CASH FLOW MANAGEMENT ON FINANCIAL PERFORMANCE OF MANUFACTURING AND ALLIED FIRMS LISTED IN NAIROBI SECURITIES EXCHANGE, KENYA

Mwasingo, J. M., & Ibrahim, A.

The Strategic JOURNAL of Business & Change MANAGEMENT
ISSN: 2312-9492 www.strategicjournals.com
Vol. 9, Iss. 4, pp 976 – 990. November 3, 2022. www.strategicjournals.com, ©Strategic Journals

CASH FLOW MANAGEMENT ON FINANCIAL PERFORMANCE OF MANUFACTURING AND ALLIED FIRMS LISTED IN NAIROBI SECURITIES EXCHANGE, KENYA

[1] Mwasingo, J. M., & [2] Ibrahim, A.

[1] MBA Student, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Kenya
[2] Doctor, Lecturer, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Kenya

Accepted: October 21, 2022

ABSTRACT

The purpose of the study is to investigate the effect of cash flow management on financial performance of manufacturing and allied firms listed in NSE. The study used cross sectional descriptive research design. The study studied all 6 NSE listed manufacturing and allied companies in Kenya. The study targeted senior management of all 6 listed manufacturing firms. Stratified random sampling technique was used to select a sample size of 74 respondents with the help of Slovin's formula. The study employed both primary data and secondary data drawn from financial statements of the selected manufacturing firms for the period of study. The data was analyzed by descriptive statistics such as, mean and standard deviation. Correlation analysis and multiple linear regression analysis was used to establish the relationship between cash flows management and financial performance of manufacturing firms. Hypothesis testing was performed using t-test and F-test. The t test was used to test the statistical significance of the independent variables while ANOVA F statistic was used to confirm the goodness of fit using level of significance in the regression model. The analyzed data was presented by use of tables. The descriptive results revealed that the business operating cash flow comes from cash receipts for the sale of goods or services and the manufacturing firms receive operating cash flow from cash interest and the firms' major cash outflow is through taxes, and government fees. The study also established that firm's net operating cash flow is sufficient and the manufacturing firms collect principal on debt instruments of other entities. The study concluded that the manufacturing and allied firm's net free cash flow has increased. Also firms use free cash flow to pay dividends and the firms' net free cash flow is used to settle creditor's payment in most cases. The study further concluded that the manufacturing and allied firms listed in stock exchange have strong free cash flow. The study recommended that the management of manufacturing firms should management the operating cash flow emanating from cash receipts for the sale of goods or services. This could be achieved by adopting aggressive selling practices so as to maximize sales. Also the manufacturing firms should manage operating cash flow received from cash interest. The management of manufacturing and allied firms should find a mechanism to curb cash outflow which is through taxes and other government fees.

Key Words: *Operating Cash Flow, Investing Cash Flow, Financing Cash Flow, Free Cash Flow*

CITATION: Mwasingo, J. M., & Ibrahim, A. (2022). Cash flow management on financial performance of manufacturing and allied firms listed in Nairobi Securities Exchange, Kenya. *The Strategic Journal of Business & Change Management,* 9 (4), 976 – 990.

INTRODUCTION

World over, manufacturing sector has played an important role in driving economic development by stimulating and sustaining high productive growth, boosting employment opportunities for semi-skilled labour and building country competitiveness through exports (Abdul Rahman & Sharma, 2020). Very few countries in the world have managed to industrialize and develop without the manufacturing sector playing a leading role. However, since 2019, global manufacturing output has been on a steep decline attributed to the uncertainty caused by Brexit and trade tension between the U.S and China (UNIDO, 2020). Further, the global outbreak of COVID-19 pandemic exacerbated the drop in manufacturing output as several countries went into lockdown towards the end of the first quarter of 2020. As a result, global manufacturing output dropped by 6%, 11.2%, and 1.1% in the first, second and third quarters of 2020, respectively, with industrialized economies registering the biggest drop (Algieri, Aquino & Succurro, 2020).

The smooth running of an organization's operations is heavily dependent on a firm's cash flow. The optimal cash levels maintained by a firm is determined by its different policies regarding investments, dividend payment, cash flow management, working capital requirements and capital structure (Kamran, Zhao & Ambreen, 2017). Cash is essential for the operations and continuous survival of every business entity, including the manufacturing firms. Cash is needed on a day to day basis to pay for the entity's financial needs and other obligations as they fall due (Algieri, Aquino, & Succurro, 2020). Management of cash flow could be a vital component of any company's operational plan (Quinn, 2016). Cash flow is an index of the money that is actually received by or paid out by a firm for certain time period. This index is not inclusive of non-cash accounting charges such as depreciation. Cash represents the firm's vascular system, if it dwindles, the business will not survive (Algieri, Aquino & Succurro, 2020).

In Africa, manufacturing output expanded by a modest 0.8% compared to the global manufacturing output expansion by 12% in the first quarter of 2021. Nwakaego, Ikechukwu and Ifunanya (2016) study of Nigerian firms revealed that cash flows had a negative and significant outcome on corporate performance in the industry dealing with food. In Ghana, an empirical investigation by Hamza, Mutala and Antwi (2017) established that cash flow management components were positively and considerably correlated to the financial performance of Small and Medium Enterprises.

