CORPORATE PERFORMANCE AND COST OF EQUITY CAPITAL: AN EPERICIAL EVIDENC FROM TEXTILE SPINNING SECTOR OF PAKISTAN

To 7501

DATA ENTERED

Researcher

Hafiz Muhammad Ateeq ur Rehman

REG NO. 28-FMS/MSFIN/S08

Supervisor

Mr. Shoaib Abdullah

Asisstant Professor

Department of Business Administration

Faculty of Management Sciences

INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD

i

Accession No __*IH 750*__

CORPORATE PERFORMANCE AND COST OF EQUITY CAPITAL: AN EPERICIAL EVIDENC FROM TEXTILE SPINNING SECTOR OF PAKISTAN

Hafiz Muhammad Ateeq ur Rehman

REG NO. 28-FMS/MSFIN/S08

A thesis submitted in partial fulfillment of the requirements for the Degree of Master of Philosophy/Science in Management with specialization in Finance at

the Faculty of Management Sciences

International Islamic University,

Islamabad

Supervisor

September, 2010

Mr. Shoaib Abdullah

Assistant Professor

<div align="center">(Acceptance by the Viva Voice Committee)</div>

Title of Thesis: "Causal Relation Between Corporate Perforance and Cost of Equity
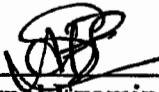
Capital."

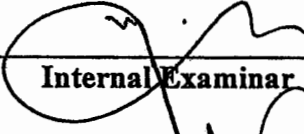Name of Student: Hafiz Muhammad Ateeq ur Rehman

Registration No: 28-FMS/MSFIN/S08

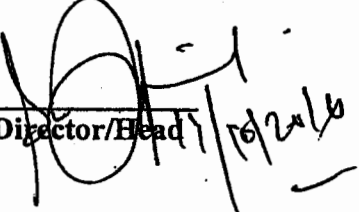Accepted by the Faculty of Management Sciences International Islamic University

Islamabad, in partial fulfillment of the requirements for the Master of Science/Philosophy

Degree in Management Sciences with specialization in Finance.
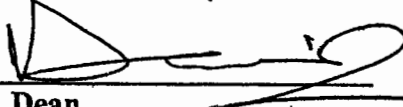
Viva Voce Committee

_____
Supervisor

_____
External Examiner

_____
Internal Examinar

_____
Chairman/Director/Head

_____
Dean

Date: _____6 . 9 - _____ 2010

IN THE NAME OF

ALLAH, THE MOST MERCIFUL AND BENEFICIENT

DEDICATION

"I dedicate the robust work to my great father who provided me an opportunity to become a successful person and today what I am because of him"

ABSTRACT

The main purpose of this study is to find the relation between corporate performance and cost of equity capital. The study contains past literature evidences to build the relation between corporate performance and cost of equity capital while corporate performance is taken as independent variable. Panel regression model is used to investigate the relation while Hausman test is applied to check the fixed and random effect. The study finds insignificant relation between corporate performance and cost of equity capital. Moreover, random effect is selected which states that some other factors hidden in error term have a great impact on the cost of equity capital. The data include only eight years which can be enhanced for further research in the market of Pakistan. In addition, other performance indicators can also be looked into further investigation.

COPY RIGHTS

DECLARATION

I declare the current reserch work is my own work and it is categorically affirmed that no part or even segment of this robust study has been copied out from any source. It is further confirmed that I have prepared the existing thesis completely on the basis of my personal effort made under the sincere guidenance of my supervisor.

No part of the current work in this thesis, has been presented in support of any application for any degree or qualification of this or any other university or institute of learning.

Hafiz Muhammad Ateeq ur Rehman

MS Scholar

Faculty of Management Sciences

ACKNOWLEDGEMENT

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

CAPM :   Capital Asset Pricing Model

EPS: Earning Per Share

KE: Cost of Equity

KSE: Karachi Stock Exchange

P/E: Price to Earning Ratio

ROA: Return on Asset

SBP: State Bank of Pakistan

CHAPTER-1

1. INTRODUCTION

1.1 BACKGROUND

Corporation is a large business owned by shareholders but separate from owner and it can sell its stock in public (Meigs et al., 1996).Corporation is also an attractive form of the business in the modern global world and the concept of limited liability causes to create more worth for the stakeholders while the transfer of ownership is a big feature of corporation (Brealey et al., 2006). Further, a core attention of a corporation is its unlimited life (Brigham and Ehrhardt, 2001). So the charisma of conglomerate is due to its limited legal responsibility as well as unrestricted floatation of its shares in the stock market.

Corporation creates value for its stakeholders yet it does not break the trust of its stakeholders. Public limited companies describe the information regarding what they are doing in the benefit of its stakeholders (Horne, 2002). Moreover, corporation achieves its social values as well as long term relation with stockholders by maximizing the value of the stock and generating financial information. (Lougee and Wallace, 2008). In addition, corporation proclaims different types of information to create the stock value and to build the good relation with its respective stakeholders (Estallo et al., 2007). Corporation makes financial decisions in the interest of its shareholders and also maximizes the price

of its share to increase the wealth of shareholder. It also produces financial information to inform the stockholders regarding its overall business decision (Damodaran, 2001). Today corporations can not sustain without improving social values in its respective community. Such social activities lead to boost the financial performance indicators which also divert the perceptions of the capital providers regarding that business. (Dam, 2006). So information regarding businesses and maximization of the wealth of shareholders are the main focal point of the corporation.

In modern corporate world, shareholders take keen interest to monitor the firm on the basis of information presented by organization. Investors spend abundant amount of money in getting the proper information through agent of the business which also shows the importance of the information in the corporate era (Patibandla, 2006). Information plays an important role when investors want to enter in any business unit. Stakeholders buy the stock on the basis of financial disclosure level while it can also change the expectation of output and profit level of the firm. In addition, if disclosure level is fully described then it also increase the welfare level domestically (Hwang and Kirby, 2000). Additionally, investors are more conscious now days as compare to previous two or three decades regarding financial performance and information of relative company. It causes to create the strong relation between investors as well as to create the opportunity to finance the slake resources easily. Moreover, all the slake resources can not be availed without creating social value of relative company and the value can not be increased without improving financial performance. Further, it is necessary for corporation to show stable financial performance to achieve the opportunity of slake resources for the betterment of businesses (Waddock and Graves, 1997). Now Investors scrutinize the

financial information as compared to past, present and future of a relative firm when estimate or require the return on investment in the same firm (Majid and Sufian, 1999). The current information and financial announcement has a great impact on the investor's perceptions as well as it indicates the financial performance of a relative business.

Since 20th century, the advancement in corporate world, financial performance has become the most relative issue and different techniques are used to asses the corporate performance. For example, some investors use accounting base measures to recognize the economic performance of an organization and some believe on market base measures to account the performance of the corporation but both techniques reveals the performance of a firm (Goetzmann and Garstka, 1999). Corporation shows financial performance in qualitative as well as in quantitative manner to satisfy its shareholder (Richardson and Welker, 2001). Corporation also shows high performance to establish the relation with stakeholders as well as to make more reputable business in the eye of its shareholders. If an organization does not show better performance then it loses trust in the market (Dempsey, 1996). In the modern corporate world even management follows different performance models and also shows department vise performance to monitor the business as well as to convince the sharholders (Oliveira and Neto, 2009). Consequently, there is a strong relationship between corporate performance and investor's expectation. Firm performance also motivates the financiers to invest in those firms whose performance is better as compare to low performing firm.

Capital providers charge the cost of capital according to the financial performance of a relative corporation and its long term objectives. They do not invest the money in the

firm for short term basis but eventually for long term. Investors totally relay on corporate performance which causes to decrease or increase the cost of capital. Investors also require low cost of capital on high corporate performance (Rappaport, 2006). Corporation announces the financial information to magnetize the investors and it also improve the image of the firm's insubstantial assets as well as it is essential for the reputation of the firm. Further it also reduces the risk and the corporation enjoys lower cost of capital if its reputation is better then other relative business unit (Wang and Smith, 2008). Thus better corporate performance builds a positive perception for shareholders who provide capital either through debt or equity. Although it also reduce the uncertainty level as well as risk level of the relative corporation.

Capital providers or shareholders continually observe the relative corporate performance. Public limited companies issue the financial information at the end of its accounting cycle known as financial statements. On behalf of such information, investors analyze the firm's condition which reveals whether Corporation is performing good or bad. Therefore required rate of return totally based on financial performance and it is presented by organization at the end of its operating cycle (Luzi, 2002). Accordingly financial statements play an important role in business decision making and also determines the risk level of a relative firm. It is also a useful tool to find out the over all cost of capital as well as the cost of equity. However, the strong financial statements describe the strength of an organization that indicates as a good performing company in front of its shareholders. Additionally better performance leads to build a trust between shareholder and company as well as to reduce the cost of equity capital (Poshakwalea and

4

Courtisb, 2005). Financial performance indicates the better utilization of the resources and it reduces the uncertainty level as a result it diminishes the cost of equity capital.

Financial statements are used to measure the financial performance of a relative corporation and the existing state of affairs of a business unit. On behalf of financial statements, financial analysts make a ratio analysis to measure the financial analysis (Prahalad and Hamel, 1994,). Financial forecasters use different ratios to measure the corporate performance while earning per share (EPS), price to earning ratio (P/E) and return on assets (ROA) is taken as a proxy to show the financial performance in the robust research. For example, Poshakwalea and Courtisb (2005) examine P/E ratio as measure of corporate performance and find the relation of P/E with cost of equity capital. On the other hand, Pugh et al., (2000) shows ROA as measure of corporate performance in the corporate world. Consequently Tan et al., (2007) state earning per share (EPS) as a proxy for financial performance of the corporation. In addition, Choi and Jung (2008) use return on assets (ROA) as well as price to earnings (P/E) ratio as a proxy to measure the corporate performance. In this study ROA, EPS and P/E ratios are taken as an independent variable with one controlled variable market risk (MR) as also used by Choi and Jung (2008) in their study.

