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THE RELATIONSHIP BETWEEN WORKING CAPITAL MANAGEMENT AND DIVIDEND PAYOUT RATIO OF FIRMS LISTED IN NAIROBI SECURITIES EXCHANGE

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Abstract

The study was set out to establish the relationship between working capital management and dividend payout ratio of listed firms in Nairobi securities exchange (NSE), Kenya. A correlation research design was utilized. Population of the study comprised all thirty four firms which had been consistently listed in Nairobi securities exchange from 2006-2013. Secondary data was analyzed using a multiple regression model and Pearson correlation analysis was carried out to determine the relationship between working capital management and dividend payout ratio. Further, ANOVA test and independent t-test were used to determine the level of significance. The conclusion of the study was that there is a positive relationship between working capital management and dividend payout ratio of listed firms in Kenya (r=0.293) however the level of significance was (p=0.000) indicating that there is no relationship between working capital management and dividend payout ratio of listed firms in Kenya.

Keywords; Dividend payout ratio, working capital management, and Nairobi securities exchange

INTRODUCTION

The theory of dividend policy is one of the most important theories in finance because it is directly related to shareholders. However, dividend policy is one of the unresolved issues in finance theory. Indeed, there exists no definite explanation on how firms determine their dividend policy. In this connection, dividend policy decision is one of the four decisions of financial management because it affects the financial structure, the flow of funds, corporate liquidity and investors' attitudes (Bijendra, 2009). For instance, dividend decisions are important because they determine what funds flow to investors and what funds are retained by the firm for investment. In this regard, Managers have to decide whether to pay dividend or not and if they decide to pay dividend, they will face a further question of how much they should pay. Therefore, dividend policy is intended to regulate and guide a firm's management when issuing dividends to shareholders (Wanjiku, 2013).

Dividends are the returns that accrue to shareholders as a result of the money invested in acquiring stocks of a given company. Thus, in maximizing shareholders wealth, both investment decisions and dividend decisions should be given serious attentions simultaneously (Oladipupo and Ibadin 2013). As a consequence, dividend paid has an effect on the liquidity and profitability position of a firm. Additionally, when a firm issues dividends it reduces the amount of liquid cash that can be used to meet the demands of short time creditors and lenders. As a result, it can have an impact on the survival of a firm forcing the firm to an insolvency situation (pandey, 2010).

Liquidity management is a critical component of every organization. More so the firms listed at the NSE market. This is due to the fact that there is more scrutiny of the financial statements of the listed firms. The aspect of liquidity management becomes very crucial for a firm when deciding on its dividend payout. Firms' earnings provide a firm with relevant cash flow to maintain its liquidity position. Hence afirms management will need to consider the level of earnings to issue out dividends (Wanjiku, 2013)

In this regard, working capital management becomes very important for the success of a business because of its effect on firm's profitability as well on liquidity. Working capital management refers to investment in current assets and current liabilities which are liquidated within one year or less and is therefore crucial for firm's day-to-day operations (Kesimli and Gunay, 2011).

Van Horne and Wachowicz (2004) affirms that excessive levels of current assets may have a negative effect on the firm's profitability whereas a low level of current assets may lead to lower level of liquidity and stock outs resulting in difficulties in maintaining smooth operations.

Therefore this study was set out to assess the relationship between working capital management practices and dividend payout ratio of firms listed in Nairobi securities exchange.

