

## **EFFECT OF LIQUIDITY ON FINANCIAL PERFORMANCE OF STAR RATED HOTELS IN NAIROBI COUNTY, KENYA**

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## **ABSTRACT**

Capital structure is among the most significant financial decisions in business financing strategy. It encompasses the choice of equity and debt level in financing business operations. This study aimed to observe the effect of capital structure determinants in the hotel industry and how this can influence their financial performance. Specifically, the study sought to determine the effect of liquidity on financial performance of hotels. The hotel industry was chosen because of its importance in the Kenyan economy as well as this particular industry hardly having been studied in relation to its capital structure determinants and their effect on financial performance. This study used explanatory research design and utilised secondary panel data extracted from the

financial statements of the target population, which is 40 star rated hotels. From the study results, it was found that liquidity has positive and significant effect on financial performance of star rated hotels in Nairobi. This shows an increase in liquidity enhanced financial performance of star rated hotels in Nairobi County. This indicates that the proportion of current assets did not constrain the operational capacity of respective star rated hotels. It can therefore be concluded that working capital strategies deployed by respective star rated hotels enhanced their operational capacity and maximized shareholders wealth.

**Keywords:** Capital Structure, Financial Performance, Liquidity, Star Rated.

## **INTRODUCTION**

### **Background of the study**

The hotel industry globally is characterized by high capital costs and a high proportion of fixed costs to total costs (Cheng, 2013). The intensive capital nature of hospitality sector firms influences their capital structure determinants. According to Salazar, Soto and Mosqueda, (2012), capital structures are due to financing decisions and if such decisions are not optimized, it may result in organization failure. The existence of optimum capital structure still remains a mystery to both investors and management alike. Worldwide, tourism generates about 10% of the global wealth. In Kenya, tourism brings in the economy about 9% of the Gross Domestic Product (GDP) placing it at the 6<sup>th</sup> place after agriculture, forestry and fishing, mining, industry and energy. The aforesaid statistics confirms that hotels are of significant importance in tourism and the general economy at large, this is the motive why the study on capital structure determinants of hotels is being undertaken to ensure that the industry gets the responsiveness it merits from all its stakeholders.

Gitman and Zutter, (2012) defines capital structure as the mix of equity and long-term debt upheld by the firm. Although, the actual mix levels of the firm's permanent long-term financing represented by debt, common stock and preferred stock equity may vary somewhat over time, most firms try to keep their financing mix close to a target capital structure. According to Brigham and Ehrhardt

(2011), the purpose of the capital structure is to establish the optimal mix of equity and debt. A firm's capital structure verdict comprises its decision of a target capital structure, the specific types of financing it decides to use at any particular time and the average maturity of its debt. As with operating decisions, managers should make capital structure decisions that are designed to maximize the firm's intrinsic (perceived) value.

Capital structure plays a role in determining the risk level of the company. Fixed cost is the key factor irrespective of whether it is used during production process or fixed financial charges. Fixed cost should be kept low if the management is likely to confront an uncertain environment, but how low or how high, is the basic question. The organizations assets can be financed either by the owner or the loaner. The owners claim increase when the firm raises funds by issuing ordinary shares or by retaining the earnings which belong to the shareholders. The loaners claim increase when the company borrows money from the market using some instrument other than shares. The various means of financing symbolises the financial structure of the enterprises (Nirajini & Priya, 2013).

There are diverse determinants that affect a firm's capital structure, and an organisation should attempt to define outstanding or optimal mix of funding that will make the utmost of its financial performance. The best mix of financing is that which minimizes the cost of capital and maximizes the value of the firm. Capital structure is the debt equity mix of business finance used to represent the proportional effect of equity and debt in corporate organizations' finances, embracing any of the following three alternatives; 100% equity:0% debt or 100% debt:0% equity or X% equity:Y% debt, taking into account the determinants of each option holistically for different industries (Dare & Sola, 2010).

According to Anwar (2011), several researches have shed light on the explicit characteristics of industries and firms that guide their capital structure decisions. Such studies generally agree that effect increases with growth and opportunities, non-debt tax shields, firm size, fixed assets, and decreases with uniqueness of the product, advertising expenditures, profitability, research and development expenditures, volatility and bankruptcy probability. However, results of both empirical and theoretical studies are not always definite. Emanating from above, this study focused on the following capital structure determinants; firm size, tangibility of assets, liquidity and earnings volatility. The cited indicators were chosen amongst others because of the capital intensive nature (size and tangibility) and the volatility nature (liquidity and earnings volatility) of the hospitality business, since the hotel sector is service-based that has a number of unique characteristics including low barriers to entry and operators who pursue a family or life style business model.

### **Liquidity**

Liquidity is an aptitude to transform assets into cash swiftly without affecting the assets price. Holding liquid assets permits managers to pursue attractive upcoming investment opportunities with internal funding without adjusting their basic capital structure. Hypothetically, the trade-off theory recommends that businesses with higher liquidity proportions are able to borrow more due to their capacity to meet their commitments on time. This theory therefore predicts a positive relationship amongst liquidity and debt level. The pecking order theory foresees a negative association between liquidity and leverage since an organization with higher liquidity value prefers to use internal funds

in financing new investments. Few research studies have revealed reliable results with the pecking order hypothesis such as Viviani, (2008) and Deesomsak *et al.*, (2004).

