The effect of capital structure on profitability of

Non-financial sectors: evidence from Pakistan stock exchange

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Dedication

I would like to dedicate this piece of work to my family, especially my parents who have left no stone unturned in the progress of our careers and academics. This is dedicated to my parent's hard work and constant dedication towards making me blossom well and succeed well throughout my whole life which has finally put me able enough to execute this project.

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Contents

Abstract

The purpose of this research is to look at the impact and effect of capital structure on the performance of organizations in Pakistan's nonfinancial sector. The sample size for the study is non-financial organizations listed on the Pakistan Stock Exchange. Capital structure has always been a major topic, whether in terms of determining it or its impact on firm profitability. Pakistan is a developing country and it is trying to become stable in its economic strength. Best way for Pakistan to go about it is to make its financial and non-financial sectors stronger so to increase employment opportunities, overall quality of products, and by more profit paying more tax hence increasing revenues for the government. At the same time imports from other countries would decrease and exports would increase. So this study is done to help the concerning parties on how to manage their capital structure the best way possible so as to increase their profitability to the maximum. To Measure the performance of the firms profitability, Return on Assets (ROA) and Return on Equity (ROE) are taken as profitability measures and Debt to Equity Ratio as Capital Structure variable. Stata 14.1 is used for our calculations. Total population of non-financial firms listed in Pakistan Stock Exchange is taken as 404 whereas the selected sample size is 78. Test used to measure our data is Hausman Test and random effect test. Results are found that size of capital structure impacts ROA in positive way and ROE in negative way. This means as Leverage increases ROA increases at the same time ROE decreases Recommendations are also given to the government on how to manage this Thesis for their maximum Advantage.

CHAPTER 1

INTRODUCTION

Introduction

1.1-Background

Pakistan is a struggling country. It has total area of 8, 81,913 km^2 and total population of 20 crore people. Most of its source of income surrounds River Indus as agriculture. It is also known for its production of finest mangoes in the world. Sports equipment's, medical equipment's are its main exports.

Country has faced many acts of terrorism in the past due to which foreign investors have been wary of investing in Pakistan. Also, its political instability like dharnas does no justice to it. Still things are stabbing now in the case of terrorism. Army and government are trying their best to protect against Pakistan's both internal and external enemies.

Pakistan has had the history of coming out in front of all the problems it faces in its quest for success in the world market. Low literacy rates, high levels of unemployment are being dealt with by giving micro finances to start the business. Government is taking initiatives to lower the unemployment levels of population. They are also promoting campaigns so that country keeps a check on its population growth.

In the past few years it has been seen that overall economic growth of the country is higher than the population growth. In midst of all the cause country has somehow been building up to its reputation as one of the N11.

Industrial sector contributes a lot in gross domestic product (GDP) of a country. In Pakistan, industrial sector has been divided into thirty-seven industries which are being dealt in its single stock exchange market namely, Pakistan Stock Exchange (PSX). Pakistan is an agricultural country and one of the Next Eleven, a group of eleven nations that could be among the world's great economies in the twenty-first century (Grant, 2011). The economy used to be based on agriculture, but it has recently become semi-industrialized, with growth centers along the Indus River. Textiles, sporting equipment (mostly footballs and cricket balls), carpet rags, leather items, and medical tools are among its principal exports.

In the past, Pakistan has had its share of in boundary political disputes, acts of terrorism, etc. But now the economic conditions of the country are becoming stable. The country is trying to upgrade itself from product manufacturing businesses to service sectors. Corporations of both financial and non-financial

sectors are growing. In fact, over the previous few years, Pakistan GDP has grown at a faster rate than the country's population (QURESHI, 1997).

Pakistan is now trying to enter from manufacturing-based incomes to services income. Currently its financial market is Pakistan Stock Exchange (PSX) which came into being by merging three stock exchanges here both financial and non-financial sectors of the country are listed. Most of its companies are non-financial in nature and non-financial sector is our topic of study.

1.2-Contextual Analysis

Securities and Exchange Commission of Pakistan (SECP) has passed many laws due to the fast growing of corporate sector in Pakistan including the latest one, The Companies Act 2017. Some points of this Act can be summarized as under:

- Based on previous years financial statements that were thoroughly audited, classification of the company will be done.
- If the criterion of company does not fall into previous year's classification for two consecutive years, it is changed.
- Employs are assessed or calculated on basis of average number of employs hired by a company in that month.
- Fourth schedule shall be followed by companies that are subsidiary to listed companies.

This act defines the criteria of how the companies will be listed in Pakistan Stock Exchange. Will they be in financial Sector or non-financial Sector of Pakistan? After that the companies decide what kind of capital Structure they would want. What would be their ROA (Return on assets)?

Anything that is utilized in a business is called capital. It could be obligation or proprietors' value. Capital is the premise of most significant exercises of a business. On the off chance if a firm does not have business capital up to a particular cutoff it probably could not meet its commitments which are required for the survival in the market. Capital Structure is the status of liability and assets of the firm. (Modigiliani, 1958). Company needs to get maximum benefit from the best possible structure to maximize its profit. It also shows the ownership of the business. Firms have different sources of finance to finance their assets; they can use stock, bonds, preferred stocks. Assets are shown on left side of balance sheet and capital, both liabilities and owners' equity, on right side. Companies that maintain good ratio of debt and equity they get competitive advantage in the market. Firms also need to have

some liquidity in its assets. If all the assets become fixed, then company will not have enough cash to meet its short term and long-term liabilities

Research has proved that companies need to maintain certain level of leverage to stay competitive in the market. If company uses 100% equity, then taxes become high. Profits become low. If a company uses 100% debt than ownership may be lost, company may default all that could happen. So, to sum it all companies need good debt equity ratio to have competitive edge. (Badar & Saeed, 2013)

1.3-Gap Analysis

Most of the studies are done on how to determine the capital structure of the firm. It is well known that the term 'structure' means instrumentation of things which put light on capital structure which is basically the instrumentation or the arrangement of capital from different sources. Capital Structure is of great importance whether as determination of it or impact of it on firm profitability. Pakistan is a developing country and it is trying to become stable in its economic strength. This study just like (Badar & Saeed, 2013) is based on capital structure's impact and effect on profitability of the organizational entities. To measure profitability of firms there are different approaches used by different researchers as it was pointed that leverage affects the cost and profit of the agency (Berger, 2002). For any type of business, the decision of capital structure is important (Baker, 1973). Many successful and profitable firms declared that it is more feasible to consider debt as a major financing tool or option (Abor, 2005). The choice of capital structure may also vary from area to area as in China short term financing is the major approach being used by number of Chinese firms (Chen, 2004).

There are number of researches performed on Capital Structure in different countries like capital structure in terms of sugar industry (Badar & Saeed, 2013), empirical study of Chinese firms (Chen, 2004), Banking sectors (Tehranian, 2004) and many more but this study the impact of debt to equity ratio on ROE and ROA of non-financial firms listed in Pakistan Stock Exchange.

