



**INFLUENCE OF CASHFLOW ACTIVITIES ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA:  
CASE OF KAKAMEGA COUNTY**

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**Eyahuma, G.,<sup>1\*</sup> & Miroga, J.<sup>2</sup>**

<sup>1\*</sup>MBA Candidate, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

<sup>2</sup>Ph.D, Lecturer, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

**Accepted: June 9, 2020**

**ABSTRACT**

*The study focused on the influence of cash flow activities on financial performance of commercial banks in Kenya. The research used descriptive design. The target population of the study comprised of branch managers, operations managers, credit managers, branch accountants and head office accountants of all the commercial banks in Kakamega County. The target population of the study comprised of 160 respondents made up of branch managers, operations managers, credit managers, branch accountants and head office accountants of all the commercial banks in Kakamega County. The banks were Standard Chartered bank, National bank, Family bank, Barclays bank, Co-operative bank, Kenya Commercial bank, Equity bank, Diamond trust bank, Bank of Africa, and Bank of Baroda. The sample size of the study was 114 respondents who participated in the study. The study used both primary and secondary data. Descriptive statistics was done on demographic information of the respondents to find out their characteristics in terms of frequencies and percentages. The findings showed a great significance to a firm because it directly influences both liquidity and profitability. Cash flow from investment comprises of both current assets and current liabilities of the firm. The study concluded that Cash flow from operating activities had a statistically significant influence on financial performance of Commercial banks in Kakamega County. Cash flow from financing activities had a statistically significant influence on financial performance of Commercial banks in Kakamega County. Cash flow from investing activities had a statistically significant influence on financial performance of Commercial banks in Kakamega County. The Study recommended that the commercial banks in Kakamega County need to train staff to ensure that financing activities make it possible for the commercial banks to make money. The study was done in Kakamega County. Future research is encouraged to cover other areas and compare the findings. The findings form a basis for researchers, academicians and interested parties to make inferences in future.*

**Key Words:** Commercial Banks, Financial Performance, Cash flow, financing activities, Operation Activities, investing activities

**CITATION:** Eyahuma, G., & Miroga, J. (2020). Influence of cashflow activities on financial performance of commercial banks in Kenya: Case of Kakamega County. *The Strategic Journal of Business & Change Management*, 7(2), 385 – 404.

## INTRODUCTION

Organizations employ the use of various financial statements for financial analysis; the cash flow statement which is a requirement of IAS7 is one of them. It is a vital tool of the enterprises financial statements based on approving the accounting regulation in conformity with the directives of International Accounting Standards. Management of cash flow has become a critical element of many firms' operational strategies (Quinn, 2011). In the words of Efobi (2008), the management of cash flow plays a big role in the operations and profitability of a firm.

Proper management of cash flow is important since the business focuses on it to survive in the forceable future. The statement mainly focuses on financial objectives in the short and long term (Uwonda and Okello, 2013). According to Kores and Subranmanyam (2012), the cash flow management policies of a firm which play the role of managing working capital as cash receipts from clients, inventory holdings and payment of cash to suppliers generally improve the profitability of the firm.

The main objective of studying movement of cash is to create information required for internal and external use. Internal users include managers, employees & stakeholders, whereas external users include suppliers, financial creditors and clients. The information concern with assessment of the firm's capacity at present and in the future is to create cash and cash equivalents (valceaus 2005). The cash flow focuses on cash inflow and outflow. It can be looked at in two ways, namely the direct and indirect method. The former examines all the receipts and payments flow from the three cash flow components, while the later focuses on the flow of operations beginning with the net amount registered in capital and also adjustments for non-cash items and the other things included in investment and financing activities (Buglea, 2005).

The second method generally does not consider the importance and purpose of the cash flow statement (Jones et al 2010). Standard setters would not be keen if the two methods could realize the key reasons of financial reporting, also a number of authors including (Orput and Zang, 2009; Clinch et al. 2002; Frino and Jones, 2005; Mello Esouza, 2006; Jones, 1995) and the Standard Setters themselves look at the direct methods as being superior to the other method in accomplishing the financial reporting objectives.

Globally the cash flow statements are employed to determine the profitability of an enterprise. The cash flow gives a picture of how an enterprise raises its funds, and how the money was spent during a financial period. This tool weighs the ability of a company to meet its financial obligations in the meantime. A company is looked at as being in good shape if it consistently generates income more than it spends. According to Scott Rothbort (2018), the cash flows statement of a company is meant to build a bridge or bring about reconciliation between the cash balances of the company while comparing different accounting periods. The financial tool is vital to investors since it gives an overview on how a firm generates and expends funds and finally its capacity to give back value to shareholders.

These are the components of the cash flow statements. They include operating, investing and financing activities. They are classified depending on the nature of the transaction. Examples of operational activities include cash received from the goods sold and cash paid for purchases. This is so because both revenues and expenses are both included in net income. All the cash activities in relation to fixed assets are classified as investing activities. For instance cash from sale of immovable property, and amount paid on investment in cash that have a relationship with non-current liabilities and owners' capital. The third component of cash flow

highlights the cash flow emerging from changes in the equity of the firm and its financing structure.

According to banks, deposits driven by customers are explained under cash flow from operations. They believe that the health of their operations depends on the deposits they receive, and the capability of attracting an increasing number of deposits. Charles Mulford (2008). The key business of a bank is to ensure that it manages the spread between the amounts it lends out to its customers and the interest rate received from loans. Interest earned on loans should be greater than interest paid on deposits to ensure spread of income generated from the interest. The size of the spread determines the amount of profit a bank will generate. When the borrowing rates are so high the economy is likely to be hurt which in turn will lead to decreased borrowing power. Ultimately the net income of the bank will reduce. In the words of Mangeli (2012), profitability of commercial banks is achieved through spreading fluctuations of the market interest rates.

### **Statement of the Problem**

The bank is among the sectors relied on to ensure that vision 2030 is realized. This can be achieved through ensuring that efficient financial services are provided and also creation of investment ventures that will bring about a vibrant and competitive financial service globally in our country ROK (2007). In order to compete globally in offering financial services, financial distress should be managed well by banks Watson (2015). In the words of Kamau (2011) and Mwega (2011) economic growth is driven by the banking sector through allocating resources efficiently to the units that are productive in an economy. This will result in being able to compete globally. According to Naiseku (2014) an efficient system and major source of liquidity in the systems of finance are provided by the bank. In spite of this, more than ten financial institutions have either collapsed and or liquidated or have been placed under receivership by Deposit Protection Fund Board

