

Competition for 'Top 25 Companies' Award's Criterion of PSX: An Evaluation of the Financial Aspects

Fahem Naveed¹, Abdul Jalil Khan² and Rabia Riaz³

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Abstract

A company's performance is a complex phenomenon because of a variety of aspects to quantify it, however, a competitive criterion has been established by Pakistan Stock Exchange (PSX) in terms of "Top 25 Companies". Those firms qualifying this criterion over the last two decades need to be compared with those who have yet to achieve it. The main objective of the study is to evaluate the financial stability and extra-ordinary performance based on PSX quantitative criteria of those firms maintaining top 25 position over last 24 years. The financial aspects of 18 firms out of more than 40 has been selected by taking last 24 years' data. These firms are classified into two different samples, the sample from companies successfully qualify the criterion for "Top 25 Companies" award, while the second sample consist of other renowned ones that yet to qualify for this criterion. The performance evaluation of both types of firms has been done through financial statements available on the website of PSX through their annual reports to calculate the ratios. In addition to these financial ratios other relevant indicators considered for evaluation purposes are, equity premium as a difference in returns between stocks and less risky instruments (bonds), firm size measured through sales, and market performance measured through total assets. The impact of these ratios on the stock returns has also been evaluated through regression analyses which allowed to identify those specific advantages the 'top-25 qualifier' firms may have over the 'other non-qualifier' firms. The findings suggest that 'top-25 qualifier' firms mainly beat the 'others non-qualifier' based on equity-related measures including dividend payout ratios, market premium and the equity premium. Therefore 'other non-qualifier' should improve equity-related context to successfully qualify for this criterion in future.

Keywords: Stock Exchange, Top 25 Companies Criterion, Financial Ratios.

Introduction

The Top 25 Companies Awards was established in 1978 and the very first award distribution ceremony was held in 1980. The objective of PSX Top 25 Companies Awards is not only to reward and recognize the listed companies meeting criteria of excellent performance, but also to set an example and benchmark for other listed companies to follow. At the same time, the award-winning companies are highlighted to local and global investors, given that these winning companies have achieved distinction on several grounds such as dividend payouts, capital efficiency and corporate governance metrics, to name a few of the factors against which these companies are selected. More recently, the selection criteria of SDGs and ESG related reporting as well as Diversity & Inclusion were also included in the Top 25 Companies Awards. The PSX Top 25 Companies Awards is a touchstone for all

¹MPhil Economics Student, Forman Christian College (A Chartered University), Lahore, Pakistan.

Email: fami.naveed@gmail.com

²Assistant Professor at the Department of Economics, Forman Christian College (A Chartered University), Lahore, Pakistan. Corresponding Author Email: abduljalilkhan@fccollege.edu.pk

³MPhil Economics Student, Forman Christian College (A Chartered University), Lahore. Email: rabiart04@gmail.com



companies to follow and achieve. The listed companies who win these awards are not only amongst the best performing companies in Pakistan but are also comparable to the best performing companies internationally.

This study provides an analysis of such firms that desire to qualify for this criterion through improvement and learning from those firms consistently maintaining their position for long. A company's success has long-term consequences for its shareholders, employees, and the economy as a whole. Investors are expecting a high-value return on their investment, and a growing business can promise massive returns over the years. As a company grows, it can afford to pay its employees more, give better products to customers, and reduce its environmental impact. Furthermore, increased investment in the future will result in more jobs and a higher level of income as a result of higher salaries (Saleem, 2019). The firms' value creation usually depends on company finance which is represented in the equity form. This equity helps as a management portfolio choice to encourage and attract finance because the securities or bonds issued by the private or government sector own less risk as compared to the corporate investment. The organization's performance depends on the stock market, and the stock market depends on the market value of equity. The firm performance is directly stimulated by a few elements, together with stock market advances, macroeconomic conditions, threats of competing businesses, market situations, timing, and funds availability. However, according to the capital market and alteration of the regulatory framework, the firm performance usually changes over time and goes to the next upper level of success. Several studies have been conducted to examine the economic and non-economic factors that can assist or hinder a company's performance (Ahmad et al., 2019). The relationship between debt and profitability has been further explored by (Rashid et al., 2021).

According to literature on finance in each country, the development of the stock market is crucial and the center for the firm operations and development of the economy. Liquidity and volatility of the stock market may be used to analyze the company's market performance (Matsoma⁴, 2022) because a well-established financial system can improve the efficiency of capital allocation and productive investment. However, after the financial crisis, the companies operating in the stock market confronted uncertain situations related to their performance. In Pakistan, firms are facing different circumstances and issues associated with the development of financial system. The most important hassle is that corporate governance affects the profit distribution policy, however, a capital gain tax may influence the investors' interest more and reduce the potential of stock price appreciation (Ullah et al., 2020). The efficiency of resource allocation in enterprises can be improved if investors have more faith in the financial market, which can be obtained through a better understanding of their characteristics. Liquidity and trading activity are critical characteristics among the numerous fundamental components of financial markets (Iqbal & Masood, 2022). Return on equity, debt to equity, and return on the asset are the crucial ratios that are implemented as a proxy for estimating the overall growth prospects of the firms. Growing the firm-level premium allows the company to have more "paid-in capital over par on common stock" and will enable shareholders to enjoy the increased value of their current shares.

This study adds to literature in several significant ways. The fundamental goal of this study is to evaluate the performance of the companies in the Pakistan Stock Exchange (PSX) to sort out how those companies are performing in terms of their financial aspects that have won the "top 25 companies" award and successfully maintained this status for long at least over the last 24 years, so that the other companies the 'follower' firms may get inspiration to improve their financial performance to qualify

⁴The information is available at: <https://www.psx.com.pk/psx/psx-blog-articles/the-psx-top-25-companies-award-an-accolade-for-excellence-in-corporate-performance-blog#:~:text=The%20PSX%20Top%202025%20Companies%20Awards%20is%20a%20touchstone%20for,the%20best%20performing%20companies%20internationally>

for that criteria. This study also partially focuses on this question: do the criteria defined by PSX under the 'Top 25 Companies' award indeed induce the firms to perform better and compel them to increase their value? Since according to brand magazine⁵

This analysis claims, also, to serve as a tool for the international institutional investors or other foreign investors and the local investors to better track the progress of market accessibility in individual countries as well as for regulators to be clued-up of the areas perceived as not meeting international standards and, for which, some improvements may be presented.

Another sub-objective is to investigate whether or not those companies holding the 'Top 25 Companies' award for long have significantly improved their value measured through stock returns and these returns are significantly determined by the financial ratios as well. The stock returns measured through the annual closing prices for the sampled period have been used to reflect the value of firms in the stock market for the investors. The study findings will be valuable to corporate managers and investors in addition to other stakeholders across Pakistan with a focus on quantitative (financial) aspects of "top 25 companies" award where more attention is needed for the potential investors looking for investment opportunities as well as for those managers seeking growth potentials for their companies.

Literature Review

Since investors are highly concerned regarding maximizing the returns they are getting from the investment in the stock market consequently they are worried about those factors which are affecting stock returns including how variation in the financial ratios are going to affect the stock returns consequently these ratios are playing important role to measure the effect on returns over investment (Şanlı, 2024). The effect of financial performance on stock returns has been evaluated by considering six manufacturing companies list on the Indonesia Stock Exchange (IDX) covering 2018 to 2022, findings reflect that return on assets and current ratios significantly affect the stock returns but return on equity and debt to equity ratios both remain insignificant (Nasrallah et al., 2023). The market returns are evaluated through various ratios in Amman Stock Exchange 29 listed real estate companies for the data ranging from 2010 to 2020, where findings show that real estate firms need to manage their working capital to cater the unforeseen events in the short-run with high efficiency (Almansour et al., 2022). The impact of various ratios have been tested on stock return based on Indonesian Stock Exchange (IDX) during 2012-2020 by selecting eleven companies using multiple linear regression, the findings reveal that ROE, DER, CR, TATR and price to book value fail to cause any effect on the stock returns (Prayoga & Wahyudi, 2021).