There is a negative association between liquidity and debt ratios and organizations that have high liquidity prefer equity financing instead of debt financing as reported by Deesomsak *et al.*, (2004). Pecking order theory brings forward the negative relationship that the businesses with high liquidity are for sure able to generate high-level cash in-flows that they use for financing further investments (Hossain & Hossain 2015). Another point of view recommends that firms with higher liquidity percentages are able to sustain a comparatively higher debt proportions due to their greater capability to meet short-term obligations when they are due, denoting a positive relationship between an organization's liquidity position and its debt ratio (Ozkan, 2001).

Low liquidity measure is an indication that the organization is experiencing financial challenges, or is poorly managed, hence an equitably high liquidity ratio is encouraged. Nonetheless, this should not be too high, as excess funds incur an opportunity cost and may probably be invested for higher returns. There are two conflicting views in relationship between liquidity and leverage. The more liquid firm uses external financing due to its ability to get benefit of tax shields and paying back liabilities, this results to positive relationship between liquidity and leverage as established by trade off theory. As embraced by the pecking order theory, the more liquid firm is able to use its internal funds first and then reduce the level of external financing, this results into negative relationship among liquidity and leverage. Most studies have acknowledged the negative association (Mazur, 2007). In this research, negative relationship amongst liquidity and leverage was expected. Few studies have tested the effect of liquidity as a factor on the selection of capital structure. Liquidity is the fraction of current assets to current liabilities as measured by Ahmad, Nasir, Ali and Ullah, (2011) and Mazur (2007). Consequently, liquidity was measured as the ratio of current assets to current liabilities as pertains to this study.

### **Liquidity and Financial Performance**

Onyekwelu, Chukwuani and Onyeka (2018) studied the effect of liquidity on financial performance of deposit money banks in Nigeria. Correlation research design was applied and panel data collected among five banks from 2007 to 2016. Descriptive and bivariate statistics analyzed the data. The study found that there was positive and significant effect of liquidity on financial performance of deposit money banks in Nigeria. The study drew its data among five banks while current empirical examination had 40 star rated hotels thus, there was a population that arose from past study.

Kaodui *et al.*, (2020) examined the effect of liquidity on financial performance of companies listed in Ghana stock exchange. Explanatory research design was applied and panel data sourced among 15 entities from 2008 to 2017. Descriptive and multivariate statistics analyzed the data. Results of the study indicated that there was a positive and significant effect of liquidity on financial performance of companies listed in Ghana stock exchange. Further, there were bidirectional causality between liquidity and financial performance of companies listed in Ghana stock exchange. The study was limited to listed non-financial companies whose regulations differs from star rated hotel hence there are contextual gaps that warranted the current empirical examination.

Kariuki, Muturi and Njeru (2021) studied the influence of liquidity on financial performance of insurance firms in Kenya. Correlation research design was applied and secondary data sourced from financial statements. Descriptive and multivariate statistics analyzed the data. It was found that liquidity positively and significantly affected financial performance. Since the study relied on panel data it was appropriate to report on diagnostic tests so as to minimize on the likelihood of drawing biased conclusions. Further, the study presents population gaps since insurance companies and star rated hotels are exposed to different industry specific risks hence none of their findings may be generalized in their respective sectors.

Durrah, Rahman, Jamil and Nour (2016) studied the relationship between liquidity ratio and financial performance of food industrial companies listed in Amman Bursa. Correlation research design was applied and panel data collected from 2012 to 2014 among eight industrial companies. Univariate and bivariate statistics analyzed the data. Results of the study indicated that there was a positive and significant effect of liquidity and financial performance of food industrial companies listed in Amman Bursa. Due to differences in business operating environment between Kenya and Bursa there is need for a localized study.

Yameen, Farhan and Tabash (2019) examined the impact of liquidity on firms performance of Indian pharmaceutical companies listed in Bombay stock exchange. Correlation research design was applied and secondary data collected from 82 firms from 2008 to 2017. Descriptive and multivariate statistics analyzed the data. Results of the study indicated that quick ratio and cash ratio have positive and significant impact of liquidity on financial performance of Indian pharmaceutical companies listed in Bombay stock exchange. Since the study adopted panel data there was need for consideration diagnostic tests prior to modelling. This may have justified on the choice of the most optimal model to fit.

Akenga (2015) examined the effect of liquidity on financial performance of firms listed in Nairobi securities exchange. The study aimed at examining the effect of cash ratio, cash reserves and debt ratio on financial performance. Causal research design was applied and 30 firms were purposively selected. Univariate and multivariate statistics analyzed the data. Results of the study indicated that there was a positive and significant effect of cash ratio and cash reserves on financial performance of firms listed in Nairobi securities exchanges. In contrast, debt ratio had no significant effect on financial performance of listed firms in Nairobi securities exchanges. The study may have considered data over several years so as to examine short and long run effect of liquidity on financial performance of firms listed in Nairobi securities exchange.