in Kenya between 2005 and 2015 (CBK, 2015). This shows that averagely, one financial institution collapsed yearly over the eleven-year period making it a worrying trend. In addition, there was a decline in the sum of financial institutions ranked strong, from 22 banks in 2014 to 11 banks in 2015(CBK, 2015). Kenya's investment rate was below 25% of GDP during 2005 – 2014, indicating the lowest investment rate among the peer group, with the exceptions of Cambodia and Pakistan (World Bank, 2016). From this analysis, banking industry in Kenya seems to be experiencing performance fluctuations indicating negative financial performance (Khaliq, Hussein, Altarturi, Mohd, & Thaker, 2014). A lot of research has been done on cash flow activities and financial performance Mung'o , (2010) analyzed the input of cash flow on financial performance of Kenyan commercial banks for the period 2005-2009; Zhou et al (2012) looked at the link between cash flow activity and profitability as evidenced from listed Real Estates Companies in China; Binglar et al (2014) on cash flow and corporate performance: Food and beverage companies in Nigeria; Watson (2005) looked at a variety of earnings and cash flow activities measures of profitability of a firm and stock returns; Parsian & Amir (2013) carried a research on the effect of operating cash on financial performance in Tehran stock exchange; Nwanyanwu (2015) researched on the relationship between operating cash flow activities and organization profitability in the hospitality and print media industry in Nigeria; Rehaman (2017) analyzed investment cash flow on financial performance in Pakistan firm. However, most of these studies were based on data from other countries and different industries and hence their findings may not be applied to the local banking context. On the other hand, local studies failed to show the extent to which components of cash flow influence profitability of commercial banks in Kenya. This research therefore sought to bridge this gap by ascertaining the influence of cash flow activities on financial performance of commercial banks in Kenya;

case study of commercial banks in Kakamega County, Kenya.

### **Objectives of the Study**

The general objective was to evaluate cash flow as a measure of performance of Commercial Banks in Kakamega County. The specific objectives were:

- To assess the influence of cash flow from operations on financial performance of commercial banks in Kakamega County.
- To determine the influence of cash flow from financing activities on financial performance of commercial banks in Kakamega County.
- To ascertain the influence of cash flow from investing activities on financial performance of commercial banks in Kakamega County.

The research hypotheses were;

- **HO<sub>1</sub>** Cash flow from operations has no significant influence on financial performance of commercial banks in Kakamega County
- **HO<sub>2</sub>** Cash flow from financing has no significant influence on financial performance of commercial banks in Kakamega County
- **HO<sub>3</sub>** Cash flow from investing has no significant influence on financial performance of commercial banks in Kakamega County.

### **LITERATURE REVIEW**

#### **The Theory of Ivatury and Pickens 2006**

This theory states that, reduction of cost of operations has significantly positive effect on the performance of banks. To deliver banking services efficiently, high operation costs are involved. Cash Flow from Operations (CFO) is a component of the cash flow statements that shows the sum of cash and enterprise receives from the continuous routine business activities. For example, manufacture and sale of goods or providing services Will Kenton, October (2018). Operating Cash Flow does not consider capital expenditure in the long term, or investment costs, this is because they may be

occurring just once. CFO will mainly concentrate on the core business.

Cash flow from operations is incurred on a routine basis. It is very important because banks must maintain positive cash flow from this component to sustain them over a long period. Cash flow from operations should be compared to net profit realized by the bank; it is the main reason movement of cash is observed. The invention of branchless banking for instance has reduced the costs associated with banking, internet banking and automatic teller machines involve the use of devices to reach out to clients, and this reduces on the cost of staffing, since clients serve themselves (Ivatury & Pickens 2006).

The Financial Accounting Standards Board (FASB) argued in SFAS 95 that users are able to approximate the Cash Flow Collected from Customers (CCC) and Cash Paid to Suppliers (CPS) if they wished to. FASB on the other hand thinks this estimation process is fairly mechanical. (Mello E-Souza, p1). Evidence has been provided that even sophisticated users including researchers have failed to recognize that figures for changes in the working capital accounts, as calculated in the balance sheet, are not same as those shown in the reconciliation of profit with cash flow from operations. However, work by Hribar and Collins (2002) overturned the findings by previous publications by demonstrating how they suffered from errors-in-variables problems.

The issue mainly came up since these previous researchers counted on the statement of affairs figures while not considering the many other events including translation of foreign currency and write offs could have effect on working capital, on the other hand have zero impact on income (Hribar & Collins 2002). Anderson et al (2007) extended other researchers work and deduced that profitability in line with cash flow is more persistent than that related to accruals. An analyst of 3672 firms by Arthur et al (2008) from Australia firms showed that

components of cash flow model are superior to an aggregate model in showing and foreseeing earnings in future.

Orput and Zang (2009) proved that disclosures using the direct method improve on the operations cash flow to stock prices. It can be concluded from this that earlier research does not provides proven report on usefulness of cash flows in decisions making. This study will therefore provide empirical evidence to test the theory, if the influence of operations activities as a component of cash flow is capable of generating positive cash flow over a long period and remain viable. According to Kumar (2010) an enterprise is regarded responsive if it takes time to communicate to its client, the length of the time it takes to respond or deal with other problems Kotter (2000).

### **The Agency Theory**

The contributors to the Agency Theory include Eliot and Eliot (2002), Boodhoo (2009) and Akintonye (2009). Cash flow that is used to measure profitability depends on the financial policy adopted by a firm. The Agency Theory gives a well-defined direction concerning the behavior of a firm about Cash flow. As far as the theory is concern, conflicts arise from the possible divergence of interest between shareholders (Principles) and managers (agents) of the firms. The core business of managers is to manage the firm in such a way that returns are generated for the shareholders, thereby increasing the profit figures and the cash flow (Eliot and Eliot 2002).

In the words of Boodhoo (2009), leverage should lower the agency costs, reduce inefficiency, and improve financial performance in turn (Akintonye 2008). The cash flow from financing activities focus on the way a firm raises equity and repays investors through the security market. Ryan Furhmann (2018). They include off-setting cash dividends, giving loans, leasing and trading in more securities. The cash flows

measure the flow of cash between a firm and its owners Ryan Furhmann (2018).

In the study carried out by Bingler et al (2014) on corporate profitability, selected food and beverage firms were studied. The data collected was subjected to multiple regression technique. The results from the study revealed that operations cash flows and cash from financing activities have a positive significant relationship with profitability in the sector. Discretionary accruals may increase or decrease income, this will depend on how the managers are motivated.

According to Badert eher et al (2009) his argument is based on detail about the input of earning management, including discretionary accruals to conceal the firm's real picture as a way of the management to maintain their equity value. For this reason, manipulated statements presented as inputs would lower ability to predict cash flow. Commercial banks should lend out money at an interest rate prescribed by the central bank to contain the economy of the county. Very high interest rates lead to inflation and default in loan repayments in extreme cases.

Considering the empirical reviews this research will test the theory on the relationship of cash flow activities and financial performance of banks in Kakamega County. This was the gap the study sought to fill. No works have been done on the relationship of cash flow activities and the financial performance of banks in Kakamega County

### **Theory of Information Asymmetry**

This theory was developed in the 1970's and 1980's as a possible explanation for common phenomena that general equilibrium economics couldn't explain. It was developed and written by George Akalif, Michel Spence and Joseph Stiglitz who won a nobel prize in 2001. Investing activities in the cash flow statement result from gains or losses on investment in the financial markets and operating subsidiaries.