Statement of the Problem

The prime objective of any business firm is to maximize shareholders wealth. However, this objective can be achieved when the company earns sufficient profits, at the same time; preserving liquidity of the firm is also an important objective too. Therefore, the issue of increasing profits at the expense of firm's liquidity can pose serious challenges to the firm, thus the firm must adopt a strategy to maintain a balance between these two objectives (Makori and Jagongo, 2013). In this regard, working capital management becomes an important issue during financial decision making since it forms part of investment in asset that requires appropriate financing and also when incurring liabilities (Odhiambo, 2011). However, Rose et al (1996) argues that dividend decision is a major financial decision in the sense that a firm has to choose between distributing profits to the shareholders and ploughing them back into the business. Furthermore, dividend paid has an effect on the liquidity position of a firm. Similarly, Waweru (2012) affirms to the fact that firm's dividend policy decision is very crucial and the way managers go about in making dividend policy decisions should follow a precise set of guidelines because these decisions will impact on the value of the firm and on the future performance. Thus, Ajanthan, (2013) points out that several theories have been proposed to explain the relevance of dividend policy and whether it affects the firm's value, but there has not been a universal agreement. Conversely, a study by Oladipupo and Ibadin (2013) in Nigeria revealed that working capital management does not matter in dividend policy decision. However several studies in Kenya have explored on working capital management and profitability. No studies have been done on working capital management and dividend payout ratio with specific reference to listed firms in Kenya. This study therefore comes in to establish any relationship between working capital management and dividend payout ratio of firms listed in NSE.

Main Objectives of the Study

The main objective of the study was to establish the relationship between working capital management and dividend policy of firms listed in Nairobi securities exchange.

Specific Objectives of the Study

i. To determine the relationship between accounts receivables collection period and dividend payout ratio of firms listed in NSE.

ii. To establish the relationship between inventory conversion period and dividend payout ratio of Firms listed in NSE.
iii. To evaluate the relationship between average payment period and dividend payout ratio policy of Firms listed in NSE.
iv. To examine the relationship between cash conversion cycle and dividend payout ratio of Firms listed in NSE

Research Hypothesis

Ho_1: There is no statistical significant relationship between accounts receivable collection period and dividend payout ratio of firms listed in NSE.

Ho_2: There is no statistical significant relationship between inventory conversion period and dividend payout ratio of firms listed in NSE.

Ho_3: There is no statistical significant relationship between average payable period and dividend payout ratio of firms listed in NSE.

Ho_4: There is no statistical significant relationship between cash conversion cycle and dividend payout ratio of firms listed in NSE.

LITERATURE REVIEW

Muchendu (2003) did a study on the determinants of dividends of publicly quoted companies in Kenya. The duration of the study was ten years from 1992-2001. The data used in this study was taken from companies listed in Nairobi securities exchange. The dependent variable of the study was dividend of companies; independent variables were liquidity, networking capital, market price and net income. Correlation research design was used in the study. The data collected was analyzed using regression analysis. However; the study indicated that working capital, net profit and market price are significant factors in the determination of dividends. Furthermore, the study revealed that companies listed at Nairobi securities exchange (NSE) maintained a constant dividend payout over the years.

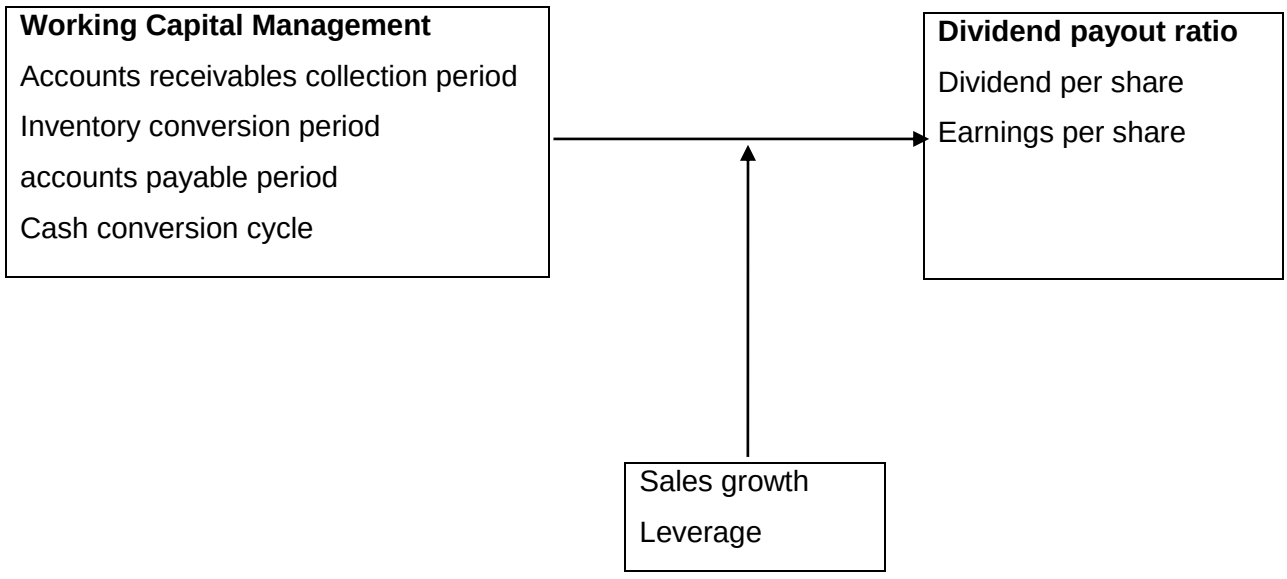
Bitok (2004), examined the effects of dividend policy on the value of listed firms in Kenya for a six year period from 1998 to 2003. The population of interest in the study consisted of all firms quoted in NSE. Dividend policy was taken as independent variable and the value of firms as dependent variable. The data collected was analyzed using simple linear regression and correlation analysis. The results of the study revealed that there is a weak negative relationship between dividend policy and the value of firms quoted at the Nairobi securities exchange.