Capital Asset Pricing model (CAPM), a traditional method measures the cost of equity capital as Daves et al., (2000) use in their study to find the cost of equity. However, in order to measure the beta (three year monthly return) are used as.stated by Daves et al., (2000) while the rate on defense saving certificate is treated as risk less rate used in CAPM.

1.2   OBJECTIVES

Internationally a lot of work shows the impact of different factors to determine the cost of equity capital. Traditionally, only market risk premium is used as an independent factor which controls the return of relative stock. The main objective of my research work is to explore the relationship between corporate performance and cost of equity capital. However, the main objectives of this research are;

i.   To explore the relationship between Corporate performance and cost of equity capital

1.3   SIGNIFICANCE OF THE STUDY

Corporate performance produces positive financial information which helps the investors in financial decision making as well as for the people who want to integrate themselves in the corporate world. This research provides guidance to the professionals with new dimensions (ROA, P/E and EPS) as a measure of cost of equity related to the corporate world of Pakistan. The corporate people can think over this new exploration when make any strategy or policy regarding the business entity. This study examines how corporate performance leads to change the attitude of the people regarding their demand on invested capital. Moreover, the body of knowledge divulges what factors determine the price of the stock and what the reasons behind this volatile phenomenon are? In addition, the research also enhances the body of knowledge at academic level and discusses the behavior of the investors as well the movement in the prices of relative stock when performance of the corporation is changed. The study also investigates

6

different factors those change the cost of stock. These factors also make a difference in the current knowledge regarding the psyche of stakeholders. In so far as contribution of this work is to explore the new dimensions that cause to transform the stock prices in the context of Pakistani scenario.

In order to find the relationship of corporate performance and cost of equity, the information related to textile spinning sector is taken which is playing an important role in the Pakistani economy. Moreover, the spinning sector is the oldest sector of Pakistani economy since at the time of independence. So this is one of the developed sector in the subsector of the textile industry of Pakistan and it is the major source of foreign reserve in the economy of the country. With the passage of time the growth in the spinning/yarn production has positive trend as show below.

Table 1: Production of Yarn (Million Kg)[1]

Year	Quantity	Value 000 US	Value	Unit Value	
	000 kgs	$	000 Rs	$/Kg	Rs/Kg
1995-96	535889	1540259	52164188	2.87	97.34
1996-97	508188	1411519	55238949	2.78	108.7
1997-98	461919	1159542	49988086	2.51	108.22
1998-99	421481	945169	47420389	2.24	112.51
1999-00	512971	1071616	55485197	2.09	108.16
2000-01	545134	1076063	62914292	1.97	115.41
2001-02	544217	942359	57898536	1.73	106.39
2002-03	519329	928358	54314000	1.79	104.58
2003-04	499071	1126878	64874366	2.26	129.99
2004-05	504722	1056535	62985529	2.09	124.61
2005-06	671697	1382874	83345816	2.06	124.08
2006-07	665525	1428041	86582126	2.15	130.09
2007-08	562424	1294165	80863110	2.3	143.78

[1] Trade Development Authority of Pakistan & Federal Bureau of Statistics, Govt. of Pakistan

From 1995 to 2008, there is positive growth in yarn production and it also shows the contribution of spinning sector in the national income. On the other hand, the following information also shows the export figure of spinning products to the other countries which also shows the importance of textile spinning sector. Moreover, spinning sector is famous because of its equity share in the capital market and so many companies are enlisted on the stock market and so many investors have invested in the same spinning sectors.

Table 2: Export Of Cotton Yarn (Value Us $: 000)[2]

Year	Cotton Yarn	Blended	Total
1997-98	1151	390	1541
1998-99	1154	394	1548
1999-00	1276	402	1678
2000-01	1336	393	1729
2001-02	1385	433	1818
2002-03	1469	456	1925
2003-04	1473	466	1939
2004-05	1770	520	2290
2005-06	2006	550	2556
2006-07	2039	688	2727
2007-08	2156	690	2846

Following are the reason to choose the spinning sector:

i.   Spinning sector is the oldest developed sectors since independence

ii. Data is easily available

iii. The spinning sector is playing an important role in the economy of Pakistan

iv. The export and growth figures of spinning sector are much attractive

[2] Textile Commissioner's Organization, Govt. of Pakistan

Prior to the current research, less work is done on relation between corporate performance and cost of equity capital and less work is done in same dimensions related to equity market of Pakistan. The research about the relation between corporate performance and cost of equity capital fill the gap between past and recent knowledge by introducing ROA, P/E and EPS ratios as measure of cost of equity capital related to the market of Pakistan.

1.4 ARRANGEMENT OF THE STUDY

The rest of the study has been ordered as follows. Chapter two discusses the previous literature in support of the current study to find the relation between corporate performance and cost of equity capital. Chapter three discusses the research design and methodology for the current research work. Chapter four explains the procedure of data compilation as well as examines the results and discussion. The last chapter concludes the summery of findings and results.

CHAPTER-2

2. LITERATURE REVIEW

Corporate financial information plays an important role to value the firm as well as analyzes the reputation level of the relative firm (Lang, 2008). Corporation produces financial information at the end of its operating cycle to show the financial strength of its operations. It also motivates the shareholders of the corporation while improper and unclear information can spoil the reputation of relative company in the market (Armitage and Marston, 2008). Investors as well as shareholders require the financial information to make financial decision regarding their capital (Majid and Sufian, 1999). In corporate world accounting information about bad or good occurrence plays an important role to evaluate the status at market level.

Higher level of corporate financial disclosure condenses the uncertain situation at market and it leads to reduce the risk level of particular business unit. Therefore investors rank the organization on the basis of risk perceived through released information by corporation (Richardson and Welker, 2001). Consequently, corporations show strong and gradually improved financial information to attract the relative stakeholders. Moreover, superior corporate financial information face less hurdles as compare to organizations those are unable to show improved financial indicators. In addition, it also set the risk level of a relative organization and also changes the stock prices as well as to build a

good image in the existing market phenomenon. (Bushee and Noe, 2000). Stakeholders dislike firms those do not announce financial information regularly. They analyze earning indicators of the corporation and investors badly react if corporation does not produce financial information regarding earning indicators frequently (Lakhal, 2009). It is reality, volatility in stock earning totally based on the corporate financial information. Moreover, such volatility generates good or bad signal of a relative firm and shareholders start selling and buying of a relative stock of the same company (Asquith et al., 1986). Investors also compare past corporate financial structure and earning with the current financial environment of the same corporation. It leads to set the current risk level and current scenario of the corporation to make the financial decision (Doff, 2008). Informational risk is the most important factor for management, investors and government agencies. Because management makes decision on the basis of financial indicators while investors require same information to value their capital and government institutes necessitate such information to check the validity of the accounting announcements. From one side such financial information reduces the risk level and on the other side it helps to finance the slake resource for corporate usage (Habib, 2005). That's why corporation announces more information in order to reduce the risk level as well as to attract the concerned stakeholders.

In the era of globalization, accounting information demonstrates the corporate performance as well as the financial position of a particular company (Livne and McNichols, 2009). Subsequently financial performance also determines the relative risk of the stock and motivates the investors to provide more capital to the respective entity in order to create more wealth in future (Nichols and Wahlen, 2004). Corporation also

11

changes its capital structure policy in order to achieve the better financial indicators. Such change in capital structure also increases the performance and it leads to attract the capital provider (Seppa, 2008). High corporate performance catches the attention of the investors in capital market and it also reduces the risk level. Low corporate performance increases the risk level and it also decreases the market share of a relative company in the capital market (Siddiqui, 2008). Accordingly variation in financial performance changes the perception of the stockholders because of increase in uncertainty and capital providers require more return due to increase in risk (Mahoney, 2008).

Legislative authority binds the corporate sector to show the financial information at a specific time which shows the real picture as well as risk level of relative business unit. Financial statements are the tool to asses the informational evidence of a firm. Clear and purposeful financial information also cause to increase liquidity of the stock in the capital market as well as to attract the shareholders (Bhattacharya, 2006). Financial statements shows the financial information and stakeholders analyze the ratio analysis to check the uncertainty level on the basis of such statements. However, variation in such ratio not only finds out the risk level of relative firm but also exhibits the real picture of the firm and it also helps the shareholders to settle on the cost of equity capital (Ryan, 1996).

Financial statements and corporate performance also generate a signal to its shareholders regarding value creation of particular investment (Kaur and Narang, 2008). In consequence, annual reports show the financial display of a relative company and stakeholders measure financial performance by analyzing such financial reports. In

addition, financial statements also determine the risk level of a corporation to determine the required rate of return on provided capital.

Financial statements depict the real picture of the corporation as well as it generates a perception and risk level regarding (Livne and McNichols, 2009). Corporations make performance strategy to build strategic relation with their stockholders that shows the importance of financial performance. Mostly, capital providers observe the return on assets of the firm as proxy to measure the corporate performance (Berman et al., 1999). Another work discusses the importance of corporate performance in the eye of shareholders and one of the best indicators to measure the better corporate performance is to obtain the high results of return on assets (Pandya and Rao, 1998). Financial statements point out different indication of financial performance by financial ratios. Return on assets (ROA) is the best measure of corporate performance and increase in the ratio of ROA reveals the positive financial performance of relative business and vice verse (Siddiqui, 2008). Mostly financial analyst use ROA and Tobin's Q to measure the corporate performance. However, increasing trend in ROA and Tobin's Q shows the positive financial performance while negativity in such indicators shows low performance of a relative corporation (Bhagat and Bolton, 2008). In so far as stakeholders use different measures to observe the financial performance which is the most important factors to check the trend of the organization.