The concept market for lemons by Akerlof 1970 explained quality uncertainty and market mechanism, whereby sellers have more insight on the quality of their product than the buyers. An investing activity also refers to cash spent on investment in capital assets including property plant and equipment. Inflows include proceeds from disposals of property plant and equipment. The literature of this theory is found in the works of the nobelists George A. Akerlof (1970), Michael Spence (1973) and Joseph Stiglitz (1975). Individuals are not privy to information in regard to their risk types, on the other hand bankers' and sellers of property know so much in regard to calculation of interest and profits respectively.

On the other hand, the banks who are the financiers may not be able to accurately judge in advance who their loan defaulters would be. This idea is the same as the since-challenged Gresham's laws in money circumstances, where inferior quality drives out bid though the driving mechanism is different. In his paper, Joseph Stiglitz (1975) argues that asymmetry information was placed into contained general equilibrium models to describe negative externalities that price out the bottom of markets and for instance, the uncertain health insurance premium needed for high-risk individuals causes all premiums to rise, forcing low-risk individuals away from their preferred insurance policies.

Market research from other economists including Ibrahim and Barro (capital structure 2010) and others have questioned the existence, evidence and practical duration of asymmetric information problems causing market failure. Very little positive correlation cash flow from investing activities and performance of commercial banks in Kakamega County was observed. One possible explanation for this was that individuals do not have more information about their risk or investment while banks have tables and significantly more experience.

Other economists such as Bryan Caplan at George Mason University point out that everyone is not in the dark in real markets. For instance, banks employ the services of the credit bureau to rate their customers and gauge their creditability. In my opinion, if commercial banks relaxed their loaning policy and offered unsecured credit to support the mushrooming small businesses whose membership is partially drawn from informal sector such as the boda-boda sector in Kakamega County to enable them buy motor cycles, acceptance of small deposits from them could bring about information asymmetry. It may not be clear if their repayment behavior will be reliable given the unpredictable nature of their earnings.

Commercial banks need to do some feasibility study on possible inconsistencies in repayment pattern at different times in various situations. This study therefore sought to research targets to assess how investing activities of the cash flow influence performance of commercial banks in Kakamega bearing in mind the unpredictable behavior of customers in loan repayment.

### **Empirical Review**

#### **Cash Flow from Operating Activities**

This component of cash flow mainly shows the amount of funds a company makes from the ongoing routine business activities, Will Kenton (Oct 2018). They influence financial performance of commercial banks since possibility of generating positive cash flow from operations enable the banks to remain viable over a long period of time. In the empirical evidence provided by Prowal and Tainis (2013) successful operations of a company would be met only if the company generates enough cash that meets their daily operations, pay taxes and dividends.

This study tested the influence of cash flow activities on financial performance of commercial banks and uses them to differentiate between sound and risky investments. According to Maxwell Samuel Amuzu

(2010) his work on cash flow activities as a measure of performance of listed companies in emerging economies, (Ghona as an example) revealed that cash flow analysis is a good measure of performance for firms that are competing.

Measuring performance (organization achievements) is a vital part of monitoring an organization progress. It comprises measuring the actual performance outcomes or results of an organization against its intended goals. Sector specific studies measuring business performance have tended to focus on traditional industries. Capacity building is aimed at improving skills for carrying out key functions, solving problems and achieving objectives in the daily operational activities of any organization.

Customers all over the world have become more quality conscious; hence there has been an increased customer demand for higher quality service. The purpose of good service delivery is to have processes that consistently deliver high quality service to drive customer satisfaction and customer retention. Operational activities of a bank are recurrent, satisfaction and retention of clients is therefore paramount. This can only be achieved through proper service delivery.

#### **Cash Flow from Financing Activities**

This component of the cash flow is mainly concern with the way in which a firm raises equity and repays it to investors through the securities market. Ryam Furhann (2018). Among the financing activities are payment of dividends, loan refinancing, issuing and selling of stock. According to Watson (2005) the flow of cash and profitability of firms are significantly related. He employed multiple regression in his data analysis. He examined different profits and measures of cash flow of firm's profitability and stock returns.

In his conclusion, he said that a firm with an acceptance performance in the eyes of its managers and shareholders may not be accepted in social respect. In his study on selected food and beverage

companies in Nigeria, Binglar et al (2014) studied cash flow and corporate performance. He used multiple regression technique and found out that cash flow from operating and financing accounting are significantly positively related with a firm's profitability. Banks make their profits through advancing loans at rates higher than the cost of the funds they lend. More specifically, they earn income on advances to clients and interest income from debt securities they own.

Financing activities of the cash flow therefore make it possible for commercial banks to make money. To ensure that the bank is repaid, there are usually several layers of protection. The first source of repayment is cash flow, just as with any loan. A bank will not lend out if the cash flow of the borrowing party is not sound. However, the larger the loan, the more layers of protection is involved. According to Andrew Savor (2018) in US, a lender can file a lawsuit and assuming you have assets, they can foreclose on them or garnish the wages if any.

#### **Cash Flow from Investing Activities**

This shows how an organization's cash is utilized to provide securities. For example, making capital expenditures, acquiring equipment and property for expansion. It also involves sales of assets and equipment to generate income. Credit is the risk that borrowers will not repay back the amounts outstanding on an investment because of default (Mc Neil, Embrochis & Frey 2005). It is the potential that a bank borrower will default to meet his obligation in accordance with agreed terms.

According to Erkki (2004) cash is cyclical in nature. A cash balance should therefore be taken care of for precautionary purpose, mostly for unpredictable activities which are seasonal in nature. In his approach, overdrafts facilities costs and capital costs are compared to determine the optimum. Arche's approach has an advantage of recognizing the cyclical net cash flows of firms. In his assertion, Erkki (2004)