The financial performance of the firms is considered as the measure for assessing how efficiently the organizations utilized their assets and generated better revenues. Many pieces of literature highlight the aspect of stock market performance associated with the firm's financial performance (Kaur & Singh, 2021). The company's economic growth also allowed the investors and other stakeholders to make decisions about the future aspects of the business. The analysts also used the financial growth reports to compare different industries within the same sector. An organization is considered to be a bunch of stakeholders, including shareholders, trade creditors, investors, employees, and management. Every group of stakeholders is primarily associated with the company's financial performance. The company's financial performance also indicated how well the company managed its assets and generated revenues for each stakeholder (Ahmed, Awais & Kashif, 2018). Another method of Six Sigma is also highlighted in various kinds of literature for the deep insight analysis of the financial aspects of the company (Khan et al., 2021).

Each organization also played an essential role in the development of the stock market as factors like

⁵<https://www.linkedin.com/pulse/triumph-capital-market-top-25-companies-awards-psx-monaiza-azam/>

market volatility, capitalization, and liquidity affected the growth of the stock market. The development of the stock market is directly associated with the confidence of the investors to invest in the market. The financial stability of the firm and the developed stock market played a vital role in developing the confidence of the investors. A study by (Nazir, Azam & Khalid, 2021) indicates the fact that both types of debt, long and short term induce negative effects on the firm performance, proven by the empirical pieces of evidence from the Pakistan Stock market. In (Pandey & Sahu, 2019) a sample of 30 companies listed on the Pakistan Stock Market have been used and suggested that the agency issues in the high debt policies directly resulted in lower performance. This finding was contrary to the agency-cost theory. The study also establishes that a higher level of debt increases the tangibility of the organizations but, at the same time, lowers the profits that are directly associated with the firm's financial performance. Aziz and Abbas (2019) recently researched the relationship between profitability and indebtedness for companies listed on the PSX that are not in the banking industry. According to them, the association between debt and profit is low but negative. Another study investigated a range of profitability ratios to determine the impact of debt on firms and discovered inconsistent results (Javed et al., 2014). As a result, it only improves ROA while decreasing ROE. According to Horvey and Ankamah (2020), the extraordinarily low cost of debt allows cement companies to get loans to meet basic capital-structure cost needs. This is because debt financing boosts earnings. When a company's savings are insufficient to fund its expenses, it must hunt for alternative sources of money. The cheapest type of external funding is the sale of newly issued shares of stock to existing shareholders or the general. (Zeitun & Haq, 2015) examined the impact of capital structure on firm performance by using data from the Karachi Stock Exchange, the success rates of businesses and their debt levels remain inversely related. Management needs to fund projects through retained earnings and other internal resources rather than incurring more debt than stock.

A company's capital structure describes the proportions of various sources of finance it uses. Debt financing provides some tax and regulatory benefits to the company, but it also carries a level of insolvency risk that must be assessed (Hirdinis, 2019). The company's capital structure needed to be set up in such ways that it maximized the revenues of the company along with attracting investors in the stock market (Dao & Ta, 2020). The Equity Risk Premium (ERP) is considered the significant constituent of the risk and return model of the organization in the market and also plays a crucial role in determining the cost of the equity and the capital in the aspect of both valuation and corporate finance (Wijaya & Muljo, 2022). Investors want a more significant return on their investments when equity risk premiums grow and are willing to pay less for the same degree of uncertainty in future cash flows (Merkoulova & Veld, 2022). A study covering some significant aspects of Equity risk premiums highlights that the Equity Risk Premium serves as the fundamental and critical component in corporate finance, portfolio management, and valuation. The equities risk premium is a measure of how much investors are willing to pay to hedge against the uncertainty associated with the performance of an economy or market (Damodaran, 2020). The Equity Risk Premium ERP also played a significant role in formulating the portfolio return expectations (Gomes & Ribeiro, 2018). The excess return allowed the investor to take a relatively higher risk of investing in the equity shares. The size of the premium also varied by the level of risk (Sajid et al., 2021). Fernandez et al. (2019) revealed significant heterogeneity in equity premiums across economic analysts within the same stock market in the equity premium survey. Studies show that financial performance has a significant impact on corporate value, where changes in the share prices reflect the performance and profitability as well. (Suhadak & Rahayu, 2019). However actual situation of Return on Assets (ROA) and Return on Equity (ROE) need to be explored for a given company to ensure that financial statements are genuinely playing an effective role in communicating the necessary information to the investors as well as the company's executives and employees. ROA and ROE have been employed (Fallatah & Dickins, 2012)

to measure the firm performance and value.

The literature established the fact that the financial growth of the company empowered the investors and stakeholders for future business perspectives.

Theoretical Perspectives

There are various theories in corporate finance that help to identify the structures of the firms, however for financial perspective the *asymmetric theory* of Myers and Majluf (1984) provides support for the application of financial reports to get more information regarding a company if an investor is interested in buying, holding, or selling the stocks of that particular company in the stock market. *Signaling approach* (Ross, 1977) refers to the importance of dynamics in these reports where ratios can be used to provide signals about variation in the company based on decision-making processes. The Modigliani and Miller (1958, 1963) *fundamental theorem of capital structure* insists on the use of a leverage ratio for the valuation of the firms. According to (Agyei et al., 2020) the *trade-off theory* implies that the application of the leverage ratio alongside the interest payment ratio refers to a trade-off scenario as an increase in interest causes a reduction in overall tax-liabilities by lowering taxable amount consequently ROE surpasses the ROA. The *Pecking Order theory* has opened the avenues of applying various types of ratios in addition to leverage ratios because more dependence on the company's fund needs both effective performance ratios and profitability ratios (Baskin, 1989).

Table 1: Sampled companies of PXS

Rank	Companies meet 'top 25 criteria' in the sample	Serial #	Non-position holder companies in the sample
1	Fauji Fertilizer Company Limited	I.	Atlas Honda Limited
2	Engro Corporation Limited	II.	Best Way Cement
7	Security Papers Limited	III.	Ittihad Chemicals Limited
12	Millat Tractors Limited	IV.	K-Electric
15	United Bank Limited	V.	Nestle
17	International Industries Limited	VI.	Nishat Mills
		VII.	PIA
		VIII.	Sapphire Textiles Mills Limited
		IX.	SNGPL
		X.	Shezan
		XI.	Shell Pakistan
		XII.	Unilever Pakistan

Source: <https://www.psx.com.pk/psx/exchange/general/psx-announces-top-25-companies-awards-winners-2023>

Estimation Procedure

This study is based on the data, which is obtained from the official website of the PXS, and some other reliable sources⁶. Two sets of samples are made for 18 selected companies based on the available data: six as representative of 'Top 25 companies' and 12 from other renowned ones. The selected time period of the study is from 2001 to 2023-24⁷. The balance sheet and income statements of sampled companies have been collected and used to calculate ratios such as Liquidity ratios, Efficiency measures, Leverage

⁶The source links: <https://financials.psx.com.pk/>, and <https://dps.psx.com.pk/company/> for financial reports.

⁷Projected values are used for 2024

ratios, Interest coverage ratios, Profitability measures, and Market value ratios.

Since all the financial statements across sampled firms are not identical, some of the ratios cannot be calculated because of the limitation of data availability. Consequently, analysis has been performed by using those ratios which are measurable through the given financial reports. Further stock prices and volume data are also included for these companies to measure the impact of these ratios on stock returns. According to the literature on corporate finance, return on assets (ROA) and return on equity (ROE) are the two most important indicators reflecting the performance of the firms that have been considered for comparing the selected firms through Spearman rank panel correlation analysis.

The correlation analysis is performed to observe how ROA and ROE are associated with other variables including other ratios measured through the financial statements.