Financial statement and economic information indicate the high or low financial performance that determines the cost of capital. However, the impact of disclosure on the cost of capital varies according to the size of the firm. In addition, undersized firms face

13

high cost on behalf of more financial information while large firm bear low cost of capital by providing more financial information. (Gomes et al., 2007). An organization must show relative high performance in terms of different indicators to create good relation with investors. For example, high ROA and big SIZE decrease the relative implicit and explicit cost of an organization (Waddock and Graves, 1997). Accordingly, financiers scrutinize the financial performance of relative company as well as they also differentiate between high and low performance business entities. No doubt, due to uncertainty with low performing companies, investors require more return on provided capital and vice verse (Luzi, 2002). Financial performance comes through financial information produced by corporation which denotes the reputation level of a company. However, high performance indicates the low risk level which goes in front to reduce the cost of capital and vice verse (Eccles et al., 2007). As a result corporate performance is a tool to check the risk level of the relative organization and on behalf of such financial result; stakeholders determine the overall cost of capital.

2.1   CORPORATE PERFORMANCE AND COST OF EQUITY

Investors do not invest in risky business due to uncertainty in the modern business world. Protection of investment is the critical issue now days because stockholders do not want to loose their investment at any cost. In such conditions investors observe relative financial performance of those corporations where they want to invest. Better financial performance also reduces the uncertainty as well as diminishes the cost of capital (Botosan and Plumlee, 2002). Financial statements provide the best information to the shareholders and it also helps the stockholders in the process of stock valuation (Nissim

14

and Penman, 2001). Financial analysts use financial statements to measure the financial ratios because it shows the real trend as well as the performance of the corporation. Financial ratios not only help to determine the price of the stock but also exhibit the risk level of the stock (Majid and Sufian, 1999). Financial performance is not negligible factor in the robust market phenomenon because positive earning attributes or high performance cause to decrease the cost of equity capital. In so far as, investors look a deep view of the firm's earning and performance excellence in the process of financial decision making (Francis, 2003). Theoretically, there is a strong relation between disclosure level and cost of equity because high disclosure level decreases the transaction cost as well as increases the demand of the stock. But practically, the evidence shows opposite result revealing insignificant relation between disclosure level and cost of equity (Botosan, 1997). Consequently, investors do not bother about the financial information as well as financial performance. Because neither it increases the level of risk nor it leads to boost the cost of equity capital (Al-Shiab, 2008). Another study inspects the relation between firm performance and the price of stock option by using the data of Taiwanese companies from 1999 to 2001. The consequences illustrate positive relationship between firm performance and equity based stock compensation (Guo et al., 2006). Subsequently, Investors prefer the firm on the basis performance indicators of the company. However, superior performance of the company brings the positive change in ROE, EPS and annual return on stock. The investors observe the financial view of the firm to comprehend the performance while the stakeholders also distinguish the relative firm on the basis of such indicators. However, better performance cause to increase required rate of return on stock (Tan et al., 2007). Contrary to this, financial performance not only set the risk level but

15

also leads to bring the movement in the cost of equity. In addition, there is significant negative relation between cost of equity and firm performance (Richardson and Welker, 2001). Therefore, corporation shows high performance to secure its capital providers as well as to reduce its risk level. By this strategy, organization not only reduces uncertainty but also enjoy lower cost of equity capital (Faulkender et al., 2006). As a result, capital providers analyze the real scenario then they visualize the risk level which also determines the cost of equity capital of relevant corporation.

2.2 RETURN ON ASSETS (ROA) AND COST OF EQUITY

Asset management is the most important issue now days and it also shows the corporate performance of the corporation. High asset management incorporates the high corporate performance and it causes to change the cost of equity (Billett and Ryngaert, 1997). Shareholders use performance indicators to decide the cost of equity and also use ROA as a proxy to measure the corporate performance (Ely, 1995). Corporate people use return on assets as a proxy to measure the corporate performance and required rate of return on investment totally depends upon corporate performance. In addition, there is an inverse relation between return on assets and cost of equity capital. Because return on assets incorporates the level of risk about pertinent organization it can be the best predictor to find the cost of equity (Vázquez and Trombetta, 2007). Some equity holders believe, there is no association between performance and equity. So internal and external equity holders have insignificant relation with return on assets (ROA) and return of equity (ROE) as a proxy the financial performance (Dalton et al., 2003). By analyzing

16

return on assets, investors realize the utilization of resources which not only show the real picture of the corporation but also point out the uncertainty related to that business.

2.3 EARNING PER SHARE (EPS) AND COST OF EQUITY

Corporations demonstrate high financial earning in order to motivate the capital provider. Capital suppliers analyze the value of corporate equity on the basis of its proclaimed earning indicators at the end of its operating cycle (Burgstahler and Dichev, 1997). Financial performance comes through positive financial indicators and EPS is the best source to visualize the corporate performance (Moore, 2001). It generates a signal to predict the stock prices and market worth of equity depends upon the earning growth of stock (for the next two years). So EPS is the most important factor to predict the cost of equity because total market value of equity comes through present value of future EPS (Kryzanowski and Rahman, 2009). Subsequently, EPS measure the corporate performance and plays an important role to determine the cost of equity capital (Chen, 2004). Thus disparity in earning on investment leads to divert the expectation level of the investors regarding cost of equity (Bercel, 1994). Therefore, earning on stock is the most important factor in the eye of investors and it also leads the occurrence of selling and buying activities. Positive earning growth attributes also predict the price of relevant stock as well as diminish the cost of overall capital and the cost of equity (Herbst and Wu, 2004). Dramatic movement in financial earning also causes to change the cost of equity capital and corporation try to stop such variation in earning because it can create big hurdle for same unit. In addition, increases in earning variation enhance the risk level as well as causes to enlarge the cost of equity capital and vice verse (Mikhail et al.,

2004). The investors also consider the relation of cost of equity with different factors under the umbrella of corporate governance including firm size, risk level and volatility in return on stock. Further, such factors under corporate governance are negatively correlated with cost of equity capital (Zhu, 2009). Capital providers analyze earning per share to determine the price of the stock and most of the stock prices depend upon the forecasted growth in earning per share of the next two year. Accordingly, upward trend in earning per share leads to decrease the cost of equity. (Rahman, 2007). Contrary to this another work investigates the relationship between earning per share and price of the stock using data related to UK biotechnology sector. The result clearly states there is no connection between EPS and stock return. In addition, earning for the current year and cumulative effect of that earning both have no relationship with price of the stock. In so far as, earning does not play an important role to determine the value of the stock (Dedman et al., 2008). In confutation to this a work confers that EPS cause to change the price of share but prejudiced factor to predict (Core et al., 2002). Another research finds positive relationship between earning indicators and cost of equity while the variation in earning measure cause to change the price level of the stock (Ball et al., *1993).* Consequently, investors charge on investment keeping in view the movement of EPS indicators. The positive relation explains that increase in EPS showing the way to increase the required rate of return on the share (Oha, 2006). In consequence, EPS predicts the required rate of return on capital stock and corporations declare high earning per share to reduce the cost of equity.

2.4   PRICE TO EARNINGS RATIO (P/E) AND COST OF EQUITY

Corporations present financial performance in quantitative manners to increase the status of relevant business unit. Investors also feel confidence regarding same organizations that shows better performance. Such corporations establish good repute in markets and it lead to reduce the invulnerability in robust scenario. High performance causes to reduce the ambiguity and risk level of relevant business as well as the required rate of return of shareholders (Poshakwalea and Courtisb, 2005). In present arena of corporate finance, people observe market value based analysis of the business rather than to analyze the book value based analysis of the business. Thus, stakeholders evaluate the current stock price not to look the book value per share. Accounting return and growth in book value per share is less important as compare to current market price per share in financial decision making process. However, PEG ratio (P/E ratio divided by short term growth rate) is the most important factor to measure the performance and also find the expected rate of return on equity. In addition, PEG ratio that includes the effect of P/E ratio in itself, examines highly negative correlation with cost of equity (Easton, 2003). Consequently, stakeholders keep in mind three things. First, the earning numbers publicized by respective business unit and it shows the trend of same organization in the marketplace. Second the growth and expansion strategy of business that informs the future trend of the relative corporation. Third, the expectations regarding return on stock while positive changes in such factors cause to increase the P/E ratio. Hence, high earning per share reduce the cost of equity capital (Firer, 1993). In rebuttal, P/E ratio does not predict the rate of return on stock because current high P/E ratio completely shows

19

window dressing by management (Leibowitz and Kogelman, 1994). It has been clarified that return on stock depends upon the firm performance while P/E ratio is used as a proxy to measure the firm performance. However, the reliance of rate of return on corporate performance depends upon the present stage of the corporation. For example; if corporation is in growth or matured stage then positive relation exist between performance and cost of equity (Danielson and Dowdell, 2001). On the other hand, the relation between cost of equity and P/E ratio is due to a third factor known as efficiency. Productive efficiency of corporation not only increases P/E ratio but also decreases the cost of equity capital (Chowdhry and Titman, 2001). Consequently, the investors use P/E ratio as a predictor of cost of equity capital perceiving inverse relation between both variable (Peavy and Goodman, 1985). As a result high Price to earning ratio not only attracts the investors but also decrease the cost of equity capital

2.5 MARKET RISK (MR) AND COST OF EQUITY

Smoothly financial performance causes to resolve the uncertain situation in the market about relative companies. It also reduces precariousness in the prices of the stock and examines low level of risk (Bushee and Noe, 2000). Variation in stock prices change the earning expectation as well as risk level that change the cost of equity (Elton, 1981). Hence, financial information regarding earning set the uncertainty level of the corporation in the market which causes to determine the benchmark regarding risk. In addition, variation in earning makes a ground to understand the relative market risk as well as the image, related to relevant organizations (Ecker, 2005). High risk level increases the illiquidity of stock as well as risk premium on investment at market

20

(Chatterjee, et al., 1999). Volatility in return increases the market risk and it also increase return predicted by financial information. However, there is a positive relation between risk premium and stock return (Kim et al., 2004). Subsequently another work shows the positive relation of market risk and cost of equity because of uncertainty (Reverte, 2009). Level of risk also determines the performance of a relative corporation because volatility in return itself indicates the uncertainty. In addition, low performing organization exhibits greater volatility of return as compare to high performing firm (Shyu, 2006). At last, Market uncertainty is also a factor to increase or decrease the risk level of relative company. The risk level not only reduces the performance but also create liquidity problem related to relevant stock.

