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

Supervisor Name

Dr Muhammad Akbar

Submitted By

Haris Javaid Manzoor

01-120102-021

Acknowledgements

I am extremely thankful to Allah Almighty for blessing me strength and perseverance to finish this difficult task. It is my believe in Him that has helped me persevere at times when it seemed impossible to go on. I would like to pay mark of respect to our beloved Prophet who is eternally a source of guidance and inspiration for me.

I express a heart full gratitude to my respectable supervisor Dr. Muhammad Akbar Assistant Professor at Bahria University for his cooperation and supervision and providing me the path to move forward. I always thank him for his never-ending support and valuable comments throughout the dissertation. His invaluable supervision provided me the inspiration to discover different avenues of this area of research.

Last but not least I would like to acknowledge my parents who means world to me and deepest gratitude to my brothers and sister for their endless love prayer and encouragement. Also not forgetting some of my good friends for their love and care. To those who indirectly contributed in this, your kindness means a lot to me. Thank you very much.

Haris Javaid Manzoor

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).

Contents