This research will be conducted using secondary data from PSX. As the findings of this study can be used by number of Companies or by government to critically analyze that what should be done to improve economic situation of Pakistan.

1.4-Problem Statement

Pakistan is trying to become a strong economy and for this purpose its financial and non-financial sectors need to flourish. They must increase their profits so to increase employment opportunities for the unemployed. At the same time this would also decrease the number of imports from other countries as Pakistan would be already meeting its demand of goods.

Pakistan imports large amount of goods from the market like clothes but the raw material is being produced in Pakistan like thread is produced from Pakistan and clothes are imported from other countries. We are seeing that in the last few years the textile sector of Pakistan has shifted in downward spiral due to power shortages and due to less investments from investors due to political and economic instabilities.

In total there are 404 listed companies in non-financial sector of Pakistan all of them have different type of capital structures and different profit levels. They don't know what the best capital structure for them would be. If they knew that, the economic stability of Pakistan would be achieved.

It has been said that the greater the risk, the greater the profit, and the lesser the risk, the lesser the profit. Debt financing increases profits for the firms as debt rates are usually lower than equity rates. Still it is yet to be found that in total can this be made a universal law that firms should use debt financing to increase their overall profits.

Advantages of getting Maximum from non-financial firms include:

- Decrease in unemployment
- Increase in variety of goods.
- Government will be able to pay back loans.
- Local currency appreciation.
- New investors will invest due to economic stability

1.5-Research Question

Does capital structure effect Profitability of Non-Financial Sector Firms listed on PSX?

1.6-Research Objectives

- To determine whether capital structure has any impact on the profitability of firms or not.
- To determine whether capital structure increases profit or not.

- To determine whether debt financing is more profitable.

1.7-Significance of the Research

The study in this field is limited in Pakistan. The findings of the study would help the investors in deciding which market to choose for investment and firms to decide what mix of Capital Structure they must choose. What should be their ROA?

Future Researchers are urged to find Relative Links in this study. Like is there any link Between Non-Financial and Financial Sector? All these will be helpful for the future researchers.

If after the study it is found that firms that use debt financing are more profitable than the firms in the same sector avoiding debt financing, then Government of Pakistan can use this data to further encourage debt financing for the firms

CHAPTER 2

LITERATURE REVIEW

2.1- Theoretical Literature

2.1.1 Trade off Theory

The trade-off theory states that when a company or an organization is operating on debt it gives the company benefit in terms of tax as the debt acts as tax shield for the company, thus corporations borrow a large amount of money to obtain the largest tax shield benefit, which will boost profitability of the firm. Furthermore, growing debt levels increase the likelihood of bankruptcy because the company will be forced to pay off a large amount of debt when it becomes due (Myers, 2001). According to this theory, there must be an optimal amount of leverage level at which the shield benefit from tax is realized, but if it crosses a certain limit, the probability of company's risk of defaulting on its loan commitments increases.

2.1.2 Modigliani and Miller Proposition, I

M M theory 1 is believed to be the very first theory to attract a large number of researchers. M.M theory is also referred as leverage irrelevant theorem which was presented by Modigliani and Miller (1958). According to this theorem the profitability of a company is not dependent on the amount of financing it receives. As a result, if there are reliable and perfect financing conditions managers can decide whether to use debt financing or equity financing, which exclude transaction costs, tax payments, and inflation costs.

Value of levered Firm (Vi) = Value of unlevered firm (Vu)

Whereas,

"Vi = levered firm", "Vu = unlevered firm"

It is well known that in the market businesses face lots of ups and downs which do not allow a firm to operate under perfect financial conditions as number of internal and external factors are associated with it so, on the basis of it this theory was not accepted by many economist and financers. Moreover it was concluded that this theory lacks in reliability (Modigliani & Miller, 1958).

2.2- CAPITAL STRUCTURE

Ever since (Modigiliani, 1958) thought of capital structure effect on profitability the topic has been of great discussion. For many decades different researchers have spent their lives researching on whether determination of capital structure and effect of capital structure on profitability. This topic is very significant (Durand, 1959) as firms all over the world want to attain maximum benefits from their capital Structures. They also assumed that value of levered organization is equal to non-levered organization.

This assumption made way for effect of tax (Modigiliani, 1963) as we all know interest is tax deductible. And hence all equity firm cannot have equal value to firms that have different structures. He even said that to enjoy maximum benefit from this, firms should go 100% Debt Financing.

In 1977 another variable was added to the study (Miller, 1977) and relaxation was made in case of personal Taxes. Benefit of tax was shifted from bond to stock. This is the tax that firms always have to pay so benefit on this is more relevant. Also comparatively debt financing is more beneficial than stock financing (Berger, 2004).

Some researches were done to get the best possible capital structure for firms to get maximum benefit from it (Roy, 2011). The majority of research is performed to identify capital structure; however, (Roy Badar, 2013) did it to identify the impact of capital structure on company profitability. Using ROA and the debt/equity ratio, several researchers studied the impact of capital structure on profitability. (Memon F Bhutto, 2012)In their research they found that capital structure is very important or highly significant in measuring firm performance. They also urged firms that are operating below optimal D/E Level to increase their profitability so that firms can operate to maximum extent.

The impact of capital structure was found to have different impacts on different economies. Like in developed economy it has negative impact on profitability and positive impact on firms in developing countries. (J.J, 2004). Same was seen for firms that are of high level incomes, they also had negative impact. Whereas firms that were low level income firms had direct and significant impact on profitability by increasing Debt/Equity Ratio

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2.3- Relation of Debt to Equity Ratio with ROA and ROE:

Relation between Debt to equity ratio and ROA was found to be direct and significant one, which means if we increase Debt to Equity Ratio our ROA, would increase. Relationship between Debts to Equity Ratio and ROE was found to be negative and significant one, which means that if we increase Debt to equity ratio our ROE would Decrease. (Memon, 2012)

Aghabeygzadeh and Akbarpour (2011) investigated the link between capital structure and execution of recorded firms of Tehran Stock Exchange, breaking down the ROA and ROE against the STD, LTD, and Equity to Total Liability. In general, the results showed that all capital structure factors have a favorable and significant impact on execution in the case of ROA. Then again the effect of capital structure on ROE was not affirmed, in spite of the fact that Dwilaksono (2010) found that STD and TD negatively affects ROE. Also as indicated by the creator as the nation is a creating nation and that why obligation advertise is immature and firms for the most part transfer on here and now financing. Sexually transmitted disease was found to positively affect ROA while LTD negatively affects ROA (Aghabeygzadeh and Akbarpour, 2011).

