

## CHAPTER ONE

### INTRODUCTION

The most widely accepted theory, which explains the relationship between risks and returns in the security market, is the Capital Asset Pricing Model (CAPM). The theory was developed and extended by Sharpe (1964), Litner (1965), and Mossin (1966) based largely on the earlier works of Markowitz (1952) and Tobin (1958).

According to the theory, market portfolio is considered mean-variance efficient, then ultimate diversified portfolio and the only optimal combination of risky assets in the market suggests that all investors will choose portfolios that lie on the linear capital market line (CML).

In other words, in the CAPM world, the most efficient investment portfolio in the stock market is the market portfolio. The market portfolio is a portfolio, which comprises all the stocks in the stock market, and the share of a stock in the portfolio will be the same as its share in the market. For an efficient investor who desires higher risk, he will not choose a strategy to hold only aggressive shares. Instead, he will hold the market portfolio using margin financing (called the borrowing portfolio). For an efficient investor who desires lower risk, he will not choose a strategy to hold only defensive stocks. Instead, he will choose to hold part of his investment in the market portfolio, and the remaining in risk-free assets (called the lending portfolio).

There are some serious questions as to whether CAPM does work in real life especially for institutional investors such as unit trusts. It cannot be denied that the

knowledge of the risk and return relationship and the various implications of CAPM are important for portfolio management. This is evident since a unit trust is a professionally managed collective investment scheme that pools the savings of investors with a common or similar investment objective. These pooled moneys are invested by professional fund managers in a diversified portfolio of investments of equities, fixed income securities and other assets to accumulate wealth for investors over a medium to long term period at a reasonable level of risk.

The main objective of this research is to examine whether institutional investors in Malaysia such as the unit trusts follow the investment strategy described by the capital asset pricing model. According to the CAPM, fund managers should hold only the market portfolio, and choose the level of risks for their fund by borrowing (marginal financing) or lending (hold part of the investment in risk-free assets). However, fund managers in the real world may not follow the strategy described by the CAPM. For high-risk fund, they may choose a portfolio, which comprise of aggressive stocks, and for low risk fund, they may choose a portfolio, which comprise of only the defensive stocks.

The core of the study contains two portions. One is a qualitative study, which includes interviews, and in-depth study of twenty-nine master prospectuses. The second portion involves analytical quantitative analysis. The second section covers the period from January 1995 to June 2001 where a sample of thirty-seven unit trust funds in Malaysia managed by four trust management companies is selected for the research study. The data used is secondary data.

Various statistical indicators were then calculated to test the CAPM hypothesis. These include variance, standard deviation, coefficient of determination etc. The CML effects for various periods were also estimated. In the first section, in-depth insight is gained into the fund managers' strategies and approach in investing the funds. Doing this we are able to identify and correlate whether these funds are adhering to the CAPM theory. If they are heeding to the theory, then they would be well diversified and they would rank the optimum returns. Otherwise, diversification would not really matter and returns would not be comparable. Thus, the validity of the CAPM theory can be concluded.

The finding from this research is that unit trusts in Malaysia do not follow the simple hypothetical world described by the CAPM. Instead, they actively employed various security analysts to help them to determine the appropriate stocks in their portfolio. They do not choose to hold the market portfolio and vary the risk level by either lending or borrowing. For example, fund managers who manage high-risk funds will choose only the aggressive stocks in their portfolio.

This research report is structured into five major chapters. Chapter One provides a brief introduction and overview of this study including CAPM theory, objective of study and sample of research. In the Second chapter, a detail theoretical background of CAPM and other literature review are analyzed. The chapter also specifies the objectives for the research. Chapter Three looks at the methodology of the study and also the brief explanation on the sources of the data. Also in this chapter the various methods, formulae and tools of analysis used in the study are described and explained. In chapter Four, the results of the study are depicted and discussed by providing a

concise summary of the empirical findings with regard to the financial investor's performance of the unit trust funds and how well they performed when compared to the market. Finally, chapter Five summarizes the research findings and draws a conclusion from the study. The limitations of the study and suggestions for future research are also provided in this final chapter.