Kurdish Studies
May 2024
Volume: 12, No: 4, pp. 1078-1083
ISSN: 2051-4883 (Print) | ISSN 2051-4891 (Online)
www.KurdishStudies.net

DOI: 10.53555/ks.v12i4.3109

Effect Of Financial Factors On Financial Performance With Moderating Role Of Firm Size: Evidence From Listed Manufacturing Sector

Dr. Aftab Hussain Tabasam[1], Shahid Mahmood[2*], Dr. Ch. Kamran Mahmood[3], Samra Hassan[4], Dr. Lubna Zafar[5], Nosherwan Sarwar[6]

[1]Department of Business Administration, University of Poonch Rawalakot Azad Kashmir, Pakistan
[2*]Lecturer, MUST Business School, Mirpur University of Science and Technology (MUST), Mirpur-10250 Azad Kashmir Pakistan
[3]PhD Management Sciences, Foundation University, Islamabad
[4]Lecturer, Faculty of MUST Business School, Mirpur University of Science and Technology (MUST), Mirpur Azad Kashmir-10250
[5]Department of Computer Sciences, University of Poonch Rawalakot Azad Kashmir, Pakistan
[6]MS Management Sciences, Riphah International University Islamabad, Pakistan

***Corresponding Author:** Email: shahid.dbms@must.edu.pk

ABSTRACT
This study examines how financial factors, with firm size acting as a moderating factor, affect the performance of listed manufacturing firms in Pakistan. The panel data set has been used in the current study. Data collection for analysis took place between 2014 and 2023. Furthermore, the data has been obtained from reputable firms' websites as well as the Pakistan Stock Exchange's website. Size was selected as the moderating variable for this study. Financial leverage, asset tangibility, activity ratio, and effectiveness ratio were independent variables. The effect has been examined using the most credible regression analysis models, which include the fixed-effect, random-effect, and pooled OLS models. The most appropriate model was selected as Fixed effed based on a few tests. The findings reveal that financial leverage has a significant but negative relationship with profitability. In addition, Tang, Effcency, and Activity are positive and significant influences on profitability. The findings show that the link between ROA and moderating variable size is moderated. Thus, Size has a substitution effect on leverage, while activity exhibits a complementing effect.

Keywords: Financial factors, Financial Performance, FE, RE, Pakistan

Introduction

A profitable business can provide a significant return on investment for its owners. Return on assets (ROA) impacts a company's profitability by exhibiting its ability to generate earnings through efficient utilization of resources (Alarussi & Gao, 2023; Rahman et al., 2012). The factors that affect the performance of a business have been studied since the inception of modern firms. From the point of view of finance, the main objective of a business is to maximize stockholder value, and the most crucial element in doing this is the performance of the company. The real output of a company relative to its planned outputs, goals, and objectives is known as firm performance(Banker, Chang, and Pizzini, 2004). However, evaluations of financial indicators—such as openness in markets and accounting information accuracy—are used to determine how rulings can be made (Abdulshakour, 2020). Firm-level variables refer to factors that are near a firm and have a direct impact on its operations and overall performance. recognizing all of the primary micro factors that impact a firm aids in the process of planning, preparing, and establishing a long-term business strategy (Mutunga, 2017).

Manufacturing companies' profitability leads to high-profit margins, which not only contribute to the overall growth of the industry but also enhance market value. It may be tied to the traits of businesses that have a beneficial or detrimental effect on profitability. Corporate characters refer to the unique qualities or traits that differentiate one corporation from another. A non-profitable firm cannot prosper, but a very profitable one can give its owners a substantial return on their investment. Return on assets (ROA) impacts a company's profitability by demonstrating its potential to generate a profit through effective resource utilization and efficient management (Rahman et al., 2012). According to Yator (2018), a firm's board is responsible for identifying new capital budgeting initiatives and optimizing the firm's share price. A company's financial performance has a big influence on its share value; growth is encouraged by high profitability, while share value is decreased by low profitability. The strategic aims of a firm are contingent upon its comprehension of profitability, which is shaped by business news and the precision of accounting. In times of crisis, inadequate preparation for mitigation can have a detrimental effect on financial well-being. Financial data is crucial for decision-making in the financial sector, as it allows stakeholders such as equity capital to make informed decisions. Reliability and knowledge of the market are essential. Organizational systems strike a balance between marketing engagement and profitability, but more study is required to identify the factors that affect profitability and to have a deeper understanding of profitability. Santosa (2020) found that leverage, profitability, and efficiency considerably influence the value of an Islamic enterprise.

