



UNIVERSITI PUTRA MALAYSIA

**RISK AND RETURN OF THE KLSE FINANCE STOCKS
AND THE PERFORMANCE OF BANKING STOCKS IN MALAYSIA**

ZARAZILA MOHD RIPIN

GSM 1997 18

PENGESAHAN KEASLIAN LAPORAN

Dengan in saya ZARAZILA MOHD RIPIN

No . Matrik 45113 mengaku bahawa kertas projek kursus ini adalah hasil usaha saya sendiri.

Tandatangan: *Jarajo*

Tarikh: 9 August 1997

TESIS

**RISK AND RETURN OF THE KLSE FINANCE STOCKS
AND THE PERFORMANCE OF BANKING STOCKS IN MALAYSIA**

by

ZARAZILA MOHD RIPIN

**A project paper submitted to the faculty of Economics and Management,
Universiti Putra Malaysia, in partial fulfillment of the requirement for the
degree of Master of Business Administration.**

August 1997



ACKNOWLEDGEMENT

I would like to express my sincere thanks to my supervisor, Dr. Annuar Md. Nasir for his valuable guidance, support, encouragement, assistance and patience. His encouragement has helped me complete this project paper without which this study would not be possible.

My deepest appreciation is also extended to my family for their endless help and encouragement given over the long period of time especially my parent who has tried their best in providing me with the best education

Thank you

ABSTRAK

Tujuan kajian ini adalah untuk menganalisa hubungan di antara nsiko dan pulangan saham ke atas 50 saham-saham kewangan yang disenaraikan di Papan Utama Bursa Saham Kuala Lumpur untuk waktu jangka 30 Mei 1995 sehingga 30 Mei 1997. Selain daripada tujuan di atas, prestasi saham untuk Lima Syankat Terbesar Bank-Bank Tempatan ke atas Indeks Kewangan Bursa Saham Kuala Lumpur juga dijalankan untuk mengetahui hubung-kait mereka dengan menggunakan "Indeks Ukuran Prestasi" Sharpe, Treynor and Jensen.

Keputusan kajian menunjukkan saham Maybank merupakan saham yang mempunyai nsiko paling minimum di antara saham-saham 5 bank utama yang di analisa. Untuk saham-saham kewangan yang lain, Phileo Allied Berhad merupakan saham yang berisiko paling tinggi dan Bank Islam Malaysia Berhad adalah saham yang berisiko paling minimum.

Pulangan saham untuk Sektor Kewangan adalah didapati 60% lebih tinggi daripada Indeks Komposit seperti yang dibuktikan oleh "*Beta Coefficient*". Indeks Kewangan mempunyai korelasi positive yang tinggi berbanding dengan Indeks Komposit.

Kajian ini juga telah membuktikan bahawa hypothesis yang mengatakan pulangan saham adalah lumayan untuk saham-saham yang mempunyai Beta "tinggi" jika dibandingkan dengan saham-saham yang berbeta "rendah" didapati konsisten dengan teon hubung-kait di antara nsiko dan pulangan.

ABSTRACT

The purpose of this study is to investigate the relationship between risk and return of fifty Finance Stocks listed on the Main Board of Kuala Lumpur Stock Exchange for the period of 30th May 1995 to 30th May 1997. In addition to this objective, the performance of Big Five Local Banks in relations to the KLSE Finance Index is also analyzed using the Performance Measurement Indices of Sharpe, Treynor and Jensen.

The study found that during the above period, the Maybank stock is the least riskiest finance stocks in the top Five Local Banks. For other finance stocks, Phileo Allied Berhad is the riskiest security while Bank Islam Malaysia Berhad is least riskiest. The return for Finance Stocks is 60% more than the return on the Composite Index as reflected by the Beta Coefficient. Finance Stocks have high positive correlations relative to the Composite Index.

The study has also corroborates the hypothesis that the return of securities with high betas to be greater than the returns of the securities with low betas, consistent with risk-return theoretical relationship.



TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENT	i
ABSTRAK	ii
ABSTRACT	iii
TABLE OF CONTENTS	iv
List of Tables	vi
List of Appendix	vii
CHAPTER ONE: BACKGROUND OF STUDY AND RESEARCH OBJECTIVES	
Introduction	1
Risk Preference	2
Why Risk?	2
Prospects of Banking Sector in Malaysia	4
Performance of Banking System	5
Problem Statement	9
Objectives of The Study	10
Significance of The Study	10
Organization of The Study	11
CHAPTER TWO: REVIEW OF LITERATURE	
Linear and Positive Relationship Between a Security's Expected Return and Systematic Risk	12
Efficient Market Hypothesis (EMH)	16
Market Anomalies	17
Relationship Between Bank's Stocks and Market Performance	18



	Page
CHAPTER THREE: DATA AND METHODOLOGY	
Data	20
General Description of the Big Five Local Banks	21
Collection of Data	22
Descriptive Analysis	24
Risk and Return Estimation: Theoretical Framework	28
Performance Measurement	30
CHAPTER FOUR: RESULTS AND DISCUSSIONS	
Descriptive Analysis	37
Risk and Return Analysis	40
Performance of Banking Stocks on the Malaysian Market	46
CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS	
Conclusion	48
Suggestion For Further Research	49
BIBLIOGRAPHY	50-52
APPENDIX	53-67



LIST OF TABLES

	Page
Table 1	Market Capitalization of Big Five Local Banks 20
Table 2	Year End Closing Indices For KLSE Finance Index and Composite Index 37
Table 3	Analysis of Changes For Finance Stocks' Total Asset (1995 vs 1992), Average Price and Average Volume 39
Table 3-A	Analysis of Changes For Finance Stocks' Total Asset (1995 Vs 1992), Average Price and Average Volume - Continuation 40
Table 4	Analyses of Variance and Parameter Estimates Obtained From Regression Analyses of Stock Prices for Five Big Local Banks and Finance Index on KLSE Composite Index from 30/5/1995 - 30/5/1997 46



LIST OF APPENDIX

	Page
Appendix A : List of Companies	53
Appendix B1-B5 : Monthly Returns on Selected 50 Finance Stocks (30-5-1995 to 30-5-1997)	54-58
Appendix C1-C2: Summary of Finance Stocks Industry's Statistics (By Alphabetical Order)	59-60
Appendix D1-D2: Summary of Finance Stocks Industry's Statistics (By Ascending Correlation Coefficient)	61-62
Appendix E : The 10 Lowest and 10 Highest Correlation of Coefficient	63
Appendix G: Naïve Portfolio Design (Risk and Return Analysis - Sorted by Random 15 Counters Each)	64
Appendix H1-H2 : Annualized Average Returns and Standard Deviation	65-66
Appendix I1-I2 : Summary of year-end Closing Price For Finance Stocks (31/12/1992-31/12/1996)	67-72



CHAPTER ONE

BACKGROUND OF STUDY AND RESEARCH OBJECTIVES

Introduction

Risk taking is not a necessity for an investor. If investor is given a choice, he can placed all his money in the savings account or fixed deposits with financial institutions that give a pre-determined interest as a return of investment. Hence, if investor is risk averse , he will invest in the stock market only if he gets higher returns compared to the interest received from the financial institutions.

Investment in a bank's account can be deemed as risk-free. As such, it has a beta of 0 and in exchange it pays a pre-determined rate of interest. On the other hand, an investment in a fully diversified portfolio of stocks has an inherent average risk. The investor can expect to receive a higher return than the rate of interest in exchange for bearing the risk of common stocks.

Professional investors look at the risk while the amateur investor will focus on profits. An understanding of risk is essential to every aspect of trading before the "price shock" forces the investor out of the market arising from a series of losses. As for an investor, he would rather look for investment



that gives the highest returns for the lowest risk, in the form of higher profits.

Risk Preference

The investor's willingness to accept more or less risk in exchange for profits is known as risk preference. For a rational investor having to choose two investments with the same returns would definitely opt for the lowest risk investment. Likewise, if the two investments give same risk, he would choose the one with the highest return. To get the best combinations of risk and return, it is necessary to accept proportionately higher risk to increase returns by a small amount.

What is Risk?