In Kenya, Kenya Association of Manufacturers (KAM) and global auditing firm KPMG survey of 2020 indicated that manufacturers have witnessed reduced demand, faced challenges in sourcing for raw materials, cash flow challenges and reduced working hours which drove down production and output. The report has also shown that 79 percent of surveyed companies are experiencing cash flow constraints, with 86 percent of SMEs facing the same challenge, leading to difficulties in facing their financial obligations such as salaries and operational costs. Overall, output by the manufacturing sector contracted by 3.2 percent in 2020 Q3 and 3.9 percent in 2020 Q2 compared to a growth of 2.9 percent in 2020 Q1. The Manufacturing sector's contribution to GDP reduced to 7.5% in 2019 from 7.8% in 2018. Value added by the sector dropped to KSh. 183 billion in 2020 Q3 from KSh.191 billion in 2020 Q1 (KNBS Quarterly GDP report, 2020).

Confirming the manufacturing firms' woes in Kenya, Trans-century Plc has been facing adverse cash flow challenges for the last 4 years, i.e. from 2015 to 2021. The company has been operating in a fairly difficult financial environment due to inability to raise necessary funds to finance its working capital requirements and business operations (Trans-century report, 2021). The Trans-century company was forced to implement critical turnaround plan based on debt reprofiling to match cash flows thus reducing the annual debt service cash outflows by nearly Kes 500 million. It is also planning for

The Strategic Journal of Business & Change Management. ISSN 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

delisting from NSE as a strategic restructuring measure. The reasons behind application by the company to delist due to continued mismatch between the company's debt profile and cash flows (Trans-century report, 2021).

Statement of the Problem

Management of cash flow has a big and positive relationship with company performance (Abdul Rahman & Sharma, 2020). In Kenya, KAM, KPMG survey of 2020 indicated that manufacturers have witnessed reduced demand, faced challenges in sourcing for raw materials, cash flow challenges and reduced working hours which drove down production and output. The survey showed that compared to last year, many manufacturing firms (18%) experienced a decrease in their sales turnover of more than 30% in 2020. Manufacturing firms in Mombasa, just like their counterparts in other parts of Kenya, have continued to record decline in returns.

Bamburi cement in 2020 deliberately released cash tied up in trade receivables and inventories to boost its cash flow revenue. Despite this measure, the company revenue declined by 5% from Kes 36,796 million in 2019 to Kes 34,884 million in 2020 (Capital Markets Authority, 2020). Trans-century Plc in 2020 implemented critical turnaround plan based on debt reprofiling to match cash flows thus reducing the annual debt service cash outflows by nearly Kes 500 million. However, these plans have not solved the dismal performance and in 2021, the company has applied for delisting from NSE due to the continued mismatch between the company's debt profile and cash flows. In light of these significant developments in the manufacturing sector, there is a need to investigate the cash flow management effect of financial performance of manufacturing firms.

The extant body of cash flow management literature finds mixed support for the theoretical predictions on the relationship between cash flow management and performance. Soeti (2020) investigated the effect of management of cash flow on the financial performance of mutual funds in Kenya. Muraya (2018) conducted a study to investigate the effect of cash flow on financial performance of investment firms listed in Nairobi Securities Exchange. Oteyo (2018) did a study on effect of cash management on financial performance of SMEs in Nakuru County. Murigu, Kiragu and Kiai (2018) carried out an investigation on cash flow management practices effect on hotels performance in Nyeri County. Although the reviewed literature has shown many studies have been done on cash flow and performance, the studies have narrowly addressed the implication of cash flow management on perspective of manufacturing firms' financial performance in a developing economy like Kenya. The current study sought to fill the knowledge gaps by investigating the effect of cash flow management on financial performance of NSE listed manufacturing and allied firms in Kenya.

Objective of the Study

The general objective of the study was to investigate the effect of cash flow management on financial performance of manufacturing and allied firms listed in Nairobi Securities Exchange, Kenya. The study was guided by the following specific objectives;

- To investigate the effect of operating cash flow on financial performance of manufacturing and allied firms listed in Nairobi Securities Exchange, Kenya
- To determine the effect of investing cash flow on financial performance of manufacturing and allied firms listed in Nairobi Securities Exchange, Kenya
- To evaluate the effect of financing cash flow on financial performance of manufacturing and allied firms listed in Nairobi Securities Exchange, Kenya
- To establish the effect of free cash flow on financial performance of manufacturing and allied firms listed in Nairobi Securities Exchange, Kenya

The Strategic Journal of Business & Change Management. **ISSN** 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

The research tested the following hypotheses;

- **$H_0$1:** Operating cash flow has no significant effect on financial performance of manufacturing and allied firms listed in Nairobi Securities Exchange, Kenya
- **$H_0$2:** Investing cash flow has no significant effect on financial performance of manufacturing and allied firms listed in Nairobi Securities Exchange, Kenya
- **$H_0$3:** Financing cash flow has no significant effect on financial performance of manufacturing and allied firms listed in Nairobi Securities Exchange, Kenya
- **$H_0$4:** Free cash flow has no significant effect on financial performance of manufacturing and allied firms listed in Nairobi Securities Exchange, Kenya

LITERATURE REVIEW

Theoretical Review

Free Cash Flow Theory

Free cash flow theory was developed by Jensen in 1986. This theory refers to surplus of cash is available after financing profitable firms. This states that net income from capital expenditure (CAPEX), influences financial performance of firms. Schoubben (2016) described high free cash flow is the net income adding depreciation and amortization, minus capital expenditure, minus change in non-cash flows, plus borrowing.