Prior research has been carried out in diverse economies across multiple sectors. Similar to Abbasi and Malik (2015), these researchers, such as Rahman et al. (2018), utilize an equivalent number of factors. Rizwan et al.(2024), controllable factors affecting the profitability of the firm. According to the excellent knowledge of the author, the current study includes important financial factors with the moderating effect of firm size as a gap, while updated data has been used to identify the effect.

Literature Review

Financial managers have long been focused on performance, and the topic has been thoroughly researched. A wide range of factors impact performance, as per prior studies. Liargovas and Skanalis (2008) analyzed all the factors that impact the financial results of a business. The results indicated that leverage, export activity, location, size, and the management competency index are the most significant variables affecting financial performance. Asimakopoulos et al. (2009) examined the factors which affect a company's profitability. It was found that sales growth boosts profits for small businesses but has no effect on large ones. That profitability is positively influenced by business size and managerial effectiveness but negatively influenced by leverage. Nagy (2009) evaluated the variables that affect a company's profitability. The study identifies several variables, such as sales, current ratio, debt-to-equity ratio, and net profit margin. Almajali et al. (2012) determined the factors that have an impact on the performance of a company. The researchers found that liquidity, size, leverage, and leadership skills all exert significant impacts on the firm's success, while age doesn't have any impact.

Ching et al. (2011) performed an analysis of the elements that influence a firm's performance and identified the main components that significantly drive profitability. The study's findings indicate that firm size has the most significant influence on firm performance, whereas financial debt has the least significant impact. The elements that were found to impact the return on assets (ROA) were the gross profit margin and the amount of equity. On the other hand, the return on equity (ROE) was influenced by leverage. Leverage impacts the value of the company. The main objective of the financial manager is to maximize shareholder value. Consequently, leverage has been thoroughly studied in capital structure research. Literature shows both simple and complex links. Peswani (2011) found that a highly leveraged firm might offer a greater return on equity to its shareholders, although the profitability of both organizations was similar. Akhtar et al. (2012) did a study. The study's findings indicate an upward association between financial leverage and corporate financial performance. Based on the research, it seems that can enhance their performance by embracing greater levels of leverage.

In a study conducted by Onsongo (2019), the investigator evaluated if the size of a firm has a moderating effect on the connection between performance and operational risk for companies listed on the NSE. Data was collected from 14 manufacturing firms over 5 years, specifically from 2013 to 2017. The data acquired using a data collection instrument was analyzed using panel regression. ROA was used to assess financial performance, the cost-to-income ratio was used as a proxy for operational risk, and the total assets of the firm were used to measure size. In the first phase of analysis, it turned out that operational risk had no impact on financial performance. When the size of the firm is taken into account, it emerged that operational risk had a positive and significant effect on performance. The size of a firm has significant effects on its financial performance.

Albert et al. (2020a) and Tran & Le (2020) assert The firm's debt policy is adversely impacted by concentrated or majority ownership. Albert et al. (2020b) found similar findings, indicating that majority ownership has an important effect. Concentrated ownership hurts the capital structure. In general, the smaller the debt portion, the larger the majority. This condition shows that when the majority increases, the effect becomes stronger. The lower the the ratio of debt to ratio, the smaller the shareholding. The most important supervision of management is Considered adequate and improves the business's decision-making process about debt. More significant The bigger the majority's shares, the fewer chances management has to grow its debt. Proportion. Furthermore, the factors that drive majority ownership are a desire for shared control and The idea of private benefit is addressed by Vijayakumaran and Vijayakumaran in their 2019 work. The majority of people exercise their right to vote. Power to enjoy profits that are retained or earnings that are not paid to minority shareholders (Xiu, 2009). Furthermore, majority ownership has an impact on the firm's debt policy, which is a trade-off between the investment risk and return of the firm as discussed by Santosa (2020).

