

ABSTRACT

THE COMPARISON OF ACCURACY OF CAPITAL ASSET PRICING MODEL (CAPM) AND ARBITRAGE PRICING THEORY (APT) IN STOCK RETURN PREDICTION IN JAKARTA STOCK EXCHANGE

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Financial economist have developed a number of approaches for measuring and pricing risk. The best known is the Capital Asset Pricing Model (CAPM) proposed by William Sharp and John Lintner. The appeal of this model lies in its postulation of a simple, measurable relationship between risk and expected return. It describes the required of expected return on real asset or security as the sum of return on a risk-free instrument and premium for risk. Risk is measured solely by beta (β), the sensitivity of the asset's or security's return to movements in broad market index. The risk premium depends on that sensitivity on the spread between the expected return on the broad index and the risk-free rate. Because CAPM provides such a simple description of risk and return and because the key variables are easily obtained, alternative models face a stiff challenge.

Arbitrage Pricing Theory (APT) does not overcome all of the objections, and it has some shortcomings of its own. Nevertheless, it is the first model to challenge CAPM that has a real chance of replacing it. The feature that make APT of greatest potential value to corporate decision-maker is its attempt to explain the risk-return relationship using several factors instead of a single market index.

While multi factor models have been around for many years, none had the theoretical foundation required to challenge CAPM until Stephen Ross presented in APT in 1976. Ross began with the idea that returns vary from expected levels because of *unanticipated* change in production, inflation, term structure, and other basic economic forces. The variables that used in APT this study are the economic growth, inflation and interest rate.

The accuracy of model can measured from its standard deviation. Standard deviation between actual and expected return for each stock using both CAPM and APT was compared. This study use 24 samples that go public in Jakarta Stock Exchange. The average standard deviation of CAPM is 16,7058% and standard deviation of APT is 18,1026%. This result means CAPM more accurate than APT in stock return prediction, but statitically is not significant. CAPM more accurate than APT because the average percent of explained variance of market return, as measure R^2 is 49,07% and R^2 of economic growth, inflation and interest rate is 48,76%.

Key words: Capital Asset Pricing Model (CAPM), Arbitrage Pricing Theory (APT), Beta (β), economic growth, inflation and interest rate.