COMPARATIVE EMPIRICAL EXAMINATION OF TRADITIONAL CAPM AND THE DOWNSIDE RISK BASED CAPM IN THE EMERGING EQUITY MARKET OF PAKISTAN



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Dedication

This thesis is dedicated to my beloved parents, my grandmother and to the sweet memories of my late grandfather and to J.J & Iman

LIST OF ABBREVIATIONS

APT arbitrage pricing theory

CAPM capital asset pricing model

DMs developed markets

D-CAPM downside capital asset pricing model

Ems emerging markets

GLS generalized least squares

ISE Islamabad stock exchange

KSE Karachi stock exchange

LSE Lahore stock exchange

MLPM mean lower partial moments

MS mean semivariance

MSB mean semivariance behavior

MV mean variance

MVB mean variance behavior

MVDR mean-variance-downside-risk

OLS ordinary least squares

SBP state bank of Pakistan

SECP securities and exchange commission of Pakistan

SML security market line

Abstract

The present study is an attempt to check the empirical validity of the traditional capital asset pricing model (CAPM) and the downside risk based capital asset pricing model (DAPM) in the emerging equity market of Pakistan. In addition to this the present study also aims to examine the comparative performance of both the models to determine which model has the better explanatory power in explaining the cross section of stock returns in the developing equity market of Pakistan. The present study uses a sample of 98 stocks listed on the Karachi Stock Exchange for a sample period of eight years beginning from January 2004 to December 2011. Monthly data of all the stocks were available and used for the entire sample period. The six month treasury rate announced by the State Bank of Pakistan is considered as the risk free rate. The present study uses the Fama & MacBeth (Fama & MacBeth 1973) methodology for the empirical analysis. In the last step t-tests statistics are implied to check the statistical significance. The results of the present study fails to provide any empirical support in favor of both the traditional capital asset pricing model and the downside risk based capital asset pricing model in the emerging equity market of Pakistan i.e. Karachi Stock Exchange (KSE).

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