Kartal (2016) studied the effect of liquidity on financial performance of firms in Turkish retail sector. Correlation research design was applied and quarterly time series data was collected among listed firms. Time series analysis was applied. Findings of the study indicates that there was a positive statistically significant effect of liquidity on financial performance of firms listed in Turkish retail sector. Since the study collected panel data it was appropriate to fit either random or fixed effects.

Sile, Olweny and Sakwa (2019) examined the effect of liquidity on financial performance of commercial banks in Kenya. Correlation research design was adopted and secondary data was sourced for 43 banks. Descriptive and multivariate statistics were applied. Findings indicated that cash and cash equivalent, capital and deposit ratio on financial performance. It was recommended that finance managers of banking sector should have a balance between liquid and longterm assets that enforces conflicting interest that enhances sustainability of liquidity and sustainable profitability. Further, banks ought to comply with liquidity requirements so as to optimize their performance.

Chasha, Kavele and Guandaru (2022) studied the effect of working capital management, liquidity and financial performance of small and medium enterprises in Kenya. Qualitative research design was applied and secondary data collected through document content review. It was found that working capital management, liquidity statistically and significantly affected financial performance of small and medium enterprises in Kenya. Since SMEs operates in different sectors there is need for customized study in the hospitality sector so as to validity existing findings.

Hacini, Abir and Dahou (2021) studied the effect of liquidity risk management on financial performance of Saudi Arabian banks from 2002 to 2019. Liquidity risk was operationalized as loan to deposit ratio and cash to deposit ratio. Causal research design was applied and secondary data retrieved from annual financial statements. Panel data method were applied for data analysis. Findings indicated that there was an inverse and significant impact of liquidity risk on financial performance of Saudi Arabian banks. Since banking sector and hospitality industry have heterogenous risks then there was need for a customized study to valid existing empirical evidence and respond to empirical gaps.

Mehdi (2014) studied the effect of bank liquidity on financial performance of Moroccan banking industry. Causal research design was applied. Data was analyzed using univariate and multivariate statistics. Liquidity was operationalized as liquid assets to total assets, liquidity assets to short term liabilities, liquid assets to deposits, loans to total assets and loans to short term deposits and short term liabilities. Findings indicates that there was a statistically significant effect of bank liquidity in financial performance. Further, banking performance was significantly affected by macroeconomics characteristics (inflation, foreign direct investment, financial concentration index). Since the study had panel and time series data it was appropriate to limit itself to single type of data.

Nugi et al., (2022) examined the effect of leverage and liquidity on financial performance of companies in property and real estate sector in Indonesia listed in Indonesian securities exchanges. Correlation research was applied and data collected from 2014 to 2018. Univariate and multivariate statistics analyzed the data. Findings indicated that there was no significant effect of liquidity and leverage on financial performance of listed property and real estate sector in Indonesia securities exchanges. Since the study had panel data it was appropriate to report on diagnostic tests that were relied on prior to modelling.

Chika, Eke, Igwoba and Werikum (2022) studied the influence of liquidity and profitability on the profit growth of Nigerian pharmaceutical firms. Expo fact research approach was applied and secondary data of six firms was collected for 30 years. Univariate and multivariate statistics were used for data analysis. Results of the study indicated that liquidity ratio and quick ratios had statistically significant effect on profit growth rate. In contrast, there was no statistically significant effect of profitability of profit growth rate of Nigerian pharmaceutical companies. The study poses contextual gaps since hospital and pharmaceutical companies are driven by different agenda and their industry specific risks is not homogeneous.

Abdulla et al., (2022) studied the impact of liquidity risk management on financial performance of UAE Islamic banks. Causal research design was applied. Quantitative data was analyzed through univariate and bivariate statistics. Findings indicated liquidity risk management have positive statistically significant impact on financial performance. Since the study drew its data from the banking sector there is need for customized study in hospitality sector to validate the existing findings.

Osoro and Muturi (2015) studied the effect of liquidity risk management practices on financial performance of savings and credit cooperative societies in Kisii County. The study specifically examined the effect of asset quality management, capital adequacy and capital leverage practices on financial performance of savings and credit cooperative societies in Kisii County. Descriptive research design was applied and primary data collected through administration of questionnaires. Descriptive and multivariate statistics analyzed the data. Findings indicated that asset quality management and capital adequacy have positive statistically significant effect on financial performance while leverage had no significant effect. The study presented methodological gaps since it combined cross sectional and secondary data. Thus, the need for customized study that considers single type of data.

Shimenga and Miroga (2019) studied the effect of financial leverage and liquidity on financial performance of listed manufacturing companies in Nairobi securities exchanges. Descriptive research design was applied and primary data collected through administration of questionnaires. Descriptive and multivariate statistics were used for data analysis. Results of the study indicated that there was a positive and significant effect of financial leverage and liquidity on financial performance of listed manufacturing companies in Kenya. The study may have considered secondary data to minimize chances of repeated unit of analysis. Further, the study may have drawn secondary data for ease of examination of short and long run effect of financial leverage and liquidity on financial performance of listed manufacturing companies in Nairobi securities exchanges.

