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Determinants of Financial Performance in the Industrial Firms: Evidence from Jordan

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

This paper investigates the factors affecting the financial performance of the Jordanian manufacturing industrial firms. Secondary data has been collected from the Amman stock exchange annual publication "Financial Statement Analysis of industrial firms listed in Amman Stock Exchange for the period 2005-2015. The data were gathered from the financial statements of industrial firms namely, balance sheet and income statement published by www.ase.com, the sample consists of (23) industrial firms. The researchers employed E.views software packages for the regression analysis of the current study. The dependent variable is firm's performance measure ROA, the independent variables includes (LV, LQ, FS, PR, RV). The findings reveal that the variables of liquidity, profitability, and revenues are positively related with the return on assets (ROA). On the other hand, the variables of leverage and firm size are negatively related with it. In addition, the regression results show that all variables have significant impact on the financial performance. The findings are very important for different parties such as policy maker, investors, and stakeholders.

Keywords: Financial performance; profitability; leverage; liquidity; firm size; Jordan.

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1. INTRODUCTION

One of the biggest contributors to the economy is the manufacturing sector as it has the most important role and a significant impact over the economic development of any country at both local and international level. Most of the industrialized countries depending on the industrialization and manufacturing development by its production sector adding value to the economy and economic development bring the country in the line of industrialized developed countries as the role of the industrialization cannot be ignored even at micro level as well as macro level. This progress later plays a vital role to bring the country to achieve its long term economic planning and to fight the vicious circle of the economic which is the hurdle to the economic development and works against underdevelopment and contributes to increase national income [1].

Companies financial performance is not only important for the investors but also for the scholars as it is important to understand the factors affecting financial performance of the firms. Financial performance is the measure of the financial health of the organizations and shows the performance of the executive leadership of the company. Higher the financial performance of the company more effective and efficient the company in using the resources and later contributes at the macro level in countries economy [2].

The Jordanian economic performance has very little contribution from the banking and manufacturing sectors as the overall financial performance of the Jordanian firms is weaker and very few of them are showing the positive performance and generating the revenues. The present study struggles to examine the condition of the overall performance of the Jordanian manufacturing sector and its role in economic growth. The study aims to have the overview of the factors affecting the performance of the Jordanian manufacturing concerns' financial performance.

This paper organized as follows: the next section reviews the literature of previous studies, section 3 provides theoretical framework, section 4 illustrates data and methodology, and section 5 reports the results analysis.

2. LITERATURE REVIEW

The researcher and practitioners concerns regarding the international and global competition and production of Jordanian manufacturing concerns is the cause of attention towards the important factors affecting the financial performance. The antecedents of the performance have been the interest of several academicians working on the different fields of research and development. The areas include economic, finance, strategic planning, accountancy and law etc. [3]. The bottom line of any financial statement is the main interest of the stakeholders as it reflects the firm financial performance [4]. Profitability has a tendency to wind up plainly a long haul target which is contended not exclusively to quantify the accomplishment of an item yet additionally the improvement of the market for it. The manufacturers additionally opines that profit is dictated by coordinating income against the cost related with each business substance should acquire benefits with the goal for it to get by in a generally turbulent market. Though profit is depicted as an outright measure of procuring limit, budgetary execution alludes to the relative measure of acquiring limit. At the end of the day, financial performance is the capacity of an offered venture to acquire an enthusiasm from its usage. [4] noticed that financial performance gives more exact perspective of an firm's performance.

Performance is the most important gauge for profitable firms. Generally, the results of an assembling framework or organization has been evaluated by the utilization of financial measures. Nowadays, especially after the monetary emergency, investors are gradually turning out to be more anxious with the financial performance of the manufacturing concerns. In like way, policy makers are considered to evaluate an association's execution, especially its productivity, before decisions or exercises are made in perspective of certain execution estimations. Thus, having information around an organization's execution engages pioneers to substantiate managerial decisions to meet potential changes in the money related resources [5].

