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Determinants Of Financial Performance In The Industrial Firm With The Moderating Role Of Size

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Abstract

The study examines how firm growth and leverage affect financial performance in industrial firms, considering firm size as a moderator. To analyze this phenomenon, the data has been gathered from the State Bank of Pakistan website during the study period of 2014-2023. After the diagnostic tests, the most appropriate model of the regression model was used i.e. Random effect model. The findings of the study reveal that company growth (+) and leverage (-) significantly affect Firm Performance. The size moderates the relationship between growth and performance and leverage and FP. The moderation changes the relationship so it is the substitution effect. The study recommended that top management should go for leverage as size changes the relationship between leverage and profitability.

Keywords *Firm Growth, Leverage, Financial Performance, Size, Moderation.*

Introduction:

The manufacturing sector plays a vital part in the economy and significantly affects any country's economic progress, both regionally and worldwide. Most developed nations rely on industrialization and manufacturing to boost their economies and economic development. Industrialization plays a crucial role at both the micro and macro levels. This advancement is crucial to achieving long-term economic planning, conquering the economic cycle, minimizing underdevelopment, and raising national income. (Khalifa, Shafii, 2013). Investors and scholars value companies' financial success because it helps them discover features affecting firm performance. Company financial performance reflects the health of the organization and the effectiveness of its senior leadership. Higher financial performance leads to more efficient resource use and economic contributions (Rahman, 2012).

Every company aims to optimize shareholder wealth, which can be accomplished by reducing costs (Shah and Khan, 2007) and increasing firm profitability. Moreover, firm performance, or profitability, has an additional impact on the cost of equity since higher profitability may result in higher retained earnings for the company, which lowers the cost of equity (Wald, 1999).

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Hence, the performance of the firm holds enormous significance for research purposes. A study was conducted recently to examine the moderating effect of product diversity between the dependent variable (firm performance) and the independent variable (leverage), and the results indicate. Soon and Razak's study (2012) found that product diversity moderates the association across these variables. Different studies have been completed in developed nations and developing nations in micro and macro dynamics like Rahman, Farooq, and Iqbal (2018) in the insurance sector while other studies have been conducted in micro and macro factors e.g; Miala et al. (2021), Khan(2023), The moderating inspiration paradigm has been reoriented in this study to focus on firm size,

Literature Review

According to Miala et al. (2021), found that ROA, which accounts for assets, is crucial for revenue production. Firm growth may be necessary for their existence rather than solely for expansion. Nurhayati, & Basiya, 2021), Firm value varies by capital structure, accounting conservatism, and performance. Policy-driven corporate performance moderates this influence. Thus, this study investigates how business performance moderates conservatism in accounting and capital structure on firm value. Control variables include managerial and institutional ownership to test this role. The current research used multiple regression and purposeful sampling. Capital structure did not increase firm value, but accounting conservatism did. Firm value is moderated by accounting conservatism and capital structure. Managers should adopt firm-value-enhancing measures due to managerial and institutional ownership. Acknowledgment: No educational institution has funded this study at present. We appreciate the emotional support for our cause. Sales or market expansion, happy customers, building the basis for future growth, and financial results all of which are indicative of a company's performance have been measured in an arbitrary sequence (Dvir et al., 1993). Return on assets (ROA) is used as a metric to assess profitability. In their study, Ritab et al. (2004), considering assets in the calculation of return on assets (ROA) is crucial for generating income. A corporation's growth is not merely for expansion; rather, it is sometimes essential to its existence. It is a crucial component of the organization's duration. If competitors grow faster, their competitive position suffers (Johnson et al., 2008, Jan, Kakakhel & Rahman, 2014). Some scholars believe that while growth may not be the goal for all businesses, ability is vital. They show that low-growth companies fail more often.

Size has been explored as an independent determinant of company performance, but Rauch et al. (2009) found that size moderates. In their analysis, Rauch et al. (2009) examined several studies that used firm size as a moderator and found that all environmental factors' severity changes with firm size. Organizational size and environmental munificence moderated entrepreneurial orientation and performance (Zahra, 1996). In trade theory, external and internal financing are compared. Static trade-off theory states that larger organizations plan to have more debt than smaller ones due to lower bankruptcy risks. The argument of trade-off argument suggests that larger enterprises with greater debt are less likely to fail because they have a more diversified portfolio (Titman and Wessels, 1988). Larger organizations have stronger competencies, resources, and economies of scale, reducing bankruptcy risk. Thus, firm size inversely affects bankruptcy and directly affects profitability.

