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Accounts Payables Conversion Period on Liquidity of Equity Securities of Companies at Nairobi Securities Exchange

By: Kadima, M. John[1], Tobius Olweny (PhD)[2] and Clive Mukanzi (PhD)[3]

Abstract

Purpose: The purpose of the study was to determine the effect of Accounts Payables Conversion Period on Liquidity of equity securities of companies at the Nairobi Securities Exchange.

Methodology: This study adopted a descriptive survey research design since data involved was quantitative in nature and more so descriptive study focused on explaining situations. Population of the study included all 61 companies listed at Nairobi Securities Exchange at June 2016.This study embraced secondary panel data of 10 years since 2007. The data was subjected to required descriptive and inferential statistical tests with respect to the objectives of the firm; statistical analysis was done by use of E-views soft ware package.

Findings: The results indicated that Accounts Payables Conversion Period had a significant effect on Liquidity of equity securities at Nairobi Securities Exchange.

Implications: This study was therefore designed to address scholarly research gap of earlier researchers for having used only internal organization's financial information on the examination of effect of Accounts Payables Conversion Period and traditional accounting liquidity within the organization as determined by use of accounting ratios, yet companies are listed at securities exchange markets, where investors require equity securities trading information of individual firms on liquidity before making investment decisions of providing funds. The essence of the study was to relate whether the organization's internal financial performance results had an impact on external financial performance of the organizations at securities exchange markets as determined by liquidity of equity shares, more so with respect to firm size.

Key words*: *Liquidity, Accounts Payables Conversion Period, Firm Size

1.1 INTRODUCTION

In the study by Amihud, Mendelson and Peterson (2005), liquidity was an exercise of trading a security that just could make it one of key determinants upon which an investor would decide whether to invest or not.

[1] *Student, Jomo Kenyatta University of Agriculture and Technology, School of Business*
[2] *Lecturer, Jomo Kenyatta University of Agriculture and Technology, School of Business*
[3] *Lecturer, Jomo Kenyatta University of Agriculture and Technology, School of Business*

According to Kumar and Misra (2015), liquidity was life blood of stock markets and it had very important implications to traders, regulators, stock exchanges and listed companies. Globally agreed on measures of liquidity that could represent most of characteristics continue to be an area of research (O'Hara, 2004). However, prior function of stock market is to support growth of industries and the economy of a country and also reflect as a measurement tool that could give information as concerns industrial growth and stability of an economy (Aurangazeb, 2012). Management's consideration of Liquidity at securities exchange market and Accounts Payables Conversion Period forms a vital input in corporate finance and hence direct concern of shareholders is to evaluate the worthiness of their investment (Bratland & Hornbrinck, 2013).

Accordingly Accounts Payables Conversion Period is very crucial for success of a company since it reflects how honorable the organization is towards her financing practices (Achode & Rotich, 2016). Accounts Conversion Period refers to how a company can manage her contractual accounts on timely basis with the clients in order for maintenance of good reputation that is very important for the external investors (Sharma, 2017). Accounts Payables Conversion Period refers to the duration it takes for payables to be converted into cash and creditors paid and more so payables being a valuable component of trading cycle of capital, hence requires proper management since it is an important factor in maintaining existence of liquidity, solvency and profitability of companies (Raheman & Nazir, 2007). In the study by Abuzayed (2011), poor management of payables impairs liquidity and hence Accounts Payables Conversion Period of an organization would distort the organization's internal information to investors for making decisions, more so causing a discouragement.

In the study by Padachi and Carole (2014) on life of a business, firms require liquid assets and cash for their daily operations. These assets are referred to as current assets that could be easily converted into cash to sort out obligations of the firm. However, for smooth running current liabilities should be enjoined and balanced with the current assets. Frequent lack of liquidity to meet current obligations on their due dates is not a welcoming situation and may cause business failure. According to Eljelly (2004) on identification of relationship between profitability and liquidity with consideration of cash gap on a sample of joint stock companies in Saudi Arabia, results indicated cash gap being a better measure of liquidity than current ratio that consist of current assets divided by current liabilities which is highly associated with reputable performance of the firm and a favourable Accounts Payables Conversion Period measure.

In the study by Makori and Jakongo (2013), the greater the relative proportion of liquid assets, the lesser the risk of running out of cash, all other things being equal. The essence of Accounts Payables being in a situation of not being honoured by an organization has a minimum chance to exist. It is vital for the management to control the Accounts Payables related components in order to have the liquidity capability to make an organization to move on. Cornnet (2009) stated that the management employs liquidity ratios to measure how flexible the firm management is to meet short term obligations as they fall due. If the firm fails to balance current liabilities with other components in an organization, it may

be forced into liquidation. Among scholars (Award & Al-Ewesat, 2012; Abuzayedi, 2011; Aduda, Masila & Onsongo, 2012; Joshi, Sood, Soans, Denfeld, Mitra & Harp, 2008; Makori & Jagongo, 2013) shared the same sentiments.