As Huseyin (2017) asserts, managers have an incentive to hoard cash to increase the amount of assets under their control and to gain discretionary power over the firm investment decision, (as cited in Jensen, 1986). Having cash available to invest, the manager does not need to raise external funds and to provide capital markets detailed information about the firm's investment projects (Huseyin, 2017). Hence, managers could undertake investments that have a negative impact on shareholders wealth.

Keynesian Theory of Money

This theory was started by Keynes in 1936. Theory of Keynesian stated three reasons for holding money in cash; one is the need of maintaining liquidity, the second is for transaction, the speculative and precautions motives. The assumption is that speculative motive is the need to hold cash to improve performance when need arise for purchase, or favorable exchange. The precautionary motive is the only need to hold cash to cater for unexpected events. The transaction motive is the need to have cash on hand to pay daily expenses (Ali, 2016).

The limitations of this theory are that it only presented motives for holding cash which cannot be relied in improving financial performance of firms. Having effective cash flows management does not mean that firms are able to improve financial performance. Thus, a firm needs to maintain its cash flows statement in order to analyze profitability which may be negatively affected cash flows (Adelegan, 2017). According to Richardson (2016) argued on the theory that firms having surplus cash in ventures is translating to profitability situation, and hence cash flow management depends on resources at manager's discretion to apportion.

Agency Theory

The theory was instigated and developed by Jensen & Meckling in 1976. According to Jensen, the intention of managers is typically not aligned with those of shareholders and if managers have plenty of cash at their disposal, they use these assets to gain personal benefits rather than raise the significance of the institution. Therefore, in the model managers have an agenda of accumulating assets in sequence to gain discretionary have power over a firm's investment decisions (Jensen & Meckling, 1976). In this setting, the management of the firm settles on whether cash is held by the firm or paid to its investors. Consecutively for managers to pursue their individual interests, cash constitutes the most suitable form of financing, as having to raise external funds usually requires that the firm

The Strategic Journal of Business & Change Management. ISSN 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

provides the lender with insights into how the funds are going to be used.

The agency theory presupposes that large-scale preservation of incomes gives confidence behavior by managers that do not capitalize on investor value. Managers acquire control over corporate resources either from outside contributions of debt or equity capital or from earnings retentions (Bates, Kahle & Stulz, 2016). A firm with superior capability to self-finance its ventures that trim down shareholders' wealth are companies with better ability to generate and internal funds its activities (Foley, Titman, Hartzell, & Twite, 2016). Agency theory predicts that companies with higher free cash flow result in to increase in a firm's cash holdings. The explanation of the agency is largely inconsistent with the changes or adjustments in the cash holdings of the firm. According to Grigore and Stefan-Duicu (2016), agency theory remains insufficiently studied with empirical verification difficulties mainly due to the difficulty of measuring the agency costs. This theory is informed of the independent variable operating cash flow by listed manufacturing and allied firms Kenya.

Conceptual Framework

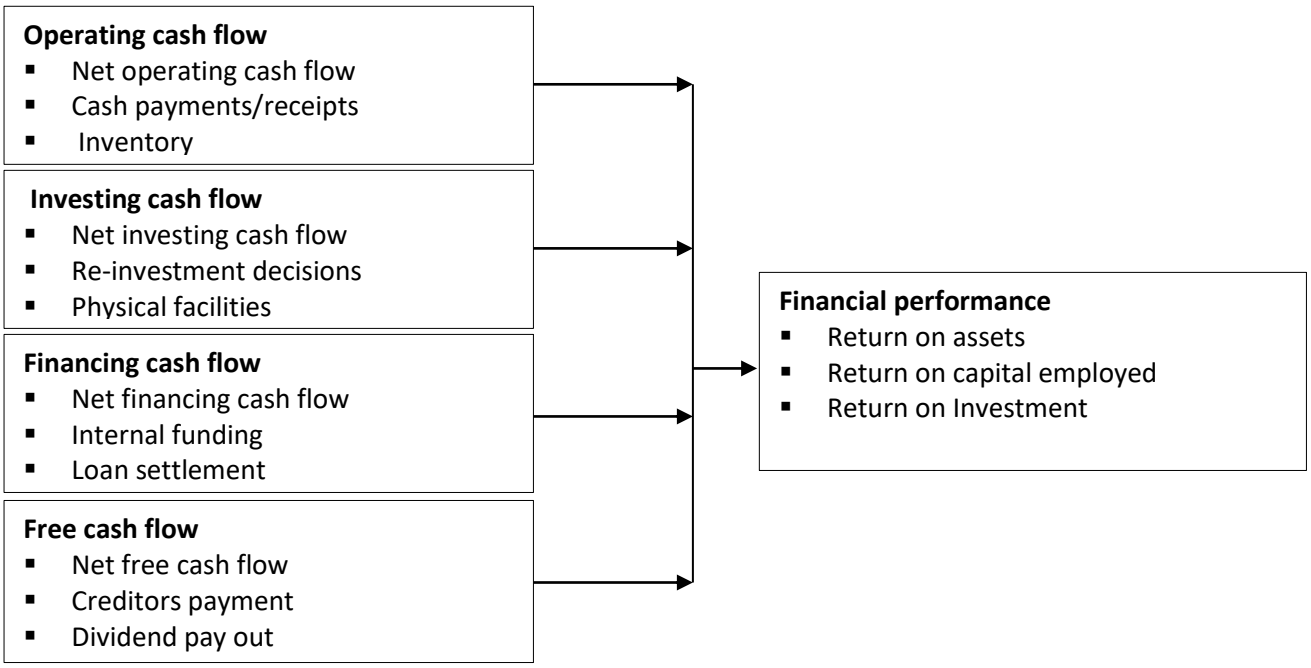

Figure 1: Conceptual framework

Review of Literature on Variables

Operating Cash Flow: Cash flows from operating activities show whether a company's daily operations generated or depleted cash. These are the main generating activities of the firm. They are the activities from which the entity derives its profit or loss. The operating activities give an idea of how much cash an organisation must have generated from its day-to-day delivery of its products and services. This number can and should be compared with the operating income on the income statement. Bhattacharyya (2016) stated that operating activities generally include those that enter into the determination of net income of the entity such as cash receipt from sale of goods and services, cash payment to suppliers of goods, cash payments to employees, etc.

