BETA OF SMARES ON THE SECOND BOARD

PREPAREL 37 : ROZITA MONANZO (197) SODOOSIS

ADVANCED DIFLOMA IN BUSINESS STUDIES ( FRIAMSE )

SUBSETTED TO LY & BURETLE FULFILLARIA FOR ADDS (F)

> DATE OF SCELASSION : NOVENBER 7 1994

### ABSTRACT

Before we go any further with this topic, it is essential to state that this paper is part of the course requirements to finish up Advanced Diploma In Business Studies (Finance).

This project paper is a brief study on beta coefficient for 52 companies listed on the Second Board in Kuala Lumpur Stock Exchange (KLSE) as stated on 31st December, 1992. This study is conducted mostly through secondary data and based on monthly basis. The purpose of this study is to determine beta of each company. We calculate beta using Sharpe Market Model and with this model we come with the best fit line for a regression that is characteristic line for each company.

The result of the study appear to show the level of risk of each company. We came out with the findings; that from the samples, CCP has the highest beta (4.83) and TRENERGY has the lowest beta (-0.23). At the end of the study, we recommend new study to be explored in the next research by students majoring in finance.

11

Acknowledgements	i
Abstract	11
List of tables	111
List of figures	iv

# Chapter 1 Introduction

1.2       Objective and Importance of the Study       2         1.3       Scope of Study       4         1.4       Limitation       5         Chapter 2       Introduction to Systematic Risk (β)       7         2.1       Systematic Risk or Beta (β)       7         2.2       Definition on Beta (β)       9         2.3       Functions of Beta (β)       9         2.4       Characteristics of Beta (β)       10         2.5       Measurement of Beta (β)       13         2.6       Limitation on Calculating Beta (β)       15         Chapter 3       Introduction to Second Board       15         Chapter 3       Introduction to Second Board       24         3.1       Background of Second Board       24         3.2       Development of Second Board       24         3.3       Listing Requirement for the Second Board       26         2.4       Review of Literature       33         Chapter 4       Literature Review on Beta (β)       24         3.4       Review of Literature       33         Chapter 5       Sharpe Market Model       35         5.1       Introduction on Sharpe Market Model       35         5.2       Implicatio	1.1	Background of the Study	1
1.3       Scope of Study       4         1.4       Limitation       5         Chapter 2 Introduction to Systematic Risk (β)         2.1       Systematic Risk or Beta (β)       7         2.2       Definition on Beta (β)       9         2.3       Functions of Beta (β)       9         2.4       Characteristics of Beta (β)       10         2.5       Measurement of Beta (β)       13         2.6       Limitation on Calculating Beta (β)       15         2.6       Limitation on Calculating Beta (β)       15         Chapter 3       Introduction to Second Board       24         3.1       Background of Second Board       24         3.2       Development of Second Board       24         3.3       Listing Requirement for the Second Board       24         3.3       Listing Requirement for the Second Board       25         Chapter 4       Literature Review on Beta (β)       33         4.1       Review of Literature       33         5.2       Implications of the Coefficient       40         5.3       Accuracy of Beta Estimates by using Sharpe Model       43         Chapter 6       Data and Methodology       43	1.2	Objective and Importance of the Study	2