Firm Size on Financial Performance

As stated by Hussain et al. (2020) business performance is vitally impacted by several dimensions as well as financial structure is one of the vital elements amidst them. In addition to this, a lot of studies have been addressed to explore if there are any negative, positive, and or no relations between business performance as well as financial structure yet these researches produce mixed outcomes. Mutunga and Owino (2017) asserted that the level of debt has a vital negative linked with business performance that is not linked with the findings of several studies for some economies. Furthermore, Zalaghi, Godini, and Mansouri (2019) as stated by it has been examined the capital structure of some of the businesses and revealed that they had a positive relationship between financial structure and profitability. Besides, the business size is measured which shows the size of the business (Warrad & Oqdeh, 2018). In addition, the firm size is a scale that can be classified through the size of a business in several ways. Particularly, the size of the business is divided into three kinds of categories that are; medium size businesses, big-size businesses, and small-size businesses (Hussain et al., 2020). The

determination of the business size depends upon the total assets of the business. In addition, the measurements of the size of the business can be viewed and judged via the business assets to which it pertains. Furthermore, the asset structure tends to reflect the kinds of elements under the composition of the total firm's assets as well as fixed assets. In addition, the asset structure is the comparison or balance between the fixed assets as well as total assets. Furthermore, it has been stated in the study that ROA is the kind of return-on-investment metric that measures the business's profitability of its total assets. In addition, this ratio shows how a business is performing by comparing the net income In this context, the endogenous factors studied in the study can be valuable resources that may have an impact on a firm's profitability. By studying how these endogenous characteristics interact with business size as moderators, the study can shed light on the conditions under which these resources are most effective at driving firm performance.

RESEARCH METHODOLOGYStudy Nature, Source, and Sources of Data Collection

The study's nature is quantitative because empirical data is offered annually for the benefit of all stakeholders, while panel data was used to investigate the phenomena. The data was gathered from a secondary source: the State Bank of Pakistan's website, the websites of the important companies, and the BSA Balance Sheet Analysis.

Population of the Study, Sample, and Sampling Procedure

The four hundred non-financial firms that make up the majority of the companies are the overall population of the study, of which 195 serve as a sample. The remaining firms are non-financial firms listed on the Pakistan Stock Exchange between 2014 and 2023. The variables were obtained from annual reposts or the website of the State Bank of Pakistan. The sample is a subset of the population that accurately captures every side of the population. The present study used purposive sampling to choose members from the target group. Additionally, assess the population of non-financial firms. However, Sekaran and Bougie (2016) established the sample size. The effect of independent variables on dependent variables will be assessed with fixed effect, random effect, and polled OLS models, with size moderating variables. Various tests have been used to determine the suitable model, which includes the Hasman, Bruesh Peagan LM, and Chow tests.

Model Data Panel

Panel data regression, as defined by Gujarati and Porter (2013), is a regression technique that incorporates cross-sectional data and time series data. The panel data will be evaluated with Eviews 10, an application specifically designed for working with statistical and economic data in time series, cross-sections, and panel data.

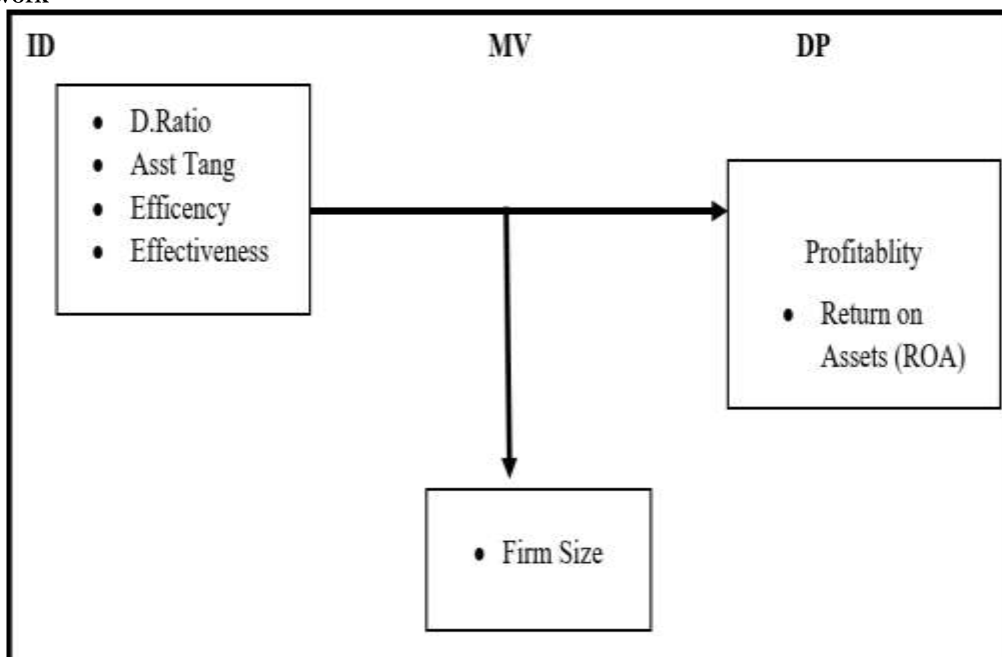
Model 1--------------

FPit= α + α0 1Debt.Ratioit + α2Tangit + α3Afficit +α4Efficit + εit

Model 2-----------

FPit= δ + δ0 1Deb.Rtit + δ2Tangit + δ3Afficit + δ4Efficit + δ5(De.Rbt SZ)it+ α6(Tang SZ)it +δ7(Affic SZ)it+ δ8(Effic SZ)it + εit,