The Strategic Journal of Business & Change Management. ISSN 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

Investing Cash Flow: Cash flow from investing activities is an item on the cash flow statement that reports the aggregate change in a company's cash position resulting from any gains (or losses) from investments in the stock markets and operating subsidiaries and changes resulting from amounts spent on investments in capital assets such as plant and equipment. Investing activities are cash flows relating to the acquisition and disposal of long term assets and investments. They are cash flow from activities that are related to capital expenditure, acquisitions and inter-corporate investments of the firm. Some of the activities that fall under this are; cash receipts from the disposal of non-current assets, cash payment to acquire non-current assets, etc. (Ambreen & Aftab, 2016).

Financing Cash Flow: Financing activities relate to activities attributed to acquisition of capital to finance start-ups, expansion or financing of any other activity that the business organization needs extra funds for. Cash flows from financing activities may be defined as cash flows from those activities that are neither operating nor investing. To be specific, they include, loan repayments, investment by firm owners, dividends received by firm owners and supply of bonds or stocks. Cash investments by firm owners entail repurchase of shares due to sale by some shareholders. Share repurchase may occur due to the following reasons; firstly, scramble for shares by investors due to decrease in price.

Free Cash Flow: Free cash flows indicate the amount of cash generated each year that is free and clear of all internal or external obligations. According to Zhou, Yang and Zhang (2016) free cash flow management is the management of the cash flow created by a firm's operations that is available to compensate its financial commitments to those that have provided its funding. These include its equity shareholders and its lenders. Free cash flow is the finances accessible to administrators ahead of the flexible capital venture or investment conclusion. It corresponds to cash that a firm is capable to make after laying out funds mandatory to preserve or enlarge its asset base.

Financial Performance: Metcalf and Titard (2016) observes that financial performance is the process of measuring the results of a firm's policies and operations in monetary terms. Financial performance of a firm can be measured using variables such as profitability and liquidity. Profitability measures the extent to which a business generates a profit from the factors of production. Four useful measures of firms' profitability are Return on Assets (ROA), Return on Equity (ROE), Operating profit Margin and Net Income. Liquidity on the other hand, measures the ability of the firm to meet financial obligations as they fall due, without disrupting the owner equity, using the market value of assets. Liquidity can be measured using the current ratio which is the ratio of current assets to current liabilities.

Empirical Review

Konak (2018) on his part examined the effect of cash flows on firm performance through estimating the impact of three types of cash flows that are namely operational, investing and financing cash flows of companies listed on the Borsa İstanbul Industrial Index in 10 years' period from 2008 to 2017. To reveal the relationship between firm performance and cash flows, cash flows from operating, investing and financing activities are included in the analysis as independent variables, while ROA, ROE and Tobins q are determined as dependent variables. Moreover, Pooled Ordinary Least Squares test and Panel Data technique are employed. The outcomes obtained that although statistically significant relationship between cash flows and firm performance is detected, that relationship differed from the effect of the model and the direction of the relationship on the basis of dependent variables.

Rehaman (2017) analyzed cash flow from investment activities on profitability in Pakistan firm. The study aims to examine the differences between net cash flows from operating and profitability in Pakistan firm. Objectives were to establish effect of cash flow from investing on profitability, effect of current assets on profitability

The Strategic Journal of Business & Change Management. ISSN 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

and to assess the effect of current liabilities on profitability the firm. The sample size was 23 firms. The study used descriptive statistics. The findings show a great significance to a firm, because it directly influences both liquidity and profitability. Cash flow from investing comprises of both current assets and current liabilities of the firm. The study concluded that net investing cash flows affect profitability.

Mohammed, Zheng and Sadaf (2017) studied the significance of free cash flows on the profitability of firms listed at the Karachi Stock Exchange. Descriptive statistics was used to analyze the impact of free cash flow on the profitability of firms listed at the KSE. Data were obtained from audited annual reports and financial statements for a period of five years (2010 –2014). Regression model was used to analyze the quantitative data. Research indicates that free cash flow is significantly and positively correlated with profitability of firms on the basis of obtained data.

Tijjani and Sani (2016) investigated the impact of free cash flow on the dividend policy of oil and gas companies in Nigeria. Dividend per share was the dependent variable, Independent variable was free cash flow of the listed oil and gas companies (FCF) while the Controls variables included leverage and earnings per share. The study applied descriptive research design and collected data from financial reports of the sampled firms for yeas 2003 to 2014. Multiple regression techniques were used in analyzing data. The study findings indicated that free cash flow had significant and positive earnings per share. Furthermore, the study found out that leverage had a significant and negative effect on the dividend policy of listed gas and oil firms in Nigeria.

