

"Comparison of APT and CAPM to suggest a model for returns: A Study of top 10 sectors with top 10 companies Listed on Pakistan Stock Exchange (PSX), Pakistan."



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Abstract

The aim of this research is basically to investigate the validity of two models that are used in predicting the expected value of the stocks and these models are helpful in pricing of the securities. These two models are the capital asset pricing model and the arbitrage pricing theory model these models are also known as the CAPM model and the APT model. For this purpose 10 different sectors of Karachi stock exchange are selected and from these selected sectors number one company from the each sector is selected. And the five different macroeconomic variables are also chosen to know the effects of these macroeconomic variables on stocks these variables are used in the calculation of APT model expected returns and for the capm the market risk premium factor is used. on these selected companies both of these models are applied first the calculation of the beta was made by taking the market risk premium factor and secondly the beta of different macro-economic factors are calculated these are helpful in knowing the volatility of the stocks related to these factors. These factors were inflation, money supply, unemployment rate and the forex rate. The time period on which this research is conducted is from January 2010 to December 2010 on the Karachi stock exchange. After this the capital asset pricing model and the arbitrage pricing theory model is applied on the ten companies of the Karachi stock exchange. All the calculations related to the beta of capital

asset pricing model and the beta of arbitrage pricing theory model are made on the MS excel and also the other calculations in the application of both of these models. to get the expected values then these expected values of the stock are compare with the estimated values of the stock to know which value is near to the fair value of the stock this will be helpful for the investor in knowing that which model should be used before making an investment decision and in which stock they should invest.

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Dedication

I dedicate this report to my parents who always pray for my success and my friends in recognition of their worth they are the source of motivation for me. I also dedicate this report to my teachers who always guide me in all the things and it is their effort and hard work that allow me to work hard. They always show me the path of success and prosperity which would be there for me for the rest of my life.

'ALL your dreams can come true if you have the courage to pursue them'

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