RECOGNIZED IN "Y"
CATEGORY BY

RESEARCH JOURNAL OF PSYCHOLOGY

Financial Performance of Industry: A Case Study from Pakistan

Dr. Sheeba Zafar
Assistant professor of Management Sciences, Shifa Tameer-e-Millat University, Islamabad, Email: sheebazafar.dms@stmu.edu.pk

Abstract

The main objective of this examination is to investigate the impact of ratio analysis to study the financial health i.e., Sales Growth (SGR) of companies for the period 2018-2022. The study sample consists of 05 firms from pharmaceutical sector. The study is quantitative in nature and secondary data is used in this thesis. An aggregate of 14 financial ratios is used, which are incorporated into the examination to explore firm sales growth. Data is gathered from firms' annual reports. Annual reports of the firms are extracted from companies' websites, PSX website and SBP. Regression, correlation, and descriptive statistics are used to analyze the data. Principle Component Analysis (PCA) method is used in the study. Five components are selected after scree-test. The findings of ordinary least square (OLS) regression model suggest that return on assets enhances SGR by 0.15%. Thus, return on assets and SGR are positively correlated. In terms of ROE and SGR we expect positive and significant coefficients for ROE variable. Hence, there is a noteworthy and strong coefficient on ROE. The outcome shows that ROE increases SGR by 0.17%. GM has insignificant effect on SGR. CR is stated to have a desirable effect on SGR. The positive signs ($p < 0.01$) on CR measure indicate that CR improved the SGR by 0.07%. The hypotheses are supported by the evidence that ATR is linked with increase in SGR. The outcomes are statistically sufficiently great at 1% level. Particularly, one unit increase in ATR is linked with 0.05% increase in SGR.

Keywords: *Financial Performance, Ratio Analysis, Industrial Sector, Sector, Pakistan*

Introduction

The aim of this study is to analyses the profitability ratios and hence financial performance of selected pharmaceutical companies for the period of 05 years from 2016-2020. The study sample consists of 05 firms from pharmaceutical sector. An aggregate of 14 profitability ratios is used in this study. Firms financial health is related with its ability to create profit; increase the estimation of capital contributed and in the meantime reimburses its long term and short term liabilities (Myšková et al., 2017). In order to examine the financial health of company's different techniques can be used however in this study we have employed profitability ratio analysis.

The pharmaceutical companies assume a crucial part in each country both according to the point of view of the commitment of health in the gross domestic product and of the commitment to reinforcing country wellbeing list (Chashmi et al., 2016). Pakistan has around 780 little and enormous drug fabricating units which meet over 60% of total interest of pharma items, and this industry is arranged in two significant fragments homegrown organizations and multinationals (Shanwari, et al., 2021).

The preamble of this research is to critically evaluate the financial performance of pharmaceutical industry in Pakistan. Financial statements are annual reports which show the overall performance and profitability of a company over a period of time. In order to critically evaluate the financial statements of pharmaceutical companies in Pakistan, different ratios was used which include profitability ratios, liquidity ratios, efficiency ratios, leverage ratios and activity ratios. The purpose of this research is to examine the impact of different variables on the financial performance of pharmaceutical companies in Pakistan. The significance of the research is to investigate how the profitability ratios of pharmaceutical companies have fluctuated over the years and to understand the possible causes of these changes. Overall, the emerging demands in the modern era for more effective and affordable medicines have resulted in increased investment in the pharmaceutical sector of Pakistan,

making this industry one of the most important contributors to the country's economy and the theoretical roots of this paper was discussing the different developmental stages of Pakistan's pharmaceutical industry.

The Objectives of the Study were as.

i. To study the financial performance of pharmaceutical industry with the help of ratio analysis.

Rationale of the Study

Pakistan has an extremely energetic and forward-looking pharmaceutical sector (Rehan et al. (2019). This sector in Pakistan started its business activities a couple of years after the nation appeared. With the progression of time, a large portion of the multinational firms started producing exercises to adapt to the necessity of value medicines for the quickly expanding populace in the two wings of the country (Chisti et al., 2013; Hanif et al., 2024).

