

A Study That Identify the Relationship between the Financial Leverage and Firms Profitability: Empirical Evidence from Oil and Gas Companies of Pakistan Listed In KSE

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Abstract— this study identifies the relationship between the financial leverage and Firms profitability of Oil and Gas marketing companies of Pakistan listed on Karachi Stock Exchange (KSE). The study was identified 05 companies listed on the KSE for the period starting from year 2007 to 2012. The Degree of Operating Leverages (DOL), Degree of Financial Leverage (DFL) & Degree of Combined Leverage (DCL) are the independent variables and Earning per Share (EPS) is the dependent variable for this study. The present study used the correlation coefficient and linear regression to measure the variables. The findings revealed that there is no significant relationship of DOL, DFL and DCL with EPS. Thus, fixed operating expenses and the financing mix decisions of the firm are not significantly impact the earning capacity of the listed companies in KSE.

Keywords: Degree of Operating Leverage, Degree of Financial Leverage, Degree of Combined Leverage.

1 INTRODUCTION

A perceived idea, that there is a relationship between the firms' performance and financial leverage. In existing financial studies, financial leverage is defined as the sum (amount) of money or debt that the company required to finance its needs (Hampton, 2000) or it's a measure that what ratio of debt and equity a firm can use. The exploitation of fixed expense and owner's equity in the capital structure is termed as gearing or financial leverage (Dare and Sola, 2010). Douglass said that financial leverage has a tendency to change risks and yields in the companies. Thus, capital structure is tightly linked with financial leverage. Financial leverage means a borrowing (debt) or loan the excess of which are reinvested in order get a greater return. If the interest paid on the loan is less than the firm's return on asset (ROA), then its overall return on equity (ROE) will be greater if it did not borrow (Laurent, 2005). Contrary, if the firm's paid greater interest than ROA, then its ROE will be less than if it did not borrow. (Andy et al., 2002) said financial leverage accounts for greater returns to the shareholder, but the potential loss is also higher, if the investment is not worthy and the firm still needs to pay the accrued interest and principal amount of loan. This comprises of financial risk (Pandey; 2005). Damouri (2013) stated that the risk can be

measured through leverage ratios and there are a variety of measures of the capital structure in which most essentials are book value measures, market value measures and semi-market value measures. EPS or profit after tax affected by financial leverage Pandey (2010).

Miller and Modigliani (1958), conclude that capital structure of firms' is not related to firm value. However, Meckling and Jensen (1976) argued on this point and proposed that the corporate performance is affected because leverage has an impact in capital structure of firms' and influenced financial decisions. The research topic the impact of financial leverage on firm performance has been quite debatable and relevant to the literature of corporate finance. Previous empirical researches have showed vague results on this topic for example; Meckling and Jensen (1976), Simerly and Li (2000), Myers (1977), Fox and Balakrishnan (1993), Kinsman and Newman (1999), Pushner (1995), Gleason et al. (2000), Chhibber and Majumdar (1999), suggested a negative Co-rrrelation exists between firm's performance and financial leverage. But on the other hand Chatterjee and Lubatkin (1994), Spence (1985), Jensen (1986), Nickell and Nicolitsas (1999), Ghosh et al. (2000) Nickell et al. (1997) found positive Co-rrrelation. Furthermore, some other

researchers like Raviv and Harris (1991) and Ghosh (1992) came out with a mix relationship and conflicting findings between firm's performance and leverage. So far, this relationship varies country to country stated by current studies of (González 2013) and (Weill 2008).

1.1 Problem Statement:

The firms' expected to increase its profitability, for this the companies seek out the ways to enhance its performance through proper utilization of its capital structure. The study aimed at identifying the relationship between financial leverage and the financial performance/profitability of the Oil and Gas companies of Pakistan listed in Karachi Stock Exchange (KSE).