Since firm value mainly depends upon the stock returns, regression analysis has been performed to measure the impact of these ratios on the stock returns as well based on the relationship mentioned as:

$$R_{it} = \beta_0 + \beta_1 ROA_{it} + \beta_2 ROE_{it} + \beta_3 DPR_{it} + \beta_4 EPRM_{it} + \beta_5 LR_{it} + \beta_6 MKTPRF_{it} + \beta_7 MKTPRM_{it} + \beta_8 PROFIT_{it} + \beta_9 QR_{it} + \beta_{10} SIZE_{it} + \beta_{11} STOCKPRICE_{it} + \beta_{12} STOCKSALES_{it} + \beta_{13} EP_{it} + \beta_{14} EP_{it} * MP_{it} + \beta_{15} ACR_{it} + \beta_{16} ITR_{it} + \beta_{17} TATR_{it} + \beta_{18} EPS_{it} + \beta_{19} PER_{it} + \beta_{20} TDER_{it} + \beta_{21} TIER_{it} + \beta_{22} OPM_{it} + \beta_{23} NPM_{it} + \beta_{24} ARTR_{it} + \beta_{25} FATR_{it} + \epsilon_{it} \dots \dots \dots (i)$$

where,

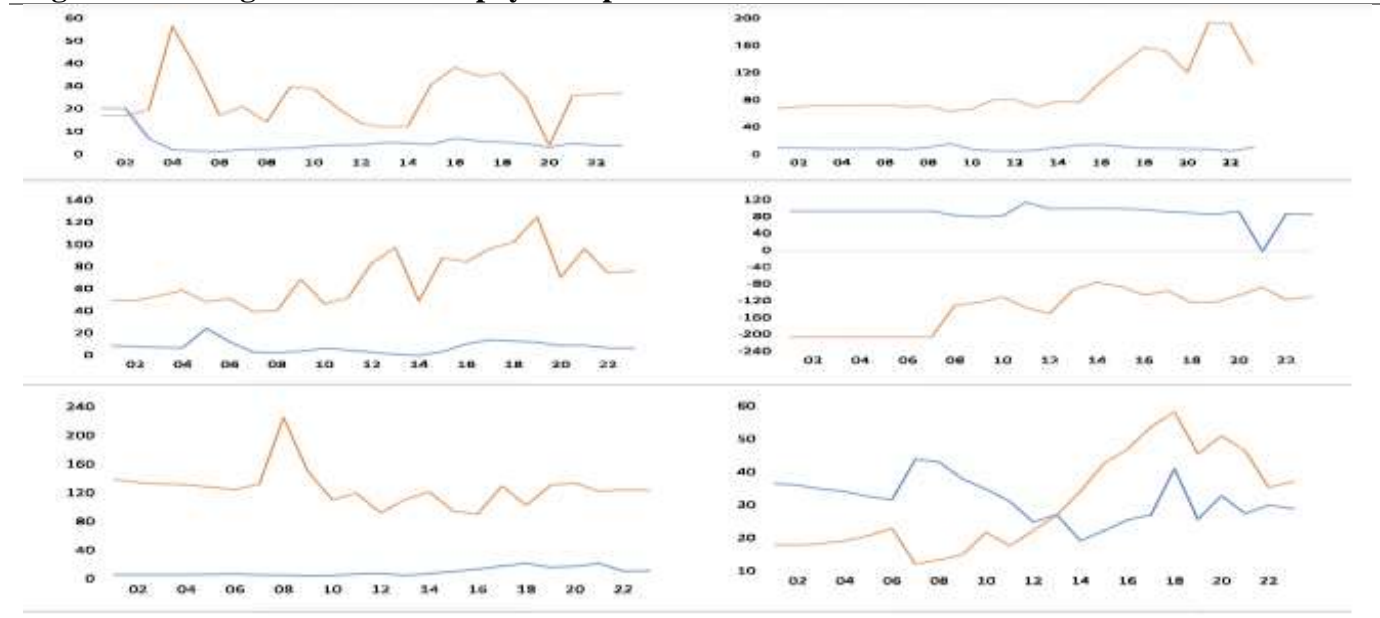
ACP	= Average Collection Period	MKTPRM	= Market Premium Market Premium
ACR	= Accounts Receivable	NPM	= Net Profit Margin
APP	= Average Payment Period	NWC	= Net Working Capital
ART	= Accounts Receivable Turnover Ratio	NWCSR	= Net Working Capital to Sales Ratio
CCR	= Cash Coverage Ratio Cash Coverage Ratio	NWCTAR	= Net Working Capital to Total Assets Ratio
CR	= Current Ratio	OPM	= Operating Profit Margin
DPR	= Dividend Payout Ratio (%)	PROFIT	= Economic Profit (Million)
EMP	= Equity Premium	QR	= Quick Ratio
RM		ROA	= Return on Total Assets (ROA)
FAT	= Fixed Assets Turnover Ratio	ROE	= Return on Equity (ROE)
R		SIZE	= Firm Size
GPR	= Gross Profit Margin	STOCKPRIC	= Average of High Rate and Low Rate
IT	= Inventory Turnover Inventory Turnover	E	
IR	= Total Debt (Leverage) Ratio	STOCKSALE	= Average of High-Volume Low-Volume
LTD	= Long-Term Debt to Equity Ratio	TATR	= Total Assets Turnover Ratio
ER		TDER	= Total Debt to Equity Ratio
LTD	= Long-Term Debt Ratio	TIER	= Time Interest Earned Ratio
R			
LTD	= Long-Term Debt to Total Capitalization Ratio		
TCR			
MKT	= Market Performance (Million)		
PRF			
<i>i</i>	= <i>i</i> -th Company in the sample		

Discussion and Analysis

It has been observed that the stock returns are more unstable in the beginning but later they became stable in the same way returns related to Fauji fertilizer corporation show more fluctuation they became a bit stable from 2018 to 2022. Although stock returns of international industries are somewhat stable but remain but deviation from mean remains large. Miller tractor stock returns vibrate within a small band. Overall, the fluctuations are there in the case of returns but in the case of Engro, FFC, and Miller tractor level of variations remained so small that it can easily be considered as a normal situation however in the case of international industries limited fluctuations are very high and so

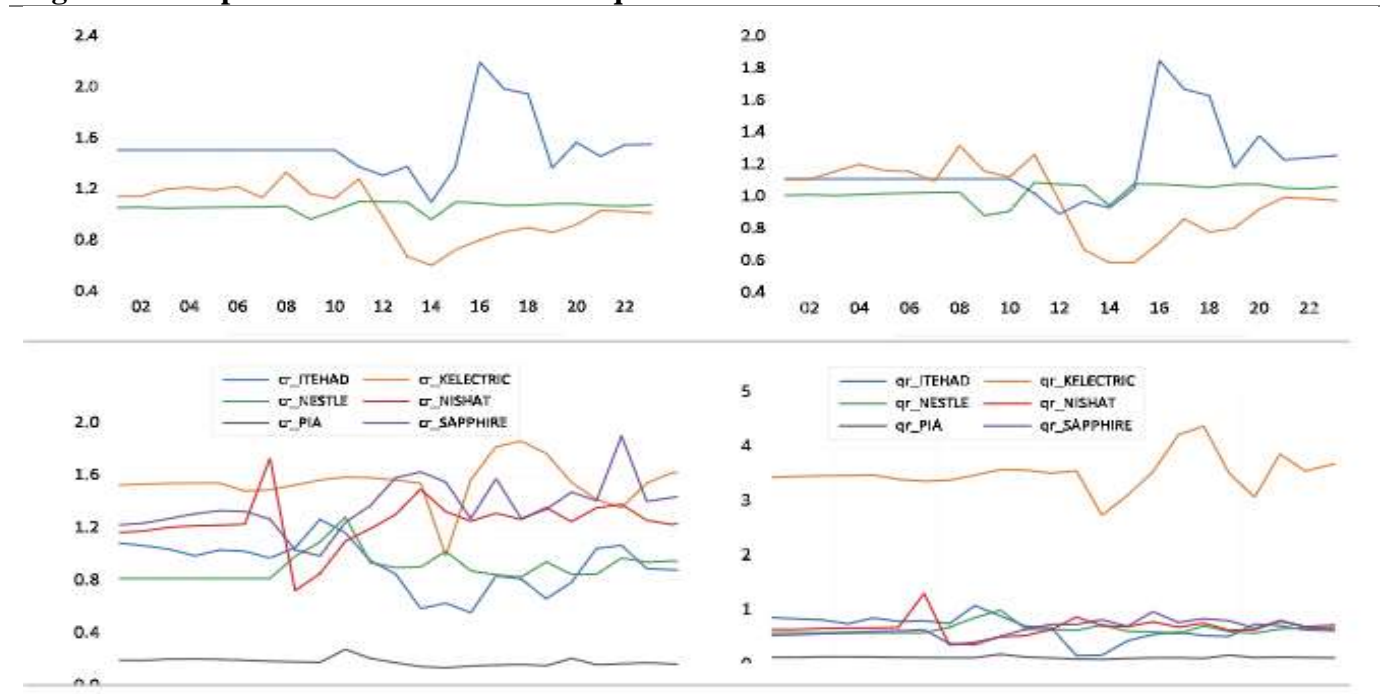
reflecting more instability. Relatively high fluctuations have been observed in the case of SPL whereas UBL fluctuations remained normal and low.