3.3 Framework



3.7.1 Model Selection Panel Data

Across individuals and across time, individual behavior can be examined using

RESULTS AND DISCUSSION

Data Analysis

Table 4.1 Regression Model(Fixed Effect, ROA)

Variables	Coefficient	Std. Err	T-v	P.V
Leverage ratio	-4.5689	0 .9568	-4.77	0.0011
Assets Tang	2.8955	0.8285	3.494	0.0131
Effective	5.6464	0.6544	8.628	0.0001
Efficiency	|0.8568	0.4101	2.089	0.0040
Constant	6.05497	0.99548	6.0824	0.0014
R Squ	0.64243			
Adju R	0.5943			
P value	0.000			

Table 4.1 shows how the independent effect on ROA. The variation in the ability of the independent variables to predict the return on assets (ROA) is shown by the R square value of 64 percent. All of the factors explain 64% of the variance in financial Performance, based on the R-squared score. Since the p-value is less than 0.05 (0.000), the model as a whole is well-fit.

Leverage is estimated to have -4.5689 by the Fixed effect model. The negative sign of the coefficient indicates that leverage has a negative correlation with the dependent variable. With a p-value of less than 0.05, tangibility (2.8955), efficiency (0.8568), and effectiveness (5.6464). Coefficients with a positive sign suggest the relationship between tangibility and effectiveness and the dependent variable, and the value indicates that both of these variables have a positive and significant impact on ROA.

Table 4.2 Fixed Effect Model (Moderating variable of Firm Size)

R0A	Coefficients	Std - error	T - ratio	P . Value
Financial Leverage	-5.48929	.79546	-6.900	0.000
Assts tang	5.65477	.95467	5.9232	0.000
Efficiency	2.8946	.85621	3.380	0.000
Effectiveness	-1.6986	.5985	2.838	0.001
Levarage*Size	-3.5667	0.25624	13.91	0.00
Asst.Tang*Size	9.9865	0.46595	21.43	0.000
Efficency*Size	2.06598	0.095685	21.59	0.000
Effectiv*Size	-0.98554	0.15856	-6.21	0.000
Constant	2.89566	0.4568	6.3390	0.000
R-square 0.70 F-Value 71.4 P-Value 0.000				

The table above provides an explanation of size as a moderating variable. The profitability of non-financial enterprises in Pakistan is affected by each of the factors. While the impacts of efficiency and effectiveness in leverage are interchangeable, the ramifications of tangibility become compliant with moderate application. According to the F-value in Table 4.6, a perfect fit has been found. Based on R-squared, which indicates the percentage of variance in the dependent variable that can be explained by the independent factors, size has a moderating effect on the relationship between liquidity and ROA

Discussion

The findings of this research shed light on how non-financial firms in Pakistan do financially about firm-level characteristics like leverage, tangibility, activity, and effectiveness. The results of this study demonstrate both the impact of the dependent variable and the moderating effect on company size. These findings correspond with previous results regarding the relationship between debt and profitability. just a small number of results dispute the current findings. A company is compelled to pay interest on whatever debt it incurs. When a company takes on more debt, it is bound to pay more in interest. Because of the possibility of a rise in operating costs, this can cut into the firm's profitability. An increase in the effectiveness of our findings By raising efficiency, a company can boost its bottom line through increased output, decreased expenses, and a distinct advantage over the competition.

Firms have a better chance of long-term success if they improve their efficiency through innovation and process changes. Improved efficiency: Improved productivity usually implies more output, A stronger company can get an edge over its competitors by offering stronger goods and services at lower rates, with a quicker turnaround time, or both. A larger portion of the market and more profits are likely results. The results of our study corroborate the findings of other research showing that activity and tangibility contribute to a firm's profitability(Rizwan 2024, Rahman 2018). Firms with a higher value of property, plant, and equipment are frequently viewed as more creditworthy by lenders and have lower levels of financial risk (e.g., Musa et al., 2018). Lower interest rates and increased profitability are possible results of this.