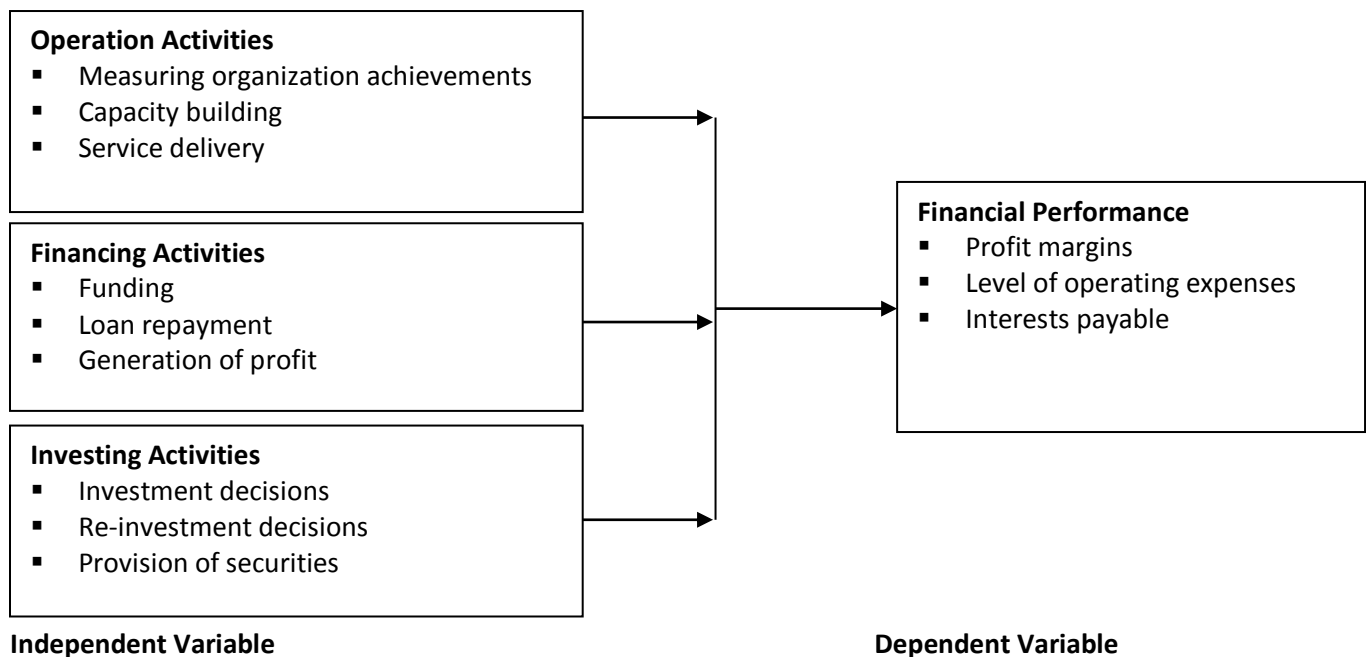


seconds Gibbs reasoning that to determine optimum cash balance investment and financial decisions are paramount. Commercial banks therefore need a combination of investment and financial cash flow activities to determine their optimum cash balance.

In Gibbs (1976) approach a combination of short and long term borrowing should be employed to avoid the use of long term funds to cover peaks arising from unused cash balance during periods of low cash demand. To determine the amount of Buffer money to hold an investment decision according to Gibbs will highly influence the performance of commercial banks. Huseyin (2011) asserts that managers can hoard cash to increase their control on a firm's assets and gain discretionary power on investment decisions of the firm. With the availability of cash to invest,

external funds are not required, these normally provided the capital market with detailed information about the firm and its investment projects (Huseyin 2011). Commercial banks need to hold more cash to ensure the availability of funds to invest in growth projects even if the NPV of these projects is negative (Huseyin 2011).

Banks have kept a secret regarding quality of their assets to outsiders who invest with them. The informational asymmetry can change the investor's decision if the bank must raise funds from the uniformed, and assets sold will be subject to a lemons discount. Banks may also hold T-bills to signal their quality, enabling them to issue risky debt at a lower interest rate.



**Figure 1: Conceptual Framework**

**METHODOLOGY**

The study adopted descriptive survey design. The target population was 160, which comprised of branch managers, operations managers, credit managers, branch accountants and head office accountants of all the commercial banks in Kakamega

County. The banks are Standard Chartered bank, National bank, Family bank, Barclays bank, Co-operation bank, Kenya Commercial bank, Equity bank, Diamond trust bank, Bank of Africa and Bank of Baroda. Stratified simple random approach was used to sample 114 respondents. The study used Primary

and Secondary data. The study used structured and semi structured questionnaires as data collection procedure. Secondary data was collected using document analysis for a period of 10 years between 2008 and 2018. Both descriptive and inferential analysis was carried out by the use of Statistical Package for Social Sciences (SPSS 24). Analyzed data was presented by use of tables.

## FINDINGS AND DISCUSSIONS

### Descriptive statistics of operating Activities and Financial Performance of Commercial Banks

**Table 1: Descriptive Statistics of Operating Activities and Financial Performance of Commercial Banks**

Statements	SA f (%)	A f (%)	NS f (%)	D f (%)	SD f (%)	Mean	Std Deviation
The results generated by operating activities is the main source of financing and not a measure of profit	62 (60.2)	34 (33)	7 (6.8)	0(0)	0(0)	4.46	.81428
Organizational achievements are measured through operating activities	52 (50.5)	51 (50.5)	0(0)	0(0)	0(0)	4.50	.50242
Capacity building improves skills, solves problems, thus achieving objectives in daily operation activities of the bank	75 (72.8)	28 (27.2)	0(0)	0(0)	0(0)	4.50	.44709

Statement number one; the results generated by operating activities is the main source of financing and not a measure of profit had 62(60.2%) who strongly disagreed, 34(33%) disagreed, 7(6.8%) were not sure while 0(0%) disagreed and strongly disagreed respectively. The statement mean was 4.4660 which was below the composite mean 4.4919, implying the statement does not support financial performance and should be enhanced. Statement number two; organizational achievement are measured through operating activities 52(50.5%) who strongly agreed, 51(50.5%) agreed, 0(0%) were not sure, 0(0%) disagreed while 0 (0%) strongly agreed. The statement mean 4.5049 was above the composite mean 4.4919 which implied the statement supports financial performance of commercial banks. Statement numbers three; capacity building improves

The first objective the study sought to achieve was to assess influence of operating activities on financial performance of commercial banks in Kenya. To achieve this, the respondents were asked to give their opinion showing the level of their agreement or disagreement with the statement provided in a Likert scale of 1- 5 where: Strongly agree (SA)=5, Agree(A)= 4, Neutral or not sure (N)= 3, Disagree (D)= 2 and Strongly disagree (SD) = 1. The three statements on operating activities were presented in Table 1.

skills, solves problems, thus achieving objectives in daily operation activities of the bank. Out of those who responded, 75(72.8%) strongly agreed, 28(27.2%) agreed, 0(0) were not sure, disagreed and strongly disagreed respectively. The statement mean 4.5049 was above the composite mean 4.4919 which meant it supports financial performance of commercial banks.

### Financing Activities and Financial Performance of Commercial Banks in Kenya

Secondly the research sought to determine how cash flow from financing activities influence financial performance of commercial banks in Kakamega County. The three statements on financing activities are presented in Table 2.

**Table 2: Financing Activities and Financial Performance of Commercial Banks**

Statements	SA f (%)	A f (%)	NS f (%)	D f (%)	SD f (%)	Mean	Std Deviation
Cash flow from financing activities shows changes in capital and the financing structure	52 (50.5)	48 (46.6)	1 (1)	2 (1.9)	0(0)	4.43	0.70946
Financing activities make it possible for commercial banks to make money	57 (55.3)	27 (26.2)	11 (10.7)	0(0)	0(0)	4.13	0.8375
To ensure that the bank is repaid, there are usually several layers of protection	55 (53.4)	41 (39.9)	7 (6.8)	0(0)	0(0)	4.33	0.02315

From Table 2, in statement one; Cash flow from financing activities shows changes in capital and the financing structure, out of 103 respondents, 52 (50.5%) strongly agreed, 48(46.6%) agreed, 1(1%) was not sure while 0% disagreed and strongly disagreed respectively. The statement mean 4.4369 was above the composite mean 4.30096, which meant it should be enhanced. In statement two; financing activities make it possible for commercial banks to make money, 57(55.3%) strongly agreed, 27 (26.2%) agreed, 11 (20.7%) were not sure while 0% disagreed and strongly disagreed respectively. The statement mean 4.1359 was below the composite mean which meant that the statement financing activities make it possible for commercial and therefore should be enhanced. Statement three; to ensure that the bank

is repaid, there are usually several layers of protection. Out of 103 respondents, 55 (53.4%) strongly agreed, 41 (39.9%) agreed, 7 (6.8%) were not sure while 0% disagreed and strongly disagreed respectively. The statement mean 4.3301 was above the composite mean 4.30096 and hence it should be enhanced.