In the study by Horngren *et al* (2012), current liabilities were liabilities that become due within the next year or within the normal operating cycle if it would not be longer than one year; hence Current liabilities are closely related to current assets since current assets are supposed to raise cash that would be needed to pay current liabilities. Hence, through current liabilities as a phenomenon leads to accounts payables conversion period arising. Liabilities account includes accounts payables and short-term borrowings. Scholars like Nyarige and Olweny (2014) stated on paying bills and inclusively emphasized on transaction costs being reduced by trade credit. In steady of paying bills every time goods were delivered, a buyer might want to accumulate obligation to pay them within specified times and such an action would enable a given firm to separate cycle of payment from delivery schedule.

2.1 Literature Review

In the study by Amihud and Mendelson (1986) on asset pricing and bid –ask price spread, the relationship between Liquidity and cost of capital indicated high liquid markets being more attractive to investors because of easy exit from firm's Ownership and this reduces opportunity cost of capital significantly. In the study by Hui and Heubel (1984) on comparative liquidity advantages among major United States of America stock markets, unsystematic risk represented the illiquidity of stock. Sensitivity of unsystematic risk to changes in the volume executed measured liquidity. Market efficient coefficient was applied as price based measure which stated that price movements are more continuous in liquid markets, even though equilibrium prices are affected by incoming new information. In the study by Amihud (2002) on price impact proxies, the study captured lack of liquidity by dividing daily return by daily dollar volume, hence such a measurement is called as illiquidity and it reflects price shock triggered by a unit of dollar volume.

In the study by Kumar *et al*. (2015), an asset is more liquid if it is immediately realized without loss. Investors may either persist on immediate execution at current bid or ask price or wait to trade at a favorable price, on the same note, Kyle (1985) emphasized that the quoted Ask (offer) price includes a premium for immediate buying and the Bid price similarly reflects a concession required for immediate sale. Among the scholars O' Hara (1995) on the study of liquidity and financial stability stipulated that a liquid market has depth, tightness and resilience dimensions. In the study by Bogdan, Baresa and Ivanovi (2012) on measuring liquidity on stock market, free float could serve as a measurement of stock liquidity so long as they exclude the stocks held by strategic stockholders.

Organizations encounter liquidity problems when institutions do not have sufficient cash or liquid assets to fulfill its cash requirements (Singh & Shahid, 2016). For any institution to be stable in survival and put up with its activities as a going concern it must stay liquid and fulfill its commitments as and when they become due; hence, liquidity problem is the probability that an institution will not be in financial capability to settle down its current obligation on due date. It is a situation where an institution is unable to pay its liabilities

without incurring any additional charges and penalties (Kesimli & Gunay, 2011). The liquidity problem has discouraging outcome on the institution's performance and is caused by poor accounts payable management practices. If firms fail to minimize their spending, the current liabilities will not be settled when they fall due, additional charges will be attached to the obligation hence reduce the institution's credit score to the fund providers and suppliers (Mathuva, 2010).

In the study by Duru and Okpe (2016) on management of accounts payables of Industrial manufacturing companies in Nigeria, research design utilized in this research was Ex-post facto research design. It was utilized since it used events that took place during the previous years. The population of this research consisted of all the companies in industrial and domestic products manufacturing companies in Nigeria. The sample size was reliant on data accessibility. The research used only secondary data taken out from yearly report and statement of accounts of the companies under research. The data for this research included, accounts payables, Sales turnover, long term debt, and profit before tax. The research showed association between accounts payable ratio and profitability was positive and statistically significant. The research also showed that equally debt ratio and sales growth rate had positive and significant consequence on profitability of the companies under research. The research utilized secondary data which had already been obtained and in the public domain. Unlike the primary data which is first-hand information.

In the study by Sharma (2017) on account payables management of selected companies of fast moving consumable goods sector in India. Five individuals of FMCG companies were analyzed; hence the data for ten years of the concerned companies formed the sampling size of the financial data. Judgment sampling technique (Non probability sampling technique) was utilized. Secondary data were collected and analyzed. The monetary values of account payables turnover ratio were high in these companies. Furthermore, bigger value of accounts payables turnover revealed that the firm is skillful in paying its short term liability quickly, if larger volume of accounts payables turnover ratio is satisfactory for business organization.

Achode and Rotich (2016) had a study on effect of accounts payables as source of financing on performance of listed manufacturing firms at the Nairobi Securities Exchange where a cross-sectional research design was adopted. Data was gathered at a single point in time, census sampling technique was used. Secondary data was collected from the companies' financial statements and journals at the Nairobi Securities Exchange. The descriptive analysis of the variables, critical analysis and advanced analysis of the data was carried out with the help of SPSS. A multiple regression model was applied to test the association between the accounts payables and firm performance. The outcomes from research showed that majority of the firms quoted at the NSE had a direct positive relationship between accounts payable and the dependent variable, Profitability and Liquidity.

Concerning this particular study, literature review concentrates on the relationship between Accounts Payables Conversion Period and Liquidity of Equity Securities at Nairobi Securities Exchange, the study considered to determine the effect of Accounts Payables Conversion Period on Liquidity of Equity Securities at Nairobi Securities

Exchange while using Firm Size as a moderating variable. Such tests lead to the understanding of how internal performance relates to external performance of an organization. Hence the following hypotheses were tested.