In addition, we found that the earning potential of an enterprise grew as its size increased. If the size of a company affects its profitability, it could be because larger companies are better able to take advantage of economies of scale, which in turn boosts their bottom line. A positive influence of company size on profitability would indicate that larger firms are more profitable.

Conclusions and Recommendations

The study identifies the key elements at the firm level that affect the financial performance of non-financial firms in Pakistan, taking into account the moderating effect of firm size. The panel data set was utilized for this research. The data was included during the study period from 2014 to 2023. Also, the data was gathered from the official websites of the companies as well as the Pakistan Stock Exchange. For this study, size is chosen as the moderating variable, while the independent variables that affect financial performance are leverage, tangibility, activity, and effectiveness. We have utilized the most appropriate regression models to examine the impact. The present investigation is best suited to a fixed effect model. Results demonstrate that non-financial firms' profitability is positively and significantly affected by all internal variables, while return on assets (ROA) is adversely and significantly correlated with leverage. Results demonstrate a negative and statistically significant relationship between ROA and leverage of firm endogenous factors. The association between liquidity and ROA is moderated by the moderating variable size, according to the results. When it comes to leverage, efficacy, and efficiency, size acts as a substitute in the moderation analysis, but tangibility acts as a supplementary effect.

References

1. Abbasi, A., & Malik, Q. A. (2015). Firms ' size moderating financial performance in growing firms: An empirical EVIDENCE from Pakistan. International Journal of Economics and Financial Issues, 5(2).
2. Abdulshakour, S. (2020). Impact of financial statements on financial decision-making. Open Science Journal, 5(2).
3. Ahmad, W., Ahmed, T., & Shabbir, G. (2015). Determinants of textile firms profitability in Pakistan. Forman Journal of Economic Studies, 11(1).
4. Akhtar, S., Javed, B., Maryam, A., & Sadia, H. (2012). Relationship between Financial Leverage and Financial Performance: Evidence from Fuel & Energy Sector of Pakistan. European Journal of Business and Management, 4(11), 7-17.
5. Alarussi, A. S., & Gao, X. (2023). Determinants of profitability in Chinese companies. International Journal of Emerging Markets, 18(10), 4232-4251.
6. Albart, N., Sinaga, B., Santosa, P. W., & Andati, T. (2020a). The Controlling Role of Ownership on Financial Performance and Capital Structure in Indonesia. International Journal of Finance & Banking Studies, 9(3), 15–20.
7. Albart, N., Sinaga, B., Santosa, P. W., & Andati, T. (2020b). The effect of corporate characteristics on capital structure in Indonesia. Journal of Economics, Business, and Accountancy Ventura, 23(1), 46–56.
8. Al-Hadi, A., Hasan, M. M., & Habib, A. (2016). Risk committee, firm life cycle, and market risk disclosures. Corporate Governance: An International Review, 24(2), 145-170.,
9. Almajali, A. Y., Alamro, S. A. and Al-Soub, Y. Z. (2012). Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange, Journal of Management Research, 4(2), 266-289
10. Asimakopoulos, I., Samitas, A. and Papadogonas, T. (2009). Firm-specifi c and Economy Wide Weterminants of Firm Profitability: Greek Evidence Using Panel Data. Managerial Finance, 11, 930–939.
11. Babalola, Y. A. (2013). The effect of firm size on firms profitability in Nigeria. Journal of economics and sustainable development, 4(5), 90-94.
12. Banker, R. D., Chang, H., & Pizzini, M. J. (2004). The balanced scorecard: Judgmental effects of performance measures linked to strategy. The Accounting Review, 79(1), 1-23.
13. Bashir, H., Sultan, K., & Jghef, O. K. (2013). Impact of derivatives usage on firm value: evidence from nonfinancial firms of Pakistan. Journal of Management Research, 5(4), 108.
14. Davcik, N. S., & Sharma, P. (2015). Impact of product differentiation, marketing investments and brand equity on pricing strategies: A brand level investigation. European Journal of Marketing, 49(5/6), 760-781.
15. Gunadi, I. G. N. B., Putra, I. G. C., & Yuliastuti, I. A. N. (2020). The Effects of Profitabilitas and Activity Ratio Toward Firms Value With Stock Price as Intervening Variables. International Journal of Accounting & Finance in Asia Pasific (IJAFAP), 3(1), 56-65.
16. Hussain, S., Quddus, A., Pham, P. T., Rafiq, M., & Pavelková, D. (2020). The moderating role
17. Hussain, S., Quddus, A., Pham, P.T., Rafiq, M. and Pavelková, D.,(2020). The moderating role of firm size and interest rate in capital structure of the firms: Selected sample from sugar sector of Pakistan. Investment Management and Financial Innovations.
18. Kamran, R.,M., Aftab, H.T., Fahid,S., Sadaf., A., Kinat, B., Kamran,M.,(2024)., Endogenous Determinants Influencing Financial Performance of Manufacturing Industry: Evidence From Pakistan
19. Koch, A., Ruenzi, S., & Starks, L. (2016). Commonality in liquidity: a demand-side explanation. The Review of Financial Studies, 29(8), 1943-1974.
20. Krasnikov, Alexander, Satish Jayachandran, and V. Kumar(2010. "The impact of customer relationship management implementation on cost and profit efficiencies: evidence from the US commercial banking industry. Journal of marketing,73(6) 61-76.
21. Liargovas,p and Skandalis,k. (2008). Factor affecting firm's financial performance The Case of Greece, University of Peloponnese