#### **Cash flow from investing activities and financial performance of commercial banks in Kakamega County**

The third objective the study sought to achieve was to assess how cash flow from investing activities influences financial performance of commercial banks in Kakamega County. The five statements o results are presented in Table 3.

**Table 3: Cash Flow from Investing Activities and Financial Performance of Commercial Banks in Kakamega County**

Statements	SA f (%)	A f (%)	NS f (%)	D f (%)	SD f (%)	Mean	Std Deviation
The cash flow reflects how an organization's cash is used to provide securities. (e.g. capital expenditures, property acquisition and to expand)	52 (50.2)	43 (4.7)	7 (6.8)	1 (1.0)	0(0)	4.19	0.1998
With the availability of cash to invest, external funds are not required	48 (46.6)	42 (40.8)	1(1)	0(0)	0(0)	4.15	0.14410
Re-investment decisions often increase the value of securities	43 (41.7)	37 (35.9)	15 (4.9)	5 (4.9)	3 (2.9)	3.81	0.34855

From Table 3, in statement one; the cash flow reflects how an organization's cash is used to provide securities. (e.g. capital expenditures, property acquisition and to expand), out of 103 respondents,

52(50.2%) strongly agreed, 43 (4.7%) agreed, 7 (6.8%) were not sure, 1 (1%) disagreed while 0% strongly disagreed. The statement had a mean of 4.1942, which was above the composite mean and therefore

should be enhanced to improve financial performance. In statement two; with the availability of cash to invest, external funds are not required, out of 103 respondents, 48 (46.6%) strongly agreed, 42 (40.8%) agreed, 1(1%) were not sure while 0% disagreed and strongly disagreed respectively. Majority of the respondents agreed with the availability of cash to invest, external funds are not required. The statement mean 4.1553 was above the composite mean and hence to improve financial performance in commercial banks, it should be enhanced. Statement three; re-investment decisions often increase the value of securities. Out of those who participated in the study, 43 (41.7%) strongly agreed, 37 (35.9%) agreed, 15 (4.9%) were undecided, 5 (4.9%) disagreed while 3 (2.9%) strongly disagreed. Majority of the respondents agreed re-

investment decisions often increase the value of securities. The statement mean 3.8155 was below the composite mean 4.055 and therefore need to be enhanced to improve financial performance of commercial banks.

#### Financial Performance

Financial performance was considered by the study as the dependent variable which the study sought to find out the level of its influence on cash flow activities. Financial performance was measured based on; return on assets (ROA) and return on equity (ROE).

Table 4 presented the descriptive statistics for the measure of return on assets as the mean ROA for each year across the 10 years.

**Table 4: Annual Mean of Returns on Assets (ROA)**

Year	Observation	Mean	Standard deviation	Min	Max
2008	11	0.0550	0.0171	0.0196	0.0888
2009	11	0.0565	0.0166	0.0258	0.0993
2010	11	0.538	0.0125	0.0196	0.0795
2011	11	0.0550	0.0167	0.0168	0.0193
2012	11	0.0517	0.0244	0.0274	0.0908
2013	11	0.0604	0.001	0.0867	0.1024
2014	11	0.0541	0.0129	0.0054	0.0864
2015	11	0.0163	0.1031	0.0851	0.0653
2016	11	0.0352	0.0183	0.00153	0.0862
2017	11	0.0149	0.0165	0.0321	0.0765
2018	11	0.0423	0.0123	0.0142	0.0534

Through the years, the highest yearly mean returns on assets ranged from 0.00153 (lowest) for the year 2016 and 0.1024 (highest) in 2013. The mean ROA thus seem to have no linear trend against time with means between 0.0163 (lowest) in 2015 and 0.538(highest) in 2010. The mean ROA seems to have low variability of below 0.2 indicating their dispersion is very close around the mean.

Considering return on assets which was also used to measure the financial performance of the banks, the descriptive statistics results are shown in Table 5. Commercial banks in Kenya seemed to have lower returns on assets compared to the returns on equity.

**Table 5: Annual Mean of Returns on Equity (ROE)**

Year	Observation	Mean	Standard deviation	Min	Max
2008	11	0.3628	0.1563	0.0263	0.6847
2009	11	0.3458	0.1401	0.05563	0.6100
2010	11	0.3444	0.1374	0.1288	0.6088
2011	11	0.3843	0.1138	0.0101	4.6439
2012	11	0.4881	0.1249	0.0271	4.2266
2013	11	0.5252	0.7588	0.1725	0.7959
2014	11	0.3739	0.6784	0.011	0.6308
2015	11	0.3584	0.1232	0.0514	0.7615
2016	11	0.3617	0.1615	0.0313	0.8315
2017	11	0.3712	0.1733	0.06175	0.7611
2018	11	0.4133	0.1019	0.01611	0.8543

The mean returns on assets ranged between 0.011(lowest) and 4.6439 (highest) which were the mean ROA for the years 2014 and 2011 respectively. It's an indication that banks have minimized investment in assets or they don't realize so much in investment on assets. The variability of the returns on assets were also very low with all the standard deviations ranging between 0.0109 and 0.7588. The lowest possible return on mean on assets realized by a firm in study across the 10 years was 0.3444 in 2010 and the highest ROA realized by a firm was only 0.5252 which was in 2013.

#### **Inferential Statistics of Cash Flow and Financial Performance of Commercial Banks**

The objectives of the study were to assess how the cash flow from operating activities influence financial performance of commercial banks in Kakamega County; determine how cash flow from financing activities influence financial performance of commercial banks in Kakamega County and ascertain how the cash flow from investing activities influence financial performance of commercial banks in

Kakamega County. They were discussed in the following sub sections.

#### **Influence of Cash flow from operating activities on Financial Performance**

The first objective of the study was to assess the influence of cash flow from operating activities on Financial Performance of Commercial Banks in Kenya. The study set out null hypothesis;

**Hypothesis HO<sub>1</sub>:** Cash flow from operating activities has no significant influence on financial performance of Commercial Banks in Kakamega County.

The test criteria were set such that the study accepts the hypothesis if the value of beta,  $\beta_1 \neq 0$ . Simple regression  $P = \alpha + \beta_1 OPCF + e$  was used where P is profit  $\alpha$  is the y-intercept term, OPCF is cash flow from operating activities,  $\beta_1$  is the beta value and e is the standard error term. The mean of OPCF was regressed with mean of P through simple regression. The interpretation of the results involved using significance of R square and Regression coefficient at 95.0% confidence level. Summary of the regression model was presented in Table 6.

