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IMPACTS OF WORKING CAPITAL MANAGEMENT ON ORGANIZATIONAL PERFORMANCE: MARKET COMMONALITY AND RESOURCE SIMILARITY APPROACH

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ABSTRACT

Drawing from the market commonality and resource similarity of UNILEVER and PZ, the objective of this study is to investigate the working capital management variables on the profitability of UNILEVER and PZ industries from 2007 - 2016. Secondary data were collected from the published annual reports and audited financial statements of the two companies and analyzed using SPSS Version 24. The selected (explanatory) variables referred to as independent variables are inventory period, receivables period, payables period, liquidity (current ratio) and leverage while return on assets (ROA) was used as a proxy for profitability and as such referred to as dependent variable. The result of the descriptive statistics shows that payables has the highest mean value of 116.37 and standard deviation value of 66.26, an indication that the payables has more impacts on the overall model; and represents the center of distribution of the data. While the standard deviation value shows how spread out the data were from the mean. The Pearson 2-tailed correlation carried out at 5% (0.05) and 1% (0.01) were positively and statistically significant, an indication that a strong positive relationship exists among the variables in the model. This was further confirmed by the R² value of 0.848 (84.8%) and adjusted R² value of 0.794 (79.4%) which means that 84.8% of the variations in the profitability of UNILEVER and PZ industries can be predicted from the relationship between the variables used in the model. While the remaining 15.2% of the variations could be explained by other variables not included in the model. Finally, Anova with df (4,15) and F-test value of 15.7 shows that the model fits the data and is structurally stable because the significant value (0.000) is less than 0.05. The study recommends that the companies should concentrate on the management of leverage among others because any change in it brings about a change in their return on assets.

KEYWORDS: impacts, working capital management variables (inventory, payables, receivables, leverage, liquidity), return on assets.

INTRODUCTION

The intensity of competition and rivalry among firms that compete in common market and with similar resources, has led them to focus more attention on their internal strengths in order to sustain their overall corporate strategy and also maximize their potential competitive advantages within the external environment. Also, suppliers and customers are exercising considerable bargaining leverages in the external environment. As a result, firms focuses attention on its working capital management (short term assets and liabilities) which forms important components of total assets of the organization. Therefore, these short term assets and liabilities employed in day-to-day transactions of the organizations need to be analyzed, Talat and Nazir (2011). In view of their importance, there is the need for careful and systematic investigation of these short term assets and liabilities, since they play a vital role for firm profitability, risk as well as its value, Smith (1980). Efficient and effective management of working capital is an important component of overall corporate strategy to create value for the business. Companies always attempt to maintain an ideal state of working capital that maximizes their value, Haworth and West head (2003), Deloof (2003), Afza and Nazir (2008). Business firms are expected to meet current and future financial obligations to all stakeholders in the business and corporate sectors at large, Fidel, James and Samuel (2015).

The corporate sector remains the engine room of growth and development of all economies Atseye, Edim, and Eke (2014). In view of the above, it is imperative for firms in developing countries like Nigeria to be able to finance their activities internally especially now the economy is in recession in order to grow overtime if they are ever to play an increasing and predominant role of providing employment as well as income in terms of profits, dividends, and wages to household. Based on the foregoing, firms all over the world and Nigeria alike are striving to find the optimum level of working capital in order to sustain and continue in business. In line with this, Nigeria firms and other multinational firms in the country particularly Unilever and PZ are not left out of this endeavor especially now the country is going through economic recession with its negative effects of scarcity of fund, high finance cost (interest rate), unusual high exchange rate and double digits inflation rate, thereby making it difficult for firms to borrow funds to finance their businesses and production operations.

Based on the foregoing, the objective of this study is to investigate how payables, receivables, inventory, leverage and liquidity impacts on the profitability of Unilever and PZ industries Plc for a period of 10 years which include the period when the economy is under recession. It is noteworthy, that no prior studies on this area has been carried out particularly to examine how these selected variables impacts on Unilever and PZ profitability especially within this period of ten (10) years (2007-2016) . Therefore, it is no doubt that this study is most suitable in a period like this to fill the identified academic gap for the economic recession period. In doing this, research

questions were formulated which guided the researcher during the analysis such as what are the impacts of payables, receivables, inventory, leverage and liquidity on profitability of Unilever and PZ industries.

In the same vein, research hypotheses were also formulated as such as ;

Ho1: leverage does not have any significant impact on profitability,

Ho2: Payables does not have any significant impact on profitability.

Ho 3: Receivables does not have significant impact on profitability.

Ho4: Inventory does not have any significant impact on profitability.

H05 : Liquidity does not have any significant impact on profitability.