The theoretical review clearly illustrates the relation between corporate performance and cost of equity capital. Tentatively, different factors related to corporate performance also demonstrate the relation with cost of equity capital and strongly supports of the recent research to find the relation of corporate performance with cost of equity.

The main objective of this research is to investigate the relationship between corporate performance and cost of equity. The theoretical review clearly illustrates the relation between corporate performance and cost of equity capital. Tentatively, different factors related to corporate performance also demonstrate the relation with cost of equity capital and strongly supports the current research to find the relation of corporate performance with cost of equity. The current work includes four variables KE, ROA, P/E and EPS of which KE is dependent variable while the rest of the variables are

21

independent variable. The main purpose of the robust research is to identify the others factors those can effect the cost of equity irrespective to market risk. Before this work, less research has been conducted on this topic in Pakistan. So the current work will enhance the body of knowledge and it will reason an opening statement toward this new issue. Moreover, the existing study also discusses a new issue related cost of equity and it also reveals the other variables having also an impact on the cost of equity capital.

CHAPTER-3

3. RESEARCH METHODOLOGY

3.1 HYPOTHESIS DEVELOPMENT

The main objective of this research is to investigate the empirical relation between corporate performance and cost of equity capital. The review of theoretical and anecdotal substantiation advocates the relation between corporate performance and cost of equity. Accordingly, Chan et al., (2009) also explore the significant relation between corporate performance and required rate of return. By incorporating such arguments and logical facts, the formulation of hypothesis in the current part of the research is presented in the following form.

Hypothesis: 1

      H0:   Corporate performance has no relation with cost of equity capital

      H1:   Corporate performance has relation with the cost of equity capital

Return on assets measure the corporate performance and also has a significant impact on the cost of equity capital. In addition, (Ely, 1995) also scrutinize the significant relation between return on assets and cost of equity. Another proposition in the light of proceeding evidences as under.

Hypothesis: 2

      H0:   Return on asset has no relation with cost of equity capital

23

H1:   Return on asset has relation with the cost of equity capital

Another factor EPS also measures the corporate performance and it leads to predict the cost of equity. Following (Rahman, 2007) hypothesis in an alternative form is as below,

Hypothesis: 3

H0:   Earning per share has no relation with cost of equity capital

H1:   Earning per share has relation with the cost of equity capital

Firer (1993) argues the inverse relation between price to earning ratio and cost of equity. He states high P/E ratio reduces the risk level and it also reduces the required rate of return. Therefore, following hypotheses states,

Hypothesis: 4

H0:   Price to earning ratio has no relation with cost of equity capital

H1:   Price to earning ratio has relation with the cost of equity capital

Return volatility also leads to increase the demand of the investors on provided capital. Thus Kim et al., (2004) also examine the positive relation between risk level and cost of equity. In the light of past substantiation the hypothesis is articulated as,

Hypothesis: 5

H0:   Market risk has no relation with cost of equity capital

H1:   Market risk has relation with the cost of equity capital

24

.In rebuttal, null hypothesis negate the above claims and Pringle (1973) also argues that the P/E and EPS are not the best predictors to determine the cost of equity while such techniques are used when the management wants cheaper resource to finance the capital. Consequently, Dalton et al., (2003) explore the insignificant relation between ROA and cost of equity. In so far as, null hypothesis shows the opposite result to alternative and it supports the Pringle's and Dalton et al.'s argument in 1973 and 2003 respectively.

3.2 RESEARCH DESIGN

The thesis scrutinizes the empirical relation between corporate performance and cost of equity capital. Additionally, the study also inspect whether or not the factors those measure the corporate performance, individually leads to change the required rate of return. Financial ratios have been taken up to measure the corporate performance while traditional measure to estimate the cost of equity capital has been exercised known as capital asset pricing model (CAPM). This section shows the variables and ways to measure the variables as well as the model specification. The following are the research approaches used in the current work.

3.2.1 LITERATURE REVIEW

First of all, for the support of robust research the previous literature is reviewed to build a resourceful judgment and prove the relation between performance and cost of equity capital. However, literature includes internet based articles and published books accessed from multiple journal database provided by International Islamic University digital library. Although, literature review is a standardized way to enhance the body of

25

knowledge as well as find the evidences to the support of recent work. In so far as, different measures used in research are derived from precedent literature and all the techniques are also taken from the previous literature.

3.2.2 *MEASUREMENT OF CORPORATE PERFORMANCE*

In order to measure the corporate performance, literature provides different ratios used as a proxy to measure the financial performance in this research. However the study use three financial indicators to measure the corporate performance derived from literature with one control variable. First market base return on assets (ROA) is used as a proxy for corporate performance by means of Tobin's Q technique and it is the best way to find the market base return because investors rely on market base indicators as argued by (Choi and Jung, 2008). Although, accounting rate of return as measure of corporate performance does not show the real and current scenario of the businesses. Thus, Tobin's q is the best technique which shows the performance on market base return on assets (Wernerfelt and Montgomery, 1988). The research includes the following way to measure the market base performance of the assets while Choi and Jung (2008) use same way to quantify the corporate performance rather than accounting base return on assets because market base performance can reduce the uncertainty level of relative corporation.

$$TQ_{i,t} = \left(L_{i,t} + MVE_{i,t} \right) TA_{i,t}$$

Where

        TQ   = Tobin's Q Ratio

        L   = Liability

        MVE = Market Value of Equity

26

T.A   = Total Assets

i   = Name of the Company

t   = Number of the year

Why investors are interested to see the market base indicators rather than accounting base indicators? Because the stakeholders want to know the difference between actual investment and ·the value created by firm in current market (Petravičius and Tamošiūnienė, 2008). In addition, Francis (2008) also argues that Investors take a keen observation to see the current scenario of the organization and market base value of the return is stronger then book value of the asset' s return. Literature shows the importance of market base assets return using Tobin's Q rather than accounting base return on assets as shown by (Barzegar and Babu, 2008; Pham et al., ; Smirlock et al., 1984; Kaur and Narang, 2008) in previous research work. Second EPS is used as a measure of corporate performance and literature also shows EPS as an indicators of financial performance as stated by (Kryzanowski and Rahman, 2009; Chen, 2004; Rahman, 2007 ; Core et al., 2002 and Oha, 2006) in their previous work. However following way is adopted to measure the earning per share,

$$EPS_{i,t} = NI_{i,t} / T.S_{i,t}$$

Where

EPS = Earning Per Share

NI = Net Income

$T.S$ = Total No. of Share

i = Name of the Company

27

t = Number of the year

Thirdly, P/E ratio is used as a measure of corporate performance which is also brought up by reviewing literature. However, a lot of research work discusses the importance of P/E ratio and previous studies also use same ratio to measure of corporate performance as Choi and Jung (2008) discuss the importance of P/E ratio and it determines the price of stock while (Poshakwalea and Courtisb, 2005; Firer, 1993; Chowdhry and Titman, 2001) also reveal the importance of P/E ratio in determining the cost of equity. Following technique is taken on to formulate the P/E ratio.

$$P/E_{i,t} = C.P_{i,t} / EPS_{i,t}$$

Where

P/E = Price to Earning Ratio

$C.P$ = Current Price of the stock

EPS = Earning Per Share

i = Name of the Company

t = Number of the year

Market risk is used as control variable because in panel regression there is problem of endogeneity due to the other factors which lies in the error term of the model. Thus Kim and Wu (2006) also tell the problem of endogeneity in the model and it comes due to the other factors irrespective of the variables included in model. Guo et al., (2006) also use control variables to asses the effect on independent variables in the model.

28

Conversely, market risk is used as a control variable in the existing study as Choi and Jung (2008) use market risk as control variable and states the positive relation with cost of equity as well as it also leads to change the firm performance level. Anecdotally and rationally such measurements show the financial performance of the organization and investors predict the cost of equity on the basis of such ratio. Barzegar and Babu (2008) employee the risk level as a control variable because it also affects the financial performance. The measurement regarding market risk is as follow,

$$M.R_{i,t} = (COV(X,Y)_{J,t} / VAR(X)_{J,t}$$

Where

        $M.R$ = Market Risk

        $COV(X,Y)_{J,t}$ = Co movement of market and variable return

        VAR X = Change in market return

        i = Name of the Company

        t = Number of the year

Such measures incorporate the firm financial performance on the basis of previous literature and also have importance regarding analytical point of view in the process of stock valuation.

3.2.3 MEASUREMENT OF COST OF EQUITY CAPITAL

Cost of equity is the charge on investment by the capital provider because financiers also take the risk on provided capital. In order to measure the cost of equity, traditional model of capital asset valuation CAPM is used to determine the required rate

of return. Although capital asset pricing model (CAPM) is the best technique to estimate the price of the sock because it includes relative risk of the security when estimate the cost of the stock (Ward, 1999). However, Tapon (1983) also argues that CAPM is the best strategic tool to find the expected value of the stock as compare to the other tools. The following equation shows the formulation of CAPM,

$$K_{e_{i,t}} = R_{f_{i,t}} + (R_{mi,t} - R_{f_{i,t}}) * \beta + \varepsilon_{i,t}$$

Where

$K_{e_{i,t}}$ = Cost of Equity

$R_{f_{i,t}}$ = Risk Free Rate

R_m = Market Rate of Return

β = Risk level of the firm

$\varepsilon_{i,t}$ = Error Term

i = Name of the Company

t = Number of the year

Beta is used to measure the risk level of the company as Almisher and Kish (2000) also use in its exploration. Consequently, Bellalah and Ellouz (2007) exercise the same method to find the cost of equity capital and it also includes the additional premium in its formulation. However, defense saving certificate is used as a proxy of risk free rate while average market return is used to measure risk premium and cost of equity in their model. In addition three year monthly prices are used to find the beta of the stock as Daves et

30

al.,(2000) also employ the three year monthly prices to measure the beat of the relative share.