Figure 1: Average collection and payment period



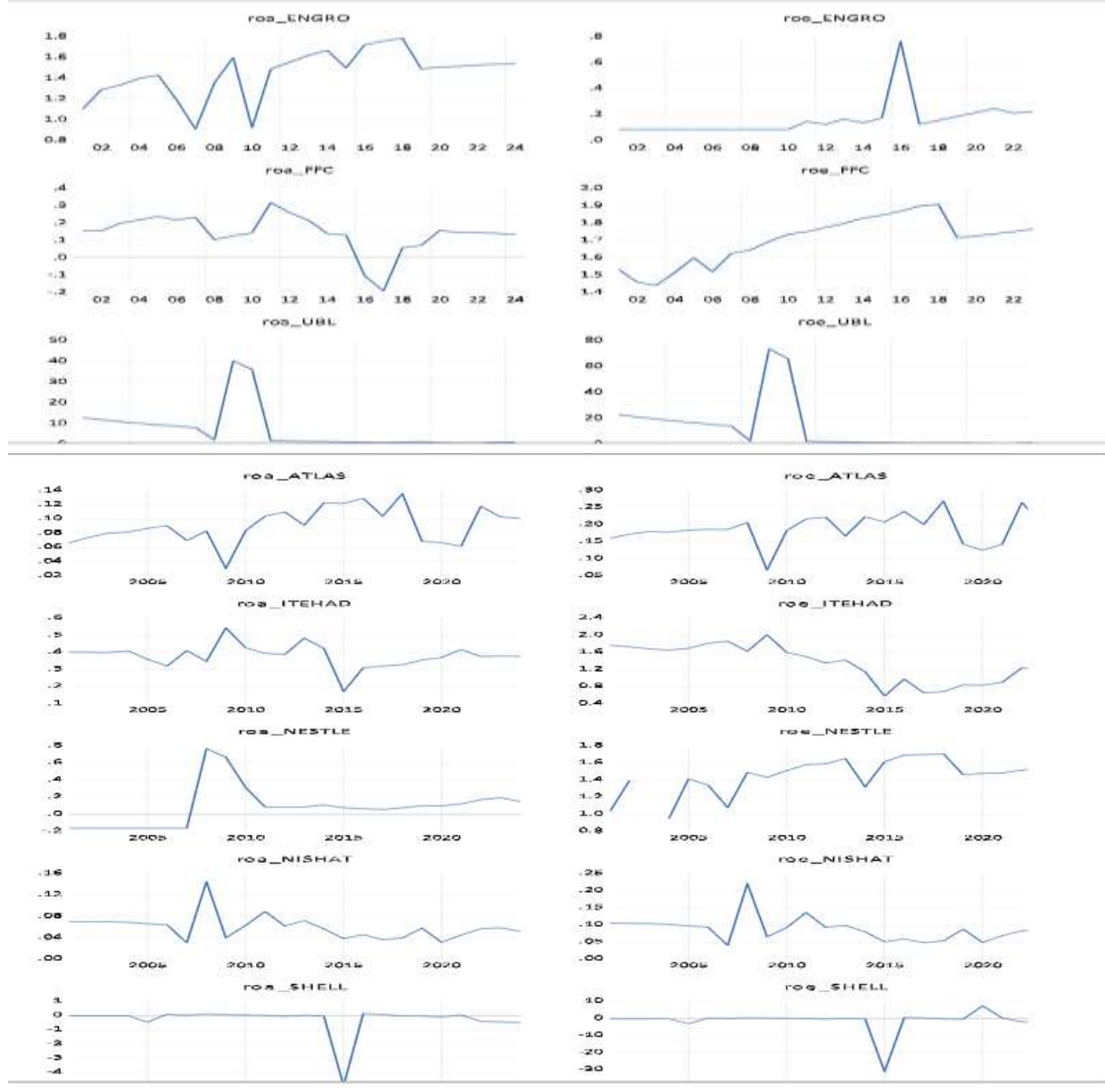
When we observe the other companies which are not part of the Top 25 companies the returns behave like the leading companies with the same kind of fluctuations revolving around zero means. The level of returns was found to be very large in the case of DHL only, in all other cases these fluctuations remained very low just like we have observed in the case of leading companies.

Figure 2: Comparison of current ratio and quick ratio



We can conclude that there is no such kind of difference between followers and the leading ones in stock returns across these sampled companies viz., top-25 companies don't have any advantage in terms of stock returns over the followers.