Risk is the uncertainty that the anticipated return will be achieved. The investor must be willing to bear the above risk to achieve the expected return. The variability of returns is often differentiated into two types of risk, namely: systematic and unsystematic risk. The total risks or portfolio risk bears by the investor consists of unsystematic and systematic risk.

Unsystematic Risk.

The unsystematic risk is also referred to as diversifiable risks. It depends on factors that are unique to the specific asset. For example, an individual

events that affect a particular security or individual firm, its operations and financial methods.

In short, the sources of unsystematic risk may be subdivided into two general classifications : business risk and financial risk. Since the source of unsystematic risk applies only to specific firm, it may be reduced through the construction of a diversified portfolio. Diversification is the process of accumulating different securities to reduce the risk of loss.

Investing in more than one asset, each with a good return, will reduce risk by benefiting from equity variation that occurs at different times. Investment managers continuously searching for ways to place funds that yield better than average returns and modest risk. Through combination of a number of medium-risk, diverse investments often nets a low-risk portfolio.

Systematic Risk

On the other hand, the systematic risk refers to those factors that affect the returns on all comparable investments. According to Mayo... there is a systematic relationship between the return on a specific asset and the return on all other assets in its class (i.e. all other comparable asset.). As long as investors buy securities , they cannot avoid bearing various sources of systematic risk. The individual investor must ultimately decide on how much systematic risk he or she is willing to bear. Since this

systematic relationship exist, diversifying the portfolio by acquiring other comparable assets does not reduce this source of risk.

Systematic risk is often referred to as non-diversifiable risk . The non-diversifiable risk is attributed to general influences on all securities in the market and forms the only relevant risk for the security. I

non-diversified risk is associated with :

- fluctuation of security price in general
- fluctuation of interest rates
- reinvestment
- the loss of purchasing power through inflation
- loss from changes in the value of exchange rates.

Prospects of Banking Sector in Malaysia.

“The banking system is still the dominant source of funding in the economy. While the growth of private debt securities (PDS) market has been very encouraging , its contribution is still modest.” (Investors Digest January 1995 p.p.: 9).

During the Sixth Malaysia Plan (1991- 1995), the finance, banking and insurance sector played an important role in mobilizing and allocating funds to support the rapid growth of the economy. The sector grew



significantly at 10.7% per annum and accounted 12.5% of the growth in gross domestic product ("GDP"). In terms of contribution to GDP, its share increased from 9.8% in 1990 to 10.7% by 1995. With increasing globalization and support from the Government in turning Malaysia into a regional financial center, the finance, banking and insurance sector is expected to play a more prominent role in contributing to the growth of the economy during the Seventh Malaysia Plan period of 1996 - 2000. The average annual growth of GDP for this period is forecasted at 8%. (Source: AMMB Prospectus pp.: 25)

Performance of Banking System

As reported in the Public Bank Berhad 1996 Annual Report, the performance of the Malaysian Financial Sector was expected to be favorable in 1996 following the high growth of the economy. In the period January - October 1996, total assets of the banking system recorded a healthy growth of 24% to RM483,193.8 million (January - October 1995 : 20.6%).

In the same period, total loans and advances (excluding housing loans sold to Cagamas Berhad) grew at 27.6% (January - October 1995: 28.1%). Total deposits of the banking system (including repos) grew at higher rate at 24.7% in the same period as against 19.6% a year earlier. Reflecting improved assets quality of the banking system, the ratio of non-performing

loans to total loans has declined significantly: For commercial banks, the ratio declined from 5.5% in December 1995 to 4.6% in June 1996, and for finance companies, it declined from 6.8% to 6.4% in the same period.

Strength of Malaysian Banking System vis a vis asset price.

It was reported in the New Straits Times on 11 July 1997 that the Bank Negara Assistant Governor Dr. Zeti Akhtar Aziz felt the present strength of the country's banking system is not vulnerable to any asset price correction in the property and share markets.

She noted a marked contrast on the state of the banking sector in the mid 1980s to the current period. At the end of 1996, the risk-based capital adequacy ratio of the commercial banks, finance companies and merchant banks, stood at 10.4 % , 9.8% and 11.7% respectively. According to Dr. Zeti, these figures were well above the minimum requirement of 8%. The total loan reserve was also more than sufficient to cover any non-performing loan which turned bad. In comparison, Dr. Zeti said that since 1988, the economy has been growing at an average of 8% per annum in an environment of price stability.

