

## CHAPTER FIVE

### CONCLUSION

The main objective of this research is to investigate the empirical relevance of the implication of the capital asset pricing model. This model states that in the capital market, efficient investors will choose to hold their portfolio investment based on the capital market line (CML), which is a tangent of the efficient portfolio frontier and links the risk-free rate to the market portfolio (point M in Figure 2.2). The CML is the best attainable capital allocation line, and yields the best attainable combinations of risk and returns.

The unit trusts are a major source of fund in the capital market in Malaysia. The fund from the unit trust comes from numerous small savers in the country. Portfolio management is required to allocate the savings collected to various types of investments.

In this study, interviews with the relevant authorities in the unit trusts funds held together with in depth analysis of 29 master prospectuses consisting of 200 listed funds were conducted. Information obtained from the interviews together with the qualitative analysis were then used to construct evidence whether the CAPM holds or not in the unit trust market. Secondly the past portfolios of unit trust in Malaysia were also used as a sample to test the hypothesis. The main statistical indicators used are the goodness of fit of the CML in explaining the risk and return combinations of various unit trust funds in Malaysia.

After reviewing the various evidences, this study concludes that unit trusts in Malaysia generally do not follow the hypothetical world of the capital asset pricing model.

In the hypothetical world of the capital asset pricing model, an institutional investor such as the unit trusts will choose the combinations of risks and return in accordance with the objectives of the fund. The portfolio of its investment will be given by the CML as the line yields the best attainable combinations of risk and returns. In such world, the ideal portfolio will be the market portfolio in the stock market, or a combination of the market portfolio and risk-free rate assets such as government securities. The realized standard deviation (as a measurement of risk) and returns of the unit trusts should lie on or close to the CML. The coefficient of determination of the CML in relation to the realized risks and returns of the 37 unit trust will be equal to close to unity.

However, based on the qualitative analysis, which is estimated based on the interviews, analysis of master prospectuses and data analyzed together with the statistics obtained, reveals a different characteristic of portfolio management. Given that the unit trusts has large variances, low coefficient of determination, large standard error in their mean returns and summary of evidence from the qualitative analysis, it can be concluded that unit trusts in Malaysia deviate very significantly from the hypothetical world of capital asset pricing model. Managers of unit trusts generally do not believe that the Malaysian stock market is efficient. As such, they do not hold the market portfolio as the strategy for allocating funds. Instead, they favor the use of

security analysis (which identifies undervalued or overvalued stocks) and form their best portfolio.

In the qualitative analysis, it was visualized that each fund as category as a point on the efficient frontier. Since the each individual investor is give the liberty to invest his own money according to risk preference, this provides the investor an opportunity for the investor to select his own portfolio of funds in order to achieve optimum return. Nevertheless, even with the opportunity is being provided, the probability of the investor to equalize his investments to the market portfolio is very small. This clearly shows via qualitative analysis that CAPM is not being adhered to, since all the investors are not following the market portfolio.

As for the quantitative analysis, for the whole period under study (January 1995 to June 2001), the mean weekly return of the unit trusts has a large variation, from negative 0.5587% (for the worst performing unit trust) to positive 0.3012% (for the best performing unit trust). The estimated coefficient of determination for the whole period is very low (0.074), which means that actual risk and returns of unit trust deviate very significantly from the CML. Using the CML to predict the return of an unit trust will also result in large errors (standard error is estimated to be 0.1462%). The results improve when the analysis is done based on sub-periods. However, the value of coefficient of determination still remains significantly below 1 and the standard error still remains large. The coefficient of determination for sub-period 1 is only 0.156, and for sub-period 3 is only 0.579. Similar result is obtained using Ordinary Least Square regression analysis instead of CML. For example, the coefficient of determination of the whole period remains very low, at 0.3527.

In the period of the study, unit trusts taken as whole do not outperform or underperform the market. This is because almost the same number of unit trusts lies above and below the CML. In our analysis, 14 funds did better than the CML, two funds are on the CML while the remaining 20 did poorer. However, when the analysis is done on the sub-period level, different conclusion is obtained. Unit trusts taken as whole generally perform better than the CML when the market is falling (sub-period 2 and 4); and the unit trusts generally did poorer compared to the CML when the market is rising (sub-period 1 and 3).

This research suffers from several limitations. First, only four interviewees were available for the interview session and they are bounded by confidentiality. Secondly, in the quantitative analysis the Kuala Lumpur Composite Index is taken as the market portfolio. This means that the market portfolio used in this study may not be representative of the entire equity market in Malaysia. Thus, this is not a comprehensive study on unit trusts in Malaysia.