In an examination by Ahmad, Abdullah, and Roslan (2012), Malaysian organizations with a position with the buyer and modern segment were examined by introducing ROA and ROE against distinct portions of obligation, which were STD, LTD, and TDTA. The goal of the investigation was to consider the effects of financial structure's choices on a company's profit and execution, with a particular focus on the impact of different levels of debts. The findings indicated that STD and TD have a significant beneficial effect on ROA, whereas the effect of LTD on ROA was insignificant. In the case of ROE, all obligation levels were discovered and seen an immediate and significant impact on ROE (Abor, 2005) and (Mesquita and Lara, 2003). According to the developer, the crucial and positive effect of STD on ROA and ROE is a direct outcome of its lower necessary rate of return as less costs improve and add number of benefits. LTD and TD are similar in that LTD acts as a disciplinary operator for the administration and so improves execution, whereas TD provided the firm with the opportunity to profit from an assessment shield to improve execution (Ahmad, Abdullah, and Roslan, 2012).

Mohamad and Abdullah (2012) observed that capital structure has a negative impact on all of the organization's execution measures when they looked at changes in ROA, ROE, and ROCE against any progressions in various obligation and value proportions. These findings contradict previous research, which found that obligation has a positive impact on firm execution. Coleman (2007) found that if stores are well-managed, obligation has a positive effect on firm execution. In any case, the findings are steady with the "Pecking Order Theory," which states that debt is an expensive source of finance since growing debt levels reduces a firm's output. The reason for its high cost is due to floating, liquidation, and organization costs (Harris and Raviv, 1991).

Othman, Shahadan, and Manan (2009) investigated the connection between capital structure and firm execution in Malaysian minor and average businesses. According to the author, SMEs follow the Pecking Order Theory and always go for interior finance first, then obligation if all else fails. Because SMEs have a slim chance of obtaining value financing, the majority of capital is raised through internal financing and obligation finance. In terms of SMEs' ROA, the findings revealed that obligation had a negative impact. The creator's reasons are that in SME's the proportion of obligation is more in contrast to value financing, which is why the chapter 11 cost is high and also because speculators demand a high required rate of profits, which results in a high cost of capital and gainfulness and lower execution of the SMEs.

Decisions made regarding capital structure are of great importance in developing countries like Pakistan than they are in rich countries. By analyzing the ROA and ATR against various levels of obligation, such as sexually transmitted disease, LTD, and TD, Saeed and Badar (2013) investigated the effect of capital structure on company execution. In comparison to the bulk of previous assessments, the results were unusual. LTD has a fundamentally positive impact on the ROA, as evidenced by the results. Aghabeygzadeh and Akbarpour (2011) also discovered a positive impact, hence the results were excellent. TD and STD, on the other hand, were found to have a negative but not insignificant impact on the ROA. The inventor claims that this is because LTDs are typically issued by banks, and because of competition among banks, LTDs are typically obtained with the goal of lowering the required rate of return and more effectively utilizing assets. Sexually transmitted diseases have a higher needed rate of return, and because the money market in Pakistan isn't well-developed, this has a negative impact on the ROA (Saeed and Badar, 2013).

By observing variations in ROA and ROE against any progressions in the different obligation levels, Amjed (2011) investigates the effects of financing decisions on the performance of enterprises in Pakistan's Synthetic sector. The results showed that STD has a significant impact on both ROA and ROE; the creator's reasoning is that the lower necessary rate of return increases execution. LTD, on the other hand, was discovered to have a negative and significant influence on the presentation in both ROE and ROA; the reason offered for this negative effect is the high length and, as a result, high risk implied in LTD, and, as a result, greater required return pace. Chowdhury & Chowdhury (2010) discovered that debt had a favourable effect on performance. Because of the ineffective use of funds and the agency cost, TD has a negative and significant impact on performance. Memon, Bhutto, and Abbas (2012) discovered that agency costs resulted in lower business performance.

Khan (2012) presented experimental proof in his research regarding the impact of capital structure on firm execution for Pakistan's designing division. The study looked into the impact of different levels of responsibility on ROA, ROE, GPM, and Tobin's Q. Based on the findings, it was assumed that a large portion of the businesses rely on short-term bank advances (STD) rather than long-term obligation and even value because here and now advances are easily accessible and at a reasonable financing cost when compared to LTD, and the securities and up to a degree value markets are immature, leaving businesses to rely on STD. Because of unequal data and market wastefulness, creator noted, external finance is extremely expensive and is only used if all else fails, implying that Pakistani market organizations follow the "Pecking Order Theory." The effect of STDTA and TDTA on ROA, GPM, and Tobin's Q was negative and noteworthy. The findings supported Ebaid (2009)'s assertion that STD and TD have a negative impact on firm execution, in contrast to Dwilaksono (2010)'s finding that usage and STD had a good impact on association execution. LTDTA had a negative impact on Tobin's Q as well. All of the capital structure determinants had a negative impact on ROE, but it was insignificant. The firm's size has little bearing on ROA and GPM, but it does have a negative and significant impact on Tobin's Q.

Mansor, Mahmood, and Zakaria (2007) investigated the effect of capital structure on firm execution within the property and development industries, as well as a comparison between the two. The findings revealed that one industry is failing to meet expectations due to increased capital outfitting and obligation use, while another has somewhat low capital outfitting and obligation usage. According to the creators, engineers use less responsibility as compared to temporary workers and do well, but contractual workers use more responsibility but wastefully perform, which pushes up the cost of capital

and reduces benefits, resulting in low benefits in the long term. Furthermore, capital adaptation has a negative and significant impact on the Net Profit Margin and the Price-Profit Ratio. Umar, Tanveer, Aslam, and Sajid (2012) discovered that the NPM was negatively influenced at all levels of responsibility, whereas the P/E percentage was positively influenced by STD and significantly influenced by LTD. The creator's overall conclusion was that excessive use urges reduce benefits because obligation has resolved commitments regardless of whether the corporation has earned something or has caused a misfortune. Jenson and Meckling (1976) found that increasing organization costs consistently lowers execution and, as a result, the firm's productivity.

Hypothesis

H1: Debt-equity ratio has relationship with return on assets

H2: Debt-equity ratio has relationship with return on equity.