Figure 3: Comparison of ROA and ROE across standard group and other companies

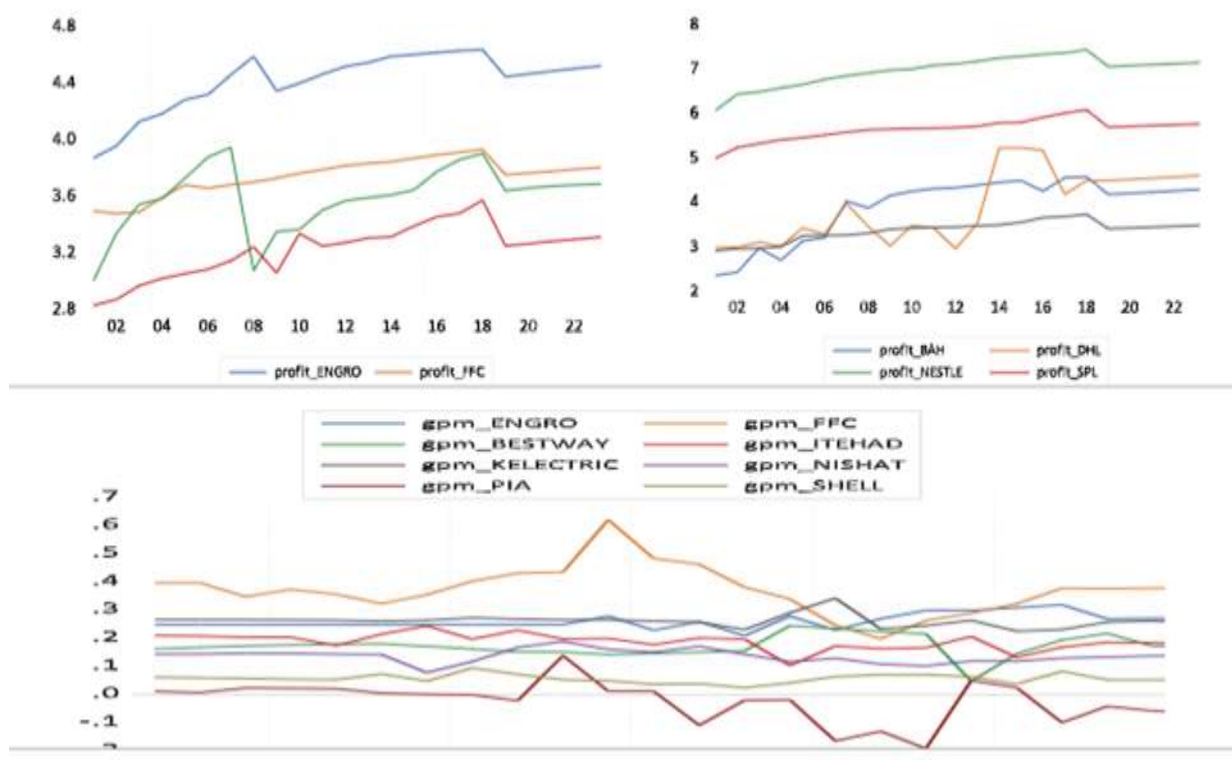


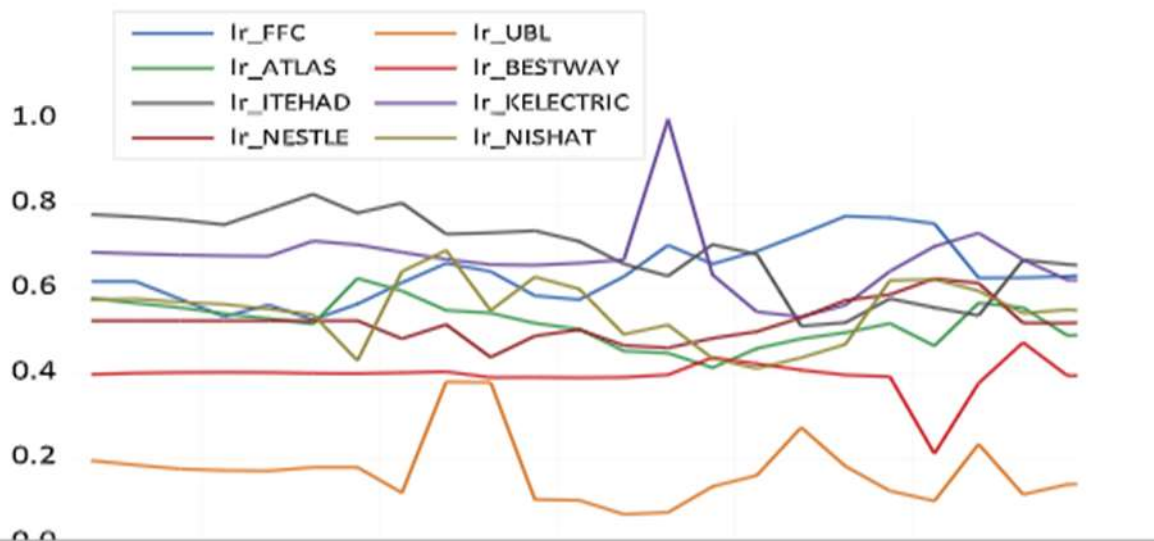
These returns have been used as a dependent variable to perform regression analysis to observe how the various ratios as well as market performance and sales are going to affect the potential returns in each company case. Interestingly most of these returns are normally distributed with a means of zero. Since there is no consistent trend in the stock returns and in most of the ratios reflecting stationarity in these variables. The application of regression analysis on these variables will be valid to observe how returns are going to be affected by the change in the given independent variables.

The data regarding collection and payment periods is available only for six companies. In figure 1, most of the companies have average collection periods lower than the average payment period including FFC, ITTEHAD, NISHAT, and ATLAS reflecting that these firms may face liquidity crunch most of the time.

The same cash management problem may partially be faced by SAPPHIRE when higher average collection period than average payment period become reverse 2013 probably induces the liquidity shortage. NESTLE is the only company that has a higher average collection period for the whole sampled period than its average payment period so effectively managing its cashflows. The current ratio, as in figure 2, is almost at the same level for both top-25 companies as well as for other companies. The patterns on these graphs depict that there is no significant difference between all these companies in terms of the current ratio.

Figure 4: Comparison of profitability across lead group and other lag companies

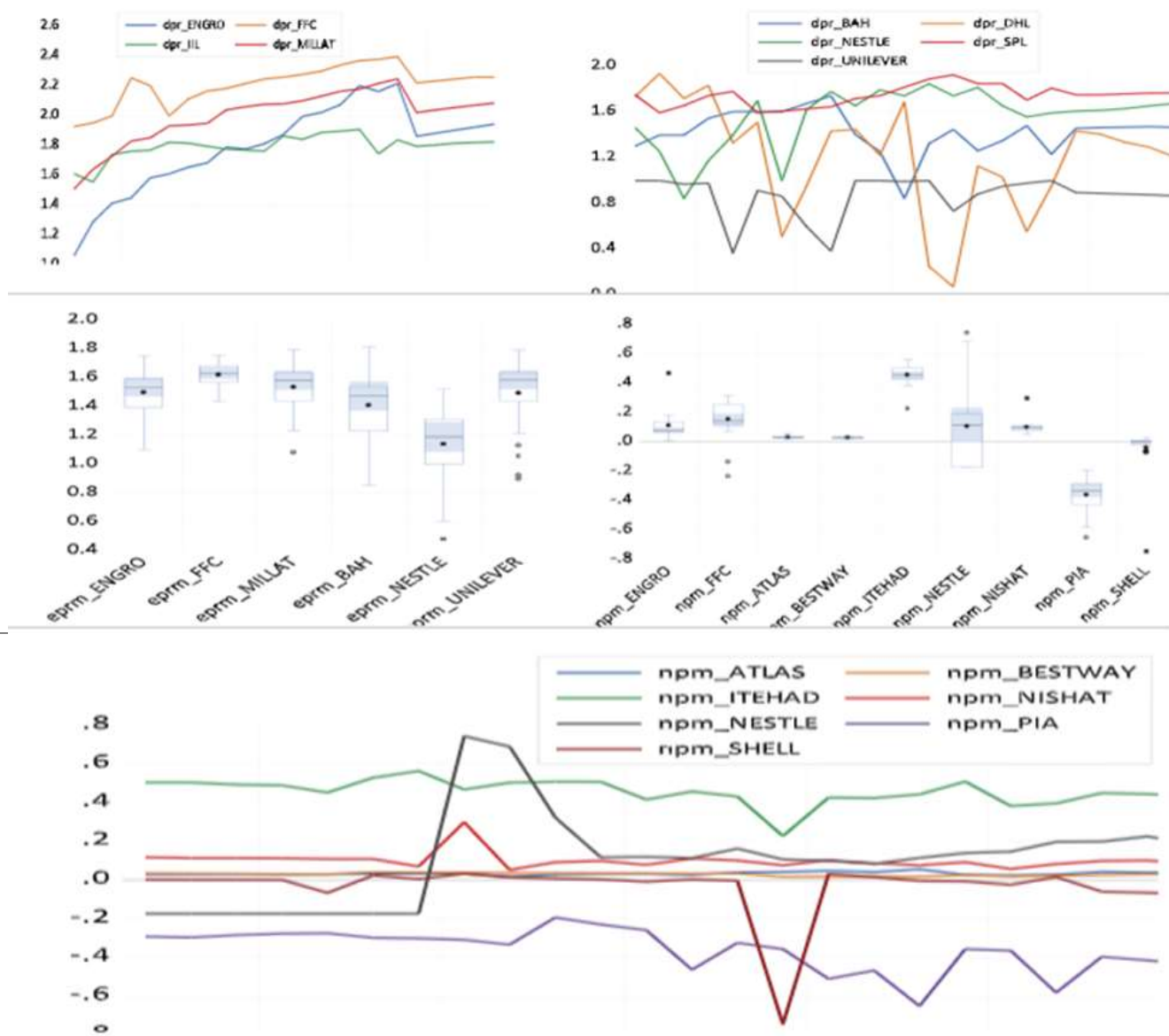




When observing the figure 3, the return on equity of ENGRO has a upward creeping growth but it remains less than one whereas the (ROA) has a rising trend with dips and peaks but remain more than one during sampled period except a marginal dip happened twice only. It is evident that ENGRO is making an exceptional profit from its assets, but shareholders are unable to get their due share perhaps due to payments to referred stockholders or repayment of debt.

The case of Fauji Fertilizer Corporation is the opposite to ENGRO because ROA remains less than one and to an extent stagnant, but ROE consistently rises and more than one across the whole sample period. Hence FFC is keeping its pace of efficiency more stable and mainly equity is being used to make more profit or debt is used more efficiently. FFC is also paying more dividends as reflected by the higher dividend payout ratio in figure 07. Nestle case is identical to FFC. In the case of ITTEHAD initially ROE is large but declined and become less than one perhaps due to very high leverage ratio stays for long, may cause excessive interest burden, reduce net income and so the ROE.

Figure 5: Lead group performance beats the other companies



In figure 4, it is very interesting to note that those companies which are not the part of top 25 have a bit higher level of profitability compared to those which are the part of top 20 companies. Although the trends reflect that both groups are alike as profit margins in both groups are rising throughout the sampled period with some variations, more instability is recorded in MILLAT tractors within top-25 companies and DHL in others.