3.3   STATISTICAL MODEL SPECIFICATION

3.3.1   THE DETERMINANT OF COST OF EQUITY CAPITAL

3.3.1.1   Panel regression model

In order to find the relation between corporate performance and cost of equity capital, performance includes a number of variables like return on assets, price to earning ratio, earning per share while market risk as a control variable in the overall respective model. However, cost of equity is taken as a dependent variable using CAPM model. The mathematical form of the model is as follow,

$$K_{e_{i,t}} = \alpha_{it} + \beta i \left(MR \right)_{it} + \gamma_i \left(ROA \right)_{it} + \delta_i \left(P/E \right)_{it} + \rho_i \left(EPS \right)_{it} + \varepsilon_{it} \qquad (1)$$

Pool regression model is employed in order find an empirical relation between cost of equity and corporate performance. In the above equation, MR shows the market risk of the relative firm while ROA shows the return on assets measured using Tobin's Q ratio.

In addition, P/E ratio illustrates price to earning ratio where as EPS demonstrates the earning per share of the relative firm. In addition, α shows the constant term of the model where 'i' show the name of the company from 1 to 30 and 't' shows the time from 2001,...., 2008.

31

FIGURE 1 RELATIONAL MODEL OF CORPORATE PERFORMANCE AND COST OF EQUITY
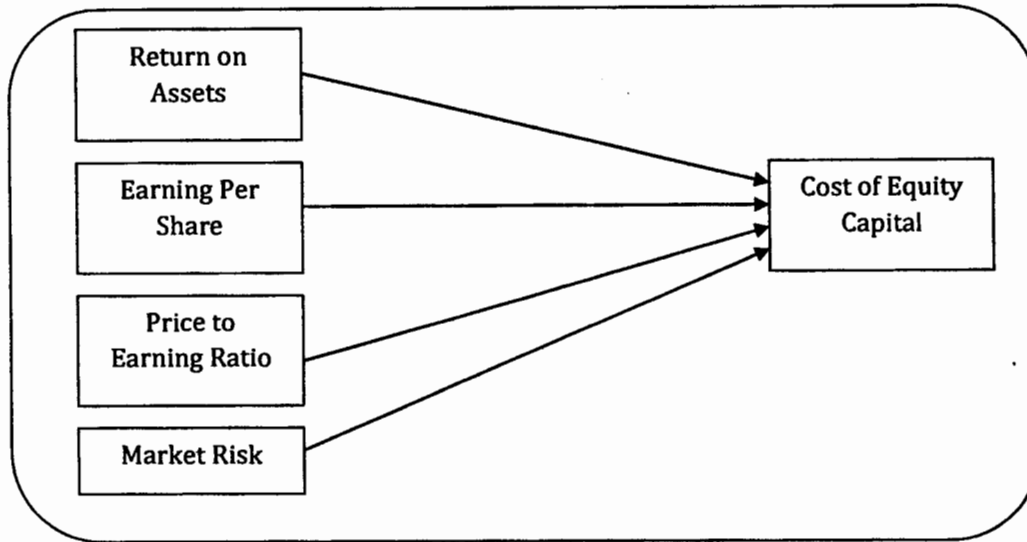
Accordingly β, γ and δ exhibit the quotient of the relative factors even as 'ε' reveal the error term of the overall model formulated in equation (1). Figure1. shows the relational model of cost of equity and corporate performance.

3.3.1.2. Fixed effect, Random Effect and Hausman test specification.

In order to find the fundamental relation between cost of equity and corporate performance, the data of thirty companies from 2001 to 2008 has been used. However, such panel data of various corporations leads in adoption of panel regression model to find the relation between independent and dependent variable. Many factors affect the cost of equity but the study contain only three variables related to corporate performance with one control variable market risk while the companies were selected randomly KSE (Karachi Stock Exchange) of Pakistan. In addition, random and fixed effect is also

checked for the models given in equations 1 as proposed in the study of Snijders (2005) while to check the effectiveness of both effect Hausman (1978) test was applied.

CHAPTER-4

4. DATA COLLECTION AND DATA ANALYSIS

4.1 DATA AND SAMPLE

This segment illustrates the procedure related to the collection of the data used in this current work. It also analyzes the proposition as well as the sample assortment method employed in this study. In addition, 30 companies from Textile Spinning Sector has been selected on convenience base. However, the data is obtained from KSE (Karachi Stock Exchange) of Pakistan which is the biggest stock exchange among the other stock exchanges in Pakistan. Additionally, the study includes the data of Textile Spinning Sector related to corporate performance indicators and it is taken from the SBP (Standard Bank of Pakistan) website. However, both sources are reliable and authentic all around the country for financial as well as for public information related to any sector of Pakistani market. Although Siddiqui (2008) use only one year data to find the corporate performance of the Islamic banking sector while the robust study includes 8 years in order to measure the relation between corporate performance and cost of equity capital. To choose the sample of the companies the following approaches are considered;

    (a)   The share of the company must be traded publicly

    (b)   Banking and services related companies are not included in the sample

34

(c)   The study includes 30 companies out of 109 companies of the textile spinning sector to generalize the relation between corporate performance and cost of equity.

On the basis of such condition the work contains 30 companies from textile spinning sector and it includes the years from 2001-2008 while sample includes 240 observations on the basis of panel data. The determinants of corporate performance are taken on basis of anecdotal evidence those are P/E ratio, ROA and EPS whereas MR is treated a control variable. Because MR can be controlled by making economic policy on macro level and can also cause to decrease the cost of equity more tactically. Apart from this cost of equity is measured by using CAPM which is the most well-known as well as important tool to find the required rate of return.

In CAPM, β is used to measure the relative risk of the stock and monthly stock prices are utilized to measure the return volatility. Pham et al., (2007) also use the same technique to find the risk of the stock. However, Defense Saving Certificate (DSC) rate reported by SBP is used as a proxy of risk free rate because it is one of the risk free rate long term security among different securities issued by Government of Pakistan. In addition, average market return from 2001 to 2008 is used to measure the market risk premium.

4.2   EMPIRICAL ANALYSIS AND RESULTS

4.2.1   *FINDINGS AND ANALYSIS*

This segment demonstrates the empirical relation between corporate performance and cost of equity capital while the formulation of all models is discussed in the chapter of methodology and it clearly shows the different relational equations individually and collectively. However, **Table 1** shows the descriptive statistics of the variable included in this existing work from 2001 to 2008 of 240 observations. An average value of cost of equity in 8 years is found 0.08 while maximum and minimum value of the same variable is 0.36 and -0.03 respectively that shows average return on stock remains of "between" 0.36 to -0.03. However, the variation in the mean value of the cost of equity remains 0.045 from 2001 to 2008. Consequently, the descriptive statistic related to the factors of corporate performance is also given in the next rows. As the mean value of return on asset is 0.42 and it remains between 0.04 and 1.15 correspondingly while the variation of such values from 2001 to 2008 is 0.22. Additionally, mean value of P/E and EPS is given in the next two rows are 6.4 and 0.71 respectively while the variation in P/E and EPS is 27.19 and 8.52 respectively. In addition, the mean of market risk is 0.29 while variation of market risk is 0.47 in the table below.

Table 3. Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
costofequity	240	.0814125	.0456928	-.0329	.3672
returnonas~t	240	.4251613	.2239951	.0479	1.1515
pricetoear~o	240	6.440444	27.18665	-130	255
earningper~e	240	.7141667	8.523875	-45.4	72.8
marketrisk	240	.2933304	.4776623	-3.1811	1.4446

The pragmatic findings are alienated into three parts. Firstly, by doing panel regression analysis, the overall effectiveness of corporate performance on the cost of equity capital is presented using panel regression model. The equation (1) reveals the model formulation regarding overall relation of corporate performance and cost of equity capital. Secondly, the relation of corporate performance and cost of equity is analyzed on the basis of fixed regression analysis. Thirdly, the analysis of random effect panel regression model using STATA has also been checked. To check the efficacy of the random or fixed effect, Hausman test is used. The criteria to choose the fixed or random, the probability of relative model is considered, if $P > \chi^2$ is less than 0.05 or significant then fixed effect will be selected and vice versa. In addition,

Table-2 shows the results of correlation matrix in which cost of equity is positively correlated with ROA (0.022) and P/E (0.065) ratio while negatively (-0.05) correlated with EPS. Additionally, EPS is positively correlated with ROA (0.03) and P/E (0.06) while P/E ratio moves positively with ROA (0.02). However, MR move negatively with KE, ROA and P/E while positively with EPS.

37

Table 4. Table 2 Correlation Matrix (2001-2008)

	costof~y	return~t	pricet~o	earnin~e	market~k
costofequity	1.0000				
returnonas~t	0.0218	1.0000			
pricetoear~o	0.0659	0.0172	1.0000		
earningper~e	-0.0475	0.0330	0.0574	1.0000	
marketrisk	-0.9005	-0.0502	-0.0863	0.0791	1.0000

4.2.2 PANEL REGRESSION ANALYSIS

In this section, the overall relation between corporate performance and cost of equity is discussed using OLS panel regression model. **Table-3** shows the regression analysis of the corporate performance and cost of equity capital. However, the model is explained by 81% while 19% is unexplained by the other variables. In addition, overall model is significant because F-value is (0.000). Conversely, individual indicators are insignificant with cost of equity capital except market risk because P-value is greater than (0.05).