H_{01}: Accounts Payables Conversion Period will not lead to Liquidity of equity securities of companies at Nairobi Securities Exchange.

H_{02}: Firm Size will not lead to Liquidity of Equity Securities of Companies at Nairobi Securities Exchange.

2.2 Theoretical Framework

2.2.1 Liquidity Proxies and Characteristics Theory

In the study by Kumar *et al*. (2015), an asset is more liquid if it is immediately realized without loss. Investors may either persist on immediate execution at current bid or ask price or wait to trade at a favorable price, on the same note, Kyle (1985) emphasized that the quoted Ask (offer) price will include a premium for immediate buying and the Bid price similarly reflects a concession required for immediate sale. Among the scholars O' Hara (1995) on the study of liquidity and financial stability stipulated that a liquid market has depth, tightness and resilience dimensions. In the study by Bogdan, Baresa and Ivanovi (2012) on measuring liquidity on stock market, free float can serve as a measurement of stock liquidity so long as they exclude the stocks held by strategic stockholders.

In 1987, Bernstein's study on different measures of stock liquidity concluded that liquidity and efficiency are not compatible and hence a liquid market on sensing the arrival of new information, keeps noise and sudden price changes at a lower level. On Inefficient markets, prices tend to move so fast when new information is received, so liquidity leads to less efficient markets. In the study by Amihud and Mendelson (1986) on asset pricing and the bid –ask price spread , the relationship between Liquidity and cost of capital indicated high liquid markets being more attractive to investors because of easy exit from firm's Ownership and this reduces the opportunity cost of capital significantly. In the study by Hui and Heubel (1984) on comparative liquidity advantages among major United States of America stock markets, unsystematic risk represented the illiquidity of stock. Sensitivity of unsystematic risk to changes in the volume executed measured liquidity. Market efficient coefficient was applied as price based measure which stated that price movements are more continuous in liquid markets, even though equilibrium prices are affected by incoming new information.

2.2.2 Trade- off Theory

The situation in a perfect market, there is a generalized assumption that there is free entry and exit of firms, ease of raising funds and no transaction cost to the firm. Trade off theory explains that firms are financed partially by debt and partly by equity and states that there is an advantage in financing with debt, the tax benefit of debt, the cost of financing distress including bankruptcy costs. The marginal benefit of further debt declines as debt increases while the marginal cost increases so that the firm that is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing. The trade-off theory suggests that firms target an optimal level of liquidity to balance the benefit and cost of holding cash. The cost of holding cash includes low rate of return of these assets because of liquidity premium and possibly tax disadvantage. The advantage of holding cash is that the firms save transaction costs to raise funds and does not need to liquidate assets to make payments. Additionally, the firm

can use liquid assets to finance its operations and invest if other medium of funding are not available or unnecessarily exorbitant.

2.2.3 Aggressive Policy of Working Capital Management Theory

Adopting an aggressive investment policy means a firm is working with high level of current liabilities as a percentage of the total assets (Panigrahi, 2014). It can also be when a firm adopts a financing decision in having a high amount of current liabilities as a percentage of their total liabilities (Mathuva, 2010). In further studies Afza and Nazir (2009), investigated the impact of an aggressive investment capital policy has upon firms' liquidity. A study was on 204 non-financial firms listed on the Karachi stock exchange, the firms were distributed into 17 various industry sectors and the time period was 1998-2005,they used the aggressive investment policy and applied the measure which was an extension of an earlier study by Weinraub and Visscher (1998). Furthermore in order to evaluate the aggressive investment policies and financing policies they used return on assets and Tobin's q (Total market value of a firm/Total asset). Their study found that an aggressive approach does not generate more liquidity as well they found that investors give more weight into stocks from firms that adopt an aggressive approach towards their management of the working capital and recommended for further study.

2.2.4 Pecking Order theory

Pecking order theory tries to capture the cost of asymmetric information and states that companies prioritize their sources of financing (from internal financing to equity) according to the law of least effort, or of least resistance preferring to raise equity as a financing means of 'last resort'. This implies that internal financing is used first; when it is depleted, then debt is issued and when it is no longer sensible to issue more debt, equity is issued. The theory maintains that businesses adhere to a hierarchy of financing sources and prefer internal financing when available, and debt is preferred over equity if external financing is required (equity implies issuing more shares which meant bring external ownership into the firm). Thus the form of debt a firm a firm chooses can act as a signal of its need for external financing; hence the management should be alert on internal and external performance of an organization.

The pecking order theory was popularized by Myers (1984) when he argued that equity is less preferred means to raise capital because when managers (who are assumed to know better about the condition of the firm than investors) issue new equity, investors believe that mangers think that the firm is overvalued and mangers are taking advantage of this over valuation. As a result investors will place a lower value to the new equity issuance. External financing is essential, debt is perceived by the firm to be safer than equity since the market value does not change much over time Prior empirical studies buttress this. A determinant of cash holding from the perspective of pecking order theory has been supported by other researches; Sharma (2017) examined liquidity and solvency and found that corporate liquidity and solvency interact through information, hedging, and leverage channels. The information and hedging channels increase equity-value of firms which helps to pay regular dividend and most importantly reduce volatility in cash flow. Achode

and Rotich (2016) showed that larger firms are more organized to take decision followed by this theory.