Maniagi et. al (2013) examined the determinants of dividend payout policy among non-financial firms on Nairobi securities exchange in Kenya. Dividend payout ratio was dependent

variable while independent variables were profitability, growth, current earnings, and liquidity. Size and business risk was taken as moderating variables. Purposive sampling technique was used to select a sample of 30 non-financial companies for duration of five years from 2007 to 2011. Secondary data was collected from audited financial statements of companies listed in Nairobi Securities Exchange website and the websites of non-financial firms. Descriptive statistics and multiple regressions were used to determine the nature of the relationship. Return on equity, current earnings and firms' growth activities were found to be positively correlated to dividend payout.

A study by Oladipupo and Ibadin (2013) in Nigeria examined the relationship between working capital management practice and dividend payout ratio of manufacturing companies quoted in Nigeria Stock Exchange. Dividend payout ratio was taken as dependent variable, and working capital management the independent variable. Working capital management was measured by the net trade cycle, current ratio and debt ratio. Data was obtained from twelve manufacturing companies quoted on the Nigeria Stock Exchange between 2002 and 2006. Data collected was analyzed using the Pearson product moment correlation technique and ordinary least square regression technique. The results of the study revealed that dividend payout ratio was influenced positively by profitability and net trade cycle was negatively by growth rate in earnings. Corporate profitability, working management, and growth in earnings had statistical insignificant effects on the dividend payout ratio at 5% confidence level. Hence, the study noted that working capital management is not significant in dividend policy decision.

Figure 1. Conceptual framework



RESEARCH METHODOLOGY

Research Design

This study used a correlation research design. According to Mugenda and Mugenda (2003) the correlation research design describes in quantitative terms the degree to which variables are related. It involves collecting data in order to determine whether and to what degree a relationship exists between two or more quantifiable variables.

Target Population

The target population of this study was all the firms quoted in the Nairobi Securities Exchange by October 2014. According to annual capital markets authority report (2014) sixty two companies were listed in the NSE by end of October 2014.

Data collection

Secondary data was collected for a period of eight (8) years ranging from 2006-2013 using published annual reports and financial statements of listed in the NSE. Data was also obtained from NSE handbooks (2006 -2013) of thirty four (34) companies continuously listed in the Nairobi securities exchange.

Data analysis approach

Data collected was analyzed using inferential statistics. Both multiple regression and correlation analysis were carried out to test the relationship between working capital management and dividend payout ratio. Statistical package for social sciences (SPSS) software version 16 was used in data analysis to determine whether the results indicate positive or negative relationships. Between 0 and 0.5 ($0<r<0.5$) the correlation is weak, and between 0.6 and 1.0, ($0.6<r<1.0$), the correlation is strong. ANOVA test was used to determine the level of significance of the regression coefficient. The following regression model adopted from Makori and Jagongo (2013) with a modification was used in data analysis.

$$Y=\beta 0+\beta 1\chi 1+\beta 2\chi 2+\beta 3\chi 3+\beta 4\chi 4+E$$

Where,

Y = Dividend Payout Ratio, estimated as ratio of dividend per share divided by earnings per Share.