1.4 Limitation       5         Chapter 2 Introduction to Systematic Risk (B)       7         2.1 Systematic Risk or Beta (B)       7         2.2 Definition on Beta (B)       9         2.3 Functions of Beta (B)       10         2.4 Characteristics of Beta (B)       10         2.5 Measurement of Beta (B)       13         2.6 Limitation on Calculating Beta (B)       15         Chapter 3 Introduction to Second Board       15         3.1 Background of Second Board       24         3.2 Development of Second Board       24         3.3 Listing Requirement for the Second Board       25         Chapter 4 Literature Review on Beta (B)       26         4.1 Review of Literature       33         5.2 Implications of the Coefficient       40         5.3 Accuracy of Beta Estimates by using Sharpe Model       33         5.4 Data       44	1.3	Scope of Study	4
Chapter 2 Introduction to Systematic Risk (B)2.1 Systematic Risk or Beta (B)72.2 Definition on Beta (B)92.3 Functions of Beta (B)102.4 Characteristics of Beta (B) towards nature of the company112.5 Measurement of Beta (B)132.6 Limitation on Calculating Beta (B)15Chapter 3 Introduction to Second Board243.1 Background of Second Board243.2 Development of Second Board243.3 Listing Requirement for the Second Board28Chapter 4 Literature Review on Beta (B)334.1 Review of Literature33Chapter 5 Sharpe Market Model315.2 Implications of the Coefficient405.3 Accuracy of Beta Estimates by using Sharpe Model43Chapter 6 Data and Methodology436.1 Data44	1.4	Limitation	5
2.1       Systematic Risk or Beta (β)       7         2.2       Definition on Beta (β)       9         2.3       Functions of Beta (β)       10         2.4       Characteristics of Beta (β)       10         2.4       Characteristics of Beta (β)       10         2.5       Measurement of Beta (β)       13         2.6       Limitation on Calculating Beta (β)       13         2.6       Limitation of Second Board       24         3.1       Background of Second Board       24         3.2       Development of Second Board       24         3.3       Listing Requirement for the Second Board       25         Chapter 4       Literature Review on Beta (β)       33         Chapter 5       Sharpe Market Model       33         Chapter 5       Sharpe Market Model       34         5.1       Introduction on Sharpe Market Model       34         5.2       Implications of the Coefficient       40         5.3       Accuracy of Beta Estimates by using Sharpe Model       43         Chapter 6       Data and Methodology       43	Chap	ter 2 Introduction to Systematic Risk (β)	
2.2       Definition on Beta (β)       9         2.3       Functions of Beta (β)       10         2.4       Characteristics of Beta (β) towards nature of the company       11         2.5       Measurement of Beta (β)       13         2.6       Limitation on Calculating Beta (β)       13         2.6       Limitation on Calculating Beta (β)       13         Chapter 3       Introduction to Second Board       21         3.1       Background of Second Board       24         3.2       Development of Second Board       24         3.3       Listing Requirement for the Second Board       26         Chapter 4       Literature Review on Beta (β)       26         Chapter 5       Sharpe Market Model       33         Chapter 5       Sharpe Market Model       33         5.1       Introduction on Sharpe Market Model       33         5.2       Implications of the Coefficient       40         5.3       Accuracy of Beta Estimates by using Sharpe Model       43         Chapter 6       Data and Methodology       43	2.1	Systematic Risk or Beta (β)	7
2.3 Functions of Beta (β)       10         2.4 Characteristics of Beta (β) towards nature of the company       11         2.5 Measurement of Beta (β)       13         2.6 Limitation on Calculating Beta (β)       15         Chapter 3 Introduction to Second Board         3.1 Background of Second Board       21         3.2 Development of Second Board       24         3.3 Listing Requirement for the Second Board       24         Chapter 4 Literature Review on Beta (β)         4.1 Review of Literature       33         Chapter 5 Sharpe Market Model         5.1 Introduction on Sharpe Market Model       37         5.2 Implications of the Coefficient       40         5.3 Accuracy of Beta Estimates by using Sharpe Model       43         Chapter 6 Data and Methodology         6.1 Data	2.2	Definition on Beta (B)	9