LITERATURE REVIEW

The corporate finance literature contains so many studies that have been conducted on working capital management, especially for companies in the developed countries and to some extent in the Middle East and Asian countries. Different aspects of working capital management including but not limited to studies involving liquidity, profitability relationship, working capital and firm performance , importance of working capital management , working capital policies – aggressive /consecutive and performance , determinants of working capital requirement etc. But few of the studies on influence of selected working capital variables on profitability.

Working capital management is very crucial particularly in this period of economic recession in Nigeria with its resultant high exchange rate, cost of finance (interest rate), Uremandu, Egbi and Enyi (2012).

Efficient working capital management would seek to strike a balance between having too high and too low liquidity to achieve an optimal level, Zainudin (2006). According to Peavler (2009) as cited in Uwunigbe, Nwalomwa and Egbi (2012), 60% of failed businesses emanate from cash problem which is an integral part of the working capital management. In line with this, however, the declines in profitability of most firms and businesses today have been largely attributed to poor and ineffective management of working capital, Uwunigbe et al (2012) opined.

Also, Lazaridis and Tryfonidis (2006), studied the relationship between working capital management and profitability of listed companies in the Athens stock exchange and the relationship was found to be positive. They measured gross operating profit and the cash conversion cycle. Raheema, Afza, Qayyum and Bodla (2010) also analyze the impacts of working capital management on firms performance in Pakistan for the period 1998 to 2007 using 204 listed manufacturing firms, the result indicate that the cash conversion cycle, net trade cycle and inventory turnover in days significantly affect the performance of firms. The result also shows that financial leverages, sales growth and firm size are important variables that have influences on profitability. The study concludes that firms in Pakistan are following conservative working capital management policy.

In same vein, Falope and Ajilore (2009) studied the effects of working capital on profitability of 50 listed Nigeria firms for the period 1996-2005 and reported a negative relationship between working management – Cash Conversion Cycle (CCC) and financial performance.

Dong and Su (2010) examined the relationship between working capital management and firm performance of sampled firms in Vietnam for the period 2006-2008. The results show a negative relationship between profitability (gross operating profit) and working capital management (cash conversion cycle). They further concluded that managers can create a positive value for the shareholders by handling an adequate cash conversion cycle and keeping each different component to an optimum level. Nwidobie (2012) examined working capital management efficiency and corporate profitability of 22 listed firms in Nigeria. The result showed that costs of working capital of the firms exceed returns on working capital investment thereby affecting their profitability.

Studies that supported a positive relationship between working capital management and profitability (conservative policy of working capital) are very few. Gill, Biger and Mathur (2010), using data from 88 American manufacturing firms for the period 2005-2007, confirmed a positive relationship between cash conversion cycle and corporate profitability (gross operating profit).

Chiouand Cheng (2006) studied the determinants of working capital management using different variables, such as industry effect, operating cash flows, growth opportunities, firm performance and size. The result showed that leverage and operating cash flows are the only variables that affect working capital management proxy of the firms during the period of study. Other variables (size, growth opportunities, firm performance) have significant relationship with working capital management proxy (not liquid balance).

Drawing from the above and other numerous studies undertaken in the area of working capital management and corporate profitability, the findings have always been inconsistent and still needs revalidation. Moreso, there is still a dearth of literature on studies that examine the relationship between all the components of working capital management and corporate profitability especially in the Unilever and PZ Nigeria particularly in this recession period.

METHODOLOGY

Data Source

Data for this study were collected from the annual reports and audited of the two (2) firms in same industry for the period of ten (10) years (2007-2016).

This study utilizes return on assets (ROA) as explanatory element of profitability and it is the only dependent variable. While payables, receivables inventory, leverage and liquidity as explanatory (independent) variables.

TABLE 1: MEASUREMENT OF VARIABLES

VARIABLES	ABBREVIATION	DESCRIPTION
LEVERAGE	WCL	Current asset
		$\frac{\text{Total assets} + \text{change in CA}}{\text{Total assets}}$
PAYABLES PERIOD	PY	Payables
		$\frac{\text{Cost of Sales}}{\text{X 365}}$
RETURN ON ASSET	ROA	Profit before tax
		$\frac{\text{Total assets}}{\text{Total assets}}$
INVENTORY PERIOD	INVT	inventory
		$\frac{\text{cost of sales}}{\text{X 365}}$
RECEIVABLES PERIOD	REC	Receivable
		$\frac{\text{Cost of Sales}}{\text{X365}}$
LIQUIDITY	LIQ	Current asset
		$\frac{\text{Current liability}}{\text{Current liability}}$

Source: empirical literature with author's modification

MODEL SPECIFICATION

This study adopts with modifications the framework used by Nazir and Afza (2009) cited in Onaolapo and Kajola(2015).