ß= Is a constant, the value of Y when all X values are Zero.

X1(ACP) – Accounts receivables collection period given by accounts receivables period dividend with credit sales multiply by days in a year

X2(ICP) – Inventory conversion period given by average inventory divided by cost of sales multiply by days in a year

X3 (APP) – Accounts payable period given by average payables period divided by cost of sales multiply by days in a year

X4 (CCC) –Cash conversion cycle given by (ACP +ICP-APP)

ß1, ß3, ß2, ß4, – are regression coefficients or change induced in Y by each X variable

E – Error term

In addition to that the model also included two moderating variables which had the effects on dividend payout ratio of firms. These variables were sales growth and leverage. Durbin Watson and variance inflation factor were used to detect autocorrelation and multicollinearity among independent variables.

ANALYSIS AND FINDINGS

Table 1: Pearson Bivariate Correlation Analysis and two tailed t- test

		ACP	ICP	APP	CCC	DPR
ACP	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	272				
ICP	Pearson Correlation	.093	1			
	Sig. (2-tailed)	.124				
	N	272	272			
APP	Pearson Correlation	.304**	.500**	1		
	Sig. (2-tailed)	.000	.000			
	N	272	272	272		
CCC	Pearson Correlation	.215**	.119*	-.410**	1	
	Sig. (2-tailed)	.000	.049	.000		
	N	272	272	272	272	
DPR	Pearson Correlation	-.079	-.073	.089	.022	1
	Sig. (2-tailed)	.193	.233	.145	.712	
	N	272	272	272	272	272

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

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

Table 1. Above indicates the correlation values between working capital management variables and dividend payout ratio. Dividend payout ratio is negatively correlated with accounts receivable collection period as shown by correlation coefficient of -0.079, this implies that collecting payments from customers within shortest time possible can significantly increase dividend payout ratio. Again the result indicates that there is no statistical significant relationship between accounts receivable collection period and dividend payout ratio as shown by p-value of 0.193 (p>0.05).

Similarly, the inventory conversion period in days have a negative correlation of -0.073 with a statistical insignificant relationship of p-value of 0.233(P>0.05); this means that reducing the period of ordering raw materials can significantly increase dividend payout ratio. However Payable days show a positive relationship of 0.089 with the dividend payout ratio, with a p-value of 0.145 which is higher than 0.05 implying that the relationship is statistically insignificant, this implies that if firms can delay making payments to their suppliers can lead to increased dividend payout ratio. Finally cash conversion cycle is positively correlated with dividend payout with a p value of 0.712; however the relationship is statistically insignificant with a p- value greater than 0.05.

Table 2: Multiple Regression analysis

					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.293[a]	.086	.072	37.4483291	.086	6.253	4	267	.000	1.518

a. Predictors: (Constant), CCC, ICP, ACP, APP

b. Dependent Variable: DPR

The R value was 0.293 as shown in the table 2 above. This means that there is a weak positive relationship between working capital management and dividend policy (r<0.5). The coefficient of determination (R^2) shows that working capital management influenced 8.6% of the variations in dividend payout ratio. In order to test for the presence of autocorrelation Durbin- Watson was performed and the results indicated that there was no autocorrelation as indicated by the value of 1.518 which is within the acceptable limit of 1.5 to 2.5.

Table 3 Test of hypothesis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35077.546	4	8769.387	6.253	.000[a]
	Residual	374434.753	267	1402.377		
	Total	409512.299	271			

a. Predictors: (Constant), CCC, ICP, ACP, APP

b. Dependent Variable: DPR

According to table 3 the overall significance of the model was 0.000 with an F value of 6.253. This means no relationship between working capital management and dividend payout ratio. Therefore the study fails to rejects the null hypothesis and concludes that there is no statistical significant relationship between working capital management and dividend payout ratio.