However, there are two major sources available for firms willing to raise funds for their activities. These sources are internal and external sources. Saleemi, (2009) defines external financing as that part of the total debt in a business that is owed to outsiders. The internal source refers to the funds generated from within an enterprise which is mostly retained earnings. Retained earnings results from success enterprises earn from their activities. According to Pandey (2010), external sources of financing include bank loans and trading cycle activities that include terms of trade that gives rise to accounts payables that could be symbolized in accounts payables conversion period.

2.3 Conceptual Framework

The conceptual framework of this study showed effect of Accounts Payables Conversion Period on Liquidity of equity securities of companies at Nairobi Securities Exchange. Figure 2.1 conceptualized dependent variable Liquidity of equity securities on independent variables; Accounts Payables Conversion Period and Firm Size which was a controlling variable.

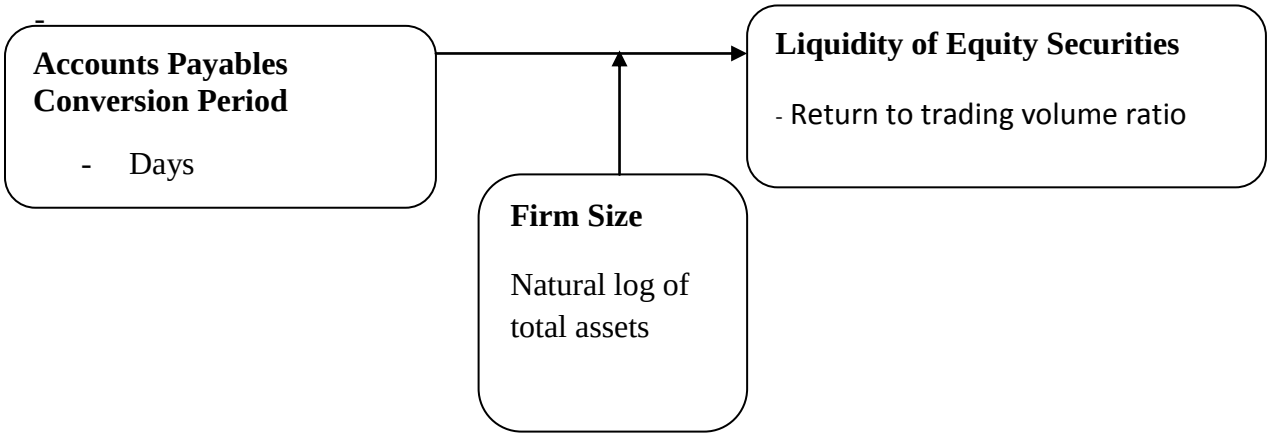

Figure 2.1: Conceptual Framework

3.1 Methodology

This study adopted a descriptive survey research design since data involved was quantitative in nature and more so descriptive study focuses on explaining situations. According to Bryman and Bell (2011), quantitative method mainly focuses on collection of numerical data and testing theories and hence an approach was deductive. In the study by Adams, Hafiz, Raeside and White (2007) on research methods for graduate business and social science students, descriptive research is often used as a pre-cursor to more quantitative research designs with general overview giving some variable pointers as to what variables are worth testing. This study employed an ontological research philosophy

paradigm with positivist epistemological assumption since positivism advocates for application of methods of natural science to study social reality and beyond without adding value to its outcome.

3.1.1 Study Population

Population is a collection of elements on which a scholar can make some inference (Cooper & Schindler, 2011).On other hand population is referred as all items in any field of inquiry as well known as a universe (Kothar, 2004). For purpose of the study, Population refers to all companies listed at Nairobi Securities Exchange at June 30th 2016. In total, there were 61 companies listed at Nairobi Securities Exchange as at that date.

3.1.2 Sampling Frame and Technique

Sampling frame is a list of elements from which a sample is actually drawn (Cooper and Schindler, 2011). Among other scholars (Kothar, 2004; Mugenda & Mugenda, 2003) shared the same sentiments. This study took a whole population of 61 companies at Nairobi Securities Exchange on 30th June, 2016, hence used census technique method that involved an exhaustive enumeration of units constituting target population.

3.1.3 Data Collection Instruments

This study used secondary data extracted from audited financial statements and annual reports of individual companies for 10-year period inclusive 2007- 2016; hence record survey sheet instrument was applied on collection of secondary data of Accounts Payables Conversion Period and Liquidity of Equity Securities of companies at Nairobi Securities Exchange.

3.1.4 Data Collection Procedure

Since this study used panel data technique for ten-year period (2007-2016) to determine effect of Accounts Payables Conversion Period on Equity Securities at Nairobi Securities Exchange, data collection was availed from downloading of published financial statements of listed companies. Using record survey sheet which was data collection instrument, information on specific components was keyed in for each firm for every year of concern, information was transferred to excel program for computation of required data that was used for analysis. The study employed E-views software for purpose of interpreting regression coefficients.