Njure, Irungu and Magomere (2016) studied the impact of liquidity on financial performance of non-financial companies listed in Nairobi securities exchanges. Descriptive research design was applied and 39 nonfinancial companies were selected. Panel data was sourced from financial statements from 2010 to 2014. Descriptive and inferential statistics analyzed the data. Findings indicated that there was a positive and significant effect of liquidity on financial performance of

non-financial companies listed in Nairobi securities exchanges. The study precipitated methodological gaps since it did not report on diagnostic tests that were relied on in the study.

Reschiwati, Syahdina and Handayani (2019) studied the effect of liquidity, profitability, size of companies and firm value of 15 banks listed in Indonesian stock exchange. Exploratory research design was applied and secondary data sourced from 2014 to 2018. Univariate and bivariate statistics were adopted for data analysis. Results indicated that there capital structure was statistically influenced by liquidity, profitability and firm size though it did not significantly affect firm value. Further, there was a positive statistically significant effect of profitability, firm size and liquidity. Since the study drew its data from banking sector, the results may not be generalized in the hospitality sector thus the need for a customized study.

Maria (2019) analyzed the effect of liquidity, leverage, financial performance and company value of food and beverage companies listed in Indonesian stock exchange. Exploratory research design was applied and secondary data retrieved from annual financial statements. Univariate and multivariate techniques analyzed the data. Results of the study indicated that there was a positive and significant effect liquidity, leverage, financial performance and company value. Since these companies were listed it pose contextual gaps because none of star rated hotel in Kenya is quoted. AlAli (2020) examined the effect of banking liquidity on financial performance of banks in Kuwait stock exchange from 2010 to 2018. Exploratory research design was applied and secondary data retrieved from annual financial statements. Liquidity was operationalized as loans to total assets, loan to total deposits, financing deficit to total assets. Univariate and multivariate statistics analyzed the data. Results of the study indicated that there was a direct and significant relationship between liquidity and financial performance. Further, there was an inverse statistically significant effect of liquid assets to total deposits to financial performance. The study pose contextual gaps since Kuwait business operating environment differs from Kenya thus the need for a localized empirical examination to validate existing findings. Further, there are conceptual differences since operationalization of liquidity in banking industry differs from hospitality sector.

Dahiyat, Weshah and Aldahiyat (2021) examined the effect of liquidity and solvency management on financial performance of Jordanian manufacturing companies listed in Amman Stock Exchange. Exploratory research design was applied and secondary data sourced from annual financial statement. Correlation and multiple regression analyzed the data. Results of the study indicate that there was a statistically significant effect of liquidity on financial performance of listed manufacturing companies in Jordanian. Firm size positively and significantly affected financial performance. The study may present contextual gap since manufacturing companies and hospitality whose industry specific risk that may have implications on their financial performance thus the need for a localized study.

Ratemo and Ndede (2021) examined the effect of liquidity risk and financial performance of banks in Kenya. Specifically, the study examined the effect of bank size, asset quality, operational efficiency and capital adequacy on financial performance of commercial banks. Causal research design was applied and secondary data sourced from financial statements and Central Bank of Kenya (CBK) reports. Descriptive and multivariate statistics analyzed the data. Findings indicated



positive statistically significant effect of bank size on financial performance. Asset quality negatively and significantly affected financial performance. Capital adequacy have positive and insignificant effect on financial performance while operating efficiency have positive and significant effect. It was recommended that there was need for product diversification so as to enhance financial performance of commercial banks in Kenya. Further, credit evaluation should be enhanced to minimize odds of moral hazard and adverse selection. Borrowers should be inducted through financial training to minimize odds of failure to make payments.

Effiong and Enya (2020) examined the effect of liquidity management practices on financial performance of consumer goods companies in Nigeria. Correlation research design was applied and secondary data retrieved from annual financial statements. Univariate and bivariate statistics analyzed the data. Findings indicated that there was a positive and significant effect of liquidity management practices and financial performance of consumer goods in Nigeria. Since the study considered manufacturing sector data the findings may not be generalized in the hospitality sector since the working capital operating cycle differs thus the need for a customized study.

Kai, Jagongo and Ndede (2020) examined the effect on financial performance of teachers' deposit savings credit and cooperative societies in Kenya. Correlation research design was applied and secondary data retrieved from financial records. Univariate and bivariate statistics analyzed the data. The established that capacity and purchase of funds have statistically significant effect on the financial performance of teachers DT Saccos. Further, cash position, total deposit and core deposit had an insignificant effect on the financial performance of DT Saccos. Liquidity relationship with financial performance was moderated by teachers DT Saccos.