Muraya (2018) conducted a study to investigate the effect of cash flow on financial performance of investment firms listed in Nairobi Securities Exchange. The study used descriptive research design to describe the correlation between the independent and dependent variables. The data scrutinized for this study was purely secondary data obtained from the audited accounts of the listed investment firms. The population of the study comprised of all the five investment firms listed in the Nairobi Securities Exchange. Therefore, the study constituted a census survey. Nairobi Securities Exchange for the period 2012-2016. The data collected was later analyzed using the Statistical Package for Social Sciences (SPSS). Regression analysis of the study indicated that the relationship between operating cash flows and profit after tax was low and there was insignificant statistical correlation between the two variables. Thus, tax has no effect on operating cash flows.

Soet, Muturi and Oluoch (2018) studied the effect of operating cash flow management on financial performance of mutual funds in Kenya. The study employed causal research. Secondary panel data from the audited financial statements of 22 mutual funds was retrieved from financial reports for the period 2011-2016. The data was evaluated using the regression technique. The study found out that operating cash flow management had significant and positive effect on return on assets and insignificant and positive effect on return on equity. The study concludes that operating cash flow management had significant and positive effect on return on assets and insignificant and positive effect on return on equity.

METHODOLOGY

The study used cross-sectional survey research design. A cross-sectional research design is tool used by the researcher to gather data constituting of multiple variables at specific point in time (Creswell, 2014). The study unit of observation was the 6 NSE listed manufacturing and allied companies. The study unit of analysis was management staff of the 6 manufacturing and allied firms listed in Nairobi Securities Exchange. Research data for this study comprised the primary data and secondary data. The primary data was collected by use of close ended questionnaires which were structured based on the research objectives. The researcher used questionnaires because they are easier to analyze as they are in immediate usable form, easier to administer and lastly they are

The Strategic Journal of Business & Change Management. **ISSN** 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

economical to use in terms of time and money (Cooper & Schindler, 2013). The gathering of secondary data was done using the secondary data collection sheet presented. Collected data was sorted and analyzed quantitatively. Descriptive statistics (Mean and standard deviation) was computed. Apart from descriptive statistics, regression analysis was used to measure and predict the relationship between the predictor variables and the dependent variable. The data collection tool used was Statistical Package for Social Sciences (SPSS) version 25. Analyzed data was presented in frequency distribution tables. The general form of the model was as follows:

$Y= \beta_{\theta} +\beta_1X_1+\beta_2X_2+\beta_3X_3+ \beta_4X_4+\varepsilon$

Where:

Y= Financial performance

β_{θ} = constant term

β_1-β_4 are the coefficient to estimate

X_1= Operating cash flow

X_2= Investing cash flow

X_3= Financing cash flow

X_4= Free cash flow

ε= Error term

FINDINGS AND DATA ANALYSIS

The study targeted 6 listed manufacturing and allied firms where 74 respondents formed the unit of analysis. Out of these 61 responses were obtained.

Descriptive Analysis

Descriptive analysis was conducted on the study variables to check the mean and standard deviation. The results are presented in the following tables.

Operating Cash Flow

The researcher asked respondents to rate their agreement or disagreement on the various aspects of operating cash flow. They were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 1.

Table 1: Operating Cash Flow

	N	Mean	Std. Deviation
Business operating cash flow comes from cash receipts for the sale of goods or services	61	4.90	.253
Company receives operating cash flow from cash interest	61	3.76	.885
Company major cash outflow is through taxes, and government fees	61	4.03	.929
The company net operating cash flow is sufficient	61	4.63	.366

From Table 1 it can be observed that respondents agreed to the statement that the business operating cash flow comes from cash receipts for the sale of goods or services as indicated by a mean of 4.90 and standard deviation of 0.253. The respondents agreed to the statement that the company receives operating cash flow from cash interest as shown by a mean of 3.76 and a standard deviation of 0.885. The respondents agreed to the statement that the company major cash outflow is through taxes, and government fees and that the company net operating cash flow is sufficient as indicated by a mean of 4.03 and a mean of 4.63 respectively.

Investing Cash Flow

The study respondents were asked to rate their agreement or disagreement on the various aspects of investing cash flow. They were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 2.

The Strategic Journal of Business & Change Management. ISSN 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

Table 2: Investing Cash Flow

	N	Mean	Std. Deviation
Company collects principal on debt instruments of other entities	61	2.58	.996
Cash received from the sale of productive assets is the primary investing activity cash flow	61	4.86	.777
Company gets cash proceeds from the sale of equity investments	61	4.97	.209
Company cash flows are used to pay to acquire property, plant and equipment	61	2.80	.428

From the findings, respondents disagreed to the statement that the company collects principal on debt instruments of other entities as indicated by a mean of 2.58 and standard deviation of 0.996. The respondents agreed to the statement that the cash received from the sale of productive assets is the primary investing activity cash flow as shown by a mean of 4.86 and a standard deviation of 0.750. Further, the respondents agreed to the statement that the company gets cash proceeds from the sale of equity investments (mean=4.97). However, respondents were in disagreement that the company cash flows are used to pay to acquire property, plant and equipment as indicated by a mean of 2.80 with a standard deviation of 0.428.

Financing Cash Flow

The study respondents were asked to rate their agreement or disagreement on the various aspects of financing cash flow. They were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results were presented in Table 3.