The growth rate of 10.7% per annum for the finance, banking and insurance sector surpasses that of the 8% growth in the Malaysian

economy. With this outstanding growth, the Finance Sector and its performance will be closely monitored by most investors.

New Developments in The Banking Sector.

During the speech made by the Finance Minister: Dato' Seri Anwar Ibrahim on 25/10/1996 while introducing the Supply Bill (1997) at Dewan Rakyat, it was quoted that " Malaysia is being developed as the premier capital market and services center in Asia. We have begun a process of reform for the sector through the progressive liberalization of banking and financial services. The Kuala Lumpur Options and Financial Futures Exchange (KLOFFE) and the Malaysian Monetary Exchange (MME) have begun trading financial futures....."

Package of initiatives to promote the financial and banking sector:

Dato' Seri Anwar had mentioned that various measures have been introduced to encourage the financial institutions to build up their competitiveness, including the implementation of the Two-Tier Regulatory System. Under this system, adequately capitalized and well-managed financial institutions are allowed to operate in more liberal environment while the activities of weaker institutions will remain closely supervised.

Tier 1

The Tier 1 status is only accorded by Bank Negara Malaysia to institutions that have satisfied the capital requirements and the criteria set out under the CAMEL (Capital adequacy, Asset quality, Management expertise, Earnings and Liquidity) framework to undertake a wide array of banking activities and to conduct certain aspects of banking operations under a more liberal operating environment in a progressive and judicious manner.

Under the Bank Negara Guidelines, Tier 1 institutions are permitted to carry on additional businesses and services. For example, Tier-1 merchant banks have already been permitted to engage in foreign exchange business and invest in stocks listed on ASEAN stock exchanges. Tier-1 commercial banks can now also undertake securities and lending business and engage in equity derivatives.

Apart from the above, the Finance Minister had urged the larger financial institutions to give serious consideration to merge and become significant regional players.

Competing with foreign counterparts overseas.

Mr. Alan Gemes, head of Coopers & Lybrand Financial Institutions Consulting, Asia , said local banks should consider expanding in Asia to be in tandem with the rapid expansion currently experienced by their clients.

These banks may need to form strategic partnerships with the locals, where necessary.

With almost similar cultures with the other Asian Countries and coupled with strong Malaysian-based customers expanding in the region, the Malaysian banks are able to understand the customers better, and thus, have the upper hand compared to other foreign West-originated banks wanting to tap the Asian market. Gemes further added that the Malaysian banks must adapt to their services and products to suit the needs of that local markets. (Business Times p.p. 1 dated 26 May 1997).

Expansion overseas also take enormous risks vis-a-vis differences in legal system, clientele, climate etc. Due to capital adequacy ratio, the inherent disadvantage for non-listed banks is that without big shareholders, they will not be able to increase their loan base. (Investor Digest, January 1995 p.p.:5)

Problem Statement.

An investor may therefore be interested to know whether he should place his funds in stocks of companies listed under the Finance Sector of the Kuala Lumpur Stock Exchange (KLSE) or more specifically concentrate his investment in stocks of the Big Five local Banks listed under this sector.

Alternatively, the investor may also want to know the stock movements within the Finance Sector and estimate the correlation coefficient between each stocks by creating a random portfolio.

Objectives of the Study

The purpose of this study is to investigate the relationship between risk and return in Malaysia's Finance stocks using the Market Model approach and an analysis of the performance of the stock prices of the Big Five local Banks and the KLSE Finance Index for the last two years.

Apart from the above objectives, this study will also evaluate the following hypothesis:

1. The returns of the securities with high Betas to be greater than the returns of the securities with low Betas.
2. The returns of the Securities with high Betas to be lower than the returns of the securities with low Betas when the KLSE Composite Index declined.

Significance of the Study

The purpose of computing the Beta coefficients is to formulate investment strategies. Likewise , this study aims to explore the extent to which the beta coefficients are useful for predicting the future returns of securities.