### **Statement of the problem**

The hotel industry has gone through challenging times in the last two decades and this has resulted in poor financial performance for the industry similar to most sectors of the Kenyan economy. Nzioka and Njuguna (2017) perceived that a prior study had acknowledged that the tourism industry in which hotels are found in Kenya has been facing frequent challenges which have posed a threat to their existence. The Kenya National Bureau of Standards (KNBS) Survey of 2016 documented that the hotel industry recorded decline performance between 2011 and 2015 in the following areas, accommodation and food services contribution to GDP 1.6% in 2011 and 1.1% in 2015, growth of GDP from accommodation and food services 4.1% in 2011 and 1.3% in 2015, international visitor arrivals ('000) 1,823 in 2011 and 1,181 in 2015, tourism earnings (Kshs bn) 97.9 in 2011 and 84.6 in 2015, bed-night occupancy rate 40.3% in 2011 and 29.1% in 2015. Proceeding from the above attested statistics, and the notion that the tourism industry operates in a highly uncertain environment in Kenya, sometimes due to increased political instability and terrorism incidences that leads to negative international press and travel advisories that results in dwindling demands for hotel services, then the manifestation of such seasonality is of great distress when it comes to the capital structure of hotels and its determinants. This study therefore was designed to address this research gap by seeking to gain an empirical cognizance of the effect of liquidity on financial performance of the hotel industry in Kenya.

**Study objectives**

The general objective of this study was to establish the effect of capital structure determinants on financial performance with a specific objective to establish the effect of liquidity on financial performance of star rated Hotels in Nairobi County, Kenya

**Research Hypothesis**

The study was guided by the hypothesis derived from the specific objective.

- i. H<sub>01</sub>: Liquidity has no significant effect on financial performance of star rated hotels in Nairobi County, Kenya.

**RESEARCH METHODOLOGY**

A census of the registered, licenced and classified hotels in Nairobi county, Kenya retrieved from the Tourism Regulatory Authority (TRA) website “*tourismauthority.go.ke*” for the period January 2011 to December 2019 (both years inclusive) constituted the target population. This study used explanatory research design and utilised secondary panel data extracted from the financial statements of the target population, which is 40 star rated hotels. The nine-year period secondary data was collected through data collection instruments. Data was analysed quantitatively using descriptive statistics and panel regression analysis techniques with the aid of STATA 16. F-test was used to determine the denotation of the overall model; while significance of individual variables was determined by t-test.

The multiple linear regression model utilised in order to establish the effect of independent variable on the dependent variable while analysing the study objective was as follows:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \epsilon_i \dots \dots \dots (1)$$

Where;

$\beta_0, \beta_1$ , are regression co-efficient

$Y_{it}$  is Profitability, ROE for each firm  $i$  and year  $t$

$Y$ -Financial performance,  $\beta_0$ - Intercepts of equation,  $\beta_1$ -Coefficients of variables,  $X_1$ -Liquidity,  $\epsilon$ - Error term.

Operationalization refers to the process of developing indicators or items for measuring research constructs (Cresswell, 2004). This was done as indicted in table 1;

*Table 1: Operationalization of Study Variables*

Type of variable	Variable name	Operationalization	Measurement
Dependent	Financial Performance	ROE	EAT/Total equity
	Independent	Liquidity	Current ratio
		Quick ratio	CA-Inventory/CL
		Cash ratio	Cash and cash equivalents/CI
Moderating	Operating cash flows	Net operating cashflows	Ln (Net operating cashflows)

## **RESEARCH FINDINGS**

### **Descriptive Statistics**

Descriptive measures of dispersion and central tendencies are tabulated in Table 2. The mean return on equity of hotels was 3.3% with a maximum of 72.4% and a loss of 17.4%. Hotel performance varied widely since the standard deviation was 38.2%. Financial performance was not normally distributed since the Jarque Berra coefficient had p value greater than 0.05. Non-normality of financial performance was in agreement with Wairimu, Muturi and Oluoch (2019) who documented non-normality of profitability of listed non-financial companies in Nairobi Securities Exchange. Similar results were reported by Ngware, Muturi and Olweny (2020) who found that commercial banks in Kenya have non-normally distributed data.

The mean firm size was 4.826 with a standard deviation of 0.542. Since the minimum was 3.738 and maximum of 5.875, this indicates that most of the star rated hotels in Kenya are medium sized since World Bank (2017) alludes those small sized enterprises have at most 99 employees, medium sized have 99 to 250 and large firms has more than 250 employees.

Concerning, liquidity the hotels in Nairobi County has an average of 14.243 current assets to current liabilities. Owing to the wide variations of the liquidity, it clearly indicates that some hotels may have been exposed to challenges due to excessive holding of current assets. Negative liquidity ratio indicates that there were some hotels whose current liabilities exceeded current assets.

The average operating cashflows was 15.10 and not normally distributed since P value for Jarque Berra was less than 0.05. The results of the study were in support of Nasir et al., (2011) who argues that organizations experiencing liquidity challenges are associated with poor management of working capital that would minimize likelihood of achieving desired objectives. Hossain and Hossain (2015) call for prudent working capital management so as to optimize value maximization of shareholders wealth and minimization of conflicts linked to heterogenous organization stakeholders.