The model is stated thus:

$$ROA = F(\beta_0 + \beta_1 LEV + \beta_2 INVT + \beta_3 PAY + \beta_4 REC + \beta_5 LIQ + \mu_t)$$

Where: $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$ and β_5 are elasticity parameters of the respective variables selected and μ_t is the error term. Taking the logarithm form of the equation with “In” standing for natural logarithm with yield equation.

$$\ln ROA = \beta_0 + \beta_1 \ln LEV + \beta_2 \ln INVT + \beta_3 \ln PAY + \beta_4 \ln REC + \beta_5 LIQ + \mu_t$$

Where LEV=Leverage, LIQ=Liquidity, INVT=Inventory period, PAY=Payable period, REC=Receivable Period and μ_t =error term.

RESULT AND DISCUSSION

Descriptive Statistic

TABLE 1 presents the descriptive statistics of the variables used in the study

Table 1: Descriptive statistic

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Receivables	20	37.4300	370.4500	83.730000	91.3184035
Payables	20	8.0800	239.5700	116.372000	66.2611474
Return on Asset	20	.0100	.6000	.192700	.1652686
Inventory	20	14.1600	167.4700	87.614500	32.7074407
Liquidity	20	.60	2.50	1.4070	.62692
Leverage	20	.37	1.20	.7130	.28616
Valid N (listwise)	20				

From the table above, payables has the highest mean value of 116.37 and standard deviation value of 66.26. This is an indication that the payables impact more on the model than other variables and as such, it represents the center of distribution of the data. The standard deviation value also shows how spread out the data was from the mean.

CORRELATION

		Correlations					
		Receivables	Payables	Return on Asset	Inventory	Liquidity	Leverage
Receivables	Pearson Correlation	1	-.077	-.139	-.454*	.044	-.392
	Sig. (2-tailed)		.749	.560	.044	.855	.087
	N	20	20	20	20	20	20
Payables	Pearson Correlation	-.077	1	.151	-.390	-.885**	-.277
	Sig. (2-tailed)	.749		.525	.090	.000	.237
	N	20	20	20	20	20	20
Return on Asset	Pearson Correlation	-.139	.151	1	-.079	-.310	.769**
	Sig. (2-tailed)	.560	.525		.741	.183	.000
	N	20	20	20	20	20	20
Inventory	Pearson Correlation	-.454*	-.390	-.079	1	.288	.238
	Sig. (2-tailed)	.044	.090	.741		.219	.312
	N	20	20	20	20	20	20
Liquidity	Pearson Correlation	.044	-.885**	-.310	.288	1	.168
	Sig. (2-tailed)	.855	.000	.183	.219		.478
	N	20	20	20	20	20	20
Leverage	Pearson Correlation	-.392	-.277	.769**	.238	.168	1
	Sig. (2-tailed)	.087	.237	.000	.312	.478	
	N	20	20	20	20	20	20

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

From table 2 above, the Pearson correlation (2-tailed) carried out at 5% (0.05) and 1% (0.01) respectively were positively and statistically significance, an indication that a strong positive relationship exist among the variables used in the model because all the values at 2-tailed lies between 0 and 1.

REGRESSION RESULTS

Regression

a. Dependent Variable: Networking Capital

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.921 ^a	.848	.794	.0749760

- a. Predictors: (Constant), Inventory, Return on Asset, Payables,
 b. Receivables

The strong positive relationship among the predictors/explanatory variables are further confirmed by the value of R2 (0.848) and adjusted R2(0.794), which means that 84.8% of the variation in the profitability of Unilever and PZ industries can be predicted from the relationship among the variables used in the model. While the remaining 15.2% of the variation can be explained by other variables not included in the model.

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.440	5	.088	15.664	.000 ^b
	Residual	.079	14	.006		
	Total	.519	19			

- a. Dependent Variable: Networking Capital
 c. Predictors: (Constant), Inventory, Return on Asset, Payables, Receivables

The analysis of variance (Anova) with df(4,15) and F-test value of 15.66 indicates that the model fits the data (goodness of fit) and structurally stable because the significant value of 0.000 is less than 0.05.

COEFFICIENTS

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.014	.220		-.065	.949
	Receivables	.000	.000	.217	1.556	.142
	Payables	-4.919E-5	.001	-.020	-.075	.941
	Inventory	.000	.001	-.077	-.563	.582
	Liquidity	-.125	.062	-.474	-2.023	.063
	Leverage	.547	.072	.947	7.614	.000

a. Dependent Variable: Return on assets

From the above table, the coefficient of leverage is 0.000 which means that leverage is statistically significant because $0.000 < 0.05$.