Table 4: Regression coefficients

		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	31.056	4.660		6.664	.000		
	ACP	-.184	.052	-.244	-3.511	.001	.710	1.408
	ICP	-.191	.049	-.299	-3.882	.000	.575	1.738
	APP	.166	.036	.430	4.612	.000	.393	2.544
	CCC	.081	.022	.287	3.619	.000	.543	1.840

a. Dependent Variable: DPR

The results in the above table indicate that the coefficient of accounts receivable collection period for sampled companies in Kenya was -0.184, this means that an increase in accounts receivable collection period leads to decrease in firms' dividend payout ratio. Similarly the inventory conversion period was -0.191.Furthermore, accounts payable period and cash conversion cycle had a coefficient of 0.166 and 0.081 respectively. Table 4 further shows that there is no statistical significant relationship between working capital management and dividend payout (p=0000) ratio. In order to test for multicolinearity in the data, variance inflation factor

and tolerance factors were used. Furthermore it was evident from the table that there was no multicolinearity because all values were below 10 and tolerance value of more than 0.2.

Summary of findings

The aim of the study was to establish the relationship between working capital management and dividend payout ratio of firms listed in Nairobi securities exchange. Data was analyzed using inferential statistics ranging from 2006 to 2013.

The study established that there exists anegative relationship between accounts receivable collection period and dividend payout ratio among listed firms in Kenya. This implies that collecting payments from customers within shortest time possible can significantly increase dividend payout ratio and there was no prior studies to compare with because the study was only done in Nigeria using other variables like profitability, growth in earnings. Findings of the study also revealed that there is a negative relationship between inventory conversion period and dividend payout ratio among listed firms in Kenya. This means that companies can increase dividend payout ratio by reducing inventory in days. Furthermore, companies can increase dividend payout ratio by reducing the costs of holding inventory.

Similarly, the study found out that there is a positive relationship between average payable period and dividend payout ratio among listed firms in Kenya. This implies that if time period of paying suppliers is increased then overall firm's dividend payout ratio will increase. Likewise, the study found out that there is a positive relationship between cash conversion cycle and dividend payout ratio among listed firms in Kenya. This implies that an increase in cash conversion cycle will lead to a reduction in dividend payout ratio. Finally the findings of the study revealed that there is no statistical significant relationship between working capital management and dividend payout ratio among listed firms in Kenya.

CONCLUSIONS

From the findings, there is a weak positive relationship between accounts receivables collection period and dividend payout ratio(r=0.079) .Similarly, the results also indicated that there is a weak positive relationship between inventory conversion period and dividend payout ratio (0.073) .Furthermore, the results of the study also indicates that accounts payable period and cash conversion cycle have a weak positive relationship with dividend payout ratio as shown by (r=0.089 and r= 0.022) respectively. The study therefore concludes that working capital management has a weak positive effect on dividend payout ratio of firms listed in NSE (r=0.293).

Furthermore, it is evident that at 95% confidence level, accounts receivable collection period shows a statistical significant relationship as shown by P value (0.001) ($p<0.05$), While accounts payable period, inventory conversion period and cash conversion period shows a statistical insignificant relationship as shown by p value of (0.0000). Finally the overall findings indicates that there is no statistical significant relationship between working capital management and dividend payout of firms listed in NSE as shown by p value of 0.0000 ($p<0.05$).

RECOMMENDATIONS

From the above findings the study recommends that managers of firms listed in Nairobi securities exchange should set credit policies that would enable them to receive receivables as soon as possible this helps to reduce their accounts receivables period. In addition managers should also focus on maintaining the inventory at optimal level to reduce the costs of holding inventory. Similarly, managers must also delay paying suppliers, the longer the average payable period the more dividend payout ratio; this can only be achieved by selection of good suppliers and maintaining reputation of the firm. Lastly managers should focus on reducing the cash conversion cycle by investing more in working capital.

Finally lenders should come up with abroad scope to cover all working capital management components that can sufficiently explain dividend payout ratio of listed firms in Kenya. This is because the current working capital management components explained only 8.6% of dividend payout ratio in listed firms. Finally investors should invest in sectors that showed a strong positive significant relationship between variables under study.

