Testing Fama and French Three-Factor Model and Earnings-to-Price on Stock Excess Return

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By

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In Fulfilment of the Requirement for the Master of Science
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ZULMI RAMDY
**ABSTRAK**


**Katakunci:** Model tiga-faktor Fama dan French, kesan saiz kecil, kadar pulangan saham
ABSTRACT

Bursa Efek Indonesia (BEI) is the centre of Indonesia equity market. This study empirically tests Fama and French three-factor model in Indonesia equity market characteristic which is influenced by Indonesia economic condition. Furthermore, new proposed model is also tested in this equity market where three-factor model is combined with earnings yield to explain variation on stock excess return. The result shows that stock excess returns is not affected by only market return but also by size and market to book ratio. Moreover, earnings yield helps three-factor model to capture more variation in stock excess return. The empirical results are consistent with Fama and French three-factor model and also four-factor model. In addition, involvement of earnings yield also is proved empirically improve efficiency of three-factor model.

Keyword: Fama and French three-factor model, small size effect, stock return
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## TABLE OF CONTENT

Permission to use ............................................................................................................................................... ii

Declaration ...................................................................................................................................................... iii

Abstrak ........................................................................................................................................................ iv

Abstract ........................................................................................................................................................ v

Acknowledgements .................................................................................................................................... vi

Table of Content .......................................................................................................................................... vii

List of Tables ................................................................................................................................................ x

List of Figures .............................................................................................................................................. x

List of Abbreviations ................................................................................................................................... xi

### Chapter One: Introduction

1.0 Background ............................................................................................................................................. 01

1.1 Problem Statement ............................................................................................................................... 04

1.2 Overview of Economics in Indonesia .............................................................................................. 06

1.3 Research Objectives ............................................................................................................................ 10

1.4 Research Questions .............................................................................................................................. 11

1.5 Significance of the Study ..................................................................................................................... 11

1.6 Scope of the Study ............................................................................................................................... 12

1.7 Chapter Summary ............................................................................................................................... 12
Chapter Two: Literature Review and Hypothesis Testing

2.0 Introduction ......................................................................................................................................... 13

2.1 Capital Asset Pricing Model (CAPM) ................................................................................................. 13

2.2 Size and Book-to-Market Ratio ......................................................................................................... 16

2.3 E/P Ratio (Earnings Yield) ............................................................................................................... 20

2.4 Three-Factor Model ......................................................................................................................... 23

2.5 Chapter Summary ............................................................................................................................. 25

Chapter Three: Methods

3.0 Introduction ......................................................................................................................................... 26

3.1 Dependent and Independent Variables .............................................................................................. 26

3.1.1 Dependent Variables ..................................................................................................................... 28

3.1.2 Market Excess Return .................................................................................................................. 29

3.1.3 Size Effect (SMB) ....................................................................................................................... 30

3.1.4 Book-to-Market Effect (HML) .................................................................................................... 30

3.1.5 E/P Ratio (Earnings Yield) .......................................................................................................... 31

3.2 Data Collection ................................................................................................................................... 32

3.3 Data Analysis ..................................................................................................................................... 33

3.3.1 Descriptive Analysis ..................................................................................................................... 33

3.3.2 Coefficient Analysis of Stock Return .......................................................................................... 33

3.4 Research Framework ......................................................................................................................... 34

3.5 Model Specification and Regression .................................................................................................. 34

3.6 Chapter Summary .................................................................................................................................. 36
Chapter Four: Analysis and Findings

4.0 Introduction ................................................................. 37
4.1 Descriptive Analysis ...................................................... 37
4.2 Coefficient Analysis of Stock Return .................................. 42
4.3 Chapter Summary .......................................................... 49

Chapter Five: Conclusions and Recommendations

5.0 Introduction ...................................................................... 50
5.1 Conclusions ................................................................. 50
5.2 Recommendations .......................................................... 52

References ............................................................................. 54

Appendixes A-E ..................................................................... 57
LIST OF TABLES

Table 1: Descriptive Statistics of Dependent Variables Properties .................................. 37
Table 2: Descriptive Statistics of Dependent Variables
(Stock Portfolio Returns) .................................................................................................. 38
Table 3: Descriptive Statistics of Independent Variables ..................................................... 40
Table 4: Regression of Stock Excess Returns for Market Excess Returns,
Size (SMB) and Book-to-Market Equity (HML) ............................................................... 42
Table 5: Collinearity Statistic for the Three-Factor Model ................................................... 42
Table 6: Regression of Stock Excess Returns for Market Excess Returns,
Size (SMB), Book-to-Market Equity (HML) and Earnings Yield (UMO) ................. 46
Table 7: Collinearity Statistic for the Four-Factor Model ................................................... 46

LIST OF FIGURES

Figure 1: Indonesia GDP from 2003 until 2010................................................................. 10
Figure 2: Research Framework .......................................................................................... 34
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Stock Exchange</td>
<td>AMEX</td>
</tr>
<tr>
<td>Book-to-market equity ratio</td>
<td>BE/ME</td>
</tr>
<tr>
<td>Bursa Efek Indonesia</td>
<td>BEI</td>
</tr>
<tr>
<td>Capital Asset Pricing Model</td>
<td>CAPM</td>
</tr>
<tr>
<td>Earnings-to-price ratio</td>
<td>E/P</td>
</tr>
<tr>
<td>Foreign Direct Investment</td>
<td>FDI</td>
</tr>
<tr>
<td>Gross Domestic Profit</td>
<td>GDP</td>
</tr>
<tr>
<td>High minus low</td>
<td>HML</td>
</tr>
<tr>
<td>National Association of Securities Dealers Automated Quotations</td>
<td>NASDAQ</td>
</tr>
<tr>
<td>New York Stock Exchange</td>
<td>NYSE</td>
</tr>
<tr>
<td>Price-to-earnings ratio</td>
<td>P/E</td>
</tr>
<tr>
<td>Small minus big</td>
<td>SMB</td>
</tr>
<tr>
<td>Underrated minus overrated</td>
<td>UMO</td>
</tr>
</tbody>
</table>
CHAPTER ONE
INTRODUCTION

1.0 Background

Stock returns are a most important concern that will always be considered as the main point when investors plan to put their money into any financial and/or real assets. Higher returns would be entailed by higher risks, and vice versa. Investors have to consider their decision in investing their money according to their risk-taking capabilities. Many theories have evolved to guide investors in measuring their appropriate risk for a given particular level of return, which will help them to make their decision easier. But not all theories created can be practiced in different markets and times. Anomalies could occur in every different condition of the global market and force scholars to test their theories occasionally and prove that the theories are still reliable.

The most well-known theory is the Capital Asset Pricing Model (CAPM), proposed by Sharpe (1964) and finally followed by Lintner (1965). They suggested that particular stock excess returns are affected solely by market portfolio excess returns. It can be said that an appropriate return on a particular stock was affected by β (non-diversifiable risk), which is explained by the relationship between its return to market return. Investors will be compensated by time values that are represented by risk-free returns and returns required for any additional risk from market portfolio excess returns. This model was proposed as an extension of the Markowitz theory of portfolio theory. In this theory, risk of portfolio is indicated by the sum of the weighted volatility of the portfolio and less volatility due to diversification and covariance between
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References