The present study aims to examine the Pakistan Pharma sector profitability position. The examination could help investors as well as firms to get its financial effectiveness. It intends to assist the administration with figuring out its financial issues as of now and the particular regions in the business, which could require a few exertions for more powerful and proficient usage of its assets. Hence, this study will help the investors, stakeholders, and policy makers in identifying the reasons behind the low or high financial performance. The investors can use the results of this study to invest in the future or not. This study will help them in assessing the company from various angles in terms of profitability ratios.

Literature Review

According to Reilly and Brown (2005), balance-sheet analysis seeks to evaluate firms' effectiveness in many crucial sectors, such as harm, effectiveness, and revenue growth. The eventual aim of that analyzation is to provide insights into the future performance management. They also recommend that financial ratios associated with the economy, the firm's industry, the firm's major rivals, and the firm's past comparative ratios be investigated. Only optimum solution liquidity advantages sales and profits, allowing the business to maximize on short-term possibilities. Working capital ratios that are frequently used such current, acid test, or quick, and stock turnover. The cashflow ratio, which attempts to measure the relationship between current assets and current liabilities can be utilized to evaluate a firm's short-term liquidity.

Taping and Stephan (2008) in their examination on benefit determinants observed that liquidity of Ukrainian firms, estimated by current proportion, impacts productivity. One can name the size of the organization, theoretical resources, and liquidity among other significant determinants of benefit for organizations working in the developing business sectors. Hence, liquidity significantly affects company's productivity and to that end it requires legitimate administration. A number of variables can be included under the broad term of liquidity, but for this study only two was focused on; current ratio and acid test ratio. The current ratio measures a firm's ability to pay its short-term liabilities with its short-term assets (Khan & Ahmad, 2017).

Corporate liquidity can be analyzed along two fundamental aspects: static and dynamic (Uyar, 2009). Static investigation is centered around customary proportions (current and fast proportions) in view of the information from the monetary record. These proportions evaluate

how much current liabilities are covered by current resources. Dynamic examination depends on cash outpourings and inflows and utilizations cash change cycle (CCC) to quantify adequacy of an organization's capacity to produce cash. It involves both asset report and pay explanation information to make an action with a period aspect (income inside the working pattern of the firm). The two types of proportions are utilized to direct a broad-reaching liquidity examination. The basic function in managing working capital is to maintain adequate liquidity throughout the day so that the company may operate effectively and fulfill its obligations (Jiang et al., 2021).

The top management' liquidity, which makes reference to the platform of current assets and liabilities, plays an essential role in the productive management of a business as well as acquires growth prospects. A company's financial condition refers to its capacity to organize cash. Executive cash flow is crucial for all institutions, tiny, middle, and big. In any particular instance, this is undoubtedly not an easy process even though supervisors should ensure that the company is trying to operate in a fruitful and enhance the level, and there is a high chance of misunderstanding of current resources and present obligations throughout this process. If this happens, and the administrator doesn't handle it well, it will slow the company's growth and productivity. This can lead to financial trouble and eventually cause the failure of the business. (Jiang, et al., 2021).

Qasim and Ramiz (2011) prove how liquidity is defined as the amount of funds available in the not-too- distant future after taking into consideration monetary responsibilities for that time frame. Liquidity risk refers to the possibility that the institution may be unable to make a payment to loan losses as a direct consequence of changes in the amount of long-haul credits and transient lines of credit, in addition to the unconnected essence of the group's obligations. Further, liquidity risk is viewed as a type of default risk, which raises the issues of its effect on the general value chance. The Pakistani pharmaceutical industry has experienced continuous growth over the years with the country's population and income levels rising steadily. However, this growth has been hindered by various factors such as political instability, power shortages and, most importantly, a lack of access to financing. In recent years, the Pakistani pharmaceutical industry has started to face increased competition from foreign firms, which has put pressure on domestic companies to become more efficient and innovative in their operations. Thus, it is important for the Pakistani pharmaceutical industry to focus on improving its liquidity position in order to remain competitive (Khan et al., 2017).

Liquidity is especially critical to investors, long haul moneylenders and lenders, as it gives data about a specific business' security edges stood to leasers and its capacity to reimburse credits. The degrees of stock, credit, creditor liabilities and money that structures some portion of the general income of a business influence the liquidity of the firm (Maness, 1994). By keeping a fitting degree of liquidity, a business ought to be running against the wind and also, it very well might have the option to take advantage of beneficial open doors as they emerge (Gitman, 1997). Then again, as declared by Cooper, et al (1998), illiquidity, except if helped, will bring about indebtedness and in the long run insolvency as the Business' liabilities surpass its resources. Investors, long haul loan specialists, and leasers assess the degree of chance they bear and require remuneration for the dangers, which emerge from a business' capital construction.