Table 5. Simple Pooled Regression Analysis (2001-2008)

Source	SS	df	MS				
Model	.405265827	4	.101316457	Number of obs =	240
Residual	.093726067	235	.000398834	F(4, 235) =	254.03
				Prob > F =	0.0000
				R-squared =	0.8122
				Adj R-squared =	0.8090
Total	.498991894	239	.002087832	Root MSE =	.01997

costofequity	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
returnonas~t	-.0049374	.0057787	-0.85	0.394	-.0163221	.0064472
pricetoear~o	-.0000223	.0000478	-0.47	0.641	-.0001165	.0000718
earningper~e	.0001378	.0001524	0.90	0.367	-.0001625	.0004381
marketrisk	-.0865583	.002728	-31.73	0.000	-.0919327	-.0811838
_cons	.1089474	.0029392	37.07	0.000	.1031569	.1147379

4.2.3 REGRESSION ANALYSIS OF RANDOM AND FIXED EFFECT

In this part, random and fixed regression analysis is used due to the panel data of 30 companies' form 2001 to 2008. In order to check the significance of random or fixed effect, Hausman fixed test is applied and it specify which effect is significant as Snijders (2005) also use the same test to investigate the effectiveness of random or fixed effect.

Table-4 exemplifies the fixed effect on the model and it also incorporates the significant relation of cost of equity with corporate performance because the F-value is less than (0.05) while individually P-values as well as t-values describe the insignificance of the model with corporate performance except market risk. Moreover, overall the value of R-Square is 0.81.

Table 6. Fixed Effect Regression Analysis (2001-2008)

```
Fixed-effects (within) regression          Number of obs      =        240
Group variable: company                    Number of groups   =         30

R-sq:   within  = 0.7541                    Obs per group: min =          8
        between = 0.9673                                   avg =        8.0
        overall = 0.8113                                   max =          8

                                           F(4,206)           =     157.94
corr(u_i, Xb)  = -0.1721                    Prob > F           =     0.0000
```

costofequity	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
returnonas~t	-.0092647	.0092957	-1.00	0.320	-.0275915	.0090621
pricetoear~o	-.0000297	.0000581	-0.51	0.610	-.0001442	.0000849
earningper~e	.0002604	.0001931	1.35	0.179	-.0001203	.000641
marketrisk	-.0882812	.0035522	-24.85	0.000	-.0952846	-.0812778
_cons	.1112522	.0044899	24.78	0.000	.1024002	.1201042
sigma_u	.00456264					
sigma_e	.02084088					
rho	.0457371	(fraction of variance due to u_i)				

```
F test that all u_i=0:     F(29, 206) =    0.34              Prob > F = 0.9995
```

Apart from this, **Table-5** exhibits the random effect on the model variables even as corporate performance has no impact on cost of equity at individual level. Consequently, market risk has significant positive relation with cost of equity capital.

Table 7. Random Effect Regression Analysis (2001-2008)

```
Random-effects GLS regression                    Number of obs      =       240
Group variable: company                          Number of groups   =        30

R-sq:   within  = 0.7534                         Obs per group: min =         8
        between = 0.9717                                         avg =       8.0
        overall = 0.8122                                         max =         8

Random effects u_i ~ Gaussian                    Wald chi2(4)       =   1016.13
corr(u_i, X)      = 0 (assumed)                   Prob > chi2        =    0.0000
```

costofequity	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
returnonas~t	-.0049374	.0057787	-0.85	0.393	-.0162635	.0063886
pricetoear~o	-.0000223	.0000478	-0.47	0.640	-.000116	.0000713
earningper~e	.0001378	.0001524	0.90	0.366	-.000161	.0004366
marketrisk	-.0865583	.002728	-31.73	0.000	-.091905	-.0812115
_cons	.1089474	.0029392	37.07	0.000	.1031867	.1147081

sigma_u	0	
sigma_e	.02084088	
rho	0	(fraction of variance due to u_i)

Findings of Hausman test in **Table-6** specify that random effect is significant because the

$p > chi^2$ (0.80) which is greater than (0.05). The model shows that there are some other

unobservable factors hidden in error term those also have an impact on the cost of equity

capital.

Table 8. Hausman Test Effect

	—— Coefficients ——			
	(b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
returnonas~t	-.0092647	-.0049374	-.0043273	.0072812
pricetoear~o	-.0000297	-.0000223	-7.32e-06	.000033
earningper~e	.0002604	.0001378	.0001226	.0001185
marketrisk	-.0882812	-.0865583	-.0017229	.0022752

```
                   b = consistent under Ho and Ha; obtained from xtreg
           B = inconsistent under Ha, efficient under Ho; obtained from xtreg

   Test:  Ho:  difference in coefficients not systematic

             chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                     =        1.62
             Prob>chi2 =      0.8051
```

In addition, ARCH model explain the significance at individual level because of lagged

effect of 'period one' and by applying the ARCH model the P-value of ROA and P/E is

0.000 and 0.001 respectively which shows the significance of the both variable while the

P-value of EPS is 0.49 which show the insignificance of the same variable.

Table 9: Arch Application on Corporate Performance and Cost of Equity
ARCH family regression

| Sample: 2001 - 2008, but with gaps | | | Number of obs | = | 240 |
| Log likelihood = 660.3902 | | | Wald chi2(4)
Prob > chi2 | =
= | 7253.12
0.0000 |

costofequity	Coef.	OPG Std. Err.	z	P>|z|	[95% Conf. Interval]	
costofequity						
returnonas~t	-.0109366	.0030636	-3.57	0.000	-.0169411	-.004932
pricetoear~o	-.000077	.0000235	-3.28	0.001	-.000123	-.000031
earningper~e	-.0000402	.0000592	-0.68	0.498	-.0001563	.000076
marketrisk	-.0869107	.0011026	-78.83	0.000	-.0890717	-.0847497
_cons	.1054779	.0015521	67.96	0.000	.1024359	.1085199
ARCH						
arch						
L1.	1.200672	.2134834	5.62	0.000	.7822518	1.619091
_cons	.000057	5.95e-06	9.58	0.000	.0000453	.0000687

4.3 DISCUSSION

The main objective of this thesis is to investigate the relation of corporate performance with cost of equity capital. However, all the equation (1) clearly shows the mathematical explanation of relation between independent and dependent variable. Moreover, the relation is insignificant in the entire model individually with the cost of equity capital except the market risk which has significant relation with cost of equity as Botosan (1997) also reveals that theoretically, the relation can be created between cost of equity and corporate performance while practically the relation does not exist and it support the results of the existing work. The study use the CAPM to measure the cost of equity and it can be possible that CAPM is not applicable on KSE of Pakistan as Green et

41

al., (2003) also state that conventional models to measure the cost of equity do not include economic changes. In so far as, if CAPM does not contain the other changes then result can be insignificant to the other's performance indicators.

On the other hand, individually performance indicators (ROA, P/E and EPS) are also insignificant with cost of equity capital. Dalton et al.(2003) also find the same relation and discuss ROA is not significant predicator of the cost of equity. Moreover, Leibowitz and Kogelman (1994) divulge that P/E ratio is not a predictor of required rate of return which also supports the robust result of the study. Consequently, Pringle (1973) also argues that the P/E is not the best predictors to determine the cost of equity used when the management wants cheaper resource to finance the capital. In addition, the result clearly show the insignificant relation between EPS and cost of equity while Dedman et al., (2008) also show the same result in their study. Therefore, it is clear that corporate performance has insignificant relation with cost of equity capital and such factors are not good predicators of the rate of return. As Rappaport (2005) also reveals, earning means cannot be the perfect measure to value the stock. Shen (2000) also states that historical factors can not be the good predicator because in every moment economy has changing behaviors. For example, investors can predict on behalf of P/E ratio but result can differ from historical data. Consequently, McInnis (2009) also investigate insignificant relation between earning and cost of equity.

As far as the choice of random effect and fixed effect is concerned, the random effect is preferred due to the insignificance of the p-value which is greater than 0.05 in overall model specification as well as in factors analysis and pair vise analysis. The

42

random effect divulges that contrary to the explained variables there are some other factors which are also mention in error term ' ε_{it} ' change the value of the cost of equity capital. As a result of discussion, the objectives of the work are to find the relation between cost of equity capital and corporate performance. In so far as the research investigates insignificant relation between cost of equity and corporate performance.

Contrary to this, if ARCH model is applied then it removes all the effect due to legged period 1 and ROA and P/E become significant at individual level while EPS remain insignificant.

CHAPTER-5

5. CONCLUSION, FURTHER RESEARCH AND LIMITATION

5.1 CONCLUSION

In this research, I tentatively and analytically appraised the topic of "corporate performance and cost of equity". I employed different analysis to find such relation between cost of equity and corporate financial performance. A many of ratios were employed to measure the corporate performance and familiar technique was adopted to find the cost of equity capital. The different notions, associations, evidences were introduced with the support of past literature and it also supports the relation of current research proposition. However, corporate performance is insignificantly associated with the cost of equity capital because financial performance does not state the real picture of the firm and there are others hidden factors which change the cost of equity capital. Qualitative and quantitative up to date process to investigate the relation between cost of equity and corporate performance clearly enhance the body of knowledge in the corporate world. It also states that in Pakistan corporate performance does not change the cost of equity capital except market risk.

5.2 FINDINGS

To answer the research hypothesis whether there is a relation between cost of equity capital and corporate performance. A data of the number of 30 companies from

44

Textile Spinning Sectors from 2001 to 2008 was analyzed and the robust study found the following key findings related to my research objective

- Corporate performance has an insignificant relation with the cost of equity capital.

- ROA has an insignificant relation with the cost of equity capital.

- EPS has an insignificant relation with the cost of equity capital.

- P/E ratio has insignificant relation with the cost of equity capital.

- MR has significant relation with the cost of equity.

As a result the relation of the all determinants of the corporate financial performance is insignificantly associated with the cost of equity capital. It clearly supports the research objectives as well as the previous studies also ropes the same relation that the current study investigates.