Theoretical Framework

Conceptual Framework

Figure 1

Dependent Variable

Return on Assets

Independent Variable

Debt/Equity Ratio

Dependent Variable

Return on Equity
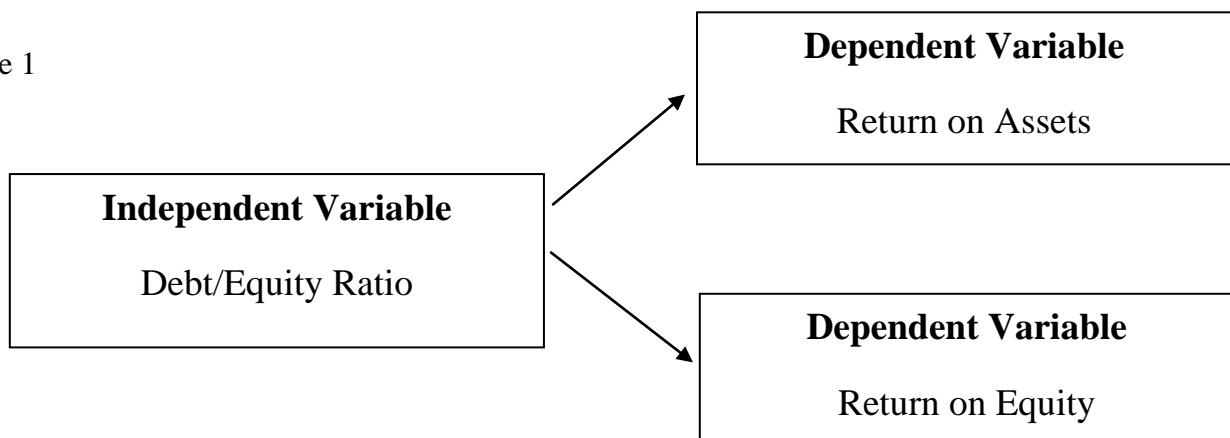
Variables	Definition	Source
ROA	"Return on assets (ROA) is a financial ratio that can help analyze the profitability of a company. ROA measures the amount of profit a company generates as a percentage relative to its total assets."	**(MCamish,2021)**
ROE	"Return on equity (ROE) is a measure of a company's financial performance that shows the relationship between a company's profit and the investor's return."	**(Bernstein,2018)**
Capital	"Capital is a broad term that can describe anything that confers value or benefit to its owner, such as a factory and its machinery, or the financial assets of a business or an individual."	**(Hargrave,2021)**
D/E Ratio	"The debt-to-equity (D/E) ratio is used to evaluate a company's financial leverage and is calculated by dividing a company's total liabilities by its shareholder equity."	**(Fernado,2021)**

CHAPTER 3

METHODOLOGY

3.0- Methodology

This chapter includes a full discussion of population, sample, and data analysis for evaluating the hypothesis relationship between variables. The interpretation of the results will be included as well.

3.1- Research Design

A research that is done on numerical data. Statistical approaches are used in collection of data like questionnaire, polls, surveys, or by using secondary or pre-existing data from annual books, newspapers, journals etc is known as Quantitative Research and that research is being used in current research as data will be collected in secondary form through annual reports of selected companies

3.2- Research Type

- Exploratory Research is usually done on online surveys with open ended questions.
- Causal Research is done to determine cause and effect relation between variables.
- Descriptive Research is a research which predetermined response helps to provide statistically correct data

This research is descriptive as the data collected through this research is statistically. It is quantitative in nature. The questions are structured, and the research is preplanned. The purpose of this research is to do research on given data not why this data was there or how could this data be changed. It is to simply state the data that is there.

3.3- Target Population & Sample Size

Non-financial companies that are listed on the Pakistan Stock Exchange are considered. There are about 404 companies listed in non-Financial Sector in Stock Exchange. Sample size is 78 companies and companies are selected on Random Basis.

The formula Used to measure Sample size is $n = N/(1+N(e)^2$;

where **N** represents total Population,

n represents Sample Size,

e Represents Precision

3.4- Selected Companies

The firms are selected on Random Bases. The Data is of 2018, 2019 & 2020 as this is the closest available data of all the firms. These companies are selected from different sectors within non-financial Sector.

Proportion of companies for sample size from each sector= (No. of companies in a sector/total population companies) *sample size.

Sectors	Number of observation	Proportion	Sample Size
Textiles	47	11.538462	9
Cable	16	3.8461538	3
Gas	26	6.4102564	5
Oil	16	3.8461538	3
Shoes	5	1.2820513	1
Miscellaneous	26	6.4102564	5
Glass	16	3.8461538	3
Food	26	6.4102564	5
Leather	5	1.2820513	1
Paper board	10	2.5641026	2
Chemical	36	8.974359	7
Pharmeutical	21	5.1282051	4
Fertilizer	16	3.8461538	3

Communication	10	2.5641026	2
Transport	5	1.2820513	1
Automobile	10	2.5641026	2
Engineering	21	5.1282051	4
Power	21	5.1282051	4
Tobacco	5	1.2820513	1
Cement	31	7.6923077	6
Sugar	26	6.4102564	5
Synthetic	5	1.2820513	1
Woolen	5	1.2820513	1
Total	404	100	78

3.5- Main Variables

Profitability and Capital Structure are the two most important variables. Profitability measures such as return on assets and return on equity would be employed, and the debt to equity ratio would be used to indicate the firms' leverage.

3.6- Analysis and Tests

In this study in order to get the result houseman test was implemented as this test detects and predict variables in a regression model. This test is usually apply on the panel data which is the data we are dealing with. Moreover, endogenous variables values are also determined through other variables that are included. In terms of panel data this test helps to chooses between fixed effect test as well as random effect test as a result it generates two hypothesis one is alternate hypothesis and the other is null hypothesis. If the null hypothesis is accepted it portrait that random effect test is eligible but if alternate

hypothesis is accepted it means fixed effect test is more eligible. Furthermore, this also determines correlation between unique errors and regressors. Stata 14.2 was used to run Hausman Test

Hausman Test
Firstly let's set Hypothesis

1. **Our Null Hypothesis is data is consistent at Random Effect**
2. **Our Alternate hypothesis is data is consistent at Fixed Effect**

H_0 =It is consistent under Random Effect

H_a =it is Consistent under Fixed Effect

We will reject alternate hypothesis if p value is greater than .05

Coefficients			
(b)	(B)	(b-B)	Sqrt(diag(V_b-V_B))
Fixed	Random	Difference	S.E

ROA	21.34823	16.58151	4.766722	2.453923
ROE	-9.436893	-9.410137	-.0267559	.2547268

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(2) = (b-B)'[(V_b-V_B)^(-1)](b-B)

=   4.08

Prob>chi2 =   0.1302

Since p Value is greater than 0.05 we reject alternate hypothesis

This means that Random effect is consistent.

Below is given the data of random effect test which further adds that it is consistent.

Random Effect Test ROA

Random effect test ran on Stata 14.2 to test return on assets effect on debt/equity ratio. The results are below:

Random-effects GLS regression

Number of observations   =   234

Group variable: Code	Number of groups = 78
R-sq:	Observation per group:
within = 0.7332	min = 3
between = 0.7399	avg = 3.0
overall = 0.7383	max = 3

Wald chi2(2)   =   641.75

Corr (u_i, X) = 0 (assumed)	Prob > chi2 = 0.0000

	DEqtyRato	Coef	Std. Err.	z	P>|z|	[95% Conf. Interval]
ROA	16.58151	2.357001	7.04	0.000	11.96188	21.20115
ROE	-9.410137	.3787812	-24.84	0.000	-10.15253	-8.667739
_cons	1.69519	.2981518	5.69	0.000	1.110823	2.279557

sigma_u   2.1388356

sigma_e   1.5010867

 rho   .66999103   (fraction of variance due to u_i)

Random Effect Test ROA

The positive value of Coefficient shows a positive relation between return on assets and debt to equity ratio, which means that by increasing the value of Debt and Equity ratio of firms, the return on assets of firms will also increase.