1.2 Research Question:

- To what extent does financial leverage influence firm's profitability of listed oil and gas companies?
- How the financial leverage does affect the firm's performance/profitability?
- Does the position of DCL, DFL, and DOL differ?

1.3 Significance of the Study:

There are very few publications on the topic of relationship of financial leverage and firm's performance in oil and gas sector of Pakistan. So, it's an opportunity to investigate their relationship. In Pakistan financial leverage used by firms to financed their projects/needs but they are unaware of its effect. This study will be very useful for the firms to consider the capacity they have to borrow, and to identify their financial needs, how shareholders' return can be generate and eventually for economic development of Pakistan.

1.4 Objectives of the Study:

Objective of the study is to identify the relationship between financial leverage and firm's profitability and to examine whether financial leverage create an impact on financial performance by taking empirical evidence from listed oil and gas companies of Pakistan.

1.5 Limitations of the Study:

- The study addresses only to the oil and gas companies of Pakistan.
- Due to the shortage of time, only secondary data analysis is done.
- While conducting the study some of the other external factors that effects leverage are not taken into consideration.

1.6 Scope of the Study:

The study aims to provide possible and realistic outcomes that will be useful for future researchers in Pakistan to take guidance in order to get the clear picture. The outcomes of the study is not limited to only oil and gas companies but can also be applied to other sectors of Pakistan. Furthermore, the managers of various companies can also take advantage from the study.

2 LITERATURE REVIEW

(V.Kalpna, 2014) took 3 listed Steel Companies in Bombay Stock Exchange (BSE) to analyze the linkage between profitability and leverage. The analysis was done by applying Correlation, Analysis of Variance, Standard Deviation etc. The study showed that the profitability is affected by leverage, because it increases the shareholder's wealth. Futher, there is a negative relation between EPS and DCL, EPS and DOL, EPS and DFL. Moreover, it was found that profitability would reduce due to greater usage of fixed cost expense and debt.

(Elangkumaran.P, August 2013), investigated what impact does leverage create on share price and earnings. Linear regression and corelation coefficient was applied on a sample of 20 listed companies on Colombo Stock Exchange (CSE) Sri Lanka. The result showed that there is no relationship of EPS with DCL, DFL and DOL and it can be explained by only 4 percent of earnings.

(Enekwe, 2014), discussed the relationship of leverage and performance of the existing pharmaceutical companies of Nigeria, 12 years data of 3 different companies has been collect-

ed and the data was evaluated through regressions and Pearson correlation, which indicates the negative relationship of debt-equity ratio and debt ratio with Return on Assets. whereas, a positive relationship exists between interest coverage ratio and Return on Assets.

(Rehman, 2013) investigated the effect of financial leverage on firms performance for this annual reports of 35 sugar companies of Karachi Stock Exchange was evaluated. Correlation was applied on the study and it was found that positive relationship exist between debt equity ratio and ROA and sales growth and negative relationship with EPS and Net Profit margin and ROE.

(Raza, September 2013) used panel data and applied regression on the annual reports of 482 non-financial listed firms of Karachi Stock Exchange for the purpose of seeking out the capital structure's determinants. There is a negative link between leverage and performance, because imposing high debt lowers the firms' profitability.

Haque A. (2014), studied that how corporate investment of Pakistani firms affected by financial leverage. The study analyzed the panel data of 400 non - financial firms belonging to different sectors ranging from 1998 - 2011. The study concluded the negative relationship between corporate investment and leverage which highlighted that managers are restricted to overinvest in Pakistani firm if the leverage is increased.

(Rayan, 2008), conducted a research to evaluate the relationship of firm value and leverage, either it is positively effected or negatively in South African context, for this regression was applied on a sample of 113 listed companies in Johannesburg Stock Exchange (JSE) from different industries to have an overall picture. the result revealed a negative relationship of leverage and firm value.

