



TABLE OF CONTENT

CONSTRUCTING OPTIMAL STOCK PORTFOLIO WITH HARRY MARKOWITZ MODEL ON JAKARTA ISLAMIC INDEX (JII)	ii
STATEMENT OF AUTHENTICITY OF WRITTEN THESIS	iii
ACKNOWLEDGMENT.....	iv
LIST OF TABLES	ix
LIST OF FIGURES	x
ABSTRACT	xi
ABSTRAK.....	xii
CHAPTER I.....	1
INTRODUCTION.....	1
1.1. Background.....	1
1.2. Problem Statement.....	3
1.3. Research Question.....	5
1.4. Research Objectives	5
1.5. Research Contributions	5
1.6. Research Scope.....	6
1.7. Systematic of Writing.....	6
CHAPTER II	8
LITERATURE REVIEW.....	8
2.1. Investment	8
2.2. Investment Based Decision	9
2.2.1. Expected Return.....	9
2.2.2. Risk	9
2.2.3. Relationship between Risk and Return	10
2.3. Shariah Stock Market	11
2.4. Portfolio.....	14
2.4.1. Portfolio Theory	14
2.4.2. Diversification.....	16
2.4.3. Optimization Portfolio	18



2.5. Harry Markowitz Model.....	18
2.6. Previous Studies	20
2.7. Research Framework	21
CHAPTER III.....	22
RESEARCH METHODS	22
3.1. Research Design	22
3.2. Data Collection Method	22
3.3. Research Instruments.....	22
3.3.1. Rate of return.....	22
3.3.2. Expected Return.....	23
3.3.3. Variance and Standard Deviation.....	24
3.3.4. Covariance of Return	25
3.3.5. Correlation Coefficient of Return	26
3.3.6. Sharpe's Measure with Solver Linear Programming	27
3.3.7. Portfolio Efficient Frontier.....	28
3.4. Data Analysis Method	29
3.5. Case Profile	30
3.5.1. Jakarta Islamic Index.....	30
CHAPTER IV.....	32
RESULTS AND DISCUSSION	32
4.1. Descriptions of the Data	32
4.2. Discussions	32
4.2.1. Screening to find stocks which are consistently in the list of 30 JII stocks for 5 years	32
4.2.2. Calculate the Expected Return of Individual Stock	34
4.2.3. Calculate the Variance and Standard Deviation.....	36
4.2.4. Calculating Covariance and Correlation between Individual Stocks	
37	
4.2.5. Constructing the Optimum Portfolio (<i>Solver</i>).....	38
4.2.6. Portfolio Efficient Frontier.....	40
CHAPTER V	43
CONCLUSION.....	43



**CONSTRUCTING OPTIMAL STOCK PORTFOLIO WITH HARRY MARKOWITZ MODEL ON JAKARTA
ISLAMIC INDEX (JII)**

RAFIKA MAULIDYA, Marwan Asri, Prof., M.B.A., Ph.D.

Universitas Gadjah Mada, 2019 | Diunduh dari <http://etd.repository.ugm.ac.id/>

UNIVERSITAS
GADJAH MADA

5.1. Conclusion	43
5.2. Limitations.....	43
5.3. Recommendations	44
BIBLIOGRAPHY	45
APPENDIX	48
Appendix 1. Monthly Return of 19 Stocks on JII 2013-2018	48
Appendix 2. Monthly Return of Individual Stock JII 2013-2018	56
Appendix 3. Portfolio Optimization: Return-Risk Tradeoff	57



LIST OF TABLES

Table 3.1 Expected Return Calculations.....	23
Table 3.2 Portfolio Variance Calculations	25
Table 3.3 Standard Deviation Calculations.....	25
Table 3.4 Covariance of Return Calculations	26
Table 3.5 Correlation Coefficient of Return Calculations	27
Table 4.1 The list of 19 Stocks.....	33
Table 4.2 Market Return	34
Table 4.3 Expected Return of Stocks.....	35
Table 4.4 Expected Return of 10 Stocks Selected	36
Table 4.5 Variance and Standard Deviation of Stocks	36
Table 4.6 Covariance between Individual Stocks	37
Table 4.7 Expected Return on the same Proportion.....	38
Table 4.8 Expected Return on Optimum Portfolio	39
Table 4.9 Combination of Minimum Variance Portfolio.....	42



LIST OF FIGURES

Figure 2.1 Risk / Return Tradeoff	11
Figure 2.2 Diversification Portfolio	17
Figure 2.3 Research Framework	21
Figure 3.1 Efficient Frontier	29
Figure 3.2 Performance of Jakarta Islamic Index 2013-2018	31
Figure 4.1 Efficient Frontier Minimizing Portfolio	41