Larger organizations are supposed to have greater resources and recover credit customer account receivables more efficiently. All variables contribute to large enterprises' ability to maintain lower liquidity and cash cycles than smaller firms (Frank and Goyal, 2003). The research uses organization size as a control variable to compare operating environments. Their

study employed a natural log of assets as a surrogate for organization size to assess performance. Another study by Eljelly (2004) found that liquidity inversely affects organizational profitability. They also found a significant association between organization size and performance. Growing firms also benefit from economies of scale. Firm growth can lead to economies of scale and higher earnings. In contrast, neoclassical organizations prioritize profitable projects with growth potential before less profitable ones. Profit-earning enterprises maximize profitability by adding growth prospects to their portfolios, although this may lower profit rates. The relationship between business expansion and profitability remains a puzzle for scholars. Davidsson et al. (2009) found only inconclusive evidence linking growth and performance. Recent empirical research (Jang and Park, 2011) remains ambiguous on the relationship between business growth and profitability. A study undertaken by Ahmed et al. (2011) examined the factors affecting profitability in six life insurance businesses in Pakistan from 2001 to 2007. The researchers used the panel data technique for their analysis. The firm-level characteristics, including leverage, size, growth, age, liquidity, business risk, and asset tangibility, were explained. It was discovered that leverage, risk, and size are key factors affecting profitability. On the other hand, the firm's age, growth, liquidity, and tangibility of assets are not important factors in determining life insurance. Rahman, Farooq and Iqbal (2018), study aims to determine profitability factors in Pakistan's insurance marketFor this research, multiplier (LM) tests with fixed effect and pooled OLS models were chosen as relevant. Pooled OLS and fixed effect models indicate that negative macroeconomic factors such as leverage, company risk, and inflation rate greatly impact insurance sector profitability. Size and GDP rate affect profitability positively and statistically significantly. Liquidity and growing are not major factors in the study. This is the first study to cover the complete insurance business, including takaful, with firm-specific and country-specific variables, using the most suitable mathematical models. This study is crucial for insurance sector leaders and policymakers in Pakistan, as it focuses on business profitability and shareholder wealth.

Hypothesis in light of Literature Review

H1: Leverage is significantly related to Financial Performance

H2: There is a moderating effect of size between Firm leverage and FP.

H3: Growth is significantly related to FP

H3: There is a moderating influence of firm size between the relationship of firm growth and firm performance.

Research Methodology

The secondary data comes from the Amman Stock Exchange yearly publication "Financial Statement Analysis of industrial companies listed in Pakistan Stock Exchange for 2014-2023." The industrial organizations' balance sheets and income statements. The sample includes 195 of the 400 total firms. Variable data came from the SBP website or annual reposts. All population characteristics are represented in the sample. The current study uses target population purposive sampling. The non-financial firm population. The sample size was based on Sekaran & Bougie (2016). A panel data model. Time series and cross-sectional data and models are included. Here is the regression equation to determine how independent variables affect dependent variables. Here's how to calculate dependent and independent variables.

Model-1

ROA=β0+β1Leverage+β2Growth+ϵi----------(1)

Model-2

ROA=β0+β1Leverage+β2Growth+β3(Leverage×Firm Size)+β4(Growth×Firm Size)+ϵi----------(2)

Variables	Proxies	Literature Support
Performance(ROA)	Current Assets/Current Liability	Rahman(2017) Ahmad(2012).
Growth (Gwth)	Ln[Current year Assets---Previous year assets/Previous yer assets	Rahman(2012), Rahman Farooq and Iqbal (2018), Rahman
Leverage(LV)	Total Liability/Total Assets	Rahman(2017), Rahman(2012)
Size	Log total Assets	Rahman(2012),