Tempel, E. (2011), highlighted the relation of investment and leverage, indicating the extent and existence of the agency problems between the years 2006-2010. The focuses additionally rise on the the agency problems and shareholdings of managers. For the purpose of analysis qualitative and quantitative research was done on a sample of 68 (Danish Listed Compa-

nies) and regression and co-relation was applied. The result indicated that the agency problems can be detected by the relationship of leverage and investment. Future researchers should focus on agency problems, because it may vary according to the firm.

Asif, A., Rasool, W., & Kamal, Y. (2011), examined the relationship of leverage and dividend policy. Descriptive analysis was done and corelation and regression both were applied on the sampl of 403 listed companies in (KSE) and the time frame was (2002-2008). Result showed that the dividend policy in Pakistani firms was greatly affected by the level of debt. Furthermore, a negative relationship was found between financial leverage and dividend payout, because the firms having high-debt pay less dividend.

(Mehta, June 2014), highlighted that how leverage influenced the shareholder's return. Panel data was used and random effect model and fixed effect model was applied on all 35 sugar listed companies in Karachi Stock Exchange. It was found that leverage influence the shareholder's return.

Aivazian, V. A., Ge, Y., & Qiu, J. (2005), examined that how leverage creates impact on firm's investment. Data was collected from publically traded firms in Canada and fixed effect regression and randon effect model was applied. The result revealed that leverage affected the firm's investment decisions negatively, either overinvestment on underinvestment incentives.

(Naemullah, March 2014), studied that how leverage creates impact on firm's investment. He gathered data through publically traded firms in Pakistani market. Common effect model was applied and regression equation was used on a sample of 180 listed firms. It was discovered that leverage affected the firm's investment decisions negatively, either overinvestment incentives or underinvestment in Pakistani context. Furthermore, firms in Pakistan financed their NPV projects with their internal funds.

(Saini, December-2012), said that financial risk can be measured with the level of financial leverage. Shareholders' get high ROE from the firms who have greater financial leverage,

but on the other hand such firms exposed to greater financial risk in case of having low ROA. T-test and Co-relation has been applied on a sample of 7 listed firms in India to evaluate that how leverage influence market capitalization and shareholders' return and what relationship exists between them. A positive relationship of shareholder return and leverage and a negative relationship with market capitalization was found. T-test revealed that, financial leverage creates no significant impact on shareholders' return, but having impact on market capitalization of telecommunication sector in India.

Emamalizadeh, M., Ahmadi, M., & Pouyamanesh, J. (2013), studied the preliminary relationship of financial leverage and dividend policy. Co-relation was applied on a sample of 33 food listed companies in Tehran Stock Exchange, study further followed by applying random and fixed effect model and regression analysis on panel data. The result revealed that in Food industry of Tehran the leverage has positively affected the changes income and dividend yield, but no significant relationship exists with DPS. The only positive relationship exists if dividend yield is greater than debt ratio.

Shabnam Yasemia, F. M. (2014) conducted a study to examine the relationship of firm's growth and financial leverage. Systematic elimination method was used on a sample of 40 listed companies from different sectors in Tehran Stock Exchange. There was no significant relationship found between firms' growth and leverage, but a negative relationship was found with strength.

3 METHODOLOGY

3.1 Research Design

The present study implements descriptive and an analytical

the existing relationship among variables. The study seeks to analyze and understand the leverage effects on profitability of sample listed companies by means of statistical tools.

3.2 Hypothesis:

Hypothesis 1

Ho: DOL is not correlated with EPS.

H1: DOL is correlated with EPS.

Hypothesis 2

Ho: DFL is not correlated with EPS.

H2: DFL is correlated with EPS.

Hypothesis 3

Ho: DCL is not correlated with EPS.

H3: DCL is correlated with EPS.

Hypothesis 4

Ho: The DOL position of the listed oil and gas companies in KSE does not differ.

H4: The DOL position of the listed oil and gas companies in KSE does differ.

