and French (1993, 1995, 1996a, 1996b, 1997) argued that a three-factor model is enough to explain stock return behaviors. The three factors are the market portfolio, the size-related factor and the book-to market- related factor. Basically, CAPM, APT and the Fama-French three-factor model show that stock returns are determined by certain common factors. Crosssectional stock returns are determined by the risk premium of the common factors. Fama and French (1993) shows that the documented anomalies in stock returns would disappear once the market, size-related and book-to-market-related factors are considered the common factors for security returns. With the Fama-French three factor model, common factors rather than firm characteristics determine the stock returns.

Fama and French (1993) from Chen and Eva (2002) indicates that stock return patterns can be explained by the risk-based factors. The risk load underlying the risk-based factors is responsible for cross-sectional stock return behaviors. Stock risk indicated by beta will influence the expected return since the term of investment is still valid which stated that high return high risk. Investor would more likely to demand higher return if the stock is risky. Firms also have to bargain more return to gain investors' attention to their stock.

However (Kent Daniel and Sheridan Titman, 1998) challenges that stock returns are related to the firm characteristics of book-to-market ratio and size. Moreover, they argue that firm size and book-to-market characteristics are still significant for stock returns eventhough the risk load for a size-mimicking portfolio and book-to-market-mimicking portfolio are controlled. Research from Chen and Eva (2002) indicates 2 kinds of factor affecting stock return in Taiwan, they are risk based and firm characteristic. They do not agree if each factor can stand alone affecting the stock return since the research indicates a significant intercept of risk based and firm characteristic to stock return in Taiwan. Furthermore they agree that factor of firm characteristic which in this case book to market ratio can't be significantly influence stock return without book to market related calculation of risk based factor. Firm characteristics in this research are gained from market to book value and firm size. Research from Merton [26] indicates that expected return is increasing in the asset systematic risk (beta), residual risk, and market value. Further he finds that market to book value is related to spread which shows illiquidity of a stock. This relation is supported by the result from Chui and Wei (1997) that state stocks with lower trading volume would experiences higher returns. Lower trading volume happen when investors don't get much public information about asset. This lower trading volume is

indicated by higher spread. If contradict situation happen, when more information is publicly available about asset, bid-ask spread decrease because the trading volume increase.

However research from Amihud and Mandelson (1989) indicates that beta, bid spread, residual risk and size affecting stock return. Furthermore they found that only beta and bid spread of stock trading have really significant influence to stock return. Beta is somehow the measurement of risk based factor and bid ask price is included in trading factor. Chui and Wei (1997) argue that trading volume may be significant for stock returns. Further in their research they found that stocks with lower trading volume would experiences higher returns. This shows the negative relationship that needs to be indicated why this phenomenon happen.

It emphasizes the researcher that somehow trade activity affects stock return as well showed by bid-ask spread. Then in this paper the researcher will combine those three factors to indicate the stock return. This research will indicate whether those three types of factors of trading, risk based and firm characteristic affect stock return in Indonesia. The research is conducted in LQ45 stocks since the LQ45 stock is the most consistent in financial performance. LQ45 stock is categorized as blue chip stock that has high capitalization and value. The LQ45 stock provides data that is needed in this research. The trend of financial performance in LQ45 stock is increasing from year 2013-2016 proven by consistent firms included in LQ45 stock during 2013-2016. More than that, LQ45 stock is owned by most investors in Indonesia, therefore the analysis would be more practical and visible impacted firms and investors in Indonesia. Furthermore to measure the influence to stock return in LQ45 stock, the trading factor will be gained from bid-ask spread and volume of stock trading in certain period. The risk based factor will be measured by beta and firm characteristic will be indicated by firm size and market to book value (MBV). After all, trading factors, risk and firm characteristics affecting stock return in Indonesia are investigated using a detail empirical design.

### **1.2 Problem Formulation**

Based on those reason, the problems that will be discussed in this research are:

1. How trading factors influence the stock return of firms listed in Indonesia Stock Exchange?

2. How risk based factor influence the stock return of firms listed in Indonesia Stock Exchange?

3. How firm characteristics influence the stock return of firms listed in Indonesia Stock Exchange?

### **1.3 Research Objective**

This research is conducted to answer problem existed, therefore the objective are:

1. To investigate the influence of trading factors to stock return of firms listed in Indonesia Stock Exchange. 2. To investigate the influence of risk based factor to stock return of firms listed in Indonesia Stock Exchange.

3. To investigate the influence of firm characteristics to stock return of firms listed in Indonesia Stock Exchange.

### **1.4 Research Contribution**

1.4.1 Practical Contribution

1. For Firms

Firms can do preventive action to mitigate factors that can linfluence their stock return in the future since the factors are already provided from several perspectives of trading, market risk, and firm characteristics. Firm can decide which factors have to be prioritized at the beginning than the others in order to gain maximum stock return for the firms.

### 2. For Investor

Investors will be able to determine their investment decision by considering the factors that may affect their expected return and mitigate the risk of their investment in a firm. Information about investment will be spread in public as references to motivate people doing investment.

### 1.4.2 Theoritical Contribution

1. For Investment Theory

This research supports signalling theory, Fama and French's Three Factor Model and efficient market hyphotesis. Result of this research will strengthen these theories and proven several facts that happen recently in real world. Furthermore as the proven of the theories this research can be functioned as reference to simplify learning about return of investment.