*Table 2: Descriptive Statistics*

	<b>Financial Performance</b>	<b>Liquidity</b>
Mean	0.03	14.24
Median	0.01	0.88
Maximum	7.24	177.94
Minimum	-0.17	-0.67
Std. Dev.	0.38	42.94
Skewness	18.71	3.11
Kurtosis	353.32	11.00
Jarque-Bera	1861882	1538
Probability	0.00	0.00
Observations	360	360

**Panel Diagnostic Tests**

Prior to modelling, panel diagnostic tests were carried out so as to minimize odds of fitting spurious regression or having estimates which are not best linear unbiased estimates. The test were Augmented Dickey Fuller (ADF) tests for stationarity. Lagrigan multiplier test for choice between pooled or random effects model. Heteroskedasticity test to examine uniformity of the variance of the error terms. Serial correlation for examination of first order serial correlation and Hausman test for the choice between fixed and random effects.

**Panel Stationarity Test**

Stationarity was examined using ADF whose null hypothesis stated that the data was not stationary against an alternative it is. Findings in Table 3 indicates that firm size, tangibility, liquidity, earnings volatility and financial performance was stationary at levels since their respective p values were less than 0.05. Thus, there was no need for integration before examining the effect of liquidity. These results mirrored Githira, Muturi and Nasieku (2019) who found that firm financial characteristics and stock return were stationary at levels. Similarly, Ngware et al., (2020) who documented bank portfolio diversification and financial performance of banks in Kenya were stationary at levels.

*Table 3: Panel Stationarity Test*

<b>Variable</b>	<b>Statistic</b>	<b>P value</b>
Financial performance	-2.812	0.0000
Liquidity	-3.350	0.0000

**Correlation Analysis**

An examination on the effect of liquidity on financial performance of hotels in Nairobi County. There is a positive and significant effect of fixed assets to total assets ( $\rho = 0.755$ ,  $p$  value  $< 0.05$ ). Further, collateral and liquidation have positive and not significant effect on financial performance of hotels in Nairobi County. The results were similar to Cuong (2014) who argued that borrowing costs for companies with less fixed assets is higher since they may not easily raise the required collateral. Further, the results supported Nirajini and Priya (2013) who argues that leverage has positive causality with level of liquidity.

*Table 4: Karl Pearson Correlation Analysis on the Effect of Liquidity on Financial Performance*

	<b>Financial Performance</b>	<b>Fixed assets to total assets</b>	<b>Collateral</b>	<b>Liquidation</b>
Financial performance	1			
Fixed assets to total assets	0.755	1		
	0.000			
Collateral	0.423	0.074	1	
	0.065	0.072		
Liquidation	0.512	0.624	0.425	1
	0.084	0.082	0.066	

An examination on the strength of association between liquidity and financial performance indicate that there is a positive and significant effect of current ratio on financial performance ( $\rho = 0.757$ ,  $p$  value  $< 0.05$ ). Further, quick ratio and cash ratio have positive and not significant effect on financial performance. Significant effect of liquidity on financial performance was in agreement with Mazur (2007) who asserts that it has positive co-movement with financial performance and capital structure. Further, the results concur with Nasir et al., (2011) who asserts that there is need for continuous evaluation of liquidity levels of respective companies so as to enhance the achievement of organization performance levels.

**Table 5: Karl Pearson Correlation Analysis on the Effect of Liquidity on Financial Performance**

	<b>Financial Performance</b>	<b>Current ratio</b>	<b>Quick ratio</b>	<b>Cash ratio</b>
Financial performance	1			
Current ratio	0.757 0.000	1		
Quick ratio	0.521 0.085	0.124 0.072	1	
Cash ratio	0.324 0.065	0.214 0.054	0.115 0.063	1

**Liquidity and Financial Performance**

The third objective aimed to establish the effect of liquidity on financial performance of star rated hotels in Nairobi County. An R squared on 0.526, indicates that 52.6% of changes in financial performance of star rated hotels in Nairobi County is contributed by liquidity while the remaining portion is associated with other aspects. Further, there was a positive and significant effect of liquidity on financial performance of star rated hotels in Nairobi County ( $\beta = 0.173$ ,  $p$  value  $< 0.05$ ). This indicates that unit increase in liquidity is associated with an increase in financial performance. The resultant model is of the form:

$$\text{Financial Performance} = 0.032 + 0.173 * \text{Liquidity} \dots\dots\dots(2)$$

Liquidity enables smooth day-to-day operations of any firm. Thus, firms with more liquid assets are in a better position to meet daily financial obligations such as payment of wages, purchase of raw materials as well as taking care of other utilities like water and electricity for instance. This ensures uninterrupted operations critical to financial performance. In addition, more liquid assets enable firm managers to take advantage of emerging business opportunities such as trade in stock market, buying and selling of government securities (Treasury bills and bonds) which eventually increases the earning levels. Consequently, trade-off theory posits that firms with more liquid assets are in a better position to borrow substantial sums of money for further investments due to their ability to meet their commitments on time. This means that a positive relationship exists between firm’s liquidity and leverage because; companies with more liquid assets find it favourable to finance their operations/investments using internal funds.