2.4       Characteristics of Beta (β) towards nature of the company       11         2.5       Measurement of Beta (β)       13         2.6       Limitation on Calculating Beta (β)       13         Chapter 3       Introduction to Second Board       15         Chapter 3       Introduction to Second Board       21         3.1       Background of Second Board       21         3.2       Development of Second Board       24         3.3       Listing Requirement for the Second Board       25         Chapter 4       Literature Review on Beta (β)       25         Chapter 5       Sharpe Market Model       33         Chapter 5       Sharpe Market Model       33         5.1       Introduction on Sharpe Market Model       33         5.2       Implications of the Coefficient       40         5.3       Accuracy of Beta Estimates by using Sharpe Model       43         Chapter 6       Data and Methodology       43	2.3	Functions of Beta (β)	10
nature of the company112.5 Measurement of Beta (β)132.6 Limitation on Calculating Beta (β)15Chapter 3 Introduction to Second Board213.1 Background of Second Board243.2 Development of Second Board243.3 Listing Requirement for the Second Board28Chapter 4 Literature Review on Beta (β)33Chapter 5 Sharpe Market Model335.1 Introduction on Sharpe Market Model335.2 Implications of the Coefficient405.3 Accuracy of Beta Estimates by using Sharpe Model43Chapter 6 Data and Methodology44	2.4	Characteristics of Beta (ß) towards	
2.5       Measurement of Beta (β)       13         2.6       Limitation on Calculating Beta (β)       13         Chapter 3       Introduction to Second Board       13         3.1       Background of Second Board       21         3.2       Development of Second Board       24         3.3       Listing Requirement for the Second Board       26         Chapter 4       Literature Review on Beta (β)       26         Chapter 5       Sharpe Market Model       33         Chapter 5       Sharpe Market Model       33         5.1       Introduction on Sharpe Market Model       34         5.2       Implications of the Coefficient       40         5.3       Accuracy of Beta Estimates by using Sharpe Model       43         Chapter 6       Data and Methodology       43		nature of the company	11
2.6       Limitation on Calculating Beta (β)       15         Chapter 3       Introduction to Second Board       21         3.1       Background of Second Board       21         3.2       Development of Second Board       24         3.3       Listing Requirement for the Second Board       26         Chapter 4       Literature Review on Beta (β)       26         4.1       Review of Literature       33         Chapter 5       Sharpe Market Model       33         5.1       Introduction on Sharpe Market Model       33         5.2       Implications of the Coefficient       40         5.3       Accuracy of Beta Estimates by using Sharpe Model       43         Chapter 6       Data and Methodology       43	2.5	Measurement of Beta (ß)	13
Chapter 3 Introduction to Second Board213.1 Background of Second Board243.2 Development of Second Board243.3 Listing Requirement for the Second Board28Chapter 4 Literature Review on Beta (B)334.1 Review of Literature33Chapter 5 Sharpe Market Model335.1 Introduction on Sharpe Market Model335.2 Implications of the Coefficient405.3 Accuracy of Beta Estimates by using Sharpe Model43Chapter 6 Data and Methodology44	2.6	Limitation on Calculating Beta (ß)	19
<ul> <li>3.1 Background of Second Board</li> <li>3.2 Development of Second Board</li> <li>3.3 Listing Requirement for the Second Board</li> <li>24</li> <li>3.3 Listing Requirement for the Second Board</li> <li>25</li> <li>Chapter 4 Literature Review on Beta (β)</li> <li>4.1 Review of Literature</li> <li>33</li> <li>Chapter 5 Sharpe Market Model</li> <li>5.1 Introduction on Sharpe Market Model</li> <li>5.2 Implications of the Coefficient</li> <li>5.3 Accuracy of Beta Estimates by using Sharpe Model</li> <li>Chapter 6 Data and Methodology</li> <li>6.1 Data</li> </ul>	Сћар	ter 3 Introduction to Second Board	