**Table 6: Regression Summary Model of OPCF and PAT**

Model	R	R Square	Model Summary	
			Adjusted R Square	Std. Error of the Estimate
1	.773 <sup>a</sup>	.598	.596	3.14279

a. Predictors: (Constant), OPCF

ANOVA <sup>a</sup>					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	2953.760	1	2953.760	299.050	.000 <sup>b</sup>
Residual	1985.304	101	9.877		
Total	4939.064	102			

a. Dependent Variable: P

b. Predictors: (Constant), OPCF

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	7.485	1.532		4.887	.000
OPCF	.904	.052	.773	17.293	.000

a. Dependent Variable: P

From the model summary in Table 6, R coefficient value was 0.773 at  $p \leq 0.005$ . The squared R value of 0.598 implied 59.8% change in Profit was explained by OPCF. The results showed the F test value 299.050 at  $p = 0.000$ . The test is statistically significant to show that OPCF is fit to explain P. In other words, it displays a probability of 0% to accept the null hypothesis. The student T- test was 4.887 when constant. When OPCF was introduced, it increased to 17.293, at  $p = 0.000$ . This therefore implied the null hypothesis was rejected given the significance values of beta, given the decision rule was to reject  $H_0$  if  $\beta_1 \neq 0$ ,  $P \leq 0.05$  ( $0.773 \neq 0$  at  $p \leq 0.05$ ) and displayed the financial regression equation in the following model

$$P = \alpha + 0.773OPCF + e$$

The current findings were similar to a study by Mung'o (2010) who analyzed the input of cash flow on a profitability of Kenyan commercial banks for the period 2005-2009. The study analyzed various banks' profits and the components of cash flow as the independent variables. The collected secondary data were analyzed by using a multiple regression model. The study revealed that profit among commercial banks improved tremendously during the period under review. Cash flow from financing and investing activity were found to have a great influence (positive) on profits of the banks while operating cash

flow has a negative effect. This is true since operating cash flow is generally routine and recurring.

This study is also in agreement with the findings of Nwanyanwu (2015) who did a study on the relationship between operating cash flow activities and organization performance in the hospitality and print media industry in Nigeria. The objective was; to examine the relationship between operating cash flow activities on organization performance, to determine the impact of loans processing on organization performance and to establish the effect of equity investment on organization performance. The sample size was 45 hospitality and print media firms. Data collection was via a questionnaire. Descriptive statistics was used to analyze data. The study used inferential statistics using correlations analysis. The findings revealed that operating activities affect profitability. The study concluded that cash paid to suppliers and taxation imposed on profits should be considered when calculating cash flow from operations.

#### **Influence of cash flow from financing activities on Financial Performance of Commercial banks**

The second objective of the study was to determine the influence of cash flow from financing activities on financial performance of commercial banks in Kakamega County. The study set out the second null hypothesis

**Hypothesis HO<sub>2</sub>:** Cash flow from financing activities has no significant influence on financial performance of commercial banks in Kakamega.

The test criteria were set such that the study accepts the hypothesis if the value of beta,  $\beta_2 \neq 0$ . Simple regression  $P = \alpha + \beta_2 \text{ FINCF} + e$  was used where P is

profit,  $\alpha$  is the y-intercept term, FINCF is cash flow from investing activities,  $\beta_2$  is the beta value and e is the standard error term. The mean of FINCF was regressed with P through simple regression at 95.0% confidence level. Summary of the regression model was presented in Table 7.

**Table 7: Regression Results for Cash Flow from Financing Activities**

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.868 <sup>a</sup>	.753	.752	2.46138		
a. Predictors: (Constant), FINCF						
ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3721.331	1	3721.331	614.246	.000 <sup>b</sup>
	Residual	1217.733	101	6.058		
	Total	4939.064	102			
a. Dependent Variable: P						
b. Predictors: (Constant), FINCF						
Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.214	.923		12.145	.000
	FINCF	.915	.037	.868	24.784	.000
a. Dependent Variable: P						

From the results, the beta value was 0.868 at  $p=0.000$ . The  $r^2$  value was 0.753  $p=0.05$ . This meant 75.3% change in Profit was attributed to FINCF. The ANOVA summary showed the F test value 614.246 at  $p=0.000$ . The test is statistically significant to show that FINCF is fit to explain Profit. The model is fit to explain the variance in Profit caused by FINCF. The student T- test was significant at 12.145,  $p=0.000$  without FINCF. When FINCF was introduced, it increased to 24.784, at  $p=0.000$ . This therefore implied the null hypothesis was rejected given the significance values of beta, given the decision rule was to reject Ho<sub>2</sub> if  $\beta_2 \neq 0$ ,  $P \leq 0.05$  ( $0.868 \neq 0$  at  $p \leq 0.05$ ) and displayed the financial regression equation in the following model

$$P = \alpha + 0.868 \text{ FINCF} + e$$

The hypothesis HO<sub>2</sub> was thus rejected given the tests were done at 95% confidence level and 0.05% significant. The findings are in agreement with an empirical research by Zhou et al (2012) who examined the relationship between cash flow activity and financial performance as evidenced from listed Real Estates Companies in China. The study revealed that free cash flow is negatively linearly correlated to the financial performance of a company. Too much free flow of cash flow activities leads to a decline in financial performance.

#### **Influence of cash flow from investing activities influence financial performance of commercial banks**

The third objective of the study was to ascertain how the cash flow from investing activities influences financial performance of commercial banks in

Kakamega County. The study set out the third hypothesis

**Hypothesis HO<sub>3</sub>:** Cash flow from investing activities has no significant influence on financial performance of commercial banks in Kakamega County.

The test criteria was set such that the study accepts the hypothesis if the value of beta,  $\beta_3 \neq 0$ . Simple regression  $P = \alpha + \beta_3 \text{INVCF} + e$  was used where P is

profit,  $\alpha$  is the y-intercept term, INVCF is cash flow from investing activities,  $\beta_3$  is the beta value and e is the standard error term. The mean of INVCF was regressed with mean of Profit through simple regression. Model summary results were as displayed in Table 8.