3.1.5 Measurement of Study Variables

The study adopted Liquidity of equity securities of companies at Nairobi Securities Exchange as dependent variable and Accounts Payables Conversion Period and Firm Size constituted independent variables. L(Y) liquidity was measured by depth dimension using Amihud (2002) liquidity model of return to trading volume of shares. Accounts Payables Conversion Period was computed by taking total purchases times 365 days divided by average accounts payables. Firm Size was calculated by taking natural log of individual market value of firms.

3.1.6 Data Analysis and presentation

Data analysis included descriptive and inferential statistics and analyzed in accordance with objectives of study. Hence, the study was enabled for determination of dispersion of data which included computation of mean, maximum, minimum, standard deviation and standard error values of variables overtime. More so it involved finding correlation matrix to counter find which variables will be highly correlated in-order to avoid effects of multi-collinearity which is common in time series data. Inferential statistics on the other hand is a branch of statistics largely concerned with the analysis and interpretation of data obtained from the sample or population (Hoyle & Ingram, 1991).

3.1.7 Model Specification and Rationale of variables

The choice of a model depends on ultimate objective of analysis, hence considering respective exogeneity of explanatory variables (Saunders & Thornhill, 2009).This study embraced a panel data regression using Ordinary Least Squares method, where data was pooled into a panel data set and estimated using panel data regression. According to Creswell (2003), a researcher pools data on underlying variables of expectation and employs regression to estimate quantitative effect of causal variables upon variable that they influence. In the study by Jaroslava and Martin (2005) on performance of panel unit root and stationarity, multiple regression analysis consisted of pooling several predictor variables in a single regression equation that enabled for assessment of effects of multiple predictor variables on dependent measure and hence avoiding single predictor variable. A univariate analysis was employed and data converted to their natural logs for purpose of dealing with problem of large numbers. Model specification estimation and rationale of variables involved testing for validity of fixed effects under consideration of Hausman test, testing for normality, multi-collineality, autocorrelation and homoscedasticity, and then followed by correlation and regression.

This study had one dependent variable(Y) which was liquidity of equity securities of companies at Nairobi Securities Exchange (L) and two independent variables (X_1 and X_2). X_1 being (Accounts Payables Conversion Period) and X_2 (Firm Size), β_0 implies Beta of the firm at time t; i =1, 2….10 years, β_1. . β_2 implied Coefficients of different independent variables of firms i at time t, t is Time = 1,2……., 10 Years, ε is an error term.

Hence regression equations including Firm Size and without was as follows;

Regression equation of liquidity with firm size

$$Ln\_L_{it} = \beta 0 + \beta 1\ Ln\_X_{1it} + \beta 2\ Ln\_X_{2\ it} + \varepsilon_{it}$$

Regression equation of liquidity without firm size

$$Ln\_L_{it} = \beta 0 + \beta 1\ Ln\_X_{1it} + \varepsilon_{it}$$

Where;

Ln - Natural logs of the variables

L - Liquidity of equity securities of companies at securities exchange

β_0 – Intercept of the model

β_1, β_2, - regression coefficients

X_1 – Accounts Payables Conversion Period

X_2 – Firm Size (market value)

ε_{it} - Error term

4.1 Findings

4.1.1 Response Rate

The study was based on a total number of 61 companies listed at Nairobi Securities Exchange as per published report of 30th June 2016 for a period of 10 years from year 2007 to 2016. Criterion of study was to have secondary data reports of quoted companies for a period of 10 years. 52 companies consisting of 85% embraced criterion and remaining 9 companies that consisted of 15% neither had complete records for 10 years. According to Mugenda and Mugenda (2003), recommendation was that 50% response rate was adequate, 60% good and above 70% was very good.

4.1.2 Descriptive Statistics

In the study by Tronchim (2006) on introduction to validity and social research methods, impression was that descriptive analysis virtually composes the ground for every quantitative analysis. Accordingly data was converted to their natural logs to deal with problem of large numbers. Computation of mean, median, standard deviations, Kurtosis, skewness and Jarque-Bera tests were employed as indicated on table 4.1. Natural logarithm of Liquidity of equity securities had mean of -0.089932 and standard deviation 0.020803. Natural logarithms of Accounts Payables Conversion Period (days) and Firm Size, had mean of 4.278968 and 23.33 respectively, while standard deviation of similar variables were 0.904626 and 2.000531 respectively as reflected on table 4.1 below. Mean on Liquidity reflects negative results and a positive standard deviation. All independent variables; Accounts Payables Conversion Period and Firm Size reflected positive means as well as standard deviations that show the affiliation of variables on Liquidity of equity securities at Nairobi Securities Exchange.