P value is less than .05 which means that it is statistically significant.

Random Effect ROE

The negative value of coefficient shows negative relation between return on equity and debt to equity ratio, which means by increasing debt to equity ratio return on equity, will decrease.

The result shows that hausman test will approve null hypothesis and reject alternate hypothesis.

CHAPTER 4

4.1- Result and Findings

The purpose of the research was to see how capital structure affected firm profitability. I used debt/equity as a capital structure measure and ROA, ROE as a profitability metric. The findings of this study show that the debt-to-equity ratio has a direct and significant impact on ROA, implying that firms should increase their debt-to-equity ratio to increase ROA, as was the case in (Memon, 2012). The study also discovered that the debt-to-equity ratio has a negative and significant impact on ROE, implying that as the D/E ratio rises, so does ROE. The dependent variable (ROA) varies as a result of the independent variable (debt to equity ratio).

The debt-to-equity ratio has a very significant but low moderate negative association with ROA. Furthermore, because the significance value is smaller than 0.01, the association between them is very significant. In a similar vein, the debt-to-equity ratio has a highly significant but low negative connection with ROE. Furthermore, because the significance value is smaller than 0.01, the association between them is very significant. It has also been observed that ROA and ROE have a considerable and highly significant positive connection. Furthermore, because the significance value is less than 0.01 for the association between them, it is extremely significant.

This study matches the hypotheses that were selected in theoretical framework. Debt/Equity Ratio has a quite significant impact on both ROE and ROA. These were our assumptions and the result matches this. So this means impact of Leverage on firm's profitability cannot be ignored. Hauseman test was used to verify the hypothesis among null and alternate. The value of helps us to determine that random effect test is consistent therefore we accepted null hypothesis and rejected alternate hypothesis.

These result match the studies of (J.J, 2004) (Durand, 1959) (Memon F Bhutto, 2012) they all got the same results and choose the same variables to measure effect of capital structure on profitability of

organizations in nonfinancial sector of Pakistan. This shows that even today in year 2018 the impact of study remains same.

The results show that to get economic stability Pakistan must encourage debt financing for firms. They can do that by providing low interest loans, or making regulations in private banks to lower their interest rates. As found in our study firms need an appropriate capital structure to get maximum output.

Pakistan has had its fair share of firms of this sectors loss due to lack of investors. It could be because of the economy's instability or a lack of knowledge among businesses about the impact of capital structure on profitability. Because it is now clear that a company's capital structure has a major impact on profitability (debt-equity ratio on ROA and ROE), the companies should try to bold enough to get debt financing.

CHAPTER 5

5.1- Conclusion and Future Recommendations

Every country needs a stable economic system. Pakistan is trying to get economic stability, for that it needs its financial and non-financial sector to be working in most proficient way possible to get maximum output possible. The study's main goal was to investigate the impact of capital structure on non-financial sector performance in Pakistan. Non-financial enterprises listed on the Pakistan Stock Exchange is the sample size of this study. Capital structure has always been a significant topic, whether it's how to determine it or how it affects company profitability. The best method for Pakistan to go about it is to strengthen its financial and non-financial sectors, which will enhance employment possibilities and overall product quality, as well as raise government revenue by more profit paying more tax. Imports from other countries would fall while exports rose. As a result, the purpose of this research is to assist the parties involved in determining the optimum approach to manage their capital structure in order to maximize profitability. Return on equity (ROE) and Return on assets (ROA) are used to evaluate a company's profitability, whilst the Debt to Equity Ratio is used to evaluate its capital structure. Advantages of getting Maximum from non-financial firms include:

- Decrease in unemployment
- Increase in variety of goods.
- Government will be able to pay back loans.
- Appreciation of currency
- New investors will invest due to economic stability

Pakistan has had its history of undue terrorists' attack and power shortages. But now the conditions are improving. Future investors can see that it's now a safe country and it is one of N11 countries (Grant, 2011). The purpose of the research was to see how capital structure affected firm profitability. I used

debt/equity as a capital structure metric and ROA ROE as a profitability metric. The findings of this study show that the debt-to-equity ratio has a direct and significant impact on ROA, implying that firms should increase their debt-to-equity ratio to increase ROA, as was the case in (Memon, 2012). The study also discovered that the debt-to-equity ratio has a negative and significant impact on ROE, implying that as the D/E ratio rises, ROE would decreases.

Pakistan needs a strong economic system for that it needs a strong non-financial sector. To make the non-financial Sector strong they need to increase their profitability. One way to do that is by increasing Leverage of the firms. It is seen that leverage has direct impact on profitability of firms. It is recommended to the government to encourage debt financing. One way to do that is by lowering interest rates.

5.2- Limitations

Due to lack of time and insufficient funds I was not able to take into account many firms. My sample size was small and only took non-financial sector of Pakistan. To get more thorough research future researchers must research on both sectors of PSX as registered in SECP. To be able to give Pakistan a more proficient research on getting economic stability

As my study is in contradiction with the study of (Roy Badar, 2013) that told the capital structure has no significant effect on profitability. Future researches might be able to get more on this topic and might be able to get best possible results possible.

This research should be done by taking every single firm in non-financial sector of Pakistan so to help each and every firm. Every firm has different capital structure so it's only fair that future researchers choose each and every firm.

Annexures

sr no	Name of Company
1	AKD Capital Limited
2	Al - Khair Gadoon Limited
3	Arpak International Investments Limited
4	Diamond Industries Limited
5	EcoPack Limited
6	Balochistan Glass Limited
7	Frontier Ceramics Limited
8	Ghani Global Glass Limited
9	Shabbir Tiles & Ceramics Limited
10	Tariq Glass Industries Limited
11	Al Shaheer Corporation Limited
12	Clover Pakistan Limited
13	Goodluck Industries Limited
14	Gillette Pakistan Limited

15	Ismail Industries Limited
16	Mitchell's Fruit Farms Limited
17	Murree Brewery Company Limited
18	Leather Up Limited
19	Punjab Oil Mills Limited
20	Century Paper & Board Mills Limited
21	Cherat Packaging Limited
22	Merit Packaging Limited
23	Colgate - Palmolive (Pakistan) Limited
24	Archroma Pakistan Limited
25	Berger Paints Pakistan Limited
26	Biafo Industries Limited
27	Descon Oxychem Limited
28	Dynea Pakistan Limited
29	Ghani Gases Limited
30	ICI Pakistan Limited
31	Ferozsons Laboratories Limited
32	IBL Healthcare Limited
33	Otsuka Pakistan Limited
34	The Searle Company Limited