Table 3: Financing Cash Flow

	N	Mean	Std. Deviation
Company pays attention to the timing of funds inflows and outflows to ensure that cash is available to meet its financing needs	61	4.79	.295
Financing cash flow of the company is in form of cash repayments of loans	61	4.85	.228
Financing cash flow is affected by the amount used by business in repaying principal on long and short-term debt	61	3.90	.723
Company relies on cash proceeds from issuing debentures loans notes	61	2.69	.605

Table 3 showed that respondents agreed to the statement that the company pays attention to the timing of funds inflows and outflows to ensure that cash is available to meet its financing needs as indicated by a mean of 4.79 with a standard deviation of .295. Further respondents agreed to the statement that the financing cash flow of the company is in form of cash repayments of loans as indicated by a mean of 4.85 with a standard deviation of 0.228. Respondents agreed to the statement that the financing cash flow is affected by the amount used by business in repaying principal on long and short-term debt as indicated by a mean of 3.90 and standard deviation of 0.723. However, respondents disagreed to the statement that the company relies on cash proceeds from issuing debentures loans notes as indicated by a mean of 2.69 and standard deviation of 0.605.

Free Cash Flow

The study respondents were asked to rate their agreement or disagreement on the various aspects of free cash flow. They were required to do this on a 5 point Likert scale where 1 represented Strongly disagree while 5 represented Strongly agree. The results are presented in Table 4.

The Strategic Journal of Business & Change Management. ISSN 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

Table 4: Free Cash Flow

	N	Mean	Std. Deviation
Company net free cash flow has increased	61	4.00	.816
Free cash flow is used to pay dividends	61	4.13	.511
Company's net free cash flow is used to settle creditors payment	61	4.50	.895
The company has poor free cash flow	61	2.47	.929

Results in Table 4 showed that respondents agreed to the statement that the company net free cash flow has increased as indicated by a mean of 4.00 and standard deviation of 0.816. Findings further showed that respondents agreed to the statement that the company uses free cash flow to pay dividends as indicated by a mean of 4.13 and standard deviation of 0.511. The findings also showed that respondents agreed to the statement that the company's net free cash flow is used to settle creditors payment (mean = 4.50). The respondents disagreed to the statement that the company has poor free cash flow (mean = 2.47).

Multiple Regression Analysis

The data was used to regress financial performance on operating cash flow, investing cash flow, financing cash flow and free cash flow. The results of regression analysis are presented as follows.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.769[a]	.592	.589	.55247

a. Predictors: (Constant), Operating cash flow, Investing cash flow, Financing cash flow, Free cash flow

b. Dependent Variable: Financial performance

From Table 5, the correlation coefficient for cash flow management and financial performance of manufacturing and allied firms is 0.769 indicating that there is a positive correlation. The coefficient of determination (R^2) is 0.592 indicates that 59.2% of the variation in financial performance is explained by operating cash flow, investing cash flow, financing cash flow and free cash flow. This implies that 41.8% of the unexplained variations in financial performance is accounted for by the other variables not considered in the model.

Table 6: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	51.244	4	12.811	20.334	.000[b]
	Residual	35.284	56	.630		
	Total	86.528	60			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Operating cash flow, Investing cash flow, Financing cash flow, Free cash flow

According to analysis of variance results in Table 6, the predicted relationship under the model is statistically significant at p–value of 0.000 is less than the significance level of 0.05. This shows that the model between cash flow management and financial performance is statistically significant. The model coefficient is shown in Table 7.

The Strategic Journal of Business & Change Management. ISSN 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

Table 7: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.195	.086		2.267	.000
	Operating cash flow	.297	.117	.190	2.538	.011
	Investing cash flow	.594	.309	.483	2.922	.008
	Financing cash flow	-.332	.118	.075	-2.813	.000
	Free cash flow	.511	.246	.386	2.077	.026

a. Dependent Variable: Financial Performance

From Table 7, the model would appear as follows:

$$Y = 0.195 + 0.297X_1 + 0.594X_2 - 0.332X_3 + 0.511X_4$$

The regression model indicates that financial performance would increase by 0.195, given that all the other factors are held constant at zero. Further in the regression model it shows that a unit increase in operating cash flow would lead to an increase in financial performance by 0.297. A unit increase in investing cash flow would lead to a positive increase in financial performance by 0.594. A unit increase in financing cash flow would lead to a negative increase in financial performance by 0.332 and a unit increase in free cash flow would lead to an increase in financial performance by 0.511. The predictors had significance level of 0.05 and below hence significant.

Discussion of Findings and Hypotheses Testing

Given the P values as shown in the results, hypotheses testing can be concluded as below.

H_{01}: Operating cash flow has no significant effect on financial performance of listed manufacturing and allied firms.

In relation to the variable operating cash flow, the results showed that operating cash flow has a significant effect on financial performance. This was in line with the results of regression analysis t-value of 2.538 which is greater than the critical value 2.0 and a p-value of 0.00 at 95% level of significance which is less than 0.05, hence the study rejected the null hypothesis that there is no significant effect of operating cash flow on financial performance of manufacturing and allied firms listed in NSE.

H_{02}: Investing cash flow has no significant effect on financial performance of listed manufacturing and allied firms.

In relation to the variable investing cash flow, the result above indicates that investing cash flow has a significant effect on financial performance. This is supported by regression analysis t-value of 2.922 which is greater than the critical value 2.0 and a p-value of 0.008 at 95% level of significance which is less than 0.05 thus the study rejected the null hypothesis that there is no significant effect of investing cash flow on financial performance of manufacturing and allied firms listed in NSE.