Table 4: Random effect Model for Model 1 and Model 2 After Diagnostic tests

	Dependent variable (ROA)							
Variables	**Model 1**				**Model 2**			
	Beta	**SE**	**T-st**	**P value**	**Beta**	**SE**	**T-st**	**P value**
Cnst	−4.234	1.954	−2.166	0.04	−0.5432	0..4231	−2.229	0.002
Growth	0.0987	0.045	2.19	0.03	−2.270	0.3468	−6.854	0.001
Lev	-0.698	0.295	-2.30	0.002	0.8548	0.123	6.92	0.001
Size*Growth					0.1001	0.0089	11.2	0.000
Size*Lev					.2100	0.0275	7.63	0.000
R^2	0.078				0.325			
Adj R^2	0.045				0.2433			

Change R^2		0.563***
F-statistic	10.32	20.834***

Table 4 presents the regression analyses by using the random effect model of the panel data model. The model 1 shows the cause and effect of the independent variable on financial performance. The explanatory variable growth and leverage are significantly related to Financial Performance. The leverage is negative and significantly related to FP this result stands in line with the findings of Rahman. Farooq and Iqbal (2017). While the growth is positively and significantly related to FP this result is not supported by Rahman, Farooq, and Iqbal (2017) in the insurance sector of Pakistan. But the current result is supported by Jang and Park, (2011).

Model 1.In addition, the F-statistic value is negligible, meaning that Model 1 is not clearly described. According to the R2 value, the explanatory power of Model 1 can be increased up to 7.8%. However, the outcomes have improved (Model 2) after the interaction term (Size *growth) was added. The link between the explanatory variable (firm growth) and (ROA) has been defined by a highly substantial moderating inspiration, while firm growth exhibits a negative and considerable inspiration on the company's performance (ROA). Also, since the R2 decreased dramatically to 0.325. The leverage has a positive relation to FP with a substitution effect after moderation. Model 2 is also indicated by the significant value of the F-statistic. Since the Interaction term has a substantial value and the change in R2 is likewise significant, this indicates that the Null hypothesis (Ho) of the study is rejected in favor of the alternative hypothesis (H1). Based on the statistical data, the research accepts the hypothesis (H1) that the size of a firm moderates the relationship between firm growth and firm performance and Leverage and Firm performance.

Conclusions and Implications

The study aims to evaluate the effect of Firm growth and Leverage on Financial Performance with the moderating role of firm size. The data has been gathered from the websites of the State Bank of Pakistan. The findings of the study reveal that the Growth (+) of the firm and Leverage (-) are significantly related to FP. In addition, the obtained results indicate that the interaction term (Size. growth) has a significant impact on firm performance. Additionally, the inclusion of this interaction term leads to a significant change in the explanatory power of the model (R2), thereby supporting the research hypothesis. Based on the statistical findings, the research supports the premise that the size of a firm has a moderating effect on the relationship between firm growth and firm performance. While the leverage is also moderated by size and shows significantly related to FP. It shows the substitution effect as well because the sign of the t value has been changed after moderation. The independent variable financial leverage is also significantly related to FP. This study extends to the current literature by examining the moderating influence of company size on the link between firm growth and firm performance. It also shows that leverage becomes positive of the size moderates the relationship. The study is beneficial for management since it allows them to concentrate on both the growth and size of the organization, while also evaluating its performance. This study is confined to a small number of sectors and needs to include additional sectors. The current sample size is inadequate and future research should consider including a larger number of firms. Moreover, the same study can be conducted using panel data from several countries. Alternative proxies, such as sales for growth, total assets for company size, and return on equity for firm performance, can

be used to conduct the same study. In addition, other variables can be included as control variables.

References

Abd Razak, H. R. B., Soon, A. T., Dhanaraj, I. D., & Tan, A. H. C. (2012). Incidence of clinically significant venous thromboembolic events in Asian patients undergoing total knee arthroplasty without anticoagulation. The Journal of Arthroplasty, 27(6), 1128-1132.

Ahmed, N., Ahmed, Z., & Usman, A. (2011). Determinants of performance: A case of life insurance sector of Pakistan. International Research Journal of Finance and Economics, 61(1), 123-128.