35	Wyeth Pakistan Limited
36	Fauji Fertilizer Bin Qasim Limited
37	Fauji Fertilizer Company Limited
38	Arif Habib Corporation Limited
39	Engro Fertilizers Limited
40	Hum Network Limited
41	NetSol Technologies Limited
42	Pak Datacom Limited
43	Pakistan International Bulk Terminal Limited
44	Pakistan National Shipping Corporation
45	The Climax Engineering Company Limited
46	Pakistan Cables Limited
47	Siemens (Pakistan) Engineering Co. Limited
48	Agriautos Industries Limited
49	Atlas Battery Limited
50	Baluchistan Wheels Limited
51	Exide Pakistan Limited
52	Ghani Automobile Industries Limited

53	Ghandhara Industries Limited
54	Ghandhara Nissan Limited
55	Honda Atlas Cars (Pakistan) Limited
56	Hinopak Motors Limited
57	Indus Motor Company Limited
58	Bolan Castings Limited
59	Crescent Steel & Allied Products Limited
60	Mari Petroleum Company Limited
61	Oil & Gas Development Company Limited
62	Attock Petroleum Limited
63	Burshane LPG (Pakistan) Limited
64	Attock Cement Pakistan Limited
65	Bestway Cement Limited
66	Cherat Cement Company Limited
67	Dewan Cement Limited
68	D. G. Khan Cement Company Limited
69	Al-Abbas Sugar Mills Limited
70	Adam Sugar Mills Limited
71	Associated Services Limited
72	Nishat Mills Limited

sr no	Name of Company		
73	Quetta Textile Mills Limited			
74	Redco Textiles Limited			
75	Reliance Weaving Mills Limited			
76	Sapphire Textile Mills Limited			
77	Zahidjee Textile Mills Limited			
78	Sapphire Fibres Limited			

List of ROA of the selected Companies

This Is ROA of All Firms

sr no	Name of Company	ROA	ROA	ROA
1	AKD Capital Limited	3.3%	3.3%	3.3%
2	Al - Khair Gadoon Limited	1.7%	-0.7%	1.6%
3	Arpak International Investments Limited	3.9%	2.4%	3.9%
4	Diamond Industries Limited	3.7%	-5.2%	3.6%
5	EcoPack Limited	6.2%	1.6%	6.1%
6	Balochistan Glass Limited	-25.3%	-23.0%	-25.0%
7	Frontier Ceramics Limited	0.2%	1.8%	0.2%
8	Ghani Global Glass Limited	-3.0%	0.1%	-3.0%
9	Shabbir Tiles & Ceramics Limited	-2.5%	-1.3%	-2.5%
10	Tariq Glass Industries Limited	5.7%	5.4%	5.7%

11	Al Shaheer Corporation Limited	7.4%	4.5%	7.3%
12	Clover Pakistan Limited	7.7%	2.8%	7.6%
13	Goodluck Industries Limited	0.4%	1.7%	0.4%
14	Gillette Pakistan Limited	-2.8%	7.3%	-2.8%
15	Ismail Industries Limited	4.9%	4.5%	4.9%
16	Mitchell's Fruit Farms Limited	-0.9%	2.0%	-0.9%
17	Murree Brewery Company Limited	12.2%	11.7%	12.1%
18	Leather Up Limited	8.7%	9.5%	8.6%
19	Punjab Oil Mills Limited	12.0%	12.2%	11.9%
20	Century Paper & Board Mills Limited	2.2%	-1.5%	2.2%
21	Cherat Packaging Limited	19.8%	16.5%	19.6%
22	Merit Packaging Limited	0.1%	0.9%	0.1%
23	Colgate - Palmolive (Pakistan) Limited	20.8%	19.3%	20.6%
24	Archroma Pakistan Limited	20.0%	13.0%	19.8%
25	Berger Paints Pakistan Limited	5.0%	3.1%	5.0%
26	Biafo Industries Limited	27.4%	28.6%	27.1%
27	Descon Oxychem Limited	1.8%	-4.5%	1.8%
28	Dynea Pakistan Limited	11.5%	8.1%	11.4%
29	Ghani Gases Limited	3.3%	4.4%	3.3%
30	ICI Pakistan Limited	9.4%	8.0%	9.3%

31	Ferozsons Laboratories Limited	37.3%	17.1%	36.9%
32	IBL Healthcare Limited	15.3%	19.2%	15.2%
33	Otsuka Pakistan Limited	-7.2%	-9.4%	-7.1%
34	The Searle Company Limited	18.3%	17.6%	18.2%
35	Wyeth Pakistan Limited	5.8%	1.9%	5.7%
36	Fauji Fertilizer Bin Qasim Limited	2.1%	6.8%	2.1%
37	Fauji Fertilizer Company Limited	13.1%	20.9%	13.0%
38	Arif Habib Corporation Limited	3.5%	11.2%	3.5%
39	Engro Fertilizers Limited	8.9%	14.3%	8.8%
40	Hum Network Limited	16.6%	26.8%	16.4%
41	NetSol Technologies Limited	0.8%	-2.9%	0.8%
42	Pak Datacom Limited	3.4%	8.0%	3.4%
43	Pakistan International Bulk Terminal Limited	0.2%	1.0%	0.2%
44	Pakistan National Shipping Corporation	-0.3%	2.2%	-0.3%
45	The Climax Engineering Company Limited	-8.2%	-7.7%	-8.1%
46	Pakistan Cables Limited	5.3%	4.5%	5.2%
47	Siemens (Pakistan) Engineering Co. Limited	14.4%	-4.3%	14.3%
48	Agriautos Industries Limited	13.0%	13.7%	12.9%

49	Atlas Battery Limited	19.1%	18.8%	19.0%
50	Baluchistan Wheels Limited	11.6%	8.0%	11.5%
51	Exide Pakistan Limited	5.5%	6.0%	5.5%
52	Ghani Automobile Industries Limited	-21.2%	1.5%	-21.0%
53	Ghandhara Industries Limited	14.6%	6.7%	14.5%
54	Ghandhara Nissan Limited	13.5%	14.2%	13.4%
55	Honda Atlas Cars (Pakistan) Limited	22.2%	22.7%	21.9%
56	Hinopak Motors Limited	11.6%	13.1%	11.5%
57	Indus Motor Company Limited	20.1%	18.1%	19.9%
58	Bolan Castings Limited	2.8%	3.9%	2.8%
59	Crescent Steel & Allied Products Limited	10.3%	2.0%	10.2%
60	Mari Petroleum Company Limited	10.3%	8.6%	10.2%
61	Oil & Gas Development Company Limited	10.3%	15.8%	10.2%
62	Attock Petroleum Limited	12.7%	11.0%	12.5%
63	Burshane LPG (Pakistan) Limited	-0.5%	5.9%	-0.5%
64	Attock Cement Pakistan Limited	20.2%	18.0%	20.0%
65	Bestway Cement Limited	15.4%	13.9%	15.3%
66	Cherat Cement Company Limited	9.2%	13.6%	9.1%
67	Dewan Cement Limited	6.0%	2.9%	5.9%
68	D. G. Khan Cement Company Limited	10.6%	10.2%	10.5%