There has been two difference measures of performance, financial and non-financial performance. Financial performance can be measured by growth in profitability, production capacity, sales growth and utilization of the capital and financial resources [6]. As demonstrated by [5] an affiliation's execution is evaluated in three estimations: effectiveness, profitability, and business part premium. Then again, there is as yet a surged common

contention about the best way that should be grasped to measure fiscal execution of firms and what the best amounts of segments that impact this execution are [7]. As mentioned earlier, the investigation regarding the profitability of the firms is having vital importance as the Jordanian organizations have a significant performance in the recent days and their profitability is more important for the investors and other stakeholders. Hence understanding the antecedents of firm performance and their role in firms growth.

An engaged business focus, to finish a pleasant level of gainfulness must be learned by the business visionaries. Gainfulness is the extent to measure the execution of the association. It is an essential point of view in an association's budgetary detailing. The benefit is the degree to assess the execution of the affiliation. It is a basic perspective in an affiliation's budgetary announcing. The productivity is the key assumes that helps managers developing a fruitful gainfulness framework for their association [8]. [9] examined the causal relationship between financial development and economic growth in Jordan. The results showed that the financial development affected by export.

Agreeing [10], one of the noteworthiness precondition for whole deal firm survival and accomplishment is firm gainfulness. The achievement and other cash related destinations of the organizations are through and through impacted by the gainfulness determinant of the firm. Those components are crucial in light of the way that it give an effect to the money related improvement, work, headway and inventive change. The basic goal of the association is to increase their gainfulness. Without productivity a firm couldn't pull in outside capital and the business won't get by finished the whole deal. By knowing and see firm benefit, it will give the feedback for the firm. The firm can find an approach that should be taken to deal with the issue and limit the negative impact for business movement.

[11] analyzed the relationship of banking and large scale financial profitability qualities utilizing information of top fifteen Pakistan commercial banks over the period 2005-2009. [12] also investigated the factors affecting commercial banks evidence from Latvia utilizing Return on Asset (ROA) factor affecting profitability.

Several of them has given attention to SMEs performance and their antecedents, but a few of them has given special attention to investigation of the determinants of SMEs profitability. Profitability at small scale financial level have concentrated on relying upon the pointers. For instance, [13] investigate factors affecting the association's gainfulness at SMEs monetary level. Other researcher investigated components choose productivity of scaled down scale firm considering Swedish data. The investigation demonstrates that firm size, improvement of offers, slacked benefits, productivities, asset turnover and affiliation's age are the variable that affecting gainfulness. These studies are progress and comprehensive towards factors affecting profitability have a critical and fruitful finding on small scale organizations' profitability. Moreover the firm's size also found to be the significant factor effecting firm performance. Besides [14] evaluated the financial performance in different sector of Islamic and commercial banks, he found insignificant difference between them.

3. THEORETICAL FRAMEWORK

This paper presents the theoretical framework regarding the firm performance from financial point of view and its factors such as financial leverage, liquidity, size and returns of the firms.

3.1 Firm Performance

The efficiency of the organization's top management team is measured by the performance of the company hence reflecting the role of every individual working in the company and performing a particular task assigned to him. Hence performance is the indicator how efficiently the organization is managed and how effectively and efficiently the human and other resources are utilized in the firm. There are two types of firm performance financial and non-financial [15,16,17].

The literature usually differentiate the two kinds of firm performance, financial or economic performance and innovative performance. Monetary or financial execution is frequently communicated regarding development of offers, turnover, business, or stock costs [18], though imaginative execution is for the most part communicated as far as consumptions, licenses, level of inventive deals, or self-revealed (consequences of) advancements [19,20]. Albeit the two sorts of execution are regularly between related [21], the writing frequently utilizes the two sorts of execution as independent ideas or just concentrates on one of the two [22].

Organizational performance is the capacity in what a firm can work and achieve a particular target for the profit. This measure the performance of a firm for a particular duration. The persistence of evaluating the performance is to acquire beneficial info regarding the cash and fund flow of the firm, the utilization of funds, effectiveness, and efficiency. As well as the info can also help managers in optimal decision making [23].

3.2 Leverage

[24], defined leverage as the ratio of total liabilities to total assets. It is the residual claim of equity holders. [25] performed a study regarding the capital structure of listed and unlisted firms in the context of Philipine. His investigation demonstrated that high obligation proportion is decidedly connected with the company's development rate and benefit. [26] inspected the effects of budgetary use on the speculation choices and found this is a negative relationship. In another examination, [27] found that the negative effect of budgetary use on the interest in the irrelevant areas is much essential than the key parts.