Hypothesis 5

Ho: The DFL position of the listed oil and gas companies in KSE does not differ.

H5: The DFL position of the listed oil and gas companies in KSE does differ.

Hypothesis 6

Ho: The DCL position of the listed oil and gas companies in KSE does not differ.

H6: The DCL position of the listed oil and gas companies in KSE does differ.

Hypothesis 7

Ho: There is no effect of leverage on EPS.

H7: There is an effect of leverage on EPS.

3.3 Data type and Sources:

The study is solely based on secondary data. The data was collected from the annual reports of sample companies. In addition other data was collected from various publications

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research design. The study focuses on to identify and explain

related to the topic. The collected data was analyzed in order to make the study helpful to the planners, researchers, academicians and policy makers. Correlation and regression analysis is used to find out the relationship between financial leverage and firm's profitability.

3.4 Sample Design/ Technique:

The selection of companies was done on the basis of convenient sampling.

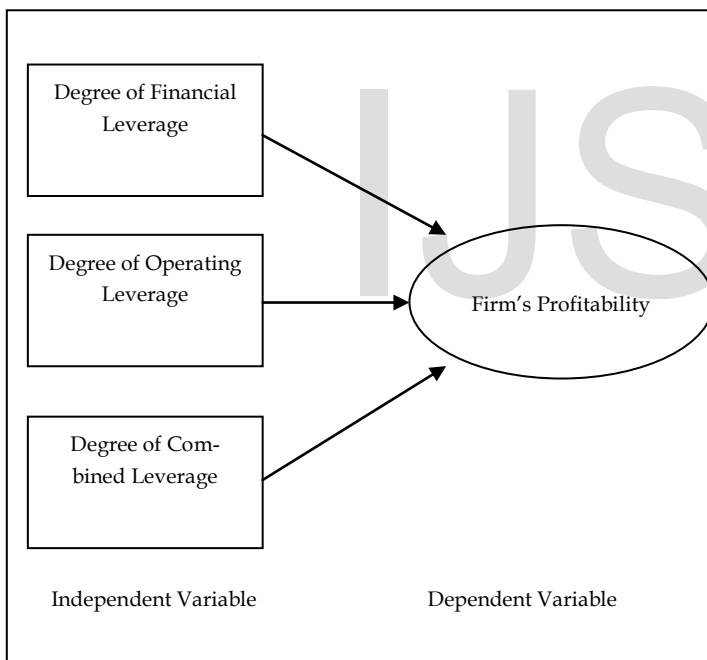
3.5 Sample Size

Five listed oil and gas marketing companies of Karachi Stock Exchange are chosen as a sample size.

3.6 Period of the study

The study covered the period of (2007-2012)

3.7 Theoretical Framework



Company	30	1	5	3.00	1.438
DOL	30	-4.162	1008.847	37.153	183.771
DCL	30	-3338.584	93.485	-106.119	610.885
DFL	30	-2.083	13.286	1.567	2.603
EPS	30	-22.600	86.170	26.001	28.276
Valid N	30				

From the descriptive analysis it is clear that the DOL, DFL and DCL show a fluctuating trend based on the mean and standard deviation values of sample companies. The standard deviation of DFL is 2.603 which are slightly dispersed from the mean value. Therefore, the firms' are unable to make profit during the period. The standard deviation of DOL is 183.771 which are highly dispersed from the mean value and indicates that the companies are more risky in terms of operating risk.

REGRESSION

Hypothesis # 1

Ho: DOL is not correlated with EPS.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error Estimate
1	.151a	.023	-.012	28.446133

a. Predictors: (Constant), DOL

The above table shows that R coefficient correlation is positive, which means that DOL is positively correlated with EPS but to some extent, because R² is 0.023 which is distant from 1. So, null hypothesis is rejected.