**Table 6: Liquidity and Financial Performance**

<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
C	0.032	0.032	1.008	0.314
Liquidity	0.173	0.058	2.971	0.000
R-squared	0.526	Mean dependent var		
Adjusted R-squared	0.512	S.D. dependent var		
S.E. of regression	0.380089	Akaike info criterion		
Sum squared residuals	46.08509	Schwarz criterion		
Log likelihood	-140.807	Hannan-Quinn criterion.		
F-statistic	11.099075	Durbin-Watson stat		
Prob(F-statistic)	0.0000			

### Summary of findings

The study objective examined the effect of liquidity on financial performance of star rated hotels in Nairobi County. It was found that liquidity has positive and significant effect on financial performance of star rated hotels in Nairobi. This shows an increase in liquidity enhanced financial performance of star rated hotels in Nairobi County. This indicates that the proportion of current assets did not constrain the operational capacity of respective star rated hotels. Further, it can be concluded that working capital strategies deployed by respective star rated hotels enhanced their operational capacity and maximized shareholders wealth.

### REFERENCES

- Abdulla, A. M. A., Aziz, N. A. A., Siti, N. Y., & Saleh, A. H. (2022). The impact of liquidity risk management on financial performance through profitability in the UAE Islamic banks: A review. *Journal of Positive School Psychology*, 6(3), 4636-4635.
- Ahmad, F., Nasir, R., Ali, M., & Ullah, W. (2011). Extension of determinants of capital: Evidence from Pakistani non-financial firms. *African Journal of Business Management*, 5(28), 11375-11385.
- Akenga, G. (2015). Effect of liquidity on financial performance of firms listed at the Nairobi securities exchange, Kenya. *International Journal of Science and Research (IJSR)*, 6(7), 279-285.
- AlAli, M. S. (2020). Liquidity management and banks financial performance in Kuwait. *Financial Markets, Institutions and Risks*, 4(3), 102-108.
- Anwar, W. (2011). Cross-Industry Determinants of Capital Structure: Evidence from Pakistani data. *African Journal of Business Management*, 7(17), 1625-1629.
- Brigham, E.F. & Ehrhardt, M.C. (2011). *Financial Management: Theory and Practice*, (13<sup>th</sup> ed.). Mason: South-Western Cengage Learning.

- Chasha, F., Kavele, M., & Guandaru, C. K. (2022). Working capital management, liquidity and financial performance: Context of Kenyan SMEs. Retrieved from <https://papers.ssrn.com>
- Cheng, S. Y. (2013). *Analyse the Hotel Industry in Porter Five Competitive Forces Faculty (Business)*. Upper Iowa University – Hong Kong Campus.
- Chika, O. V., Eke, P., Igwoba, S., & Werikum, E. V. (2022). Influence of liquidity and profitability on profits of Nigerian Pharmaceutical firms. *Goodwood Akuntansi dan Auditing Reviu (GAAR)*, 1(1), 1-13.
- Cuong, N. T. (2014). Threshold effect of capital structure on firm value: Evidence from Seafood processing enterprises in the South Central region of Vietnam. *International Journal of Finance & Banking Studies*, 3(3), 14-29.
- Dahiyat, A. A., Weshah, S. R., & Aldahiyat, M. (2021). Liquidity and solvency management and its impact on financial performance: Empirical evidence from Jordan. *The Journal of Asian Finance, Economics and Business*, 8(5), 135-141.
- Dare, F. D., & Sola, O. (2010). Capital Structure and Corporate Performance in Nigeria Petroleum Industry: Panel Data Analysis. *Journal of Mathematics and Statistics* 6(2), 168-173.
- Deesomsak, R., Paudyal, K., & Pescetto, G. (2004). The determinants of capital structure: Evidence from the Asia Pacific region. *Journal of Multinational Financial Management*, 14, 387-405.
- Durrah, O., Rahman, A. A. A., Jamil, S. A., & Nour, G. A. (2016). Exploring the relationship between liquidity and indicators of financial performance: An analytical study food industrial companies listed in Amman Bursa. *International Journal of Economics and Financial Issues*, 6(2), 435-441.
- Effiong, D. A., & Enya, E. F. (2020). Liquidity risk management and financial performance: Are consumer goods companies involved? *International Journal of Recent Technology and Engineering (IJRTE)*, 9(1), 580-589.
- Githira, C., Muturi, W., & Nasieku, T. (2019). Influence of firm financial characteristics on stock return of non-financial listed companies in East Africa securities exchanges. *American Based Research Journal*, 8(3), 100-109.
- Gitman, L. J., & Zutter, C.J. (2012). *Principles of Managerial Finance*, (13<sup>th</sup> ed.). Boston: Prentice Hall.
- Hacini, I., Abir, B., & Dahou, K. (2021). The impact of liquidity risk management on the financial performance of Saudi Arabian banks. *Emerging Markets Journal*, 11(1), 67-75.
- Hossain, M. I., & Hossain, M. A. (2015). Determinants of Capital Structure and Testing of Theories: A Study on the Listed Manufacturing Companies in Bangladesh. *International Journal of Economics and Finance*, 7(4), 176.