Financial leverage is measured by the ratio of total debt to equity (debt/equity ratio). It indicates the extent to which an organization utilized its borrowed funds. Organizations that are more leveraged are likely to face negative results as there is risk of default, in case the firm is unable to meet its obligations, there will be difficulty for them to acquire new debt from the market. Leverage is not always bad, however; it can increase the stockholders' earnings on their invested funds and make better utilization of the tax benefits related to the debt financing.

3.3 Liquidity

Liquidity refers to the extent to which liabilities being mature in the next one year can be repaid from quick assets of the firm. It can be measured by calculating the ratio between current assets to current liabilities (current ratio). It demonstrates the capacity to change over a resource for money rapidly and mirrors the capacity of the firm to oversee working capital when kept at ordinary levels. A firm can utilize fluid resources for fund its exercises and speculations when outer back isn't accessible or it is too expensive. On the other side, higher liquidity allows an organization to cope up with unforeseen risk factors and fulfill the needs to pay off its obligations while the earning are at low level [7].

Current ratio is one of the most familiar measure of working capital among the accountants an financial analysts. “Current ratio is a measure of relative liquidity that takes into account differences in absolute size. It is used to compare companies with different total current assets and liabilities” [28,29] found that present proportion is adversely critical to budgetary execution of 172 recorded Malaysian firms. Other study observationally inspected the relationship of liquidity and benefit as measured by current proportion and money hole on an example of 29 business entities in Saudi Arabia and discovered noteworthy negative connection between the association's productivity and its liquidity level, as measured by current proportion utilizing connection and relapse investigation.

3.4 Firm Size

[30] examined the relationship of firm size and profitability and found a positive influence of firm size on performance. [31] analyzed the data of 3035 Greek manufacturing firms and found that for all size classes, firms’ profitability is positively influenced by firm size. [32] inspected the part that firm size plays in gainfulness. Results demonstrated that total firm size assumes an essential part in clarifying productivity. [33] tried size-benefit relationship for firms working in the budgetary administrations segment. With the direct particular in firm size, the creators uncovered negative impact of firm size on its productivity. Working on the sample of 50 listed firms [34] studies the impact of working capital on firm performance however there findings suggested no significant relationship of working capital and firm performance.

3.5 Revenue

Manufacturing concerns have little accessibility to funds, which thus hinders their development and constant growth. Their principle wellsprings of capital are their held income and casual funds and credit affiliations, which are flighty, not exceptionally secure and have little extension for chance sharing in light of their territorial or sectoral center. Access to formal back is poor on account of the high danger of default and because of deficient monetary offices. Previous literature is evident that sales revenue is the main source for financing for the firms. In

addition, sales revenue has an effect on financial performance of manufacturing firms [35].

3.6 Profitability

Several studies done in recent past are evidenced the factors affecting firm performance and major of them concentrated on the mechanical organizations and utilizing the substantial example of organizations. For example, [36] found the determinants of firm. There are various past examinations of gainfulness are slacked advantage rate, slacked productivity level, its creativity, firm size and division impacts using data of 961 sweeping Australian firms. [37] investigate the components affecting gainfulness of the business banks in India after the progressions, it's discovered that the productivity what's more, capability of private fragment banks are moderately higher to various banks.

Both manufacturing and service sectors organizations are concerned about their profitability when they consider to invest in a particular region [38]. Furthermore there is significant difference in this case regarding the context of developing and developed countries. The literature is evident that profit is developing countries is lower than the developed countries as there is little support from the government in developing countries [39].

4. DATA AND METHODOLOGY

The type of data is secondary and has been created from the Amman stock exchange annual publication "Financial Statement Analysis of industrial companies listed in Amman Stock Exchange for the period 2005-2015. The data were collected from the financial statements of industrial firms namely, balance sheet and income statement published by www.ase.com, the sample consists of (23) industrial companies.