Organization of the Study.

The remaining chapters of this study is organized in the following manner:

- Chapter 2 provides a summary of prior research
- Chapter 3 describes the data, sample and the methodologies used in this study
- Chapter 4 presents the findings and discuss the results of the study and its implications
- Chapter 5 ends with conclusion and recommendations for further studies.

CHAPTER TWO

REVIEW OF LITERATURE

Linear and positive relationship between a security's expected return and systematic risk.

Fama and Macbeth (1973) concluded that there could be a positive trade-off between risk and return. When an investor made a portfolio decision, he should assume the relationship between security portfolio risk and its expected stock return is linear.

The results from Bachrach and Galai (1979) in their study of the Risk and Return relationship and Stock Prices supported the hypothesis that "... the rates of return on stock, with a high or low price, do not compensate the shareholder, on the average, for the nonsystematic risk of the stock. The compensation for accruing systematic risk is positive and significant."

Hawawini and Michel (1982) discovered that the pricing of common stocks in the Brussels Stock Exchange for the period 1966 - 1980 conforms to the CAPM.

On the contrary, a study of French Stock Market with Viallet (1983) for period covering 1969 - 1979 showed a negative trade-off between



average return and the risk of French common stocks. The negative trade-off was attributed to the poor performance of the French equity market and institutional factors which are appropriate to the French market (Hawawini *et al*).

Hawawini and Michel conducted another study in 1983 on 144 common stocks traded continuously on the Paris Stock Exchange for a ten year period (1969 - 1979). They reported that in general the investors were compensated only for systematic portion of the risk of their portfolios and the average return earned by them was proportionate to the systematic risk of their portfolios.

This result was consistent to the CAPM as when unsystematic risk was introduced, there was no statistically significant relationship found between the measure of risk and portfolio returns.

Studies of the CAPM in thinly traded markets such as Malaysia , Belgium, German, French and Thailand have reported a mixed results. The CAPM was tested by Nassir (1983) on Kuala Lumpur Stock Exchange for the period between 1977- 1979 while Annuar and Tan (1989) did the same test for 1977 - 1986 respectively. They found a negative relationship between systematic risk and return. These empirical findings cannot

support conclusively the hypothesis that the pricing of risky assets in Malaysia conforms to the CAPM.

Sareewiwathana and Malone conducted a study in 1985 on 30 of the most active securities traded on the Securities Exchange of Thailand. Based on this study, the relationship between systematic risk (measured by Beta) and return is found to be linear and positive. By using the Arbitrage Pricing Theory, they have suggested the investors to take the skewness into consideration when making investment decisions.

In another article entitled “ Market behavior and the CAPM in the Securities Exchange of Thailand : An empirical Application”, Sareewiwatthana and Malone had reported that “...beta is not a complete measure of risk. Both unsystematic and systematic risks’ components appear to have positive relation to returns.”

Bailie and DeGennaro concluded that that there was a little evidence for a statistically significant relationship between stock returns and stock return volatility. Their conclusion was made based on the study conducted in 1990 on a daily and monthly returns data for 1928-1984.

On the contrary, Kamaruddin (1993) conducted a risk and return study for stocks traded in the Kuala Lumpur Stock Exchange during 1987 - 1989

and found a general linear, positive and significant relationship between systematic risk and return for these stocks.

Foley concluded that the methods of estimating beta are not free of criticism for the following reasons:

“Calculations of beta almost invariably uses past data and yet reliance on the past to predict the future has been critical charge levied at both fundamentalists and technical analysts.” Beta can change and among the source of such change is the effect of divestment, mergers and acquisitions. “ Companies which grow through acquisition may have the same name and the same shares in issue but they may be in entirely different markets with very different features by the time the process is complete. Hence the share may develop different characteristics vis-à-vis the market.”

“Another criticism is concerning the question of “the market” against which the share price is compared. Market index is merely a representative measure which proxies the whole market and different indexes can be constructed to perform the role. If the beta of a share is calculated against different indexes, then it is possible to obtain different results.

In some cases, the beta may be greater than 1 and the share would be classified as aggressive or volatile . If the beta of a share is sensitive to