

FRS 2: APPLICATION OF BLACK & SCHOLES MERON'S (BSM) MODEL ON
MALAYSIAN CAPITAL MARKET



INSTITUT PENGURUSAN PENYELIDIKAN
UNIVERSITI TEKNOLOGI MARA
40450 SHAH ALAM, SELANGOR
MALAYSIA

BY:

MAS ERVINA SAMSUDDIN
ROSMAWATI HARON
NUR SYUHADA JASNI

APRIL 2011

TABLE OF CONTENTS

	PAGE
APPROVAL OF FUNDING	iii
SUBMISSION LETTER	v
PROJECT TEAM MEMBERS	vi
ACKNOWLEDGEMENT	vii
ENHANCED RESEARCH TITLE AND OBJECTIVES	viii
ABSTRACT	ix
LIST OF TABLES	x
LIST OF DIAGRAMS	xi
CHAPTER 1 – INTRODUCTION	1
1.1 Introduction	1
1.2 Problem statements	3
1.3 Objectives of the study	4
1.4 Significance of the study	4
1.5 Problems and limitation of the study	5
1.6 Organization of the study	5
CHAPTER 2 – LITERATURE REVIEW	6
2.1 Introduction	6
2.2 Share Option Used To Improve Performance	8
2.3 Theories Underpinning the Study	8
2.4 Stock Options Incentive in Companies	10
CHAPTER 3 – RESEARCH METHODOLOGY	12
3.2 Sample Selection	12
3.3 Variable Measurement	14
3.4 Price differential between Black-Scholes Merton's (BSM) value and Market Value	18
3.5 Development of Hypothesis	20
CHAPTER 4 – FINDINGS AND DISCUSSIONS	21
CHAPTER 5 – CONCLUSION	29
5.2 Recommendation and future research	29
REFERENCES	30
APPENDIX	35

CHAPTER 1

INTRODUCTION

In recent years, stock options became a standard feature in executive compensation packages in most publicly traded companies. However, after Enron and other accounting scandals, opposition blamed share options for much of the corporate misconduct. In practice, share options are private indenture between a company as a non cash reward to the employees. It is used as an incentive to keep highly skilled workers in the companies by offering a number of shares during a time and at the price specified by the companies. Normally, the price offered is much lower than the trading price. In addition to that, the stock options give a potential great capital gain should the holder continue to hold options and that prospect is indeed confer the employees to feel that like owners or partners of the business.

Share options are not traded on the share market, therefore, their price is not standardized and will depend on the company's current stock price. In the effect of towering share prices, holders of the options will capture a windfall over vesting period. Vesting period of options may varies according to the terms specified by the employers. Therefore, most of the public listed companies employ stock options as an instrument that encourages the employees to stay and work with the companies in accordance to the vesting period.

ACKNOWLEDGEMENT

Praise to Allah for the completion of this study. We would like to convey our deepest gratitude and appreciation to our group members for providing priceless advices, constructive comments and suggestions, without which we would not have successfully accomplish this though task.

Our appreciation also goes to Associate Professor Ahmad Nawawi Yaakob, Deputy Rector, Department of Research and Industrial Linkages and to all lecturers in the faculty and to all the staff who have either directly or indirectly guided us towards the completion of this study.

We are also greatly indebted to our family members and friends for their unconditional support and encouragement for the completion of this study.

ABSTRACT

Purpose – To examine the validity of Black & Scholes Meron's (BSM) formula to value executive stock options (ESOs) on 100 largest companies in Malaysia and compare the market value of 100 companies with the BSM model values.

Design/methodology/approach – The sample is obtained by companies that were listed on the Main Board of Bursa Malaysia in 2005. Top 100 companies was based on total assets are taken as sample in this research for a period of three years, 2003 until 2005 according to sectors. This study use BSM formula for analysis of stock options valuation and to examine whether the model used may lead to overestimation of ESOs expenses.

Findings – The results revealed that there is serious price differential compared to the standard BSM model for the three year period. The standard BSM model clearly overstates the value of share options which should be expensed by companies. The market values of share options are clearly below the values predicted by the standard BSM model. Therefore, in order to obtain a fair value for share options accounting, BSM model values need to be somehow corrected. The use of the BSM model as such leads to share options expenses too high compared to the arm's length prices. It shows that the standard BSM model does not represent either true or a fair view of the financial statement for company valuation

Originality/ values – The price differential will offers a unique opportunity to compare the BSM model values with the market values of stock options and explain this price differential. By examining the validity of BSM formula to value ESOs, it will offer an opportunity for standard setters to define more accurately the values of ESOs to be included in the financial statements.

Keywords – FRS 2, executive stock options, incentives, price differential

Paper Type - Research Paper