Following is the regression equation to investigate the impact of independent variables on dependent variable. The following explain the method used for calculating dependent and independent variables:

$$ROA_{it} = \beta_0 + \beta_1 LV_t + \beta_2 FS_t + \beta_3 LQ_t + \beta_4 RV_t + \beta_5 PR_t + \varepsilon_t$$

Where, β_0 = Constant coefficient including, LV = leverage, FS = firm size, LQ = liquidity, RV = Revenue, PR = Profitability, ε_{it} = Error component showing unobserved factor, t = time.

The study uses ROA as a proxy of the financial performance, the previous literature have shown a number of proxies for financial performance like Tobin's Q, ROE, ROA, ROI and EPS. The description of each variable and their expected signs are given as follows:

Table 1. The expected relationship between dependent and independent variables

Dependent variable	ROA
Independent variables	**Expected sign**
Leverage	Negative
Firm size	Positive
Liquidity	Positive
Revenue	Positive
Profitability	Positive

On the basis of above table the relationships between dependent and independent variables have been developed in the following hypothesis:

H1: There should be a negative relationship between Leverage and industrial financial performance.
H2: Firm size should have a positive impact on industrial financial performance.
H3: Liquidity should have a positive impact on industrial financial performance.
H4: There should be a positive relationship between revenue and industrial financial performance.
H5: There should be a positive relationship between profitability and industrial financial performance.

5. RESULTS ANALYSIS

The researchers employed SPSS and E.views software packages for the regression analysis of the current study. The dependent variable is firm's performance measure ROA, the independent variables includes (LV, LQ, FS, PR, RV). Table 2 reveals the descriptive statistics of all study variables, the mean value of return on assets (ROA) is 6.224% with maximum value of 85%, and it concludes that performance of listed industrial firms show well during the study period. Besides, the leverage ratio (LV) shows positive to support it with mean value of 1.157%. The mean value of liquidity (LQ) is 1.561% and the value of standard deviation is 2.880%. The mean value of firm size (FS) is 2.004% with standard

deviation of 2.360%. The mean value of profitability (PR) is 3.037% with 3.652% value of standard deviation. The mean value of revenue (RV) is 2.295% with standard deviation of 2.648%.

Table 3 reveals the correlation test between both dependent and independent variables by using correlation coefficient matrix. The correlation test shows that return on assets (ROA) is significant with the leverage (LV), liquidity (LQ), firm size (FS), profitability (PR) and firm's revenues (RV). Besides, the correlation results show a significant strong negative correlation relationship between ROA and LV, while there is positive correlation relationship between ROA and the rest of variables. Result shows that there is significant strong positive correlation between LV and LQ, significant positive correlation between FS and LV, FS and LQ, PR and LQ, PR and LV, RV and LV, and RV and LQ. The results of correlation matrix among variables indicate are consistent with the study hypotheses, it conclude that the correlation coefficients among the variables are low (none of them are above 0.8) indicating that there is no multicollinearity problem.

Table 4 shows the results of multiple regression analysis, the return on assets (ROA) is the dependent variable. The results of the study model identified are resulted as follows:

ROA = -3.3137 – 1.9209 LV + 7.8204 LQ - 7.7108 FS + 2.2106 PR + 1.7908 RV

Table 2. Descriptive statistics for all study variables for the (2005-2015) period

Variables	ROA	LV	LQ	FS	PR	RV
Mean	6.224167	1.15712	1.561785	2.004990	3.037722	2.295770
Median	3.745000	0.39452	3.027105	9.500000	1.593367	1.071003
Maximum	85.00000	1.31521	1.257015	1.040823	1.580204	9.879715
Minimum	0.020000	795.000	51.08000	77.0000	7.710000	3.15333
Std. Dev	9.732455	2.59914	2.880744	2.360287	3.652927	2.648358
Skewness	5.271854	2.034160	2.354002	2.036678	1.928796	1.694377
Kurtosis	39.23150	6.227939	7.624674	6.815384	6.125566	4.637832
Jarque-Bera	7119.45	134.8540	217.7646	155.7469	123.2509	70.8307
Probability	0.00000	0.00000	0.00000	0.00000	0.000000	0.00000
Observations	120	120	120	120	120	120
Diagnostic tests						
Serial correlation	20.929 [.000]					
Functional form	46.592 [.000]					
Normality	1746.7 [.000]					
Heteroscedasticity	37.489 [.000]					