4 DATA ANALYSIS

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic

Hypothesis # 2

Ho: DFL is not correlated with EPS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error Estimate

1	.031a	.001	-.035	28.762766
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a. Predictors: (Constant), DFL

The above table shows that R coefficient correlation is positive, which means that DFL is positively correlated with EPS but to some extent, because R² is 0.001 which is distant from 1. So, null hypothesis is rejected.

Hypothesis # 3

Ho: DCL is not correlated with EPS.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error Estimate
1	.131a	.017	-.018	28.530419

a. Predictors: (Constant), DCL

The above table shows that R coefficient correlation is positive, which means that DCL is positively correlated with EPS but to some extent, because R² is 0.017 which is distant from 1. So, the null hypothesis is rejected.

Hypothesis # 4

Ho: The DOL position of the listed oil and gas companies in KSE does not differ.

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	26.86	5.30		5.06	.000
DOL	-.023	.029	-.151	-.81	.425

a. Dependent Variable: EPS

The P- value is 0.425, which is higher than 0.05, the null hypothesis is fail to reject. It is concluded that the DOL position of listed companies in KSE does not differs.

EPS = 26.865 -0.023 DOL

When DOL held to zero, then EPS remains at constant 26.865. The above equation shows that 1% increase in DOL will decrease the EPS by 0.023%

Hypothesis # 5

Ho: The DFL position of the listed oil and gas companies in KSE does not differ.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	26.528	6.158		4.308	.000
DFL	-.336	2.052	-.031	-.164	.871

a. Dependent Variable: EPS

P value is 0.871, which is **greater** than 0.05, the null hypothesis is fail to reject. Hence, it is concluded that the DFL position of listed companies does not differ.

EPS = 26.528 -0.336 DFL

When DFL held to zero, then EPS remains at constant 26.865. The above equation shows that 1% increase in DOL will decrease the EPS by 0.023%

Hypothesis # 6

Ho: The DCL position of the listed companies in KSE does not differ.

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	26.642	5.290		5.03	.000
DCL	.006	.009	.131	.697	.492

a. Dependent Variable: EPS

P value is 0.492, which is greater than 0.05, the null hypothesis is fail to reject. Hence, it is concluded that the DCL position of listed companies does not differ.

EPS = 26.642 + 0.006 DCL

When DCL held to zero, then EPS remains at constant 26.642. The above equation shows that 1% increase in DOL will increase the EPS by 0.006%

Hypothesis # 7

Ho: There is no effect of leverage on EPS.

P- Value is small (smaller than say 0.05) then the independent variables do a good job explaining the variation in the dependent variable. The P- value of DOL, DFL, DCL are 0.425, 0.871, and 0.492 respectively which stated that EPS cannot be explaining by DOL, DFL and DCL. This implies that there is no effect of leverage on EPS. Therefore, null hypothesis is failed to reject.

5 CONCLUSION

This paper identifies the relationship of financial leverage and firm profitability i.e. EPS of selected Oil and Gas marketing companies traded in KSE. Leverage is an important factor which is having an impact on profitability of the firm which in turn affects the wealth of the shareholders. The study concluded that there is no significant relationship between DOL and EPS, DFL and EPS, DCL and EPS. Thus, fixed operating expenses and the financing mix decisions of the firm are not significantly affect the earning capacity of the listed companies in KSE. However, this study failed to support the hypothesized significant relationship between financial leverage and EPS.

6 RECOMMENDATIONS

- The financing decisions made by companies' management should be in consonance with shareholders' wealth maximization objectives which encompasses the profit maximization objective of the firm.
- Debt financing in the financial mix of the firm should be done at the optimal level so as to ensure appropriate utilization of the firms' assets.
- The separation of ownerships and management in modern day corporation (companies) demands that agents must act in ways that are in line with the objectives of the principal in order to achieve enhanced earnings per share for the firm owners.
- More often than not, it is rare for any firm to depend solely on equity finance, thus, management may seek other sources of funding which may not be in the interest of eq-

uity holders. Therefore, managers should employ financial leverage in a way that enhances value for their company owners' i.e leading to an increase in returns to equity holders

- In order to avoid liquidation of the company the management should monitor the interest charged on debt financing. It is also recommended that further research be conducted on the same topic by taking different sector and extending the years of the sample.