Table 02: Regression analysis of the stock returns [top-25 qualifier firms]

Companies	ENGRO	FFC	IIL	MILLAT	SPL	UBL
ACR			1.741035*			
CR						0.293116*
DPR	-0.27	0.894*	-0.2081	2.4*	-1.141682*L	
EMPRM	0.537*	0.4820*	0.662339*	-0.325099*	1.003874*	
LR						-0.25431
MKTPRF	2.483*	0.2091	-1.533815*	-3.39435*	1.666023*	
PROFIT	-0.116	-4.23*	-0.656287*	-0.7081*	-5.038*	
QR	-1.06*	0.4074				
ROA	0.257	0.1066				-25.3157
ROE	-0.57*	1.8333*	1.426579	0.471656	0.086552	32.94375*
SIZE	-1.74*	-0.9789*	0.742385*	0.570069*	3.704306*	
STOCKPRIC E		0.8309*			0.851738*	0.396145*
STOCKSALE	0.023	-0.155			-0.539882*	-0.366263*
Interaction			0.329501*	0.67819*		
TATR						-7.65106
Adj R2	0.2492	0.4715	0.652759	0.352939	0.568988	0.601072
F - Stat		2.963	6.169578	2.714272	0.006181	0.003853
DW Stat	1.7027	1.9329	2.289473	2.082158	1.883402	1.662443
Normality of Residuals:	1.287	0.0521	1.632448	0.191179	2.233497	1.702016
Breusch- Godfrey Serial Correlation LM Test	3.851	4.0418	1.283921	2.787022	0.09039	0.993667
Heteroskedast icity Test: Breusch- Pagan- Godfrey	0.4308	0.719	0.953	0.784	0.6719	0.5725

Note: '*' shows the significance at a 5% level otherwise insignificant in all cases. Either QR or CR is used; Either 'Size' or 'Sales' is used.

The profitability across the standard group of top-25 companies ENGRO has a highest value of profit whereas among the other companies, NESTLE has the highest profit that is even higher than that of ENGRO. Regarding gross profit margins PIA has the worst scenario whereas FFC has performed the best. The performance of UBL in terms of leverage ratio is quite well across the sample but ITEHAD maintains a higher leverage ratio with a bit slow but ongoing declining trend. As in figure 5, the performance of top-25 companies concerning the Dividend payout ratio (DPR) is comparatively much better than the other companies. The dividend payout ratios of top-25 remain higher than 1.6 during most of the sample period with unstable but growing trend. Whereas DPR for most of the other companies remains at most 1.6 with marginally above for a short while but lower mainly over the sample period.

It is very low for UNILEVER but much better in case of SPL. As far as equity premium is concerned, ENGRO, FFC, and BAH don't have any outliers and have mean values more than 1.4 reflecting that there is very high-risk perception amongst investors to purchase the stocks of these companies, so they are expecting a pronounced additional return to purchase the stocks compared to bonds or securities with a bit less risky promised return. Regarding net profit margins, ITEHAD beats all the companies with the highest more than 40% ratio and minimum variations. PIA is facing the worst situation due to negative returns i.e., losses of around 35%. However, ENGRO, FFC and NESTLE are relatively better than others but having less than 20% profit margins.

Correlation Analysis

Correlation analysis shows that market performance is significantly correlated with all the variables that are available in the case of most firms. Inversely associated with stock prices and directly with others. The highest magnitude of association is found at 82.2%, 92%, and 82.0% with a return on equity, dividend payout ratio, and equity premium respectively. In the case of ROA, net profit margin, dividend payout ratio, equity premium, and stock sales are significantly correlated, whereas with net profit margin the magnitude of association is the largest at 95%. In the case of ROE, all variables are highly significant except the net profit margin. Whereas the largest association has been observed with a dividend payout ratio of 80% and equity premium of 70% respectively.

Table 3: Regression analysis of the stock returns [others non_ qualifier firms]

Companies	ATLAS	BAH	BESTWAY	DHL	ITEHAD	KELECTRIC
CR						5.484312*
DPR		-0.653455*		12.57987		
EMPRM		-0.31476				
LR	-1.175863*		1.17*			5.68*
MKTPRF		0.016676		-6.84352		
OPM						-0.46539*
PROFIT		-0.889631*		-0.43145		
QR	0.558818		-1.397622*			
ROA	-3.817346*		7.050312*		-2.264648*	1.010206
ROE	3.263731*	0.162164	-7.465935*	0.49203*	2.927678	0.1055
SIZE		1.667644*				
STOCKPRICE	1.142454*	0.712783*	0.713363*	61.9874*	0.377782*	0.373786
STOCKSALE	0.027071	-1.114108*	-0.771784*	7.673237	-0.430676*	0.628706*
TATR			0.161472		0.549112*	-0.818947*
TDER					-2.076283	-0.859887
Adj R2	0.346235	0.44102	0.423147	0.481359	0.445482	0.150588
F - Stat	2.294581	3.169676		3.916936		
DW Stat	1.63082	1.612029	1.127469	2.11214	1.955325	1.881288
Normality of Residuals	2.720488	2.62993	0.436862	1.076547	0.12101	2.935768
Breusch-Godfrey Serial Correlation LM Test	2.516211	2.724583	4.586247	0.128868	0.094819	0.221805
Heteroskedasticity Test: Breusch-Pagan-Godfrey	0.9535	0.5702	0.4205	0.9268	0.9588	0.7358

Note: '*' shows the significance at a 5% level otherwise insignificant in all cases. Either QR or CR is used; Either 'Size' or 'Sales' is used.

Regression Analysis: Sample of 'Top 25' Qualifier Companies

However, the regression analysis has been performed based on simple time series analysis where

variables are mainly found stationary, and the application of simple least squares regression is sufficient to find out the relationship between stock-returns and the various ratios. Although the main dependent variables are stock returns assuming that these financial ratios are mostly considered by the investors in the stock market or by other stakeholders to observe the value of firms in terms of stock returns.

The different types of models have been evaluated, initially with ROA and ROE as dependent variables but no significant relationship found among these variables. Consequently, only stock returns have been considered across all the firms to measure the impact of these ratios. In most cases, models are found significant by qualifying all of the assumptions to ensure a valid regression analysis.

The results of regression analysis in table 2 show that major variables which have found significantly playing positive role in improving the value of the firm are equity premium and market performance in the case of ENGRO; dividend payout ratio, equity premium, stock prices and ROE for FFC; accounts receivables, market premium, size and the interaction terms (stock price*stock sale) in case of IIL; dividend payout ratio, size and interaction terms for MILLAT; equity premium, market performance, size and stock price for SPL; current ratio, ROE and stock price in case of UBL, respectively. Consequently, the equity premium and market premium are the most common contributing ratio in top-25 firms.

Table 4: Regression analysis of the stock returns [others non_ qualifier firms]

Companies	NESTLE	NISHAT	PIA	SAPPHIRE	SHELL	UNILEVER
ARTR			-1.002459*		0.383906*	
CR		0.257716				
DPR	-0.098514					-0.08388
EMPRM	-0.994945*					0.255205
FATR					-0.55001*	
LR		-7.189372*	-0.127848*			
MKTPRF	-0.844173*					-1.479609*
MKTPRM	0.131444					0.889224*
NPM		-1.126704*			20.57393*	
PROFIT	-0.614337*					0.445318
QR	1.130249*		0.231021*	-0.08155	0.393506	
ROA	-0.938843*	7.05733	0.280777		-22.20534*	
ROE	-0.129239	-5.762851			2.002425*	0.527148*
SIZE	1.461307*					0.923457
STOCKPRICE	-0.489373	-0.355557*	0.760692*	0.569581*	-0.382082*	-0.792892*
STOCKSALE	-0.369928	0.734504*		-0.166068	-0.041317	0.249181
TATR				-0.373827*	0.640489	
TDER		7.239638*				
TIER		0.474908*		0.496419*		
Adj R2	0.512997	0.625343	0.361667	0.40327	0.285808	0.355457
DW Stat	2.232118	1.881398	1.963485	2.584532	1.593746	2.107899
Normality of Residuals	0.93988	0.401856	4.647652	0.661787	2.879552	0.634961
Breusch-Godfrey Serial Correlation LM Test	3.336999	2.491051	4.11212	4.314786	1.332303	1.842782
Heteroskedasticity Test: Breusch-Pagan-Godfrey	0.2471	0.4657	0.7898	0.1823	0.98	0.9286

Note: '*' shows the significance at a 5% level otherwise insignificant in all cases. Either QR or CR is used; Either 'Size' or 'Sales' is used.