Since mortgage lenders have an earlier incident on the Liquidity proportions measure a company' ability to meet payment obligations by comparing the money as well as close money and also the installment obligations, the scope of assets backed by renters is of particular significance to investors. If the incorporation of the final option even by prior is

inadequate, it indicates that the business may face challenges in meeting its immediate monetary obligations. As a consequence, this may have an effect on the group's business operations and economic output. The Liquidity versus Profitability Principle: As according Morris and Shin, there is a trade-off among liquidity as well as productivity; obtaining one usually entails offering up some of the other (2010). The liquidity proportion is described conceivably by the scientists as "feasible cash on the financial record to momentary obligations." In turn, "feasible money" is described as liquid resources in addition to the different assets for which a hair style has been implemented. Proportion assessment is one of the popular ways that utilize budget summaries to evaluate the organization and establish guidelines that have only decoded monetary understanding (Ahmed et al., 2015).

Raheman and Nasr (2007) discovered a strong negative association between the current proportion and the obligation percentage and company performance in their study where normal assortment period, stock turnover in days, regular payment period, CCC, current proportion, responsibility proportion, size of the firm, and funds and resources for total assets proportion were chosen autonomous variables and net operating benefit was the reliant factor. The focus also resolved a negative correlation between liquidity as well as benefit. Moreover, they found a significant negative connection between the firm's obligation as well as its advantage (Sari et al., 2020).

In their review, Benjamin and Kamalavali (2006) used free factors including such current proportion, quick percentage, stock turnover proportion, asset turnover proportion, debt owner's turnover percentage, the proportion of a current resource for all out asset, the percentage of a current resource for working pay, comprehensive and detailed liquidity file, net fluid equilibrium size, and impact and economic expansion, whereas the subordinate variable (benefit) was approximated as far as ROI formed a negative correlation between ROI and the following variables: current percentage, cash turnover proportion, current repository for having to work pay, and impact. They also showed a positive correlation among ROI and the fast percentage, debt holder turnover percentage, current resource for absolute resource, and rate of growth.

From the current review viewed organization's monetary position was considering to be sound in light of the fact that the organization attempts to build its creation and furthermore net benefit. It is clarified that productive liquidity the executives includes arranging and controlling current resources and current liabilities in such a way that takes out the gamble of powerlessness to meet due momentary commitments and keeps away from over-the-top interest in these resources. There have been several shifts in the organization's financial condition that, depending on one's point of view, may be seen either favorably or unfavorably. The majority of the organization's finances are in good shape, which bodes well for its future.

It is encouraging to see that the nonprofit organization's net income has been on the rise over the course of the last three years. In addition, during the previous three years, the organization's current ratio as well as its acid-test ratio have both grown, which suggests that the corporation has been able to efficiently manage both its current assets and liabilities. However, over the course of the previous three years, the organization's overall debt-to-asset ratio has grown, which is a trend that should be considered bad (Khan et al., 2017). This suggests that the firm has been taking on more debt over the last several years, which puts the organization at danger in the event that there is a downturn in the economy.

Research Methodology and Procedure

Furthermore, there are two types of research approaches, thus a deduction approach and an induction approach. Hypotheses are deduced from a hypothesis in the approach of deductive research. Scientists can utilize the deductive method to create and refine a concept after analyzing the data. In contrast, the inductive approach enables scientists to create a plan and concepts for data processing. To construct the study philosophy, it is essential to parallel this methodological approach as a deduction to positivism and an induction to explanation (Vlastelica, et al., 2018). Nonetheless, there was minimal actual use and the experts may be misrepresented. As a direct consequence, the relationships between research and theory, in addition to deduction and induction decisions, are crucial elements. The present study utilizes a deductive research approach.