LIMITATIONS OF THE STUDY

The study was limited to consistently listed firms excluding banking and insurance companies, only thirty four companies were consistently listed in the NSE on the period of study. Similarly, a sample of thirty four companies is too small to generalize the results. The second limitation was that some companies had not submitted the financial statements of the year ended 2014 thus limiting data to the year ending 2013.

SUGGESTIONS FOR FURTHER RESEARCH

A similar study should be conducted using other measures of working capital management like efficiency indices, on measures of dividend policy like price earnings ratio, dividend cover, retention ratio and dividend yield. Furthermore a comparative study with a longer period should be undertaken to determine the nature of the relationship and lastly a similar study should also focus on non listed firms.

REFERENCES

Ajanthan, A. (2013). Relationship between dividend payout and firm profitability; A study of listed Hotels and restaurants in Sri Lanka. International journal of scientific and research publications vol. 3 1-6

Afza.T and Nazir .M. (2007). Working capital management policies on firms; Empirical evidence from Pakistan. Pakistan journal of commerce and social sciences 1(1) 25- 36

Bijendra .B. (2009). Dividend policy and its impact on share price an analysis of selected 'A' class listed companies, Unpublished MBA project. Apex College. Pokhara University

Bitok, J. (2004). The effect of dividend policy on the value of the firms quoted at the NSE. Unpublished MBA Project. University of Nairobi.

Kesimli, I. and Gunay .S. (2011). The impact of Global economic crisis on working capital of real estate in Turkey. Business and Economic horizon journal vol 4(1) 52-69

Makori, D. and Jagongo, A. (2013) Working capital management and firm profitability. Empirical evidence for manufacturing and construction firms listed in the NSE. International journal of accounting and taxation vol.1 No.12372-4978

Maniangi, G. Musiengi and Ondieki B. Alala (2013) Determinants of dividend payout policy among non-financial firms on NSE. International Journal of scientific and technological research vol.2 253-266

Mathuva, D. (2010). The influence of working capital management components on corporate profitability: a survey on Kenyan listed firms. Research Journal of Business Management, 3: 1-11

Mitau, M. (2013) Working capital management and its effects on firm's profitability, A survey of non-financial institutions listed on the NSE. Unpublished MBA project, University of Nairobi.

Mohammad, S. (2013) Effects of Dividends Policy on shareholders wealth. A study of sugar industry in Pakistan. Global journal of management and business research finance. Vol.13 issue 7 47-54

Muchendu, P. (2003) Study on the determinants of dividends. An empirical investigation of publicly quoted companies in Kenya unpublished MBA project. Egerton University

Mugenda, O. and Mugenda. A. (2003). Research methods. Quantitative and qualitative approaches. Nairobi, Kenya: ACTS Press.

Murega, M. (2012), Relationship between working capital management and firms' performance, Unpublished MBA project. University of Nairobi

Odhiambo, J. (2013) Relationship between working capital management and Performance of deposit, taking savings and credit cooperative societies licensed by Sacco society's regulatory authority in Nairobi County. Unpublished MBA project. University of Nairobi

Oladipupo .A and Okoeguale .P (2013) Does Working Capital Management Matter in Dividends Policy Decisions. Empirical Evidence from Nigeria. International journal of financial research vol.4 No.4, 2013 140-158

Pandey, I. M (2010) Financial management. Vikas Publishing house, New Delhi, India.

Ross, S., Westerfeild, R. and Jordan, B. (1996). Essentials of Corporate Finance. Boston: Irwin McGraw-Hill, .381-462

Van-Horne, J. and Wachowicz, J. (2011) Fundamentals of financial management 14th edition New York Prentice Hall Publishers

Wanjiku, K. (2013) Effects of macroeconomic variables on dividend policy of firms listed in NSE. Unpublished MBA project. University of Nairobi.

Waweru, G. (2010). Do dividends matter? Some evidence from an emerging market: Journal of finance, School of Administrative Studies, York university vol.24, No. 1 1-10