Table 3. Correlation matrix among the variables

	ROA	LV	LQ	FS	PR	RV
ROA	1.000000					
LV	*-0.513511	1.000000				
LQ	*0.282183	* 0.668661	1.000000			
FS	*0.528746	* 0.777826	* 0.724578	1.000000		
PR	* 0.638166	*0.455025	*0.276759	* 0.635911	1.000000	
RV	*0.659507	*0.590479	*0.508292	* 0.751695	* 0.724345	1.000000

**Correlation is significant at the 0.01 level of significant*

Table 4. Multiple regression analysis for the study model

Variable	Coefficient	Std. error	t-statistic	Prob.
C	-3.3137	0.6094	-0.51485	0.6076
LV	-1.9209	4.0807	-4.69861	0.0000
LQ	7.8204	3.4907	2.24344	0.0268
FS	-7.7108	4.9708	-1.55147	0.0123
PR	2.2106	2.3907	9.21972	0.0000
RV	1.7908	4.6408	0.38584	0.0700

The results reveal that the variables of liquidity, profitability, and revenues are positively related with the return on assets (ROA). On the other hand, the variables of leverage and firm size are negatively related with it. In addition, the regression results show that all variables are significant, the coefficient of leverage is -1.9209 indicates that ROA will decrease by 1.9209 as a result of leverage increasing by 1%. The coefficient of liquidity is 7.8204 indicates that when the liquidity increases by 1%, ROA will increase by 7.8204. The firm size has a negative impact on the ROA with coefficients of -7.7108 while the variables of profitability and revenues have positive impact with the coefficients of 2.2106, 1.7908 respectively.

6. CONCLUSION

Most of the industrialized countries depending on the industrialization and manufacturing development by its production sector adding value to the economy and economic development bring the country in the line of industrialized developed countries as the role of the industrialization cannot be ignored even at micro level as well as macro level. This progress later plays a vital role to bring the country to achieve its long term economic planning and to fight the vicious circle of the economic which is the hurdle to the economic development and works against underdevelopment and contributes to increase national income [1]. The present study struggles to examine the condition of the overall performance of the Jordanian manufacturing sector and its role in economic growth. The study aims to have the overview of the factors affecting the performance of the Jordanian manufacturing concerns' financial performance.

The bottom line of any financial statement is the main interest of the stakeholders as it reflects the firm financial performance. Profitability has a tendency to wind up plainly a long haul target which is contended not exclusively to quantify the accomplishment of an item yet additionally the improvement of the market for it. There has been two difference measures of performance, financial and non-financial performance. Financial performance can be measured by growth in profitability, production capacity, sales growth and utilization of the capital and financial resources. As suggested by [5] an affiliation's execution is evaluated in three estimations: effectiveness, profitability, and business part premium.

This paper presents the theoretical framework regarding the firm performance from financial point of view and its factors such as financial leverage, liquidity, size and returns of the firms. The type of data is secondary and has been created from the Amman stock exchange annual publication "Financial Statement Analysis of industrial companies listed in Amman Stock Exchange for the period 2005-2015.

The study has five hypotheses as follows:

H1: There should be a negative relationship between Leverage and industrial financial performance.
H2: Firm size should have a positive impact on industrial financial performance.
H3: Liquidity should have a positive impact on industrial financial performance.
H4: There should be a positive relationship between revenue and industrial financial performance.
H5: There should be a positive relationship between profitability and industrial financial performance.

The results reveal that the variables of liquidity (H3), profitability (H5), and revenues (H4) are positively related with the return on assets (ROA). On the other vein, the variables of leverage (H1) and firm size (H2) are negatively related with it. In addition, the regression results show that all variables are significant, the coefficient of leverage is -1.9209 indicates that ROA will decrease by 1.9209 as a result of leverage increasing by 1%. The coefficient of liquidity is 7.8204 indicates that when the liquidity increases by 1%, ROA will increase by 7.8204. The firm size has a negative impact on the ROA with coefficients of -7.7108 while the variables of profitability and revenues have positive impact with the coefficients of 2.2106, 1.7908 respectively.