From the data collected, the research examines the financial performance of these companies in terms of different indicators including sales growth, profitability, and productivity. Several models have been used in the analysis to identify the key drivers of financial performance. The findings of this study provide insights into the factors that contribute to the success of pharmaceutical companies in Pakistan. From 2018 to 2022, the sales of the top 5 pharmaceutical companies have grown significantly. The profitability and productivity have also increased during this period. The key drivers of financial performance are identified as sales growth, profitability, and productivity. The findings of this study will help managers to understand the factors that contribute to the success of pharmaceutical companies in Pakistan. The following are the selected pharmaceutical companies of this study:

i. Abbott Laboratories (Pakistan) Limited
ii. AGP Limited
iii. Glaxo Smith Kline Pakistan Limited
iv. Feroz soedns Laboratories Limited
v. High noon Laboratories Limited

The study population will consist of all firms from pharmaceutical sector listed at Pakistan Stock Exchange. The study sample will consist of 05 firms from pharmaceutical sector. Secondary data was used in this study. By definition, secondary data is the data that has been assembled by somebody other than the researcher and/or for some other reason than the task at hand (Zhang, 2010). Secondary data was collected from the following sources:

i. Annual reports.
ii. PSX website.
iii. Joint stock companies balance sheet analysis.
iv. PSX listed firms' financial statement analysis.

Data Analysis

The descriptive statistics present the mean, SD, maximum and minimum values of the independent and dependent variables. As shown in shows in table 1 that SGR has average value 13% and SD of 0.31. The explanatory variable has 8.9% mean value for ROA and SD of 0.41 with a base value of - 2.0977, and extreme value of 2.208. The mean value of ROE has 8.5 % and a SD of 0.414397. The variable GM is 61% mean value. The variable CR has 57% mean values.

Table 1: Descriptive statistics

Variable Maximum	Observations	Mean	Std. Deviation.	Minimum	
SGR	294	.1384453	.3140828	-.6667165	2.056833
ROA	315	.0894546	.4149352	-2.0977	2.208
ROE	315	.0854032	.414397	-2.0977	2.208
GM	315	.6157136	.1291506	.35	.9406
CR	315	.5763816	.1518504	.25	.9528
ATR	315	.4811111	.217605	.1	1.01
DER	315	.5652552	.2465909	.129	1.7051
TIE	315	16.32219	2.381746	7.3469	20
DAR	315	8.141206	1.377797	6	11.05
DI	315	8.609016	2.0148	6	15.31
DAP	315	23.79809	5.141827	12.7091	42
WC	315	12.19721	3.594349	4	20
WCA	315	.7040073	.1383213	.25	1
LTL	315	.3388352	.3800202	0	1
SLNW	315	5.716924	3.525403	0	12.5223

Correlation of Variables

When two variables are very highly correlated there exists multicollinearity. According to Gujarati (2003) when the correlation is in excess of 0.80 then there would be the problem of multicollinearity. The findings in this thesis suggest that there is no such problem in the data as no correlation exceeds 0.80.

Table.2: Correlation Matrix

	SGR	ROA	ROE	GM	CR	ATR	DER	TIE	DAR	DI	DAP	WC	WCA	LTL	SLNW
SGR	1.00														
ROA	0.06	1													
ROE	0.05	0.99	1												
GM	-0.10	-0.03	-0.03	1											
CR	-0.13	-0.19	-0.18	0.15	1										
ATR	-0.06	-0.17	-0.16	0.36	0.63	1									
DER	-0.16	-0.11	-0.11	-0.1	-0.08	-0.15	1								
TIE	-0.16	0.01	0	0.26	0.3	0.03	0.1	1							
DAR	0.00	-0.15	-0.15	0.35	0.33	0.24	0.05	-0.08	1						
DI	0.00	0.15	0.14	-0.19	-0.09	-0.11	0.12	0.01	-0.14	1					
DAP	0.02	0	0	0.19	0.3	0.21	-0.04	-0.01	0.2	-0.05	1				
WC	0.05	-0.07	-0.07	0.32	0.21	0.25	-0.01	-0.31	0.65	-0.22	0.09	1			
WCA	-0.07	-0.05	-0.05	0.51	0.66	0.34	-0.07	0.16	0.32	-0.01	0.19	0.08	1		
LTL	-0.10	-0.23	-0.22	0.3	0.42	0.64	-0.05	0.21	0.16	0.02	0.32	0.06	0.36	1.00	
SLNW	0.22	-0.04	-0.04	-0.09	0.16	0.45	-0.09	-0.13	0.01	0.11	0.15	0.05	0.03	0.33	1.00

The objective of this study is to examine that how various financial variables influence on the revenue growth (SGR) of firms in pharmaceutical sector in Pakistan. For the investigation of

the impact of financial variables on SGR this study employs the accounting data of the related firms. In this section correlation analysis, descriptive statistics and regression examination of the variables are discussed.