69	Al-Abbas Sugar Mills Limited	14.0%	14.0%	13.8%
70	Adam Sugar Mills Limited	5.5%	-2.8%	5.4%
71	Associated Services Limited	-27.0%	2.5%	-26.7%
72	Nishat Mills Limited	4.7%	3.9%	4.6%
73	Quetta Textile Mills Limited	-18.7%	-3.5%	-18.5%
74	Redco Textiles Limited	-4.9%	-1.2%	-4.9%
75	Reliance Weaving Mills Limited	0.0%	-1.0%	0.0%
76	Sapphire Textile Mills Limited	4.6%	3.7%	4.6%
77	Zahidjee Textile Mills Limited	4.1%	3.9%	4.0%
78	Sapphire Fibres Limited	5.3%	4.6%	5.3%

List of ROE of the selected Companies

This Is ROE of the companies

sr no	Name of Company	ROE	ROE	ROE
1	AKD Capital Limited	3.8%	3.8%	3.8%
2	Al - Khair Gadoon Limited	4.2%	-2.1%	4.2%
3	Arpak International Investments Limited	4.0%	2.4%	4.0%
4	Diamond Industries Limited	6.9%	-11.7%	6.7%
5	EcoPack Limited	26.5%	9.7%	25.9%
6	Balochistan Glass Limited	16.5%	16.9%	16.2%
7	Frontier Ceramics Limited	1.2%	9.3%	1.2%

8	Ghani Global Glass Limited	-5.6%	0.3%	-5.5%
9	Shabbir Tiles & Ceramics Limited	-6.1%	-3.0%	-6.0%
10	Tariq Glass Industries Limited	15.7%	15.1%	15.4%
11	Al Shaheer Corporation Limited	10.3%	20.7%	10.1%
12	Clover Pakistan Limited	7.9%	2.9%	7.8%
13	Goodluck Industries Limited	2.8%	11.1%	2.7%
14	Gillette Pakistan Limited	-4.1%	13.9%	-4.1%
15	Ismail Industries Limited	16.9%	16.1%	16.7%
16	Mitchell's Fruit Farms Limited	-2.3%	4.7%	-2.2%
17	Murree Brewery Company Limited	20.0%	20.7%	19.8%
18	Leather Up Limited	24.1%	24.7%	23.9%
19	Punjab Oil Mills Limited	31.8%	36.9%	31.4%
20	Century Paper & Board Mills Limited	5.6%	-3.7%	5.5%
21	Cherat Packaging Limited	28.0%	29.6%	27.7%
22	Merit Packaging Limited	0.9%	4.2%	0.9%
23	Colgate - Palmolive (Pakistan) Limited	26.7%	24.5%	26.4%
24	Archroma Pakistan Limited	32.2%	23.7%	31.9%
25	Berger Paints Pakistan Limited	22.8%	17.4%	22.5%
26	Biafo Industries Limited	61.7%	61.2%	61.1%
27	Descon Oxychem Limited	3.0%	-31.5%	3.0%

28	Dynea Pakistan Limited	14.8%	12.5%	14.6%
29	Ghani Gases Limited	6.0%	14.2%	6.0%
30	ICI Pakistan Limited	19.9%	16.7%	19.7%
31	Ferozsons Laboratories Limited	52.2%	27.7%	51.7%
32	IBL Healthcare Limited	19.4%	24.9%	19.2%
33	Otsuka Pakistan Limited	-384.3%	-103.0%	-380.5%
34	The Searle Company Limited	25.8%	30.9%	25.5%
35	Wyeth Pakistan Limited	9.3%	2.8%	9.2%
36	Fauji Fertilizer Bin Qasim Limited	10.6%	28.4%	10.5%
37	Fauji Fertilizer Company Limited	42.9%	62.6%	42.5%
38	Arif Habib Corporation Limited	4.5%	15.1%	4.4%
39	Engro Fertilizers Limited	22.1%	35.3%	21.9%
40	Hum Network Limited	26.5%	44.7%	26.3%
41	NetSol Technologies Limited	1.0%	-3.5%	1.0%
42	Pak Datacom Limited	4.6%	10.8%	4.6%
43	Pakistan International Bulk Terminal Limited	0.3%	1.1%	0.3%
44	Pakistan National Shipping Corporation	-1.5%	10.9%	-1.5%
45	The Climax Engineering Company Limited	-57.0%	-52.3%	-56.5%

46	Pakistan Cables Limited	14.3%	11.1%	14.2%
47	Siemens (Pakistan) Engineering Co. Limited	40.6%	-16.5%	40.2%
48	Agriautos Industries Limited	14.6%	15.4%	14.5%
49	Atlas Battery Limited	30.0%	31.5%	29.7%
50	Baluchistan Wheels Limited	13.1%	8.9%	12.9%
51	Exide Pakistan Limited	14.0%	16.7%	13.9%
52	Ghani Automobile Industries Limited	-53.2%	2.4%	-52.7%
53	Ghandhara Industries Limited	61.0%	38.7%	60.4%
54	Ghandhara Nissan Limited	34.5%	39.9%	34.1%
55	Honda Atlas Cars (Pakistan) Limited	45.2%	61.8%	44.8%
56	Hinopak Motors Limited	36.8%	38.7%	36.0%
57	Indus Motor Company Limited	42.3%	37.9%	41.5%
58	Bolan Castings Limited	5.8%	9.8%	5.7%
59	Crescent Steel & Allied Products Limited	17.0%	2.6%	16.7%
60	Mari Petroleum Company Limited	36.4%	49.1%	35.7%
61	Oil & Gas Development Company Limited	12.8%	19.7%	12.5%
62	Attock Petroleum Limited	27.3%	24.2%	26.7%
63	Burshane LPG (Pakistan) Limited	-1.5%	17.9%	-1.5%
64	Attock Cement Pakistan Limited	28.2%	24.7%	27.7%