As far as the hypothesis 1 is concerned it is supported and showing the negative influence of leverage on firm performance hence the results are aligned with [27]. While the hypothesis 2 of the study is not supported as the influence of the firm size on firm performance is found to be negative in our analysis while [30 examined the relationship of firm size and profitability and found a positive influence of firm size on performance. [31] analyzed the data of 3035 Greek manufacturing firms and found that for all size classes, firms' profitability is positively influenced by firm size. [32] inspected the part

that firm size plays in gainfulness. Results demonstrated that total firm size assumes an essential part in clarifying productivity. Hence the results of the hypothesis 2 are not aligned with the literature. The third hypothesis regarding the relationship of liquidity and firm performance found to be supported as the results suggest positive relationship hence confirming the results of [29]. The fourth hypothesis is regarding the impact of revenues on firm performance and it is also supported as the relation is found to be positive hence supporting the study of [35] while the last and the fifth hypothesis of the study suggest the relationship between profitability and firm performance and found to be supported hence aligning with the findings of [36].

7. RECOMMENDATION

The study focused the Jordanian manufacturing firms' financial performance and found that certain accounting ratios have impact over the financial performance of the firms such as leverage, liquidity, profitability and revenues. Hence in the context of Jordan being a developing country the manufacturers are recommended to maintain certain ratios at a particular level so as to achieve competitiveness not only at the local level but also at the global level. Furthermore literature is evident that there is difference in the performance of firms in the developing and developed countries, indicating the government role in developed countries for the prosperity of the industrial sectors. This indicates that developing economies such as Jordon should also support their industrialist to prosper and increase their production capacity and be able to compete at the global level.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Khalifa KM, Shafii Z. Factors affecting the financial performance of non-oil industrial companies listed on Libyan Stock Market (LSM). In 4th International Conference on Business and Economic Research (4th ICEBR 2013) Proceeding (pp. 04-05). European Journal of Business and Management. 2013;5(12):82-99.
2. Almajali AY, Alamro SA, Al-Soub YZ. Factors affecting the financial performance of Jordanian insurance companies listed at Amman stock exchange. Journal of Management Research. 2012;4(2):266.
3. Akben-Selcuk E. Factors affecting firm competitiveness: Evidence from an emerging market. International Journal of Financial Studies. 2016;4(2):9.
4. Nimalathasan B. Profitability of listed pharmaceutical companies in Bangladesh: An Inter & Intra Comparison of Ambee & IBN Sina Companies. Universitatii Bucuresti. Analele. Seria Stiinte Economice si Administrative. 2009;3: 139.
5. Tailab MM. Analyzing factors effecting profitability of non-financial US firms. Research Journal of Finance and Accounting. 2014;5(22):17-26.
6. Omondi MM, Muturi W. Factors affecting the financial performance of listed companies at the Nairobi securities exchange in Kenya. Research Journal of Finance and Accounting. 2013;4(15):99-105.
7. Liargovas PG, Skandalis KS. Factors affecting firms' performance: The case of Greece. Global Business and Management Research: An International Journal. 2010;2(2):184-197.
8. Gitman LJ, Juchau R, Flanagan J. Principles of managerial finance. Pearson Higher Education AU; 2010.
9. Matar A, Bekhet HA. Causal interaction among electricity consumption, financial development, exports and economic growth in Jordan: Dynamic simultaneous equation models. International Journal of Energy Economics and Policy. 2015;5(4).
10. Yazdanfar D. Profitability determinants among micro firms: Evidence from Swedish data. International Journal of Managerial Finance. 2013;9(2):151-160.
11. Gul S, Irshad F, Zaman K. Factors affecting bank profitability in Pakistan. The Romanian Economic Journal. 2011;39(14): 61-89.
12. Erina J, Lace N. Commercial banks profitability indicators: Empirical evidence from Latvia. IBIMA Business Review. 2013;3:1-9.
13. Burja C. Factors affecting company's profitability. Annales Universitatis

Apulensis Series Oeconomica. 2011;13(2): 215-224.