Discussion

This study had adopted a positivist view by engaging a quantitative statistical method instead of a qualitative approach. The results show that SGR has average value 13% and SD of 0.31. The explanatory variable has 8.9% mean value for ROA and SD of 0.41 with a base value of - 2.0977, and extreme value of 2.208. The mean value of ROE has 8.5 % and a SD of 0.414397. The variable GM is 61% mean value. The variable CR has 57% mean values.

In Principle Component Analysis (PCA) we decrease statistics and is utilized to lessen various variables into couple of variables. The components produced through PCA are known as principal components. In this way PCA is an option measurable analysis which is utilized to get the predominant component in the data which is to be utilized in observational model for forecasting the firm's sales growth.

The goal of these components is built with that previously removed component clarifies the biggest variety of data set and that every resulting element clarifies the following biggest variety in population. The majority of varieties of the first data set are explained by these elements/components, which are held additionally for investigation by utilizing data holding techniques, for example, the scree -test.

Thus, so as to figure out which of the element to absorb for our investigation we break down the scree-plot appeared underneath in figure one. The plot proposes to continue to hold just the above-mentioned elements which have eigenvalues equivalent to or more noteworthy than one. This basis grants us five components to hold for our regression examination.

Five components are selected after scree-test. The number of principal components chose. The given arranged data show 74 percent variance out of absolute variance. This demonstrates during the example time frame, variance of more than 70 percent is caught by the initial five chose variables gatherings.

In this study we investigate the impact of financial variables on sales growth of companies. In order to explain this association and discover that which variable element be able to reveal companies' revenue growth, the regression analysis model shows firm's revenue growth as predicted variable and other variables separated by principal components analysis (PCA) are repressors/controlled variables. The five elements score which we put forward for consideration and that later on explained in regression examination model.

The findings suggest that return on assets enhances SGR by 0.15%. Thus, return on assets and SGR are positively correlated. In terms of ROE and SGR we expect positive and significant coefficients for ROE variable. Hence, there is a noteworthy and strong coefficient on ROE. The outcome show that ROE increases SGR by 0.17%. GM has insignificant effect on SGR. CR is stated to have a desirable effect on SGR. The positive signs ($p < 0.01$) on CR measure indicate that CR improved the SGR by 0.07%.

Research Recommendations

    i.   There is a huge limitation of data. As this study is restricted to Pakistan so we used the annual reports of companies listed on Karachi Stock Exchange (KSE-100). The

> reason for picking KSE is that it has broad scope of organizations from different business segments.

ii. There had a few issues in obtaining hard data and this issue turns out to be all the more trying when we needed to gather information over the earlier years.

iii. This data is of secondary nature so there are chances that it might not be accurate and complete to a large extent because the secondary data sources may have different perspective than what we required for our study. ·

iv. The information for this project is derived from a specific business, namely the pharmaceutical companies. As a direct consequence, the program's findings can only be decided to apply to the pharmaceutical companies. As a result, future studies must gather information from other industries and areas to verify the hypothesis.

v. This research paper is time restricted and thus there is not many ratios and values been considered to be added. The limited variables have been used for this research. This means that the data may not be comprehensive, and the results could have been more reliable if bigger sample size was considered.

vi. This research paper only covers one region i.e. Pakistan Pharma sector so future research needs to cover other regions as well because financial position of companies can vary from country to country due to different regulations, customs,

Implications of the Research

This research can help policy maker, academicians and practitioners in different ways. The findings of the study can help policy makers to design policies for the promotion of pharmaceutical sector in Pakistan. It is also helpful for academicians as this research adds to the current body of knowledge. Furthermore, it was beneficial for practitioners such as managers because they can use the findings of this study to manage their firms' growth. By having this knowledge, they can decide which areas need improvement.