5.3 FURTHER RESEARCH AND LIMITATIONS

Though the literature describes the importance of the relation of corporate performance with cost of equity but less work is found on the recent study. However, I contributed that in Pakistani market corporate performance has insignificant impact on the cost of equity which also enhance the body of academic knowledge Further, it is an opening issue in the context of Pakistani market scenario and supplementary work on this topic can create a prized worth for the corporate oriented research areas. In so far as the future research may be:

45

- Impact of macroeconomic variables on the relation of corporate performance with the cost of equity capital related to Pakistani scenario.

- Impact of social factors on the relation of corporate performance with the cost of equity capital related to Pakistani scenario.

- Impact of other corporate performance indicators that can also be the reason to change the cost of equity i-e; Return on equity, Firm size etc.

- Lead-Lagged effect of the corporate performance on the cost of equity capital.

Finally corporate performance and cost of equity are not limited or small issues because day by day advance technology and scandals lead to this as a more specific topic for the research point of view. In order to attract the shareholders, corporate adopt different technique to show the corporate performance.

Therefore the research must observe those factors which predict the value of the share for the betterment of the investors and stakeholders.

BIBLIOGRAPHY

Asquith, P., Mullins, D. W. and Jr (1986). Signaling with Dividends, Stock Repurchases, and Equity Issues, *Financial Management*, Vol. 15, No. 3, pp. 27-44

Al-Shiab, M. S, (2008). The Effectiveness of International Financial Reporting Standards Adoption on Cost of Equity Capital: A Vector Error Correction Model, *International Journal Of Business*, Vol. 13, No. 3, pp. 271-298.

Almisher, M. A. and Kish, R. J. (2000). Accounting betas – an ex anti proxy for risk within the ipo market, *Journal of Financial and Strategic Decisions*, Vol. 13, No. 3, pp. 23-34.

Brigham, E. F. and Ehrhardt, M. C. (2001). Financial Management: Theory and Practice, (10th Ed), Thomson Learning, NY.

Brealey, R. A., Myers, S. C. and Allen, F. (2006). Principles of Corporate Finance, (8th Ed), McGraw Hill, OH.

Billett, M. T. and Ryngaert, M. (1997). Capital structure, asset structure and equity takeover premiums in cash tender offers, *Journal of Corporate Finance*, Vol.3, pp. 141 - 165

Bercel, A. (1994). Consensus Expectations and International Equity Returns, *Financial Anaiysts Journal*, Vol. 50, No. 4, pp.76-80.

Botosan, C. A and Plumlee, M. A. (2002). A Re-Examination of Disclosure Level and the Expected Cost of Equity Capital, *Journal of Accounting Research*, Vol. 40, No.1, pp. 21-40.

Berman, S. L., Wicks, A. C., Kotha, S. and Jones, T. M. (1999). Does Stakeholder Orientation Matter? The Relationship between Stakeholder Management Models and Firm Financial Performance, *The Academy of Management Journal*, Vol. 42, No. 5, pp. 488-506

Bellalah, M. and Ellouz, S. (2007). Asset pricing and predictability of stock returns in the French market, *Presented at international conference IFC4 (Mars 2007).* Accessed from: mpra.ub.uni-muenchen.de/4961.

Botosan, C. A. (1997). Disclosure Level and the Cost of Equity, *The Accounting Review*, Vol. 72, No. 3, pp. 323-349

Bushee, B. J and Noe, C. F. (2000). Corporate Disclosure Practices, Institutional Investors, and Stock Return Volatility, *Journal of Accounting Research*, Vol. 38, pp. 171-202.

Burgstahler, D. C. and Dichev, I. D. (1997). Earnings, Adaptation and Equity Value, *The Accounting Review*, Vol. 72, No. 2, pp. 187-215.

Bhagat, S. and Bolton, B. (2008). Corporate governance and firm performance, *Journal of Corporate Finance*, Vol.14, pp. 257–273.

Barzegar, B. and Babu, K. N. (2008), The Effects of Ownership Structure on Firm Performance: Evidence from Iran, *The Icfai Journal of Applied Finance*, Vol. 14, No. 44(3), pp.43-55.

Bhattacharya, U. (2006). Enforcement and its Impact on Cost of Equity and Liquidity of the Market, Available at: *SSRN: http://ssrn.com/abstract=952698.*

Chen, F., Jorgensen, B. N. and Yoo, Y. K. (2004), implied cost of equity capital in earnings based valuation: international evidence, *Accounting and Business Research*, Vol. 34, No. 4, pp. 323-344.

Choi, T. H. and Jung, J. (2008). Ethical Commitment, Financial Performance, and Valuation: An Empirical Investigation of Korean Companies, *Journal of Business Ethics*, Vol. 81, pp. 447–463.

Core, J. E., Guay, W. R. and Kothari, S. P. (2002). The Economic Dilution of Employee Stock Options: Diluted EPS for Valuation and Financial Reporting, *The Accounting Review*, Vol. 77, No. 3, pp. 627-652.

Chowdhry, B and Titman, S. (2001). Why real interest rates, cost of capital and price/earnings ratios vary across countries, *Journal of International Money and Finance*, Vol. 20, pp. 165–189.

Danielson, M. G. and Dowdell, T. D. (2001). The Return-Stages Valuation Model and the Expectations within a Firm's P/B and P/E Ratios, *Financial Management*, Vol. 30, No. 2, pp. 93-124.

Daves, P. R., Ehrhardt, M. C. and Kunkel, R. A. (2000), Estimating Systematic Risk: The Choice Of Return Interval And Estimation Period, *Journal of Financial and Strategic Decisions*, Vol. 13, No. 1, pp. 7-13.

Dedman, E., Lin, S. W. J., Prakash, A. j. and Chang, C. H. (2008). Voluntary disclosure and its impact on share prices: Evidence from the UK biotechnology sector, *Journal of Accounting and Public Policy*, Vol. 27, pp. 195–216

Dalton, D. R., Daily, C. M., Certo, S. T. and Roengpitya, R. (2003). Meta-Analyses of Financial Performance and Equity: Fusion or Confusion? *The Academy of Management Journal*, Vol. 46, No. 1 pp. 13-26.

Damodaran, A. (2001). Corporate Finance: theory and practice, (2nd Ed), *Johan wiley & Sons. Inc.*, NY.

Doff, R. (2008). Defining and measuring business risk in an economic-capital framework, *The Journal of Risk Finance*, Vol. 9 No. 4, pp. 317-333

Dempsey, M. J. (1996). Corporate Financial Management: Time to Change the Cost of Capital Paradigm?, *Critical Perspectives on Accounting*, Vol. 7, No. 6, pp. 617-639.

Dam, L. (2006). stock market model: Solving the financial performance puzzle, *CCSO Centre for Economic Research, Available at http://www.eco.rug.nl/ccso.*

Estallo, M. D. A. G., Fuente, F. G. D. and Grîful-Miquela, G. (2007). The Importance of Corporate Social Responsibility and Its Limits, *Int Adv Econ Res*, Vol.13, pp. 379–388

Ely, K. M. (1995),Cross-Sectional Differences in the Relation between the Accounting Return on Assets and Equity Risk, Journal Of Accounting, Auditing & Finance, Vol. 10, No. 3, pp. 437-458.

Easton, P. (2003). "PE ratios, PEG ratios, and estimating the implied expected rate of return on equity capital", *Available at SSRN: http://ssrn.com/abstract=42360.1*

Eccles, R. G., Newquist, S. C. and Schatz, R. (2007).Reputation and Its Risks, Harvard Business Review, February 2007.

Francis, R. (2008). Market valuation of accrual components, *Review of Accounting and Finance*, Vol. 7, No. 2, pp. 150-166

Firer, C. (1993), The P/E ratio and cost of equity capital, *Investment Analysts journal*, Vol. 38, pp. 43-47.

Francis, j., LaFond, R., Olsson, P. and Schipper, K. (2003), Costs of Capital and Earnings Attributes, Available at *SSRN: http://ssrn.com/abstract=414125.*

Faulkender, M., Milbourn, T. and Thakor, A. (2006), Does Corporate Performance Determine Capital Structure and Dividend Policy?, *Presented in seminar at Washington University*, NY.

Green, E. J, Lopez, J. A and Wang, Z. (2003), Formulating the Imputed Cost of Equity

Capital for Priced Services at Federal Reserve Banks, *FRBNY Economic Policy

Review / September 2003*, pp. 55-81.

Guo, W., Shiah-Hou, S. and Yang, Y. (2006). Stock bonus compensation and firm

performance in Taiwan, *Managerial Finance*, Vol. 32, No. 11, pp. 862-885.

Gomes, A., Gorton G. and Madureira, L. (2007), SEC Regulation Fair Disclosure,

information, and the cost of capital, *Journal of Corporate Finance*, Vol. 13, 300–

334.

Goetzmann, W. N. and Garstka, S. J. (1999). The Development of Corporate

Performance Measures: Benchmarks Before EVA™, *Available at SSRN:

http://ssrn.com/abstract=170674*.

Hwang, Y and Kirby, A. J. (2000), Competitive Effects of Disclosure in a Strategic

Entry Model, *Review of Accounting Studies*, Vol. 5, 57–85

Horne, J. C. V. (2002), Financial Management & Policy, (12th Ed), *Pearson Education

Limited*, UK.

Hausman, J. A. (1978). Specification Tests in Econometrics, Econometrica, Vol. 46, No.

6, pp. 1251-1271.

Habib, A. (2005). Information risk and the cost of capital: Review of the empirical

Literature, Available at *SSRN: http://ssrn.com/abstract=722781*.

Herbst, A. F. and Wu, J. S. K. (2004).Trajectory of Earnings Growth Influences Cost of Equity Capital, and Optimal Time to Sell, Investment Management and Financial Innovations, Vol. 1, pp. 100-113.