Regression Analysis: Sample of Other Non-Qualifier Companies

In table 3 and 4, other companies results are mentioned. The significantly contributing factors that increase the returns are, ROE and stock price in case of ATLAS; size and stock price in case of BAH; leverage ratio, ROA and stock price for BESTWAY; ROE and stock price for DHL; stock price and

total assets turnover ratio for ITEHAD; current ratio, leverage ratio and stock sales in case of KELECTRIC; quick ratio and size for NESTLE; stock sales, total debt to equity ratio and time interest earned ratio for NISHAT; quick ratio and stock price for PIA; stock price and time interest earned ratio in case of SAPPHIRE; account receivable turnover ratio, net profit margin and ROE for SHELL; market premium and ROE in case of UNILEVER, respectively.

There is no consistent pattern found across all other non-qualifier companies' sample. Consequently, results reveal that each firm is focusing on its own perspective regarding improvement in stock returns. However, stock price and ROE contribute positively to many other firms but market premium and equity premium as the most important contributors of top-25 firms could not contribute to all cases except for UNILEVER.

Discussion

This study is conducted to observe how some firms that have successfully obtained the top position in the Pakistan Stock Exchange (PSX) have remained successful in maintaining it for a long time such as twenty-four years is a significant period in which these firms hold their position compared to others including some renowned ones like Shell, Unilever, and Nestle⁸. There are twenty companies out of which only six have been selected as samples based on the availability of sufficient data. While the other firms a total of 522 are reported by the PSX website.⁹ Hence to account for the perception of most renowned companies some of the multinational companies working at the country level are included for evaluation and comparison purposes.

The data mostly consists of financial ratios because only the financial aspects of the firms are evaluated as the main objective of this study. However, stock prices, stock volume traded, sales or size of these firms, and market performance based on total assets have been included as well to evaluate these sampled firms. The estimation techniques mainly focused on descriptive analysis to compare the financial ratios, the line graphs have been very helpful to reflect the variation and trends in these ratios. Correlation analysis has provided the opportunity to explore the association between these ratios and other variables of interest but due to the limitation of the large number of variables, the correlation analysis has been made by using panel data. The third estimation procedure applied here is the regression analysis for each firm by assuming that since all kind of financial reporting and financial management focus on to increase the value of the firm, it's better to observe how stock returns and the impact of these financial variables are derived from financial reports. Consequently, the stock returns are used as dependent variables. Although other regression models have also been developed with ROA and ROE as dependent variables one by one for various companies unluckily none of the models validate any significant relationship across ROA or ROE with other relevant variables or ratios.

The major finding is that equity is the main concern and source of success for these firms as dividend payout ratio, equity premium, and market premium remained those variables that have created some difference between top-25 position holders and others. As finding of (Prayoga & Wahyudi, 2021) reveal that many ratios don't have any significant association with stock returns. But many other studied including (Şanlı, 2024), (Nasrallah, Khaliq, Sarda, Aulia, & Julianto, 2023) and (Almansour, Hasan, Matar, Almansour, & Haddad, 2022) show that some of the ratios are playing significant role to improve the stock returns. It may conclude that each firm is facing a different scenario in terms of respective financial context therefore ratios that are playing vital role are not alike in each case. But in the case of top 25 qualifiers some ratios remain consistent in most of the companies which is the reflection of standardization being followed by such companies. Another finding is that the net profit

⁸Included in the sample but dropped due to insufficient data and missing variables.

⁹<https://www.psx.com.pk/psx/product-and-services/products/equity>

margin is relatively at a higher level in the case of top-25 firms with some reasonable stability compared to others. A sub-finding is that top-25 position holders are not doing anything special which is not done by others however most of the features are mixed and not helpful to differentiate the performance.

Conclusion

The evaluation of two sets of companies has provided evidence that top-25 companies are performing very well, especially in the areas of equity premium, market premium and dividend payout ratio. This means their focus is on the investor and equity holders and by providing better premiums, successfully inducing them to finance these companies businesses and expansions. Those companies that are not the part of top-25 mostly do not focus on this dimension, despite their good performance in terms of financial aspects these firms lack attention in this regard. Generally, the net profit margin is somewhat quite better in the case of top-25 representative firms compared to others reflecting that top-25 firms are managing taxes and interest payment more effectively compared to other firms.

Policy Recommendations

The most relevant policy suggestion is made to those firms which have intention to join top-25, should increase their focus on market premium and equity premium as well as increase the scope of dividend payouts. This will attract the investors to become equity holders for such firms and allow them to expand their business. There is also a need to increase net profit margins and sustain it for a long time. For top-25, the main recommendation is to improve their return over assets so that investors and equity holders believe should get more strengthened due to its reflection in stock returns.

References

- Abdul Kareem, D., & Shahzad, I. (2022). Do High-Performance Work Systems Have Financial Impact On Organizational Performance? *Journal of Positive School Psychology*, 6(8), 10612-10624.
- Agyei, J., Sun, S., & Abrokwah, E. (2020). Trade-Off Theory Versus Pecking Order Theory: Ghanaian Evidence. *Sage Open*, 10(3). <https://doi.org/10.1177/2158244020940987>
- Ahmad, U., ul Husnain, M. I., Khan, D. A., & Sulman, A. (2019). Impact of Corporate Social Responsibility on Financial Performance of Non-Financial Firms: Evidence from Pakistan Stock Exchange. *Pakistan Journal of Social Sciences*, 39(3), 1083-1090.
- Ahmed, F., Awais, I., & Kashif, M. (2018). Financial leverage and firms' performance: Empirical evidence from KSE-100 Index. *Etikonomi: Jurnal Ekonomi*, 17(1), 45-56.
- Aziz, S., & Abbas, U. (2019). Effect of debt financing on firm performance: A study on non-financial sector of Pakistan. *Open Journal of Economics and Commerce*, 2(1), 8-15.
- Baskin, J. (1989). An empirical investigation of the pecking order hypothesis. *Financial Management*, 18(1), 26-35. <https://doi.org/10.2307/3665695>
- Bertuah, E., & Sakti, I. (2019). The financial performance and macroeconomic factors in forming stock return. *Jurnal Riset Manajemen dan Bisnis (JRMB) Fakultas Ekonomi UNIAT*, 4(S1), 511-522.
- Bunea, Ovidiu-Iulian & Corbos, Razvan-Andrei & Popescu, Ruxandra-Irina, 2019. "Influence of some financial indicators on return on equity ratio in the Romanian energy

- sector - A competitive approach using a DuPont-based analysis," *Energy*, Elsevier, vol. 189(C).
- Bustani, B., Kurniaty, K., & Widyanti, R. (2021). The Effect of Earning Per Share, Price to Book Value, Dividend Payout Ratio, and Net Profit Margin on the Stock Price in Indonesia Stock Exchange. *Jurnal Maksipreneur: Manajemen, Koperasi, dan Entrepreneurship*, 11(1), 1-18.
 - Damodaran, Aswath (2020). Equity Risk Premiums: Determinants, Estimation and Implications - The 2020 Edition. NYU *Stern School of Business*, Available at SSRN: <https://ssrn.com/abstract=3550293> or <http://dx.doi.org/10.2139/ssrn.3550293>
 - Daniswara, H. P., & Daryanto, W. M. (2020). Earning Per Share (EPS), Price Book Value (PBV), Return on Asset (ROA), Return on Equity (ROE), and Indeks Harga Saham Gabungan (IHSG) Effect on Stock Return. *South East Asia Journal of Contemporary Business, Economics and Law*, 20(1), 11-27.
 - Danoshana, S., & Ravivathani, T. (2019). The impact of the corporate governance on firm performance: A study on financial institutions in Sri Lanka. *SAARJ Journal on Banking & Insurance Research*, 8(1), 62-67.
 - Dao, B.T.T. and Ta, T.D.N. (2020), "A meta-analysis: capital structure and firm performance", *Journal of Economics and Development*, Vol. 22 No. 1, pp. 111-129. <https://doi.org/10.1108/JED-12-2019-0072>
 - Farooq, M., Khan, Shiraz Khan, Atif Atique Siddiqui, Muhammad Tariq Khan, Muhammad Kamran Khan (2021). Determinants of profitability: A case of commercial banks in Pakistan. *Humanities & Social Sciences Reviews* Vol 9, No 2, 01-13 ISSN: 2395-6518, <https://doi.org/10.18510/hssr.2021.921>
 - Farooqi, Talha and Siddiqui, Danish Ahmed, (2021). Free Float and Stock Liquidity: Evidence from Pakistan Stock Exchange. Available at SSRN: <https://ssrn.com/abstract=3941951> or <http://dx.doi.org/10.2139/ssrn.3941951>
 - Fernandez, Pablo and Martinez, Mar and Fernández Acín, Isabel, (2019). Market Risk Premium and Risk-Free Rate Used for 69 Countries in 2019: A Survey. Available at SSRN: <https://ssrn.com/abstract=3358901> or <http://dx.doi.org/10.2139/ssrn.3358901>
 - Gomes, L., & Ribeiro, R. (2018). Term structure (s) of the equity risk premium. Available at SSRN: <https://ssrn.com/abstract=3144028> or <http://dx.doi.org/10.2139/ssrn.3144028>
 - Hasan, M., Ahmad, M., Rafiq, M. and Rehman, R. (2015) Dividend Payout Ratio and Firm's Profitability. Evidence from Pakistan. *Theoretical Economics Letters*, 5, 441-445. doi: 10.4236/tel.2015.53051.
 - Hertina, D., & Saudi, M. H. M. (2019). Stock return: Impact of return on asset, return on equity, debt to equity ratio and earning per share. *International Journal of Innovation, Creativity and Change*, 6(12), 93-104.
 - Hirdinis M, 2019. "Capital Structure and Firm Size on Firm Value Moderated by Profitability," *International Journal of Economics & Business Administration (IJEBA)*,