References

1. Achim, M. V., Borlea, S. N., & Gaban, L. V. (2016). V. Failure prediction from the investors´view by using financial ratios. Lesson from Romania. E*&M Economics and Management*, *XIX*(4), 117-133. doi: http://dx.doi.org/10.15240/tul/001/2016-4-009

2. Acs, Z. J. and C. Armington (2001). "Gibrat's Law Reconsidered: The relationship between firm growth, establishment age, establishment size and firm Size", *Working Paper of the Regional Entrepreneurship Catalyst Kauffman Center for Entrepreneurial Leadership*, Kansas City, MO.

3. Ahmed, I. E. (2015). Liquidity, profitability and the dividends payout policy. *World Review of Business Research*, 5(2), 73-85.

4. Ahmed, Z., Awan, M. Z., Safdar, M. Z., Hasnain, T., & Kamran, M. (2016). A nexus between working capital management and profitability: A case study of pharmaceutical sector in Pakistán. *International Journal of Economics and Financial Issues*, 6(3), 153-160.

5. Ali, S.A., Zia, S.A., Razi, A. (2012). Impact of Capital Structure on the Profitability of Petroleum Sector in Pakistan, Global Journal of Management and Business Research, 12(22), 31-35.

6. Altman, E. I. (1968). Financial ratios, discriminate analysis and the prediction of corporate bankruptcy. *The journal of finance*, *23*(4), 589-609.

7. Arif, Babur Wasim (2012). "Industrial Clusters, Schumpeterian Innovations, and Entrepreneur's Human & Social Capital: A Survey of Literature", *Pakistan Social and Economic Review*, 50(1), 71-95.

8. Audretsch, D. B., & Dohse, D. (2007). Location: a neglected determinant of firm growth. *Review of World Economics*, *143*(1), 79-107.

9. Audretsch, D. B., L. Klomp, E. Santarelli and A. R. Thurik (2004). "Gibrat's Law: Are the Services Different?", *Review of Industrial Organization*, 24(3), 301-324.

10. Bana Abuzayed, (2012)."Working capital management and firms' performance in emerging markets: the case of Jordan", *International Journal of Managerial Finance*, 8(2), 155 – 179.

11. Barontini, R., & Caprio, L. (2006). The effect of family control on firm value and performance: Evidence from continental Europe. *European Financial Management*, *12*(5), 689-723.

12. Beaver, W. H., Correia, W. H., & McNichols, M. F. (2010). Financial statement analysis and the prediction of financial distress. *Foundations & Trends in Accounting*, *5*(2), 99-102. doi: http://dx.doi.org/10.1561/1400000018

13. Belás, J., Cipovová, E., Novák, P., & Polách, J. (2012). Dopady použitia základného prístupu interných ratingov na finančnú výkonnost banky. *E&M Economics and Management*, *XV*(3), 142-155.

14. Brendea, G. (2014). Financing Behaviour of Romanian Listed Firms in Adjusting to the Target Capital Structure, *Czech Journal of Economics and Finance*, *64*(4), 312-329.

15. Buckley, P. J., J. H. Dunning and R. D. Pearce (1984). "An Analysis of the Growth and Profitability of the World's Largest Firms 1972 1977", Kyklos, 37(1), 3-26.

16. Butt, S. A., & Hasan, A. (2009). Impact of ownership structure and corporate governance on capital structure of Pakistani listed companies. *International Journal of Business & Management*, *4*(2).

17. Cardinaels E., & van Veen-Dirks P. M. G. (2010). Financial versus non-financial information: The impact of information organization and presentation in a Balanced Scorecard. *Accounting, Organizations and Society*, *35*, 565-578. doi: https://doi.org/10.1016/j.aos.2010.05.003

18. Carpenter, R. E., & Petersen, B. C. (2002). Is the growth of small firms constrained by internal finance?. *Review of Economics and statistics*, *84*(2), 298-309.

19. Chashmi, N. A., and Fadaee, M. (2016). Impact of Financial Performance and Growth Opportunities on Success or Failure of Companies: Evidence from Tehran Stock Exchange, J Account Mark 5:2. DOI: 10.4172/2168-9601.1000166

20. Chisti, K.A., Ali, K., Sangmi, M.D. (2013). Impact of Capital Structure on Profitability of Listed Companies (Evidence From India), The USV Annals of Economics and Public Administration, Vol. 13, 1(17), pp. 183–191.

21. Churchill, N. C. & Mullins, J. W. (2001). How fast can your company afford to grow? *Harvard Business Review*, 79(5), 135-142.