**Table 8: Regression Model for cash flow from investing activities**

Model		R	R Square	Model Summary		Std. Error of the Estimate	
				Adjusted R Square			
1		.848 <sup>a</sup>	.719	.717		2.62958	
a. Predictors: (Constant), INVCF							
Model		Sum of Squares		df	Mean Square	F	Sig.
1 Regression		3549.213		1	3549.213	513.286	.000 <sup>b</sup>
1 Residual		1389.851		101	6.915		
Total		4939.064		102			
a. Dependent Variable: P							
b. Predictors: (Constant), INVCF							
Model		Unstandardized Coefficients		Standardized Coefficients		T	Sig.
		B	Std. Error	Beta			
1	(Constant)	10.395	1.045			9.949	.000
	INVCF	1.084	.048	.848		22.656	.000
a. Dependent Variable: P							

From the results, the beta value was 0.848 at  $p=0.000$ . The  $r^2$  value was 0.719  $p=0.05$ . This meant 71.9% change in P was attributed to INVCF. The ANOVA summary showed the F test value 513.286 at  $p=0.000$ . The test is statistically significant to show that INVCF is fit to explain P. The model is fit to explain the variance in P attributed to INVCF. The student T- test was significant at 9.949,  $p=0.000$  without INVCF. When INVCF was introduced, it increased to 22.656, at  $p=0.000$ . This therefore meant the null hypothesis was rejected given the significance values of beta, given the decision rule was to reject Ho<sub>3</sub> if  $\beta_3 \neq 0$ ,  $P \leq 0.05$  ( $0.848 \neq 0$  at  $p \leq 0.05$ ). The relationship between INVCF and Profit was summarized in the regression model.

$$P = \alpha + 0.848 \text{INVCF} + e$$

The hypothesis H<sub>03</sub> was thus rejected given the tests were done at 95% confidence level and 0.05% significant. The findings from the current study are in agreement with the research results by Rehaman (2017) who analyzed cash flow from investment activities on profitability in Pakistan firm. The findings show a great significance to a firm because it directly influences both liquidity and profitability. Cash flow from investing comprises of both short term assets and short term liabilities of the enterprise. The study concluded that net investing cash flows affect profitability. The current findings contribute to an ongoing debate from a study by Parsian & Amir



(2013) who carried research on the effect of cash flow from operations on financial performance in Tehran stock exchange. The research was conducted to relate the influence of different component of cash flows on growth of profit. The study found that different operating cash flow components affect financial performance. The study concluded that bank profit increased so highly throughout the periods. The use of cash flows from operating activities has a great influence on profitability with negative effect.

### CONCLUSIONS AND RECOMMENDATIONS

The following conclusion was made from the research findings;

Cash flow from operating activities had a statistically significant influence on financial performance of Commercial banks in Kakamega County. Cash flow from financing activities had a statistically significant influence on financial performance of Commercial banks in Kakamega County. Cash flow from investing activities had a statistically significant influence on financial performance of Commercial banks in Kakamega County.

The study recommended that commercial banks in Kakamega County need to embrace the results generated by operating activities as being the main

source of financing and not a measure of profit. There is need for commercial banks in Kakamega County to create awareness that cash flow from financing activities shows changes in capital and the financing structure. The commercial banks in Kakamega County need to train staff to ensure that financing activities make it possible for the commercial banks to make money. The study proposes the need to enlighten staff on the issue of cash flow reflecting how an organization's cash is used to provide securities. Commercial banks need to embrace re-investment decisions to increase the value of securities.

### Suggestions for Further Research

The present study was done in Kakamega County in western Kenya. Future studies are encouraged to cover other commercial banks in other counties and compare the findings. The study did not test moderating influence of government policy on the relationship between cash flow and financial performance of commercial banks. Future studies are encouraged to establish the moderating influence. The study was done in the banking industry. Future studies are encouraged to be done in other sectors to compare the results.

### REFERENCES

- Adelegan (2003) An Empirical Analysis of the relationship between cash flow and divided charges in Nigeria. *Journal of Research in Development and management* Vol 15 pp 35- 49.
- Akinloye, I. R (2008). Effect of Capital Structure on firm's performance. The Nigeria Experience *European Journal of economics, Finance and administrative sciences* Vol 10 pp 233-243.
- Akpan A.B. (2007) Effectives of Banks Capitalization and consolidation in building market confidence An Assessment of economics, perception in Nigeria. *Abuja Journal of Business Admin Ohatu* 1(2) December.
- Al Tamini, H; & Al Mazrooei, D (2014). Factor influencing performance of the UAE Islamic & Conventional National Banks. *Journal of Finance and Economics*.
- Amah , K .O, Michael c, E and Ihenchirihu .J. U( 2016) Relationship of cashflow and financial performance of listed banks in Nigeria . *European Journal of Accounting, Auditing and finance Research*, 4(4), 87 -89.
- Anderson, K., K. Woodhouse, A. Ramsay, and R. Faff 2007, The persistence and pricing of earnings, accruals and free cash flows in Australia. In AFAANZ, Gold Coast, Australia: AFAANZ.

- Arthur, N., M. Chen, and R. Czerkowski 2008, The persistence of cash flow components into future earnings. In AFAANZ, Sydney: AFAANZ. Australian Accounting Standards Board. 1991, AASB 1026, Cash Flow Statements, AASB. 2004, AASB 107, Cash Flow Statements. AASB. 2005, Non-current Assets Held for Sale & Discontinued Operations. AASB.
- Binglar W., Worlf A and Amos W. (2014). Cash flow and corporate performance: A study of selected Food and Beverages Companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, Vol. 2(7), 77 – 87
- Bingilar P.F and Oyadongham K.J (2014): Cash flow and corporate performance. A study of selected food and beverages companies in Nigeria. *European Journal of Accounting Audit and finance Research* Vol 2No7 pp 77-87
- Bodic Z A, Kane and J. Marcus, 2004, Essential of investments 5<sup>th</sup> Edition New York, Irun. Boodhoo, R. (2004), Capital structure and ownership structure: a review of lifetime. *The Journal of online education*, January Edition pp1-8
- Bragg, S.M (2002) Business ratios and formulas: a comprehensive guide New York, Iruin.
- Brochet, F., Nam, S., Ronen, J., 2008. The Role of Accruals in Predicting Future Cash Flows and Stock Returns. *Working Paper*, Available at SSRN 1126022.
- Buglea, A. Analiza financiara. Concept si studio de caz, Editura Mirton, Timosoara, 2005, page 417-422.
- Buse ,L. Annaliza economic finance Editura Scrisul Romanesc,Craiova, 2003, page 95-102 Centre for Disease control and prevention (CDC) (2009). Data collection method for evaluation: Documents Review Evaluation Brief, No.18 January.
- CBK (2015). Central Bank of Kenya Risk
- Charles Mulford (2008) The association between various financial and cashflow measures. *Journal of accounting and financial reporting* .vol 3 NO 1 PP24-39
- Chaw and Hirt 2010 . The study of relationship between free cash flows and operating earnings with stock returns and growth of net market value of operating assets is TSE. Mash had Islamic Azad University of Mashod , Iron
- Chikashi, T. O.(2013) .An Investigation of comprehensive income and firm performance of Accounting and finance research vol 2wo2 pp29-35
- Cooper & Schindler 2003: the corporate Governance of Banks; A concise discussion of concept & Evidences policy research working paper 3404.
- Corb, 2012 . The impact of working Capital management policies on firm’s profitability and value: Evidence from Iranian companies; *International research journal of research of finance and economics*, 8(8), 155-162)
- Denzin and Lincoln (2011) Handbook of the quantitative Research thousand Oaks, C,A: sage.
- Dooley, K.E. (2007). Viewing Agricultural Education Research through a quantitative levy. *Journal of Agricultural education* Vol.48, not4, 2007.