Table 4.1 Descriptive statistics table

	Ln_L	Ln_APCP	Ln_Z
Mean	-0.089932	4.278968	23.32577
Median	-0.092883	4.394440	23.37815

Maximum	-0.046987	6.654651	27.11223
Minimum	-0.121264	0.144175	17.57587
Std. Dev.	0.020803	0.904626	2.000531
Skewness	0.553055	-1.601032	-0.233895
Kurtosis	2.716180	7.560603	2.423580
Jarque-Bera	20.75587	494.2492	8.771474
Probability	0.000031	0.000000	0.012454
Sum	-34.35391	1634.566	8910.445
Sum Sq. Dev.	0.164877	311.7903	1524.810
Observations	382	382	382

The study employed three statistical methods to test normality; skewness, Kurtosis and Jarque-Bera. Skewness was used to measure asymmetry of distribution of data whereby result expected from distribution could conform to skewness being Zero for normality. Table 4.1 reflected skewness being, Ln_ L (L) was positively skewed and rest of variables, Ln _ APCP (X_1) and Ln _ Z (X_2) being negatively skewed. On simulation by use of Monte-Carlo for normality, skewness value should be less than 2. According to results all variables were normally distributed since values are less than 2. More so Kurtosis was as well employed to measure peakedness of distribution, whereby for normality result should be equal to Zero, however variables reflected positive results with Ln_ L (L) indicating 2.716180 and Ln_ APCP (X_1) and Ln _ Z (X_2) respectively reflecting 7.560603 and 2.423580. According to Sekran and Bougie (2008), when using Monte Carlo simulation, kurtosis values should be less than 6 for normal distribution.

The study employed Jarque – Bera test which is based on sample skewness and sample kurtosis. More so, simulation was employed to determine critical values for sample sizes less than 2000. Jarque- Bera value for LN_L was 20.76 and for LN_APCP and LN_Z; reflected 494.2492, and 8.771474 respectively. Given probability values were more than 0.05 (P >0.05), indication of data distribution was normally distributed and was accepted at 5% significance level. While applying Jarque- Bera test for normality, probability values less than 0.05, it implies that normality could be rejected at 5% significance level. Awad and AI-Ewesat (2012) applied Jarque-Bera on examination of working capital indicators with stock prices on Palestinian securities exchange market and established that the results conformed with probability P>0.05 on testing normality and hence there was normal distribution of data.

4.1.3 Panel Unit Root Test

In the study by Levin, Lin and Chu (2002) on unit root tests in panel data, impression was that a unit root is a stochastic trend in a time series .A time series has stationarity if a shift in time does not cause a change in a shape of distribution, for example mean, variance and

covariance have to be constant over time. This study employed multiple unit root tests for evaluation of variables stationarity, Levin Lin and Chu test (2002), IM- Peseran and Shin (2003), Augmented Dickie Fuller (1981) and Phillips-Peron (2002) on panels that were not balanced. Study results on unit root tests were reflected in tables 4.2, 4.4 and 4.7 respectively for Liquidity, Accounts Payables Conversion Period (days) and Firm Size. Unit root tests were done at intercept and level I (0), as well from tables mentioned herein, p-value in parentheses, ** and * gives a reflection of rejection of null hypothesis at 1% and 5% significance level respectively.

4.1.3.1 Liquidity

Table 4.2 show results for stationarity test of Liquidity as a dependent variable. Liquidity was found to be stationary at intercept and level I (0) because the Levin, Lin & Chu t* statistic had a probability value of 0.0000 which is significant at 1% level of significance. Therefore, we reject null hypothesis that Liquidity has a unit root. More so, Im- Peseran and Shin, Augmented Dickie Fuller- Fisher Chi-square and Phillips-Peron Fisher Chi-square had probability values of 0.0 at significant levels of 1% indicating no unit root.

Table 4.2 Unit root test

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-43.4080	0.0000	54	432
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-20.5151	0.0000	54	432
ADF - Fisher Chi-square	584.072	0.0000	54	432
PP - Fisher Chi-square	690.848	0.0000	54	486

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

4.1.3.2 Accounts Payables Conversion Period (days)

Table 4.3 shows the results of stationarity test for Accounts Payable Conversion Period, an independent variable. Levin, Lin and Chu (2002) t * statistic for Accounts Payable Conversion Period had a probability value of 0.0000 which was significant at 1% level of significance. Therefore, we reject null hypothesis that Accounts Payables Conversion Period has a unit root. Likewise Im- Peseran and Shin (2003), Augmented Dickie Fuller-Fisher Chi-square and Phillips-Peron Fisher Chi-square (2002) had probability values of 0.0 at significant levels of 1% indicating no unit root.
Table 4.3 Unit root test

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-12.0844	0.0000	54	473
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-3.74947	0.0001	54	473
ADF - Fisher Chi-square	175.554	0.0000	54	473
PP - Fisher Chi-square	174.083	0.0001	54	486

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

4.1.3.3 Firm Size

Table 4.6 shows results of stationarity test for Firm Size at intercept and level I (0). Levin, Lin & Chu (2002) t* statistic for Firm Size had a probability value of 0.0000 which is significant at 1% level of significance. Therefore, we reject null hypothesis that Firm Size has a unit root. Considering other tests; Im-Peseran and Shin (2003), Augmented Dickie Fuller- Fisher Chi-square and Phillips-Peron Fisher Chi-square (2002) had probability values of 0.0 at significant levels of 1% indicating no unit root.