22. Davis, A. K., Piger, J. M., & Sedor, L. M. (2012). Beyond the numbers: Measuring the information content of earnings press release language. *Contemporary Accounting Research*, 29(3), 845-868. doi: 10.1111/j.1911-3846.2011.01130.x

23. Deaconu, A., Crisan, S., & Buiga, A. (2016). Value allocation – Contribution and risk to the reliability of financial reporting. *E&M Economics and Management*, *XIX*(2), 105-119. doi: https://dx.doi.org/10.15240/tul/001/2016-2-007

24. Delmar, F., P. Davidsson and W. B. Gartner (2003). "Arriving at the High-growth Firm", *Journal of Business Venturing*, 18(2), 189-216.

25. Deloof, M. (2003). Does working capital management affect profitability of Belgian firms?. *Journal of business finance & Accounting*, *30*(3-4), 573-588.

26. Demirgüç-Kunt, A., & Maksimovic, V. (1998). Law, finance, and firm growth., *The Journal of Finance*, *53*(6), 2107-2137.

27. Dunne, Paul and Alan Hughes,(1994). 'Age, Size, Growth and Survival: UK Companies in the 1980s', *The Journal of Industrial Economics* 43(2), 115–140.

28. Edmister, R. O. (1972). An empirical test of financial ratio analysis for small business failure prediction. *Journal of Financial and Quantitative Analysis*, 7(02), 1477-1493.

29. Engelberg, J. E., Reed, A. V., & Ringgenberg, M. C. (2012). How are shorts informed?. Short sellers, news, and information processing. *Journal of Financial Economics*, *105*(2), 260-278. doi: https://doi.org/10.1016/j.jfineco.2012.03.001

30. Erdorf, S., Hartmann-Wendels, T., Heinrichs, N., & Matz, M. (2013). Corporate diversification and firm value: a survey of recent literature. *Financial Markets and Portfolio Management*, *27*(2), 187-215.

31. Fariñas, J. C. and L. Moreno (2000). "Firms' Growth, Size and Age: A Nonparametric Approach*", Review of Industrial Organization*, 17(3), 249-265.

32. Gill, A., Biger, N. & Mathur, N. (2010). The relationship between working capital management and profitability: Evidence from the United States. *Business and Economics Journal*, 2010(BEJ-10), 1-9.

33. Golas, Z., & Kurzawa, I. (2016). Profitability of the food industry in Poland – an ordered logit model approach. *E&M Economics and Management*, *XIX*(4), 73-88. doi: https://dx.doi.org/10.15240/tul/001/2016-4-006

34. Guariglia, A., Liu, X., & Song, L. (2011). Internal finance and growth: microeconometric evidence on Chinese firms. *Journal of Development Economics*, *96*(1), 79-94.

35. Gupta, P. D., Guha, S., & Krishnaswami, S. S. (2013). Firm growth and its determinants. *Journal of Innovation and Entrepreneurship*, *2*(1), 1-14.

36. Hanif, M., Sibt-e-Ali, M., Asghar, M. M., & Farhan, M. (2024). Macroeconomic Factors of Financial Performance: A Case Study of Cement Sector of Pakistan. *Review of Applied Management and Social Sciences*, *7*(4), 929-937.

37. Hutchinson, J., & Xavier, A. (2006). Comparing the impact of credit constraints on the growth of SMEs in a transition country with an established market economy. *Small Business Economics*, *27*(2), 169-179.

38. Javid, A. Y., & Iqbal, R. (2010). Corporate governance in Pakistan: Corporate valuation, ownership and financing. *Working Papers & Research Reports*, 2010.

39. Jiang, J., & Feng, Y. (2021). The interaction of risk management tools: Financial hedging, corporate diversification and liquidity. *International Journal of Finance & Economics*, *26*(2), 2396-2413.

40. Johnson, S. A. (2003). Debt maturity and the effects of growth opportunities and liquidity risk on leverage. *Review of Financial Studies*, *16*(1), 209-236.

41. Khan, F. A., & Ahmad, N. (2017). Determinants of dividend payout: An empirical study of pharmaceutical companies of Pakistan Stock Exchange (PSX). *Journal of Financial Studies & Research*, *2017*, 1-16.