### REFERENCES

- Acheampong, E. A. (2014). The Effect of Financial Leverage and Market Size on Stock Returns on the Ghana Stock Exchange: Evidence from Selected Stocks in the Manufacturing Sector. *International Journal of Financial Research*, 125.
- Akpansung, M. O. (2015). The Relationship between Trading Volumes and Returns in the Nigerian Stock Market. International Research Journal of Finance and Economics.
- Amihud, H. M. (1989). The Effects of Beta, Bid-Ask Spread, Residual Risk and Size on Stock Returns. *The Journal of Finance*, 479-486.
- Artmann et al. (2012). Determinants of Expected Stock Returns: Large Sample Evidence from the German Market. *Journal of Business Finance & Accounting*,.
- Bodie et al. (2008). Manajemen Portofolio dan Investasi. Jakarta: Salemba Empat.
- Chen, E. H. (2015). The Determinants for stock returns in emerging markets: The case of taiwan. *Studies in Economics and Finance*, 58-77.
- Chen, M. (2015). Risk-return tradeoff in Chinese stock markets: some recent evidence. *International Journal of Emerging Markets*.
- Chui CW, Wei KC (1998) Book-to-market, firm size, and the turn of the year effect: Evidence from the Pacific-Basin emerging markets. *Pac Basin Finance J* 6:275–293
- Clark, J. J. (1992). Seasonalities in NYSE Bid-Ask Spreads and Stock Returns in January. *The Journal Of Finance*.
- Daniel. (2017, Agustus 22). *Investopedia*. Retrieved from Investopedia.com: https://www.investopedia.com/articles/financial-theory/09/calculatingbeta.asp

- Darwish. (2012). Testing the Contemporaneous and Causal Relationship between Trading Volume and Return in the Palestine Exchange. *International Journal of Economics and Finance*.
- EF, B., & MC, E. (2009). Financial Management: Theory and Practice. *Journal of Applied Finance*, *1*(1), 25–36.
- Elzahar & Husaini. (2012). Determinants of narrative risk disclosures in UK interim reports. *The Journal of Risk Finance*, *13*(2). Retrieved from http://www.emeraldinsight.com/doi/abs/10.1108/15265941211203189
- George H.K Wang, J. Y. (2000). Trading volume, bid–ask spread, and price volatility in futures markets. *Journal of Futures Market*.
- Ghozali, Imam. (2006). *Analisis Multivariate dengan Program SPSS*. (4 ed.). Semarang: Universitas Diponegoro
- Husnan, S. (2001). Manajemen Keuangan Teori dan Penerapan Keputusan Jangka Panjang (4 ed., Vol. 1). Yogyakarta: BPFE UGM.
- Jogiyanto, H. (2008). Analisis & Desain Sistem Informasi Pendekatan Terstruktur Teori dan Praktek Aplikasi Bisnis. Yogyakarta: Andi.
- Kent & Titman. (1998). Characteristics or Covariances? *The Journal of Portfolio Management*, 24(4), 24–33. Retrieved from https://doi.org/10.3905/jpm.1998.24
- Khaled, A. T. (2013). An Empirical Investigation of the Relationship between Stock Return and Trading Volume: Evidence from the Jordanian Banking Sector. *Journal of Applied Finance & Banking*, 45-64.
- Khan, F. R. (2008). Trading Volume and Stock Returns: Evidence from Pakistan's Stock Market. *International Review of Business Research Papers*, 151-162.
- Ledakis, I. D. (2011). International Journal of Business and Economic Development (IJBED) Evidence from the London Stock Exchange.
- Lischewski, S. V. (2012). Size, Value, and Liquidity. Do They Really Matter on An Emerging Stock Market? *Emerging Market Review 13*.
- Liwang, F. P. (2011). Analisis Faktor yang Mempengauhi Struktur Modal Serta Pengaruhnya Terhadap Harga Saham Pada Perusahan-Perusahaan yang

Tergabung Dalam LQ45 Periode Tahun 2006-2009. Seminar Nasional Teknologi Informasi & Komunikasi Terapan (Semantik), 9.

Mamduh, M. H. (2004). Manajemen Keuangan. Yogyakarta: BPFE.

- Mazviona, D. N. (2014). Does firm size affect stock returns? Evidence from the Zimbabwe Stock Exchange. *International Journal of Business and Economic Development (IJBED)*.
- Nasdaq. (n.d.). *Nasdaq*. Retrieved from Nasdaq.com: http://www.nasdaq.com/investing/glossary/t/trading-volume
- Nguyen, T. A. (2004). Size And Book-To-Market Effects In The Returns On Information Technology Stocks. *Research in Finance*, 45-91.
- Pahirawasam. (2011). The Relationship Between Trading Volume and Stock Returns. *Journal of Competitiveness*.
- Paramitasari, R. (2009). Pengaruh Risiko Sistematis Dan Risiko Tidak Sistematis Terhadap Expected Return Saham Dalam Rangka Pembentukan Portofolio Saham Lq-45 Yang Terdaftar Di Bursa Efek Indonesia Dengan Single Index Model Periode Tahun 2009. *ratih@ut.ac.id*.
- Rizaldi F, I. W. (2016). The effect of firm and stock characteristics on stock returns: Stock market crash analysis. *The Journal of Finance and Data Science 2*.
- Theriou, N. (2010). Testing the relation between beta and returns in the Athens stock exchange. *Managerial Finance*, 1043-1056.
- Tian Qiu, G. C.-X.-R. (2011). Dynamics of bid–ask spread return and volatility of the Chinese stock market. *Physica A*.
- Verma, R. (2011). Testing forecasting power of the conditional relationship between beta and return. *The Journal of Risk Finance*.
- Zadeh, F. (2012). Firm Size as Company's Characteristic and Level of Risk Disclosure: Review on Theories and Literatures. *International Journal of Business and Social Science*, 3(17).
- Zainal, A. (2005). *Teori Keuangan dan Pasar Modal* (pertama ed.). Yogyakarta: Ekonisia.