65	Bestway Cement Limited	29.8%	34.1%	29.2%
66	Cherat Cement Company Limited	15.7%	16.0%	15.4%
67	Dewan Cement Limited	18.2%	10.4%	17.8%
68	D. G. Khan Cement Company Limited	13.6%	12.2%	13.4%
69	Al-Abbas Sugar Mills Limited	20.0%	22.2%	19.6%
70	Adam Sugar Mills Limited	15.4%	-10.1%	15.1%
71	Associated Services Limited	-27.4%	3.3%	-26.8%
72	Nishat Mills Limited	6.1%	5.1%	6.0%
73	Quetta Textile Mills Limited	-335.5%	-18.0%	-328.9%
74	Redco Textiles Limited	-25.7%	-4.8%	-25.1%
75	Reliance Weaving Mills Limited	0.2%	-4.6%	0.1%
76	Sapphire Textile Mills Limited	9.9%	7.2%	9.7%
77	Zahidjee Textile Mills Limited	9.7%	8.4%	9.5%
78	Sapphire Fibres Limited	9.3%	6.7%	9.1%

List of Debt-Equity Ratio of selected companies

This is Debt/Equity ratio of Firms

sr no	Name of Company	D/E	D/E	D/E
1	AKD Capital Limited	13.8%	12.8%	14.0%

2	Al - Khair Gadoon Limited	149.3%	191.1%	152.3%
3	Arpak International Investments Limited	1.3%	1.3%	1.4%
4	Diamond Industries Limited	82.9%	126.9%	84.6%
5	EcoPack Limited	318.6%	517.3%	325.1%
6	Balochistan Glass Limited	-161.3%	-173.4%	-164.6%
7	Frontier Ceramics Limited	391.2%	418.6%	399.2%
8	Ghani Global Glass Limited	83.9%	151.0%	85.7%
9	Shabbir Tiles & Ceramics Limited	136.6%	135.0%	139.4%
10	Tariq Glass Industries Limited	168.2%	178.4%	171.6%
11	Al Shaheer Corporation Limited	36.4%	360.1%	37.2%
12	Clover Pakistan Limited	3.0%	0.7%	3.0%
13	Goodluck Industries Limited	539.1%	565.3%	555.6%
14	Gillette Pakistan Limited	47.3%	90.7%	48.8%
15	Ismail Industries Limited	236.2%	259.1%	243.5%
16	Mitchell's Fruit Farms Limited	156.8%	138.9%	161.6%
17	Murree Brewery Company Limited	61.8%	76.6%	63.7%
18	Leather Up Limited	173.5%	159.6%	178.8%
19	Punjab Oil Mills Limited	158.8%	203.2%	163.7%
20	Century Paper & Board Mills Limited	151.4%	155.6%	156.1%
21	Cherat Packaging Limited	40.0%	79.3%	41.3%

22	Merit Packaging Limited	541.4%	373.2%	558.0%
23	Colgate - Palmolive (Pakistan) Limited	27.6%	27.5%	28.5%
24	Archroma Pakistan Limited	59.4%	81.8%	61.2%
25	Berger Paints Pakistan Limited	341.2%	466.2%	351.7%
26	Biafo Industries Limited	121.7%	114.2%	125.4%
27	Descon Oxychem Limited	66.4%	603.2%	68.4%
28	Dynea Pakistan Limited	27.8%	54.7%	28.6%
29	Ghani Gases Limited	78.3%	226.9%	80.7%
30	ICI Pakistan Limited	108.8%	109.7%	112.2%
31	Ferozsons Laboratories Limited	39.0%	62.4%	40.2%
32	IBL Healthcare Limited	25.6%	29.7%	26.4%
33	Otsuka Pakistan Limited	5112.4%	1001.1%	5268.9%
34	The Searle Company Limited	39.5%	75.4%	40.7%
35	Wyeth Pakistan Limited	59.1%	48.3%	60.9%
36	Fauji Fertilizer Bin Qasim Limited	388.2%	316.0%	400.1%
37	Fauji Fertilizer Company Limited	220.4%	199.2%	227.2%
38	Arif Habib Corporation Limited	25.7%	34.5%	26.5%
39	Engro Fertilizers Limited	143.7%	147.8%	148.1%
40	Hum Network Limited	58.4%	66.9%	60.2%
41	NetSol Technologies Limited	23.1%	21.3%	23.8%

42	Pak Datacom Limited	34.9%	35.6%	36.0%
43	Pakistan International Bulk Terminal Limited	49.5%	2.7%	51.0%
44	Pakistan National Shipping Corporation	409.8%	393.8%	422.4%
45	The Climax Engineering Company Limited	577.1%	575.2%	594.8%
46	Pakistan Cables Limited	166.8%	145.0%	171.9%
47	Siemens (Pakistan) Engineering Co. Limited	176.3%	287.9%	181.7%
48	Agriautos Industries Limited	12.0%	12.5%	12.3%
49	Atlas Battery Limited	55.1%	67.6%	56.7%
50	Baluchistan Wheels Limited	12.5%	10.9%	12.9%
51	Exide Pakistan Limited	149.6%	177.4%	154.2%
52	Ghani Automobile Industries Limited	146.0%	59.7%	150.5%
53	Ghandhara Industries Limited	308.2%	479.1%	317.6%
54	Ghandhara Nissan Limited	150.3%	180.3%	154.9%
55	Honda Atlas Cars (Pakistan) Limited	101.0%	172.0%	104.1%
56	Hinopak Motors Limited	208.6%	196.8%	212.9%
57	Indus Motor Company Limited	106.1%	109.7%	108.2%
58	Bolan Castings Limited	102.3%	152.6%	104.3%
59	Crescent Steel & Allied Products Limited	62.0%	33.1%	63.3%

60	Mari Petroleum Company Limited	246.0%	471.1%	251.1%
61	Oil & Gas Development Company Limited	22.7%	25.1%	23.2%
62	Attock Petroleum Limited	110.9%	120.6%	113.2%
63	Burshane LPG (Pakistan) Limited	211.2%	205.3%	215.5%
64	Attock Cement Pakistan Limited	37.3%	36.9%	38.1%
65	Bestway Cement Limited	89.7%	144.9%	91.6%
66	Cherat Cement Company Limited	67.8%	17.9%	69.2%
67	Dewan Cement Limited	198.0%	261.9%	202.1%
68	D. G. Khan Cement Company Limited	26.3%	19.4%	26.8%
69	Al-Abbas Sugar Mills Limited	41.0%	58.3%	41.9%
70	Adam Sugar Mills Limited	174.6%	266.2%	178.2%
71	Associated Services Limited	0.4%	30.3%	0.4%
72	Nishat Mills Limited	29.2%	32.8%	29.8%
73	Quetta Textile Mills Limited	1641.3%	410.5%	1674.8%
74	Redco Textiles Limited	407.3%	311.6%	415.6%
75	Reliance Weaving Mills Limited	367.0%	380.6%	374.5%
76	Sapphire Textile Mills Limited	111.1%	95.5%	113.4%
77	Zahidjee Textile Mills Limited	132.9%	113.2%	135.6%
78	Sapphire Fibres Limited	71.2%	44.0%	72.6%

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