42. Kovárík, M., & Klímek, P. (2012). The usage of time series control charts for financial process analysis. *Journal of Competitiveness*, *4*(3), 29-45

43. Kubenka, M. (2016). The strictness of traditional indicators for creditworthiness measuring. *International Days of Statistics and Economics 2016*. Prague: University of Economics, pp. 985-995.

44. Lee, M. C. (2014). Business bankruptcy prediction based on survival analysis approach. *International Journal of Computer Science and Information Technology*, 6(2), 103-119. doi: http://dx.doi.org/10.5121/ijcsit.2014.6207.

45. Lensink, R., P. van Steen and E. Sterken (2005). "Uncertainty and Growth of the Firm", Small Business Economics, 24(4), 381-391.

46. Loughran, T., & McDonald, B. (2011). When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *The Journal of Finance*, *66*(1), 35-65. doi: http://dx.doi.org/10.1111/j.1540-6261.2010.01625.x

47. Lu, J. W., & Beamish, P. W. (2004). International diversification and firm performance: The S-curve hypothesis. *Academy of management journal*, 47(4), 598-609.

48. Merkl-Davies, D. M., Brennan, N. M., & McLeay, S. J. (2011). Impression management and retrospective sense-making in corporate narratives: A social psychology perspective. *Accounting, Auditing & Accountability Journal*, *24*(3), 315-344. doi: https://doi.org/10.1108/09513571111124036

49. Myšková, R., & Hájek, P. (2017). Comprehensive assessment of firm financial performance using financial ratios and linguistic analysis of annual reports. *Journal of International Studies, 10*(4), 96-108. doi:10.14254/2071-8330.2017/10-4/7

50. Naldi. L., & Davidsson. P., (2014). Entrepreneurial growth: The role of international knowledge acquisition as moderated by firm age. *Journal of Business Venturing* 29 (2014) 687–703 *of Managerial Finance* 11:1, 60-79.

51. Raheman, A., & Nasr, M. (2007). Working capital management and profitability–case of Pakistani firms. *International review of business research papers*, *3*(1), 279-300.

52. Rehan, M., Alvi, J., Khatri, S. (2019). The role of capital structure on firm's profitability of listed cement sector in Pakistan stock exchange, Saudi Journal of Economics and Finance 3(3), pp. 107– 116.

53. Rehan, Muhammad; Karaca, Süleyman Serdar; Alvi, Jahanzaib (2020). Capital structure and financial performance: Case study from Pakistan pharmaceutical sector, Financial Studies, ISSN 2066-6071, Romanian Academy, National Institute of Economic Vol. 24, Iss. 3 (89), pp. 66-82

54. Sari, I. A. G. D. M., & Sedana, I. B. P. (2020). Profitability and liquidity on firm value and capital structure as intervening variable. *International research journal of management, IT and Social Sciences*, *7*(1), 116-127.

55. Shanwari, S., Qazi, U., Khan, I., Rauf, A., & Said, B (2021). Impact of Research & Development on the Performance of Pharmaceutical Firms: Evidence From Pakistan. *Sarhad Journal Of Management Sciences,* Vol 7, No 1

56. Stewart, G. (1995). Supply chain performance benchmarking study reveals keys to supply chain excellence. *Logistics Information Management*, 8(2), 38-44.

57. Todea, A., & Lazar, D. (2012). Global crisis and relative efficiency: Empirical evidence from Central and Eastern European stock markets. *The Review of Finance and Banking*, *4*(1), 45-52.

58. Villalonga, B., & Amit, R. (2006). How do family ownership, control and management affect firm value?. *Journal of financial Economics*, *80*(2), 385-417.

59. Wang, Y.J. (2002). "Liquidity management, operating performance, and corporate value: evidence from Japan and Taiwan", Journal *of Multinational Financial Management*, 12, 159-69.

60. Wiklund, (2006). The sustainability of the entrepreneurial orientation– performance relationship.

61. Yekini. L. S., Wisniewski, T. P., & Yuval, M. (2016). Market reaction to the positiveness of annual report narratives. *The British Accounting Review*, 48(4), 415-430. doi: https://doi.org/10.1016/j.bar.2015.12.001

62. Zuchewicz, J. (2012). Dilemas of financial reporting as the reliable information source of an entity performance results. *Equilibrium*, 7(2), 77-96.