Kryzanowski, L. and Rahman, A. H. (2009), Degrees-of-freedom problem and implied cost of equity capital, *Finance Research Letters,* Vol. 6, pp.171–178

Kaur, M. and Narang, S. (2008).Economic Value Added Reporting and Corporate Performance: A Study of Satyam Computer Services Ltd, The Icfai Journal of Accounting Research, Vol. VII, No. 52(2), pp.40-52.

Lougee, B. and Wallace, J. (2008), Corporate Social Responsibility (CSR) Trend, *Journal of Applied Corporate Finance,* Vol. 20, No. 1, pp. 96-108.

Lakhal, F. (2009). Does corporate disclosure policy change financial analysts' behaviour? Evidence from France, *Journal of Accounting & Organizational Change*, Vol. 5, No. 3, pp. 344-361.

Livne, G. and McNichols, M. (2009). An Empirical Investigation of the True and Fair Override in the United Kingdom, *Journal of Business Finance & Accounting*, Vol. 36, No.1, pp. 1–30,

Lang, M. H. (2008). Discussion of "Analyst Coverage and the Cost of Raising Equity Capital: Evidence from Underpricing of Seasoned Equity Offerings", *Contemporary Accounting Research,* Vol. 25, No. 3, pp. 701 – 6.

Leibowitz, M. L. and Kogelman, S. (1994). The Growth Illusion: The P/E 'Cost' of Earnings Growth, *Financial Analysts Journal*, Vol. 50, No. 2 ,pp. 36-48

Luzi, H. (2002), The impact of voluntary corporate disclosures on the ex-ante cost of capital for Swiss firms, *European Accounting Review*, Vol. 11, No.4, pp.741 – 773.

John McInnis, J. (2009), Earnings Smoothness, Average Returns, and Implied Cost of Equity Capital, Available at: http://ssrn.com/abstract=991414

Meigs, R. F., Meigs, M. A., Bettner, M. and Whittington, R. (1996). Accounting: The basis for business decision, (10th Ed), The McGraw-Hill Companies. Inc. NY

Moore, G. (2001). Corporate Social and Financial Performance: An Investigation in the U.K. Supermarket Industry, *Journal of Business Ethics*, Vol. 34, No. 3(4), pp. 299-315.

Mahoney, L. (2008). Corporate Social Performance, Financial Performance for Firms that Restate Earnings, *Issues in Social and Environmental Accounting*, Vol. 2, No. 1, pp. 104-130.

Majid, M. A. and Sufian, |F. (1999). Bank Efficiency and Share Prices in China: Empirical Evidence from a Three-Stage Banking Model, Available at: http://mpra.ub.uni-muenchen.de/12120.

Mikhail, M. B., Walther, B. R. and Willis, R. H. (2004). Earnings Surprises and the Cost of Equity Capital, Available at SSRN: *http://ssrn.com/abstract=504662.*

Nichols, D. C. and Wahlen, J. M. (2004). How Do Earnings Numbers Relate to Stock Returns? A Review of Classic Accounting Research with Updated Evidence, *Accounting Horizons,* Vol. 18, No. 4,pp. 263–286.

Nissim, D. and Penman S. H. (2001), Ratio Analysis and Equity Valuation: From Research to Practice, *Review of Accounting Studies,* Vol. 6, pp. 109–154.

Oliveira, P.G.M.D. and Neto, C. R. S. (2009), Corporate Performance Management, *Working Paper,* Electronic copy available at: http://ssrn.com/abstract=1461139.

Oha, K., Kimb, K and Kimc, H. (2006). An empirical study of the relation between stock price and EPS in panel data: Korea case, *Applied Economics,* Vol. 38, pp. 2361–2369.

Poshakwalea, S. and Courtisb, J. K., (2005). Disclosure Level and Cost of Equity Capital: Evidence from the Banking Industry, *Managerial and Decision Economics,* Vol. 26, pp. 431–444.

Prahalad, C. K. and G. Hamel (1994). Strategy as a field of study: Why search for a new paradigm?, Strategic Management Journal, Summer Special Issue, 15, pp. 5-16.

Pringle, J. J. (1973). Price Earnings Ratios, Earnings-Per-Share and Financial Management, *Financial Management,* Vol. 2, No. 1, pp. 34-40.

Pham, P. K., Suchard, J. and Zein, J. (2007). Corporate Governance, Cost of Capital and Performance: Evidence from Australian Firms, Available at http://ssrn.com/abstract=1015986.

Puch, W. N., Oswald, S. L. and jr, J. S. J. (2000). The effect of ESOP Adoption on Corporate Performance: Are there really performance changes?, *Managerial and Decision Economics*, Vol. 21, pp. 167-180.

Patibandla, M. (2006). Equity pattern, corporate governance and performance: A study of India's corporate sector, *Journal of Economic Behavior & Organization*, Vol. 59, pp. 29–44.

Pandya, A. M. and Rao, N. V. (1998). Diversification and firm performance: An empirical evaluation, *Journal of Financial and Strategic Decisions*, Vol.11 No 2, pp. 67-81.

Petravičius, T. and Tamošiūnienė, R. (2008). Corporate Performance and the Measures of Value Added, *Transport*, Vol. 23, No. 3, pp. 194–201

Peavy, J. W.and Goodman, D. A. (1985). How Inflation, Risk and Corporate Profitability Affect Common Stock Returns, *Financial Analysts Journal*, Vol. 41, No. 5, pp. 59-65.

Rappaport, A. (2006). Ten Ways to Create Shareholder Value, Harvard Business Review, September 2006.

Rappaport, A (2005), The Economics of Short-Term Performance Obsession,Financial Analysts Journal, Vol. 61 No. 3, pp. 65-79.

Rahman, A. (2007). The Degree-of-Freedom Problem and Implied Cost of Equity Capital, Available at *www.ssrn.com/abstract=1009247*.

Richardson, A. J. and Welker, M. (2001). Social disclosure, financial disclosure and the cost of equity capital Accounting, Organizations and Society 26, pp. 597–616

Ryan, H. A. (1996). The use of financial ratios as measures of risk In the determination of the bid-ask spread, *Journal Of Financial And Strategic Decisions,* Vol. 9, No 2, pp. 33-41.

Ball, R., Kotharij, S. P. and Watts, R. L. (1993). Economic Determinants of the Relation between Earnings Changes and Stock Returns, *The Accounting Review*, Vol. 68, No. 3, pp. 622-638.

Smirlock, M., Gilligan, T. and Marshall, W. (1984). Tobin'q and the structure-performance Relationship, *The American Economic Review*, Vol. 74, No. 5, pp.1051-1060.

Shen, P. (2000), The P/E Ratio and Stock Market Performance, *Economic Review*, Fourth Quarter, pp. 24-36.

Snijders, T.A.B. (2005). 'Fixed and Random Effects', *Encyclopedia of Statistics in Behavioral Science*. Vol. 2, pp. 664-665.

Siddiqui, A. (2008). Financial contracts, risk and performance of Islamic banking, *Managerial Finance*, Vol. 34, No. 10, pp. 680-694.

Seppa, R. (2008). Capital structure decisions: research in Estonian non-financial companies, *Baltic Journal of Management*, Vol. 3, No. 1, pp. 55-70.

Tan, H. P., Plowman, D. and Hancock, P. (2007). Intellectual capital and financial returns of companies, *Journal of Intellectual Capital*, Vol. 8, No. 1, pp. 76-95.

Tapon, F. (1983), CAPM as a Strategic Planning Tool, Managerial and Decision Economics, *Corporate Strategy*, Vol. 4, No. 3, pp. 181-184.

Vázquez, F. M. and Trombetta, M. (2007). Does graph disclosure bias reduce the cost of Equity ? , *Working Paper 0730, Business Economics Series 07.*

Wang, K. and Smith, L. M. (2008). Does Corporate Reputation Translate into Higher Market Value? *Available at: SSRN: http://ssrn.com/abstract=1135331.*

Wernerfelt, B and Montgomery, C. A. (1988). Tobin's q and the Importance of Focus in Firm Performance, *The American Economic Review*, Vol. 78, No. 1, pp. 246-250.

Ward, C. (1999), Estimating the cost of capital, *Journal of Corporate Real Estate* Vol. 1 No. 3, pp 287-293.

Waddock, S. A. and Graves, S. B. (1997). The Corporate Social Performance-Financial Performance Link, *Strategic Management Journal*, Vol. 18, No. 4, pp. 303-319

Zhu, F. (2009), Does better corporate governance always lead to lower cost of equity capital? Evidence from an international study, accessed from: *www.google.com.*

LIST OF THE COMPANIES

1. Accord Textiles Ltd.
2. Adil Textile Mills Ltd.
3. Al-Azhar Textile Mills Ltd.
4. Ali Asghar Textile Mills Ltd
5. Asim Textile Mills Ltd.
6. Nagina Cotton Mills Ltd.
7. Globe Textile Mills Ltd.
8. Sunrays Textile Mills Ltd.
9. N. P. Spinning Mills Ltd.
10. Babri Cotton Mills Ltd.
11. Crescent Spinning Mills Ltd.
12. Dewan Mushtaq Textile Mills Ltd.
13. Bilal Fibres Ltd.
14. Tata Textile Mills Ltd.
15. Din Textile Mills Ltd.
16. Data Textiles Ltd.
17. Gadoon Textile Mills Ltd.
18. Mehr Dastagir Textile Mills Ltd.
19. Nadeem Textile Mills Ltd.
20. Ideal Spinning Mills Ltd.
21. J. A. Textile Mills Ltd.
22. Kohat Textile Mills Ltd.
23. Quality Textile Mills Ltd.
24. Fawad Textile Mills Ltd.
25. Fazal Textile Mills Ltd.
26. Glamour Textile Mills Ltd.
27. Gulistan Spinning Mills Ltd.
28. Ellcot Spinning Mills Ltd.
29. Haji Muhammad Ismail Mills Ltd.
30. Fazal Cloth Mills Ltd.