Table 4.6 Unit root test

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-9.84507	0.0000	54	471
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-1.35719	0.0874	54	471
ADF - Fisher Chi-square	145.567	0.0093	54	471
PP - Fisher Chi-square	215.777	0.0000	54	486

** Probabilities for Fisher tests are computed using an asymptotic Chi -square distribution. All other tests assume asymptotic normality.

4.2 Correlation Results

Table 4.8 shows reflection of correlation findings of variables of the study. Correlation coefficients of Accounts Payables Conversion Period and Firm Size indicated -0.099679 and 0.034158 respectively hence signify weak negative correlations with Liquidity. Examination of correlation coefficients helps in accepting or rejecting the null hypothesis that there is no correlation between the explanatory study variables. Correlation range between +1 and -1, implying +1 reflects a positive linear relationship between variables and -1 reflects a negative stance of correlation. In the study by Sekran and Bougie (2008), when the correlation coefficient is less than 0.9 thresholds then there is no alarm of multi-collinearity.

Table 4.8 Correlation of Liquidity with independent variables

	Ln_ L	Ln_ APCP	Ln_Z
Ln_ L	1.000000	-0.099679	0.034158
Ln_ APCP	-0.099679	1.000000	0.041539
Ln_ Z	0.034158	0.041539	1.000000

Notations

Ln _ L –Liquidity ratio (L)

Ln _ APCP _ Accounts Payables Conversion Period (days)

Ln _ Z _ Firm Size

Ln _ Natural log of

According to Garson (2012) it was embraced that, when correlation between independent variables and dependent variable is below 0.9, then results found would show no multi-collinearity. Table 4.8 indicates correlation values are below 0.9, hence multi-collinearity did not exist.

4.3 Regression Results for Secondary Data

This section details results for multiple regression analysis of dependent variable (Liquidity) with respective independent variables, Accounts payables Conversion Period (days) and Firm Size (market value of assets). In a process of multiple regression analysis, natural logarithm of total market values indicating size of individual companies was used as a moderating variable. In the study natural logarithm of employed variables was used to deal with existence of large numbers of variables by using e-views software. Hausman test was employed to determine whether to use random effects or fixed effects model on addressing objective of study.

4.3.1 Panel regression equation (Firm Size included)

Hausman Test

According to Garson (2012), Hausman test is a transformation of difference between parameter estimates from fixed effects and random effects estimation that becomes asymptotically χ^2 (Chi-square) distributed under null hypothesis. Accordingly in table 4.9, Chi-square test statistic was 13.632936 with a significant probability value of 0.0181 which is significant at 5 percent level of significance, as well since probability of 0.0181 is less than 0.05; it is permissible to employ fixed effects model. This therefore meant that null hypothesis was rejected in favor of fixed effects model. Therefore, we accept fixed effects model as suitable for this study when firm size is included in a model.

Table 4.9 Hausman Test – Firm Size included

Correlated random Effects - Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	13.632936	5	0.0181

4.4 Fixed effects model

According to Verbeke and lesafre (1996), fixed effects model considers assumption that, individual specific effect is correlated with independent variable, hence outcome variable Liquidity (L) is assumed to be influenced by explanatory variables which are not observable but correlated with observed explanatory variables. Durbin-Watson value of 2.226060 supports finding of no autocorrelation since a value should be within the range of 1.5 and 2.5. According to Saunders and Thornhill (2009) on study of research methods for business students, if a value of Durbin-Watson is less than 1, then it implies serial correlation characteristics. Considering value of R-Squared being 0.099492, it implies independent variables explain 9.9 % of variance in dependent variable which is liquidity at Nairobi Securities Exchange. Associated results of variables' coefficients and probabilities at 5 percent level of significance as well as constant C that represented jointly proxies that influenced liquidity were as in table 4.10 and explained below:

Table 4.10

Dependent Variable: Ln_L
Method: Panel Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Ln_ APCP	-0.005380	0.002095	-2.567627	0.0107
Ln_ Z	0.005592	0.002351	2.378362	0.0180
C	-0.189613	0.055879	-3.393307	0.0008
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.099492	Mean dependent var		-0.089932
Adjusted R-squared	-0.055672	S.D. dependent var		0.020803
S.E. of regression	0.021374	Akaike info criterion		-4.716467
Sum squared residual	0.148473	Schwarz criterion		-4.127752
Log likelihood	957.8452	Hannan-Quinn criter.		-4.482910
F-statistic	3.641204	Durbin-Watson stat		2.226066
Probability (F-statistic)	0.037696			

Notations

Ln _ L –Liquidity ratio (L)

Ln _ APP _ Accounts Payables Period (days) (X_1)

Ln _ Z _ Company Size (X_5)

Ln _ Natural log of

C _ Constant (β)

4.4.1 Liquidity and Accounts Payables Conversion Period

Null hypothesis H_{o1}**:** Accounts Payables has no significant influence on Liquidity of Equity Securities at Nairobi Securities Exchange.