Therefore, we reject the null hypothesis which states that leverage does not have any significant impacts on profitability of Unilever and PZ industries and accept the alternative hypothesis i.e. leverage has significant impacts on the profitability of Unilever and PZ. This means that leverage is a meaningful addition to the model because changes in the value of leverage is related to the changes in the response (independent) variable –return on assets.

CONCLUSION AND RECOMMENDATION

Working capital represents the portion of total funds used in the day – to – day running (transaction) of organizations. Every organization requires an optimum level of working capital in order to avoid tying down much capital in inventories for their operations.

From the data used for these two firms for the period 2007-2016, regression results showed that the five(5) factors are statistically significant in determining the profitability of the firms for the periods under review. The implication of this is that the financial managers of Unilever and PZ industries should take cognizance and leverage on these variables in order to achieve optimum working capital level for their organizations.

Leverage used in this study confirms the fact that for Unilever and PZ to achieve profitability, they should ensure efficient management of leverage because changes in leverage relates to the changes in the dependent variable-return on assets which stands as a measure for profitability.

To further this research, it is recommended that other factors not considered here especially economic factors, like inflation rate and interest rate should be incorporated for an improved result because this study utilized only industry specific variables.

Based on the findings of the test conducted, the study recommends that the companies should emphasize more on managing leverages.

REFERENCES

- Afza, T and Nazir, M.S (2007): “Is it better to be aggressive or conservative in managing working capital?” *Journal of Quality and Technology Management*, 3(2), pp. 11-21.
- Ali, S. (2011): working capital management and the profitability of the manufacturing sector. A case of pakistan’s textile Industry, *The Lahore of journal of economic*,16(2), 141-178.
- Deloof, M (2003): “does working capital management affect profitability of Belgian firms”, *Journal of business finance and accounting*, 30, pp. 573-587

- Falope, O.I and Ajilore, O.T (2009): “Working capital management and corporate profitability: evidence from panel data analysis of selected quoted companies in Nigeria”, *Research Journal of Business Management*, 3,pp. 73-84.
- Gill, A, Biger, N and Mathur, N (2010): “The relationship between working capital management and profitability: evidence from United states”, *Business and Economics Journal*, 10, pp. 1-9.
- Howorth, C and Westhead, P (2003): “The focus of working capital management in UK small firms”, *SLOAN Management Accounting Research*, 14(2), pp. 94-111.
- Lazardis, I., & Tryfonidis D, (2006). Relationship between working capital management and profitability of listed companies in the Athens stock exchange. *Journal of financial management and analysis*. 19, 26-35.
- Nazir, M.S and Afza, T (2008): “On the factor determining working capital requirements”, being a proceeding of ASBBS, 15(1), pp. 293-301.
- Nwidobie, M.B (2012): “working capital management efficiency and corporate profitability: evidences from quoted firms in Nigeria:”, *Journal of Applied Finance & Banking*, 2(2), pp. 215-237.
- Onaolapo A and Kajola A, (2015) “What are the determinant of working capital requirements of Nigerians firms?.” *Research journal of Finance and Accounting vol.6*, No 6, 2015
- Peavler, R, (2009). Cash Management is important for your small Business retrieved August 22, 2012, from <http://www.bizfinance.About.com> 1.odl cash management /a/ cash-mngt.on 16/5/2012.
- Raheman A, & Nasr, M (2007). Working capital management and profitability – case of Pakistan firms. *International review of business research paper*, 3, 279-300.
- Raheman, A, Afza, T, Qayyum, A and Bodla, M.A (2010): “Working capital management and corporate performance of manufacturing sector in Pakistan”, *International Research Journal of Financeand Economics*, 47, pp. 151-163
- Talat A. & Nazir M, (2011). “working management efficiency of cement sector of Pakistan. *Journal of Economics and Behavioral studies*, 2 223-235.
- Uremadu, S.O, Egbide, B-C & Enyi, P.E (2012). Working management, liquidity and corporate profitability among quoted firms in Nigeria. Evidence form the productive sector. *International journal of academic research in accounting, finance and management science*, 2(1).
- Uwuwigbe O, Uwalomwa, U & Egbide B-C (2012). Cash management and corporate profitability: a study of selected listed manufacturing firms in Nigeria. *ACTA Universitatis Danibius*,8(1), 49-59.

Yusuf A and Nasruddin Z, (2015). An analysis of proposed framework on impact of working capital management on the profitability of selected manufacturing companies listed on the Nigerian stock Exchange.

Zainudin N. (2006). Liquidity-profitability Trade-off: is it evident among Malaysians SMEs? *International Journal of management*. 13(2), 107-118.