REFERENCES

- [1] Aivazian, V. A., Ge, Y., & Qiu, J. (2005). The impact of leverage on firm investment: Canadian evidence. *Journal of corporate finance*, 11(1), 277-291.
- [2] Andy, C. W. C, Chuck, C. Y. K. and Alison, E. L. (2002). "The Determination of Capital structure: Is national Culture a Missing Piece of the Puzzle?" *Journal of International Business Studies*.
- [3] Asif, A., Rasool, W., & Kamal, Y. (2011). Impact of financial leverage on dividend policy: Empirical evidence from Karachi Stock Exchange-listed companies. *African Journal of Business Management*, 5(4), 1312-1324.
- [4] Balakrishnan, S., & Fox, I. 1993. Asset specificity, firm heterogeneity and capital structure. *Strategic Management Journal*, 14(1): 3-16.
- [5] Dare, F. D, and Sola, O. (2010). "Capital Structure and Corporate Performance in Nigerian Petroleum Industry: Panel Data Analysis." *Journal of Mathematics and Statistics, Science Publications*.
- [6] Elangkumaran.P, N. B. (August 2013). Leverage and its Impact on Earnings and Share Price A Special Reference to listed Companies of Colombo Stock Exchange (CSE) in Sri Lanka. *International Journal of Technological Exploration and Learning (IJTEL)* , 166-171.
- [7] Emamalizadeh, M., Ahmadi, M., & Pouyamanesh, J. (2013). Impact of financial leverage on dividend policy at Tehran Stock Exchange: A case study of food industry. *African Journal of Business Management*, 7(34), 3287-3296.
- [8] Enekwe, C. I. (2014). The Effect of Financial Leverage on Financial Performance: Evidence of Quoted Pharmaceutical Companies in Nigeria. *IOSR Journal of Economics and Finance (IOSR-JEF)* , 17-25.