H_{03}: Financing cash flow has no significant effect on financial performance of listed manufacturing and allied firms.

In relation to the variable financing cash flow on performance, the regression results showed that financing cash flow has a significant effect on financial performance. It was supported by regression t-value of 2.813 which is greater than the critical value 2.0 and a P-value of 0.013 at 95% level of significance which is less than 0.05. The study rejected the null hypothesis that there is no significant effect of financing cash flow on financial performance of manufacturing and allied firms listed in NSE.

H_{04}: Free cash flow has no significant effect on financial performance of listed manufacturing and allied firms.

In relation to the variable free cash flow, the regression results showed that free cash flow has a significant effect on financial performance. It was

The Strategic Journal of Business & Change Management. ISSN 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

supported by regression t-value of 2.077 which is greater than the critical value 2.0 and a P-value of 0.020 at 95% level of significance which is less than 0.05. The study rejected the null hypothesis that there is no significant effect of free cash flow on financial performance of manufacturing and allied firms listed in NSE.

CONCLUSIONS AND RECOMMENDATIONS

On operating cash flow, the study concluded that the business operating cash flow comes from cash receipts for the sale of goods or services. It is concluded that the manufacturing firms receive operating cash flow from cash interest and the firms' major cash outflow is through taxes, and government fees. The study concludes that the company net operating cash flow is sufficient.

On investing cash flow, the study concluded that the manufacturing firms collect principal on debt instruments of other entities. The cash received from the sale of productive assets is the primary investing activity cash flow and that the company gets cash proceeds from the sale of equity investments. The manufacturing and allied firms' cash flow is used to pay to acquire property, plant and equipment.

On financing cash flow, it is concluded that the company pays attention to the timing of funds inflows and outflows to ensure that cash is available to meet its financing needs. The study concludes that financing cash flow of the company is in form of cash repayments of loans and that the financing cash flow is affected by the amount used by business in repaying principal on long and short-term debt. However, it is concluded that the manufacturing firms do not rely on cash proceeds from issuing debentures loans notes.

On free cash flow, the study concluded that manufacturing and allied firms net free cash flow has increased. Also firms use free cash flow to pay dividends and the firms' net free cash flow is used to settle creditors payment in most cases. The study further concludes that the manufacturing and allied firms listed in stock exchange have strong free cash flow.

Recommendations of the Study

The study recommended that the management of manufacturing firms should manage the operating cash flow emanating from cash receipts for the sale of goods or services. This could be achieved by adopting aggressive selling practices so as to maximize sales. Also the manufacturing firms should manage operating cash flow received from cash interest. The management of manufacturing and allied firms should find a mechanism to curb cash outflow which is through taxes and other government fees.

The study recommended that the manufacturing firms should collect principal on debt instruments of other entities and these manufacturing and allied firms should capitalize the cash received from the sale of productive assets by investing back to achieve substantive gains. The firms should invest in equity so as to receive returns. The study recommends that the manufacturing and allied firms' cash flow should be used to pay to acquire property, plant and equipment.

The study recommended that the manufacturing and allied firms should pay attention to the timing of funds inflows and outflows to ensure that cash is available to meet its financing needs. The study recommends that financing cash flow of the company should be in form of cash repayments of loans. Since the financing cash flow is affected by the amount used by business in repaying principal on long and short-term debt, the firms should renegotiate with lenders to extend repayment period and revise interest due downwards.

The study recommended that manufacturing and allied firms should use free cash flow to pay dividends. The study further recommends that the manufacturing firms should commit net free cash flow to settle creditors payment in most cases and these firms should maintain strong free cash flow.

The Strategic Journal of Business & Change Management. **ISSN** 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

Suggestions for Further Research

This study focused on investigating the cash flow management and financial performance of manufacturing and allied firms listed in NSE. However, the cash flow management aspects used in the study explained 59.2 per cent change in financial performance. It is on this basis that the researcher recommends a study be carried out to study the other determinants of the financial performance of manufacturing and allied firms listed in Nairobi Securities Exchange in Kenya.

REFERENCES

Abdul Rahman & Sharma, R. B. (2020). Cash flows and financial performance in the industrial sector of Saudi Arabia: With special reference to Insurance and Manufacturing Sectors. *Investment Management and Financial Innovations,* 17(4), 76-84. doi:10.21511/imfi.17(4).2020.07.

Adelegan, O.J. (2003). An Empirical Analysis of the relationship between cash flow and Divided charges in Nigeria. *Journal of Research in Development and Management 15(1), 35-49*

Akumu, O. C. (2014). *Effect of Free Cash Flow on Profitability of Firms Listed on the Nairobi Securities Exchange*. University of Nairobi.

Algieri, B., Aquino, A., & Succurro, M., (2020). The Impact of Cash-flow and the Main Components of the Capital Structure on the Innovative Performances of European Firms. *Review of Economics and Institutions, 11*(1/2), Article 2. doi: 10.5202/rei.v10i1.324.

Ali, M., Alireza, A., & Jalal, A. (2013). The association between various Earnings and cash flow measures of firm performance and stock returns some Iranian evidence. *International Journal of Accounting and Financial Reporting, 3*(1), 24-39.

Ambreen, S., & Aftab, J. (2016). Impact of Free Cash Flow on Profitability of Firms Listed in Karachi Stock Exchange. *Euro-Asian Journal of Economics and Finance*, *4*(4), 113–122.