- Efobi, R.U. (2008) *The Impact of Capital Structure on corporate profitability I Nigeria*. Ogun Sta : Department of accountancy, CBS, CU, OTA.
- Eliot B and Elliot J (2002). *Financial Accounting and Reporting* 12<sup>th</sup> Edition, London, Prenlice Hall/Financial times.
- Erkki, K,(2004) *Cash Management Behavior of firms and its structural change in an Emerging Money Market*. Faculty of Economics and Business Administration, Department of Accounting and Finance, University of Oulu.
- Fabozzi, F. J. and H. M. Markowitz, 2006. *The Theory and practice of investment* London: Wiley.
- Fan, Y. & Addams, H.L. (2012) United States based international manual funds: Performance and persistence. *Journal of Financial Services Review*, 21(1), 51-61.
- Francis, R.N., Eason, P., 2012. Accruals and the naïve out-of-sample prediction of operating cash flow. *Adv. Account.* 28, 226–234.
- Helen K (2012). The effect of lenders decision. *The International Journal of Accounting* Vol 37 no 3 pp3 47-362
- Hribar, P., and D. Collins 2002, Errors in estimating accruals: *implications for empirical research*, *Journal of Accounting Research*, Vol.40. No.1
- International Accounting Standards Board 1998, Non-current Assets Held For Sale and Discontinued Operations, IASB. 2008, Discussion Paper: Preliminary Views on Financial Statement Presentation, London, IASB.
- Ivatury G & Pickens, M (2006) *Mobile Phone banking and Low Income Consumers: Evidence from South Africa*, CGAP, UN Foundation, Vodafone Group Foundation
- Kamau G. (2010). *The relationship between cash-flows and profitability of commercial banks in Kenya*, Unpublished MBA Project, University of Nairobi
- Karen, (2003) *Internet Banking in Estonia*. New York: Praxis. *Journal of Manufacturing and service operations management*, 14 (2) 186-201
- Khaliq, Hussein, Altarturi, Mohd and Thaker R. (2014). Cash Position and Profitability of Telecommunication Sector in Srilanka. *Greener Journal of Social Sciences*, Vol. 3 (6), 324 – 333
- Kotter P (2000) *marketing management analysis planning and implementation* 2<sup>nd</sup> Edition, Millennium Edition, Prentise Hull.
- Kroes, J., Subramanian, R and Subramanyam, R (2012). *Operational compliance levers, environmental performance, and firm performance under cap and trade regulation*.
- Kumar, R (2010) *Research methodology: A-step-by step Guide for Beginners*, London: Sage
- Libby R, Libby P. A and Short D. G (2001) *Financial Accounting*, New York, Me Graw – Hill Companies live.
- Lucas,Y. (2013). *Personnel and Human Resource Management (5<sup>th</sup> Ed.)*. Continuum London: NewYork Publishers.
- Mangeli (2012) *determinant of banks Financial Performance in Developing Economics; Evidence from Kenyan Commercial Banks in Kenya. A case study of National Banks of Kenya Coast Region*

- Marker and Singh (2013). Relationship of cash flow and financial performance. *European Journal of Accounting Auditing, and Finance Research*, 4(4), 89-97
- Mauchi, F.N., Nzaro, R. and Njanjike, K. (2011). The effectiveness of cash management policies: a case study of HUnyani Flexible products. *International Research journals* 2(7) 1299-1305.
- Mello-E-Souza C.A. 2006, taking the mystery out of the cash flow statement: a simplified implementation of the indirect method 10.2139/ssrn.424201. SSRN elibrary.
- Mellenberg, G.J. (2008). Strategic Talent Management: A review and Research Agenda. *Human Resource Management Review*, 20 (5), 204–213.
- Mongo, G. (2010). *The relationship between casflow and profitability of commercial banks in Kenya*. Unpublished MBA project, university of Nairobi
- Mugenda, O. and Mugenda, A. (2003) Research methods quantitative and quantitative approaches. Acts press Nairobi
- Mung'o W., (2014). The Relationship between *Cash Flow and Profitability of Small and Medium Enterprises in Nairobi Country*. A Research Project Submitted for the Award of Degree of Masters of Business Administration, University of Nairobi.
- Mwega R. (2015). The Relationship between Cash Flow and Financial Performance of Accepted Companies in the Tehran Stock Exchange, MAGNT Research Report
- Nasieku C. A. (2014). *Effect of free cash flow on profitability of firms listed on the Nairobi Securities Exchange*. A Research Project submitted for the award of Degree of Masters of Business Administration. School of Business, University of Nairobi
- Nabwanga R Ojera. P. Alphonse J & Otieno S, (2011) Effect of working capital management practices on financial performance. A study of small scale enterprise in Kisii South District, Kenya. *African Journal of Business Management* Vol. 6(18) PP 5801-5817. 9 May, 2012.
- Ndugu, W. and Duoch, O. (2016). Effect of cashflow management on market performance of public construction companies on Kenya *International Journal of social sciences and information Technology*, 2(8), 1-12.
- Nwanyanwu Loveday (2015) Cash flow and Organizational performance in Nigeria: Hospitality and Print media industries perspectives. *European Journal of Business, Economics and Accounting* Vol 3 no 3 pp66-70.
- Okpanachi, Samuel G. J. and Suleiman T (2013) corporate Governance principles Application and the financial performance of Deposit named Banks in Nigeria: An Impact Assessment. *Journal of Finance and accounting* 2014 Vol2.
- Olweny, T. & Shipho, T.M. (2011). Effect of Banking sectoral factors on the Profitability of Commercial Banks in Kenya. *Economics and Finance Review* 1,(15), 1-30
- Orpurt, S., Zang, Y., 2009. Do direct cash flow disclosures help predict future operating cash flows and earnings? *Account. Rev.* 84, 893– 935.
- Pae, J., Yoon, S.-S., 2012. Determinants of analysts cash flow forecast accuracy.

- Quinn, M. 2011 Forget about profit, cash flow is king. *Wall Street Journal*, 2 (3) 2-16.
- Robert, P & Theresa, H. (2015). *The Fund Industry: How Your Money is Managed* (2<sup>nd</sup> ed). Hoboken, NJ: Wiley Finance.
- Sulayman H. Afieh: Liquidity Analysis using Cash Flow Ratio as Component to Traditional Ratio in the pharmaceutical sector in *Jordan International Journal of Financial Researcher* Vol5 No3.
- Turcay , M .(2011) *The cashflow Journal Buchavest* , Academy of economic studies . Buchavest Academy of economic studies
- Uwonda,G. and Okello, N.(2013). *Cash flow management utilization by small Medium Enterprises (SMEs) in Northern Uganda*. Merit Research Journal of Accounting, Auditing, Economics and Finance.
- Valceanu, Ghe. Analiza economico-financiara, Editura Economica, Bucuresti, 2004, page 364-380.
- Watson J.(2005) *The Association of Various Earnings and cash flow measures of firm performance and stock returns*. School of accounting, University of Technology, Sydney.
- WB (2016). World Bank International.
- Will Kenton 2018. Financial analysis Tools and Techniques, *A guide for managers, mcx Grawful publishing*; 2018pg 426-478
- Zhou H., S Yang and M Zhang, 2012. *Relationship between free cash flow and flow and financial performance* Evidence from listed Real Estate Companies in China IPCSI 36:331-335.