- [9] Ferrando, C. M.-C. (SEPTEMBER 2008). THE IMPACT OF FINANCIAL POSITIONS ON INVESTMENT AN ANALYSIS FOR NON-FINANCIAL CORPORATIONS IN THE EURO AREA. WORKING PAPER SERIES .
- [10] Ghosh, C., R. Nag, and C. Sirmans. 2000. The pricing of seasoned equity offerings: evidence from REITs. *Real Estate Economics* 28 (3):363-384.
- [11] Ghosh, D. K. 1992. Optimum Capital Structure Redefined. *Financial Review* 27 (3):411-429.
- [12] Gleason, K. C., L. K. Mathur, and I. Mathur. 2000. The interrelationship between culture, capital structure, and performance: evidence from European retailers. *Journal of Business Research* 50 (2):185-191.
- [13] González, V. M. 2013. Leverage and corporate performance: International evidence. *International Review of Economics & Finance* 25 (0):169-184.
- [14] Hampton, J.J., 1993. *Financial Decision Making*, Fourth edition, Prentice- Hall, India.
- [15] Haque, A. (2014). Role of financial leverage in determining corporate investment in Pakistan. *The Business & Management Review*, 5(3), 226.
- [16] Harris, M., and A. Raviv. 1991. The Theory of Capital Structure. *the Journal of Finance* 46 (1):297-355.
- [17] Jensen, M. C. 1986. Agency Cost Of Free Cash Flow, Corporate Finance, and Takeovers. *American Economic Review* 76 (2):323-329.
- [18] Jensen, M. C., and W. H. Meckling. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics* 3 (4):305-360.
- [19] Kinsman, M. D., and J. A. Newman. 1999. Debt Level and Firm Performance: An Empirical Evaluation, at Puerto Vallarta, Mexico.
- [20] Lubatkin, M., and S. Chatterjee. 1994. Extending modern portfolio theory into the domain of corporate diversification: does it apply? *Academy of Management Journal* 37 (1):109-136.
- [21] Majumdar, S. K., and P. Chhibber. 1999. Capital structure and performance: Evidence from a transition economy on an aspect of corporate governance. *Public Choice* 98 (3-4):287-305.
- [22] Martinez-Carrascal, C. (SEPTEMBER 2008). The impact of financial position on investment An Analysis for Non-Financials Corporations in the Euro-Area. WORKING PAPER SERIES .
- [23] Mashayekhi, B., and M. S. Bazaz. 2008. Corporate Governance and Firm Performance in Iran. *Journal of Contemporary Accounting & Economics* 4 (2):156-172.
- [24] Mehta, M. A. (June 2014). Myth vs. Fact; Influence of Financial Leverage on Shareholder's Return. *Journal of Finance and Bank Management*, 105-114.
- [25] Modigliani, F., and M. H. Miller. 1958. The cost of capital, corporation finance and the theory of investment. *The American economic review* 48 (3):261-297.
- [26] Myers, S. C. 1977. Determinants of corporate borrowing. *Journal of financial economics* 5 (2):147-175.
- [27] Naeemullah, J. K. (March 2014). The Impact of Leverage on Firm's Investment. *Research Journal of Recent Sciences* , 67-70.
- [28] Nickell, S., and D. Nicolitsas. 1999. How does financial pressure affect firms? *European Economic Review* 43 (8):1435-1456.
- [29] Nickell, S., D. Nicolitsas, and N. Dryden. 1997. What makes firms perform well? *European Economic Review* 41 (3-5):783-796.
- [30] Nissim, D., and S. H. Penman. 2003. Financial statement analysis of leverage and how it informs about profitability and price-to-book ratios. *Review of Accounting*
- [31] Ozdagli, A. K. Financial Leverage, Corporate Investment, and Stock Returns.
- [32] Pandey, I. M. (2005). *Financial Management: Vikas Publishing House PVT Limited, New Delhi.*
- [33] Pushner, G. M. 1995. Equity ownership structure, leverage, and productivity: Empirical evidence from Japan. *Pacific-Basin Finance Journal* 3 (2):241-255.
- [34] Simerly, R. L., and M. Li. 2000. Environmental dynamism, capital structure and performance: a theoretical integration and an empirical test. *Strategic Management Journal* 21 (1):31-49.
- [35] Raza, M. W. (September 2013). Affect of financial leverage on firm performance. Empirical evidence from Karachi Stock Exchange.
- [36] Rehman, S. S. (2013). "Relationship between Financial Leverage and Financial. *Global Journal of Management and Business Research* .
- [37] SHABNAM YASEMIa, F. M. (2014). STUDYING THE FINANCIAL LEVERAGE RELATION TO FIRMS GROWTH AND. *Indian J.Sci.Res.* 3(1) , 355-361.
- [38] Spence, A. M. 1985. Capital structure and the corporation's product market environment. In *Corporate capital structures in the United States: University of Chicago Press*, 353-382.
- [39] Tempel, E. (2011). The influence of financial leverage on investment: an examination of overinvestment and underinvestment in Danish listed companies
- [40] V.KALPANA. (2014). A Study on Leverage Analyses and its Impact on. *indian journal of applied research* , 276-280.

- [41] Weill, L. 2008. Leverage and corporate performance: does institutional environment matter? *Small Business Economics* 30 (3):251-265.
- [42] Yuan, Y. (November 12, 2012). Impact of Leverage on Investment by Major Shareholders. Waseda Institute for Advanced Technology .
- [43] Yu-Yen Ku, T.-Y. Y. Heterogeneous effect of Financial Leverage on Corporate.

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