<ul> <li>3.2 Development of Second Board 24</li> <li>3.3 Listing Requirement for the Second Board 28</li> <li>Chapter 4 Literature Review on Beta (B)</li> <li>4.1 Review of Literature 33</li> <li>Chapter 5 Sharpe Market Model 33</li> <li>Chapter 5 Sharpe Market Model 34</li> <li>5.1 Introduction on Sharpe Market Model 34</li> <li>5.2 Implications of the Coefficient 40</li> <li>5.3 Accuracy of Beta Estimates by using Sharpe Model 43</li> <li>Chapter 6 Data and Methodology</li> <li>6.1 Data 44</li> </ul>	3.1	Background of Second Board	21
<ul> <li>3.3 Listing Requirement for the Second Board</li> <li>Chapter 4 Literature Review on Beta (B)</li> <li>4.1 Review of Literature</li> <li>Chapter 5 Sharpe Market Model</li> <li>5.1 Introduction on Sharpe Market Model</li> <li>5.2 Implications of the Coefficient</li> <li>5.3 Accuracy of Beta Estimates by using Sharpe Model</li> <li>Chapter 6 Data and Methodology</li> <li>6.1 Data</li> </ul>	3.2	Development of Second Board	24
Chapter 4 Literature Review on Beta (B)4.1 Review of Literature33Chapter 5 Sharpe Market Model335.1 Introduction on Sharpe Market Model335.2 Implications of the Coefficient405.3 Accuracy of Beta Estimates by using Sharpe Model43Chapter 6 Data and Methodology43	3.3	Listing Requirement for the Second Board	28
4.1 Review of Literature33Chapter 5 Sharpe Market Model375.1 Introduction on Sharpe Market Model375.2 Implications of the Coefficient405.3 Accuracy of Beta Estimates by using Sharpe Model43Chapter 6 Data and Methodology44	<b>Сћа</b> р	ter 4 Literature Review on Beta (β)	
Chapter 5 Sharpe Market Model       37         5.1 Introduction on Sharpe Market Model       37         5.2 Implications of the Coefficient       40         5.3 Accuracy of Beta Estimates by using Sharpe Model       43         Chapter 6 Data and Methodology       43	4.1	Review of Literature	33
5.1Introduction on Sharpe Market Model375.2Implications of the Coefficient405.3Accuracy of Beta Estimates by using Sharpe Model43Chapter 6 Data and Methodology43	Chap	ter 5 <b>Sharpe Market Model</b>	
5.2 Implications of the Coefficient       40         5.3 Accuracy of Beta Estimates by using Sharpe Model       43         Chapter 6 Data and Methodology       43         6.1 Data       44	5.1	Introduction on Sharpe Market Model	37
5.3 Accuracy of Beta Estimates by using Sharpe Model 43 Chapter 6 Data and Methodology 6.1 Data 44	5.2	Implications of the Coefficient	40
Sharpe Model43Chapter 6 Data and Methodology446.1 Data44	5.3	Accuracy of Beta Estimates by using	
Chapter 6 <b>Data and Methodology</b> 6.1 Data 44		Sharpe Model	43
6.1 Data 44	Chap	ter 6 Data and Methodology	
	6.1	Data	44

0.1	ναια	
6.2	Methodology	50

Chapter 7 Results

7.1	Market Model Equation	55
7.2	Histogram on Beta for all companies	56
7.3	Average Beta	64
7.4	Characateristic Line	65
7.5	Analysis on Characteristic Line	68
7.6	Conclusion for the Characteristic Line	82
7.7	Findings	83

## Chapter 8 Conclusion and Suggestion

8.1	Conclusion and suggestion for	
	future research	84

Bibliography Appendices (appenddix 1 to 52)

### 1.0 INTRODUCTION

### 1.1 BACKGROUND OF THE STUDY

This project paper is an attempt to find out the beta coefficient of companies listed on the Second Board in the KLSE. Beta is a measure of systematic risk and calculating beta will help us to find out under what level of risk the companies are in.

Besides, it is useful for those who are involved in investment. If investors are the risk-takers, therefore, they will choose securities that give them a higher risk but if they are the risk-averses, they will choose securities that give them a lower risk. This is because, the higher the risk, the higher the return and the lower the risk, the lower the return that could be achieved.

1