- International Journal of Economics & Business Administration (IJEBA)*, vol. 0(1), pages 174-191.
- Horvey, S. S., & Ankamah, J. (2020). Enterprise risk management and firm performance: Empirical evidence from Ghana equity market. *Cogent Economics & Finance*, 8(1), 1840102.
 - Iqbal, J., & Masood, A. (2022). Corporate Governance Index, Financial Performance, Access to Finance and Bankruptcy Prediction: Evidence from Sugar Sector of Pakistan. *Review of Education, Administration & Law*, 5(3), 295-310.
 - Javed, T., Younas, W., & Imran, M. (2014). Impact of Capital Structure on Firm Performance: Evidence from Pakistani Firms, *International Journal of Academic Research in Economics and Management Sciences*, Sep 2014, Vol. 3, No. 5, 28-52. ISSN: 2226-3624
 - Kaur, N. and Singh, V. (2021), "Empirically examining the impact of corporate social responsibility on financial performance: evidence from Indian steel industry", *Asian Journal of Accounting Research*, Vol. 6 No. 2, pp. 134-151. <https://doi.org/10.1108/AJAR-07-2020-0061>
 - Khan, M. W. J., Shinwari, M. I., Ahmed, Z., & Sulaiman, G. (2021). Impact Of Audit And Remuneration Committee Attributes On Firm Performance: Evidence From Non-Financial Firms Of PSX. *Pakistan Business Review*, 22(4).
 - Matsoma, N. L. (2022). The relationship between the liquidity risk, financial leverage and firm financial performance: Evidence from Top-40 Johannesburg Stock Exchange (JSE) firms. *Acta Universitatis Danubius. Economica*, 18(5). Retrieved from <https://dj.univ-danubius.ro/index.php/AUDOE/article/view/1932>
 - Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221. [https://doi.org/10.1016/0304-405X\(84\)90023-0](https://doi.org/10.1016/0304-405X(84)90023-0)
 - Megamawarni, M., & Pratiwi, A. (2021). Pengaruh Rasio Keuangan dan Pertumbuhan Perusahaan terhadap Dividend Payout Ratio (DPR) dan Implikasinya pada Harga Saham Perusahaan Perbankan yang Listing di Bursa Efek Indonesia (BEI). *Jurnal Maksipreneur: Manajemen, Koperasi, dan Entrepreneurship*, 11(1), 47-68.
 - Merkoulova, Yulia & Veld, Chris, (2022). "Does it pay to invest? The personal equity risk premium and stock market participation," *Journal of Banking & Finance*, Elsevier, vol. 136(C).
 - Modigliani, Franco, and Merton H. Miller (1958) "The Cost of Capital, Corporation Finance and the Theory of Investment." *The American Economic Review*, vol. 48, no. 3, pp. 261-297.
 - Nazir, A., Azam, M. and Khalid, M.U. (2021), "Debt financing and firm performance: empirical evidence from the Pakistan Stock Exchange", *Asian Journal of Accounting Research*, Vol. 6 No. 3, pp. 324-334. <https://doi.org/10.1108/AJAR-03-2019-0019>

- Nur-Al-Ahad, M., & Rahman, M. A. (2018). Nexus between directors' remuneration and performance in Malaysia: A Supervised Machine Learning approach. *Journal of International Business and Management*, 1(2), 1-14.
- Odum, A. N., Odum, C. G., Omeziri, R. I., & Egbunike, C. F. (2019). Impact of dividend payout ratio on the value of firm: A study of companies listed on the Nigerian Stock Exchange. *Indonesian Journal of Contemporary Management Research*, 1(1), 25-34.
- Pandey, K. D., & Sahu, T. N. (2019). Debt financing, agency cost and firm performance: Evidence from India. *Vision*, 23(3), 267-274.
- Rajverma A (2024) Impact of Ownership Structure and Dividends on Firm Risk and Market Liquidity. *Journal of Risk and Financial Management* 17(7):262, 2-18. <https://doi.org/10.3390/jrfm17070262>.
- Rashid, H. A., Iqbal, Z., & Aslam, S. (2021). The Impact of Debt Financing on Corporate Financial Performance: An Evidence of Pakistani Non-Financial Listed Firms. *Pakistan Journal of Social Sciences*, 41(1), 155-162.
- Rescigno, E. T. (2018). Relationship Between Chief Executive Officer Compensation, Duality, and Return on Equity. *Unpublished Thesis*, 1- 126. Walden University. Retrieved from: <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=7376&context=dissertations>
- Sajid, A., Arsalan, M., Khan, M. T., & Ramish, M. S. (2021). The Equity Risk Premium Puzzle in Pakistan. *Market Forces*, 16(1), 147-165. <https://doi.org/10.51153/mf.v16i1.474>
- Saleem, Q., Sulong, S., & Isa, B. (2019). Relationship between stock market volatility, stock market liquidity and financial performance of non-financial firms listed on Pakistan Stock Exchange. *International Journal of Academic Research in Business and Social Sciences*, 9 (7), 307, 323.
- Salim, M. A., & Pardiman, P. (2022). The role of dividend policy as intervening variables on the effect of earning per share, debt equity ratio and price book value on stock price. *Jurnal Bisnis dan Manajemen*, 9(1), 77-86.
- Sunaryo, D. (2020). The effect of net profit margin, return on asset, return on equity on share prices in The Southeast Asian metal industry. *International Journal of Science, Technology & Management*, 1(3), 198-208.
- Ullah, A., Pinglu, C., Ullah, S., Zaman, M., & Hashmi, S. H. (2020). The nexus between capital structure, firm-specific factors, macroeconomic factors and financial performance in the textile sector of Pakistan. *Heliyon*, 6(8), e04741.
- Wijaya, D. A., & Muljo, H. H. (2022). The Effect Analysis of Solvency Ratio, Profitability Ratio and Inflation on Stock Return. *Business Economic, Communication, and Social Sciences (BECOSS) Journal*, 4(1), 65-73.
- Zeitun, R., & Haq, M. M. (2015). Debt maturity, financial crisis and corporate performance in GCC countries: a dynamic-GMM approach. *Afro-Asian Journal of Finance and Accounting*, 5(3), 231- 247.

- Fallatah, Y., & Dickins, D. (2012). Corporate governance and firm performance and value in Saudi Arabia. *African Journal of Business Management*, 6(36), 10025-34. doi:10.5897/AJBM12.008
- Ross, S. A. (1977). The Determination of Financial Structure: The Incentive-Signaling Approach. *The Bell Journal of Economics*, 8(1), 23-40. Retrieved from <https://www.jstor.org/stable/3003485>
- Suhadak, K. S., & Rahayu, S. M. (2019). Stock return and financial performance as moderation variable in influence of good corporate governance towards corporate value. *Asian Journal of Accounting Research*, 4(1), 18-34. doi:DOI 10.1108/AJAR-07-2018-0021