According to analysis in table 4.10, Accounts Payables Conversion Period had a coefficient of -0.005380 and a significant probability value of 0.0107 which is less than 0.05 and significant at 5 percent level as well there was t-statistic of -2.567627 and standard error of 0.002095. This meant that when Accounts Payables Conversion Period decrease by 0.005380 percent per year then Liquidity increases by 1 percent in the same year. Partial regression coefficient for Account Payable Conversion Period - 0.005380 portrayed characteristic that with affection of other explanatory variables being considered constant then a reduction in one percent in Accounts Payable (days) leads to an increase to Liquidity by 1 percent. Hence conclusion support for null hypothesis was that there should be rejection on consideration of the existing significance.

In the study by Afza and Nasir (2009) on investigation of impact of Accounts Payables of 204 firms listed at Karachi Stock Exchange on Liquidity of equity securities, Accounts Payables had negative significant effect on Liquidity, Weinraub and Visscher (1998) had the same sentiments on the study of whether to use more of Accounts Payables in the Working Capital Management portfolio. In the study by Wire (2015) on influence of Accounts Payables practices on firms, Accounts Payables Conversion Period had no significant account on Liquidity. Hence partial regression model can provide information relevant for prediction of liquidity at the stock exchange market when under support of the constant C and coefficient of Accounts Payables Conversion Period. Partial regression employed would be; which will be $L = -0.189613-0.005380X_1$ according to this regression, when Accounts Conversion Period was zero, the value of Liquidity becomes -0.189613.

4.4.2 Liquidity and Firm Size

Null hypothesis H_{o2}: Firm Size has no significant influence on Liquidity of Equity Securities at Nairobi Securities Exchange.

Table 4.10 above indicates that Firm size had a coefficient of 0.005592 and a significant probability value of 0.0180 which is significant at 5 percent level. Standard error was .002351 and t-statistics 2.378362.This meant that when firm size increased by 0.0056

percent per year then Liquidity increased by 1 percent in same year considering holding other factors constant. Quite a number of scholars namely; Weinraub and Visscher (1998), Afza and Nasir(2007), Awad and AI-Ewesat (2012) and Sabris's (2012) on the study of Accounts Payables of listed companies, findings embraced size of company market values had positive significant correlation with liquidity. Hence partial regression was as follows;

$L = -0.189613 + 0.005592\ X_5$

Constant C (β) had a coefficient of -0.189613 and a significant probability value of 0.0008 which is less than 0.05 at 5% significant level. Standard error was 0.055879, t-statistics -3.393307.This meant that jointly these proxies influenced Liquidity during the period of study. When the proxies jointly decreased by 0.189613 percent, Liquidity increased by 1 percent in the same year. Optimal regression of liquidity (L) on independent variables; Accounts Payables Conversion Period (days)) including Firm Size was as follows:

$L = -0.189613-0.005380X_2+0.005592X$

5.0 CONCLUSIONS

5.2.1 Accounts Payable Conversion Period influence on Liquidity of Equity Securities

Objective of this study was to determine Accounts Payables Conversion Period effect on Liquidity of Equity Securities at Nairobi Securities Exchange. Findings of panel data correlation results had to indicate Accounts Payables Conversion Period being negatively correlated to Liquidity of equity securities at Nairobi Securities Exchange. More so, Accounts Payables Conversion Period had a negative coefficient and there was a significant probability which meant that a decrease in Accounts Payables Conversion Period led to an increase in Liquidity of Equity Securities at Nairobi Securities Exchange when other factors were left unvaried.

5.2.2 Firm Size (control effects) on Liquidity of Equity Securities

Firm Size meant market value of individual firms quoted at securities exchange market. Nairobi Securities Exchange market comprises of small, medium and large companies. Huge firms are known to command and control market by involving trading in block and large transactions. Hence this study found that Firm Size had a positive significant influence on Liquidity of Equity Securities at Nairobi Securities Exchange. Reason being with more transactions, a given firm could command securities market and hence with such a volume of equity securities on market, Liquidity at securities market is enhanced. Movement of information on large blocks of equity securities moves faster among investors and hence liquidity of securities.

5.3 RECOMMENDATION

Considering the results obtained from the study, Companies should embrace proper Accounts Payables management financial skills that could eneble the well functioning of organizations with a favorable indicator of accounts payables conversion period that

could encourage investors hence such information improves Liquidity of equity securities at Nairobi Securities Exchange since the investors gain courage of an organization performing internally properly.

Furthermore the study investigated relationship Accounts Payables Conversion Period and Liquidity of Equity Securities at Nairobi Securities Exchange. However, believing that this relationship could be investigated in different ways, through confirming the study results, possible presentation of different results of similar study could be encouraged. Hence this study presents few suggestions for what future researchers could investigate.

It could be interesting and appreciative if same population could be investigated using different statistical tests to see whether results are same or not. Furthermore population taken included all listed companies at Nairobi Securities Exchange, researchers should have tests done under different functional classification of companies and not taking all companies grouped together.

It could also be interesting to conduct a quantitative study around Accounts Payables Conversion Period Management policies and various performance indicators at Nairobi Securities Exchange as well researchers should have depth interviews with management of companies.

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