Davidsson, P., Steffens, P., Fitzsimmons, J., (2009), Growing profitable or growing from profits: Putting the horse in front of the cart? Journal of Business Venturing, 24, 388-406

Dvir, D., Segev, E., & Shenhar, A. (1993). Technology's varying impact on the success of strategic business units within the Miles and Snow typology. Strategic Management Journal, 14(2), 155-161.

Eljelly, A.M.A. (2004), Liquidity-profitability tradeoff: An empirical ınvestigation in an emerging market (liquidity management). International Journal of Commerce and Management, 14(2),48-61

Frank, M.Z., Goyal, V.K., (2003). Testing the pecking order theory of capital structure. Journal of Financial Economics. 67(2), 217-248.

Jan, S., Iqbal, K., & urRahman, S. (2014). Determinants of profitability of islamic and conventional insurance companies in pakistan: An internal evaluation. Abasyn University Journal of Social Sciences, 7(1).

Jang, S.C., Park, K. (2011), Inter-relationship between firm growth and profitability. International Journal of Hospitality Management, 30, 1027-1035.

Johnson, G., Scholes, K., Whittington, R. (2008), Exploring corporate strategy: Texts & cases. 8th ed. United Kingdom: Prentice Hall International

Khan, U. U., Ali, Y., Petrillo, A., & De Felice, F. (2023). Macro-environmental factors and their impact on startups from the perspective of developing countries. International Journal of Sustainable Engineering, 16(1), 166-183.

Kazmi, A. (2002), Strategic Management & Business Policy. Delhi: McGraw Hill

Khalifa KM, Shafii Z. Factors affecting the financial performance of non-oil industrial companies listed on Libyan Stock Market (LSM). In 4th International Conference on Business and Economic Research (4th ICEBR 2013) Proceeding (pp. 04-05). European Journal of Business and Management. 2013;5(12):82-99.

Miala, S. I., Ariffin, K. M., Kasim, R., Yassin, A. M., Ishak, M. H., & Kasim, N. (2021). Intangible Asset a Key Driver for Company's Performance: An Overview. In Proceedings of the International Conference on Industrial Engineering and Operations Management. Rome, Italy.

Myers, S.C. (1977), Determinants of corporate borrowing. Journal of Financial Economics, 5(2), 147-75.

Nurhayati, I., Sudiyatno, B., Puspitasari, E., & Basiya, R. (2021). Moderating effect of firm performance on firm value: Evidence from Indonesia. Problems and Perspectives in Management, 19(3), 85.

Nurhayati, I., Sudiyatno, B., Puspitasari, E., & Basiya, R. (2021). Moderating effect of firm performance on firm value: Evidence from Indonesia. Problems and Perspectives in Management, 19(3), 85.

Rahman, S. U., Jan, F. A., Iqbal, K., & Ali, Z. (2012). Parameters of conventional and Islamic insurance companies' profitability: Evaluation of internal Analysis. Research Journal of Finance and Accounting, 3(3), 11-18.

Rahman, S. U., Kakakhel, S. J., & Ali, L. (2017). Financial and Economic Factors that Influence Profitability of the Insurance Sector in Pakistan. NUML International Journal of Business & Management, 12(2), 75-87.

Rauch, A., Wiklund, J., Lumpkin, G.T., Frese, M. (2009), Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. Entrepreneurship Theory and Practice, 33(3), 761-787.

Ritab, A.K., Ali, M., Hussam, M. (2004), Foreign ownership and firm valuation: An empirical ınvestigation. Finance India, XvllI(2), 779-799.

Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach. john wiley & sons.

Shah, A., Khan, S. (2007), Determinants of capital structure: Evidence from Pakistani panel data. International Review of Business Research Papers, 3(4), 265-282.

Soon, Y.F., Razak, I. (2012), Leverage, product diversity and performance of general insurers in Malaysia. The Journal of Risk Finance, 13(4), 347-361.

Wald, J.K. (1999), How firm characteristics affect capital structure: An international comparison. Journal of Financial Research, 22(2), 161-187

Zahra, S.A. (1996), Technology strategy and financial performance: Examining the moderating role of the firm's competitive environment. Journal of Business Venturing, 11, 189-219.