14. Matar A. Evaluating the performance of islamic and commercial banks in Jordan: A comparative study. Jordan Journal of Economic Sciences. 2017;4(1):57-75.
15. Obaid TF, Zainon MS, Eneizan BM, Abd-Wahab K. Effects of green marketing strategy on the financial and non-financial performance of firms: A conceptual paper. Oman Chapter of Arabian Journal of Business and Management Review. 2016;5(12):14-27.
16. Eneizan BM, Wahab KA, Bustaman USA. Effects of green marketing strategy on firm performance. Advances in Global Business Research. 2015;12(1).

    ISSN: 1549-9332, 952.
17. Hansen R, Mowen M. Management accounting, 7th edition. Singapore: South-Western; 2005.
18. Havnes P, Senneseth K. A panel study of firm growth among SMEs in networks. Small business economics. 2001;293-302. In Knobena. J and Oerlemansab LA (2006).
19. Oerlemans L, Meeus H. Do organizational and spatial proximity impact on firm performance? Regional Studies. 2001;39(1). In Knobena J and Oerlemansab LA (2006).
20. Hagedoorn J, Cloodt M. Measuring innovative performance: Is there an advantage in using multiple indicators? Research Policy. 2003;32(8)1365-1379, in Knobena J and Oerlemansab LA (2006).
21. Damanpour F, Evan W. Organizational innovation and performance: the problem of organizational lag. Administrative Science Quarterly Journal. 1984;29,392. In Knobena J and Oerlemansab LA (2006).
22. Knobena J, Oerlemans LA. The effects of firm relocation on firm performance, Regional Studies. 2006;3.
23. Wahab KA, Obaid TF, Zainon MS, Eneizan BM. Effects of green marketing strategies on sales volume of green cars. Singaporean Journal of Business, Economics and Management Studies. 2016;5(3):41-54.
24. Rajan RG, Zingales l. What do we know about capital structure? Some evidence from international data. Journal of Finance. 1995;50(5):1421-1460.
25. Aquino R. Capital structure of Philippine listed and unlisted firms. University of the Philippines, College of Business Administration, Discussion Paper 1005. 2010;1997-2008.
26. Aivaziana J. The impact of leverage on firm investment: Canadian evidence. Journal of Corporate Finance. 2005;11: 277–291.
27. Ahna K. Leverage and investment in diversified firms. Journal of Financial Economics. 2006;79:317–337.
28. Louderback et al. Managerial accounting (9th ed.). South-western College Publishing Thomson Learning Asia Singapore p.3. Nigeria.' Research Journal of Business Management. 2000;3(3):73–84.
29. Binti M, Binti MS. Working capital management: The effect of market valuation and profitability in Malaysia. International Journal of Business and Management. 2010;5(11):140-147.
30. Vijayakumar A, Tamizhselvan P. Corporate size and profitability an empirical analysis. College Sadhana – Journal for Bloomers of Research. 2010;3(1):44-53.
31. Papadogonas TA. The financial performance of large and small firms: Evidence from Greece. Inter. J. Finan. Serv. Manage. 2007;2(1/2):14-20.
32. Lee J. Does size matter in firm performance? Evidence from US public firms. Inter. J. Econs. Bus. 2009;16(2): 189-203.
33. Amato LH, Burson TE. The effects of firm size on profit rates in the financial services. Journal of Economics and Economic Education Research. 2007;8(1):67–81.
34. Falope OI, Ajilore OT. Working capital management and corporate profitability: evidence from panel data analysis of selected quoted companies in Nigeria. Research Journal of Business Management. 2009;3:73-84.
35. Wamiori GM, Sakwa M, Namusonge GS. Effect of access to finance on financial performance of manufacturing firms in Kenya. Strategic Journal of Business & Change Management. 2016;3(4).
36. Ioanni Schiniotakis N. Profitability factors and efficiency of Greek banks. Euro Med Journal of Business. 2012;7(2):185-200.
37. Verma S, Goyal R, Priya J. Profitability of commercial banks after the reforms: a

study of selected banks. Int J Res Financ Market. 2013;3(2):20-29.

38. Olson EM, Slater SF. The balanced scorecard, competitive strategy, and performance. Business Horizons. 2002; 45(3):11-16.

39. Salman AK, Yazdanfar D. Profitability in Swedish micro-firms: A quantile regression approach. International Business Research. 2012;5(8).

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