Bates, T. W., Kahle, K. M., & Stulz, R. M. (2016). Why do US firms hold most extra cash than they used to? *The Journal of Finance*, *64*(5), 1985-2021.

Bhattacharyya, A.K. (2011), *Financial Accounting and Reporting; A practical guide*. Second Edition. PHI Learning, Private Limited, New Delhi-110001

Capital Markets Authority (2020), *Bamburi Cement condensed consolidated statement of profit or loss for the year ended December 2020.* Retrieved from https://www.lafarge.co.ke/sites/kenya/files/atoms/files/bamburi_cement_2020_full_year_results.pdf on 1st July, 2021.

Chalak, L. S., & Mohammadnezhad, S. (2016). Investigation of the link between earnings management and free cash flows in firms with high free cash flows and low growth listed in Tehran Securities Exchange. *World Applied Sciences Journal*, *20*(3), 429-437.

Creswell, J. W. (2014). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks: Sage.

Foley, C. F., Hartzell, J., Titman, S., & White, G. J. (2016). Why do firms hold such a lot cash? A tax based explanation. *Journal of monetary Economics*, *2*(5), 1-26.

Hamza, K., Mutala, Z., & Antwi, S. (2017). Cash management practice and financial performance of small and medium enterprises within the northern region of Ghana. *International Journal of Economics, Commerce and Management*, *3*(7), 1-20.

Huseyin, Y. (2017). Another Perspective to Corporate Cash Management: a brand new Model And Definition. *International Journal of Humanities and Science*., *1*(2), 32-46.

Javed, F., & Shah, F. M. (2015). Impact of Retained Earnings on Stock Returns of Food and Personal Care Good Industry Listed in Karachi Stock Exchange. *International Journal of Scientific and Research Publications*, *5*(11), 397–407.

Kamran, M. R., Zhao, Z., & Ambreen, S. (2017). Free Cash Flow Impact on Firms Profitability: An Empirical Indication of Firms listed in KSE, Pakistan. *European Online Journal of Natural and Social Sciences*, *6*(1), 146–157.

Kenya Association of Manufacturers (KAM) & KMPG (2020). *Manufacturing priority agenda 2021.* Retrieved from https://kam.co.ke/wp-content/uploads/2021/02/2021-Manufacturing-Priority-Agenda.pdf on 20th June, 2021.

Konak, F. (2018), Effect of cash flow on firm performance: Empirical evidence from Borsa Istanbul Industrial Index. *A paper presented at International Multidisciplinary Congress of Eurasia Conference, Rome Italy, September 4-6, 2018. 345-351*.

Kothari, C. R. (2014). *Research Methodology: Methods and Techniques*. New Delhi: New Age International Publishers.

Lewellen, J., & Lewellen, K. (2016). Investment and Cash Flow: New Evidence. *Journal of Financial and Quantitative Analysis*, *51*(4), 1135–1164.

Muhammad, R.K, Zheng Z. & Sadaf, A. (2017), Free cash flow impact on firm's profitability: An empirical indication of firms listed in KSE, Pakistan. *European Online Journal of Natural and Social Sciences, 6 (1) 146-157*

Muraya, A. M. (2018). *Effect of cash flow on financial performance of Investment firms listed in the Nairobi Securities Exchange for the period 2010-2016.* Master of Business Administration Thesis, United States International University-Africa.

Murigu, R. J. (2018). Effect of cash flow management practices on financial performance of Hotels in Nyeri County, Kenya. *International Journal of Management and Economic Review*, 1(6), Pp. 142-154.

Nairobi Securities Exchange (2020), *Listed Companies in Kenya.* Retrieved from https://www.nse.co.ke/listed-companies/list.html on 2th July, 2021.

Nwakaego, D. A., Ikechukwu, O., & Ifunanya, L.C. (2016). Effect of Cash flow statement on Company's Performance of Food and Beverages Companies in Nigeria. *World Applied Sciences Journal*, *33*(12), 1852-1857.

Omag, A. (2016). Cash Flows from Financing Activities. Evidence from the Automotive Industry. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *6*(1), 115–122.

Oteyo, O. P. (2018). *Cash management and financial performance of Small and Medium Enterprises in Nakuru County, Kenya.* Master of Business Administration Thesis, Kenyatta University, Kenya.

Quinn, M. (2011). Ditch profit, income is king. *Wall Street Journal*, *2*(1), 1-6.

Soeti, M. A. (2020). *Effect of cash flow management on the financial performance of Mutual Funds in Kenya.* Doctor of Philosophy Thesis, Jomo Kenyatta University of Agriculture and Technology, Kenya.

Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *International Journal of Academic Research in Management*, 5(2), Pp. 18-27.

Tijajani, B., & Sani, A. (2016). An Empirical Analysis of Free income and Dividend Policy within the Nigerian Oil and Gas Sector. *Research Journal of Finance and Accounting*, *7*(12), 1-7.

Teale, J. (2015). Financial Planning Research Journal. *Journal of the Financial Planning Association of Australia*, *1*(1), 1–80.

Trans-century report (2021), *Circular to Shareholders on Proposed Delisting from Nairobi Securities Exchange.* Retrieved from http://www.transcentury.co.ke/userfiles/Shareholder%20Circular.pdf on 6th July, 2021

Zhang, H, Yang, S. & Zhou, M (2012). Relationship between free cash flow and financial performance. Evidence from the Listed Real Estate Companies in China. *IPC.SIT. Vol. 36; 331-335*