22. Malik, H. (2011). Determinants of insurance companies' profitability: an analysis of insurance sector of Pakistan. Academic research international, 1(3), 315.
23. Mutunga, D. K. (2017). Effect of micro factors on financial performance of manufacturing firms in Kenya (Doctoral dissertation, Kca University).
24. Nagy, N. (2009). Determinants of Profitability: What Factors play a role when assessing a firm's return on assets? The University of Akron, Department of Economics. of firm size and interest rate in capital structure of the firms: selected sample from sugar
25. Peswani, S. (2011). Does A Highly Leveraged Capital Structure of A Firm Influence Its Performance? A Comparative Study of High and Low Leveraged FMCG Companies in India. Indian Journal of Finance, 5(6), 3-7
26. Peswani, S. (2011). Does a highly leveraged capital structure of a firm influence its performance?–A comparative study of high and low leveraged FMCG companies in India. Indian Journal of Finance, 5(6), 3-10.
27. Rahman, S. U., Jan, F. A., Iqbal, K., & Ali, Z. (2012). Parameters of conventional and Islamic Bank's profitability in Pakistan: Evaluation of Internal Factor. Research Journal of Finance and accounting, 3(3), 2222-2847.
28. Rahman, S. U., Jan, M. F., & Iqbal, K. (2018). Determinants of profitability in Life and Non-life insurance sector of Pakistan: An endogenous and exogenous evaluation. JISR management and social sciences & economics, 16(2), 97-106.
29. Santosa, P. W. (2020). The moderating role of firm size on financial characteristics and Islamic firm value at Indonesian equity market. Verslas: teorija ir praktika, 21(1), 391-401.
30. Santosa, P. W., Tambunan, M. E., & Kumullah, E. R. (2020). The role of moderating audit quality relationship between corporate characteristics and financial distress in the Indonesian mining sector. Investment Management and Financial Innovations, 17(2), 88–100
31. sector of Pakistan. Investment Management and Financial Innovations.
32. Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach. john wiley & sons.
33. Tran, N. H., & Le, C. D. (2020). Ownership concentration, corporate risk-taking and performance: Evidence from Vietnamese listed firms. Cogent Economics & Finance, 8(1), 1–30.
34. Vijayakumaran, S., & Vijayakumaran, R. (2019). Corporate Governance and Capital Structure Decisions: Evidence from Chinese Listed Companies. The Journal of Asian Finance, Economics and Business, 6(3), 67–79
35. Ward, M. and Price, A. (2006). Turning Vision into Value. Pretoria: Van Schaik Publishers.
36. Warrad, L. H., & Oqdeh, S. K. (2018). Do liquidity and firm size affect profitability and does capital structure play a moderator role: Study based on Jordanian Data. International Research Journal of Finance and Economics, 170(2018), 27-40.
37. Yator, B. C. (2018). The Effect of Capital Budgeting Techniques on the Financial Performance of Companies Listed at the Nairobi Securities Exchange (Doctoral dissertation, university of nairobi).
38. Zalaghi, H., Godini, M., & Mansouri, K. (2019). The moderating role of firms characteristics on the relationship between working capital management and financial performance. Advances in Mathematical Finance and Applications, 4(1), 71-88.