- Irungu, A. M., Muturi, W., Nasieku, T., & Ngumi, P. M. (2018). Effect of asset tangibility on financial performance of listed firms in the Nairobi securities exchange. *Journal of Finance and Accounting*, 2(3), 55-74.
- Kai, C. M., Jagongo, A., & Ndede, F. W. S. (2020). Liquidity management and financial performance of teachers deposit taking savings and credit cooperative societies in Kenya. *International Journal of Finance and Accounting*, 5(2), 1-26.
- Kaodui, L., Musah, M., Kong, Y., Mensah, I. A., Antwi, S. K., Bawuah, J., Donkor, M., Paa, C. K. C., & Osei, A. A. (2020). Liquidity and firms' financial performance nexus: A panel evidence from non-financial firms listed on the Ghana stock exchange. *Sage Open Journal*, 20(20), 1-20.
- Kariuki, D. W. K., Muturi, W., & Njeru, A. (2021). Influence of liquidity on financial performance of insurance companies in Kenya. *Journal of Agriculture Science and Technology*, 20(3), 94-101.
- Kartal, D. (2016). The effect of liquidity on financial performance: Evidence from Turkish retail industry. *International Journal of Economics and Finance, Canadian Center of Science and Education*, 8(4), 63-79.
- Kenya National Bureau of Standards. (KNBS). (2016). *Survey of 2016*. Nairobi: Government Printer.
- Maria, W. (2019). Analysis of liquidity, activity, leverage, financial performance and company value in food and beverage companies listed on the Indonesia Stock Exchange. *SSRG International Journal of Economics and Management Studies (SSRG-IJEMS)*, 6(5), 52-58.
- Mazur, K. (2007). The Determinants of Capital Structure Choice: Evidence from polish companies. *Journal of International Economics*, 13, 495-514.
- Mehdi, F. E. (2014). Bank liquidity and financial performance: Evidence from Moroccan banking industry. *Verslas: Teorija ir praktika/ Business: Theory and practice*, 15(4), 351-361.
- Ngware, S. G., Olweny, T., & Muturi, W. (2019). Do Bank Size Moderate Relationship Between Banks' Portfolio Diversification and Financial Performance of Commercial Banks in Kenya??. *SEISENSE Journal of Management*, 3(2),14-30.
- Nirajini, A., & Priya K. B. (2013). Impact of Capital Structure on Financial Performance of The Listed Trading Companies In Sri Lanka. *International Journal of Scientific and Research Publications*, 3(5), 1 ISSN 2250-3153.
- Njure, C. K., Irungu, M., & Magomere, O. (2016). The impact of liquidity on the financial performance of the nonfinancial firms quoted on the Nairobi securities exchange. *Researchjournali's Journal of Accounting*, 4(2), 1-12.



- Nugi, M. N., Lilis, S., Deden, N. S. N., Devy, M. P., Reyhan, G. P. (2022). Effect of leverage and liquidity on financial performance of companies in the property and real estate sub sector in Indonesia. *Palarch's Journal of Archaeology of Egypt/Egyptology*, 17(10), 3675-3688.
- Nzioka P. N., & Njuguna R. (2017). Firm orientations and performance of hotels in Nairobi County, Kenya. *Journal of Business and Strategic Management*, 2(3), 1 – 28.
- Onyekwelu, U. L., Chukwuani, V. N., & Onyeka, V. N. (2018). Effect of liquidity on financial performance of deposit money banks in Nigeria. *Journal of Economics and Sustainable Development*, 9(4), 19-28.
- Osoro, E. M., & Muturi, W. (2015). Effects of liquidity-risk management practices on the financial performance of savings and credit co-operative societies in Kisii County, Kenya. *International Academic Journal of Information Sciences and Project Management*, 1(4), 68-85.
- Ozkan, A. (2001). Determinants of capital structure and adjustment to long run target: evidence from UK company panel data. *Journal of Business Finance & Accounting*, 28(1-2), 175-198.
- Ratemo, S. K. & Ndede, F. W. S. (2021). Liquidity risk and financial performance of commercial banks in Kenya. *Journal of Finance and Accounting*, 5(1), 113-128.
- Salazar, L.A., Soto, C. R., & Mosqueda, E. R. (2012). The Impact of Financing Decisions and Strategy on Small Business Competitiveness. *Global Journal of Business Research*, 6 (2), 93-103.
- Shimenga, M. A., & Miroga, J. (2019). Influence of financial leverage and liquidity on financial performance of manufacturing firms listed at the Nairobi securities exchange. *The Strategic Journal of Business and Change Management*, 6(2), 799-814.
- Sile, N., Olweny, T., & Sakwa, M. (2019). Liquidity as a determinant of commercial banks' financial performance in Kenya. *International Journal of Economics, Commerce and Management*, 7(1), 161-171.
- Viviani, J. (2008). Capital structure determinants: An empirical study of French companies in the wine industry. *International Journal of Wine Business Research*, 20(2), 171-94.
- Wairimu, H., Muturi, W., & Olouch, O., (2019). Influence of firm financial characteristics on leverage of agricultural -listed companies in Nairobi Securities Exchanges. *American Based Research Journal*, 8(5), 85-93.
- Yameen, M., Farhan, N. H. S., & Tabash, M. I. (2019). The impact of liquidity on firms' performance: Empirical investigation from Indian Pharmaceutical companies. *Academic Journal of Interdisciplinary Studies*, 8(3), 212-220.