

Effect of Capital Expansion and Earning Replacement Decisions on Financial Performance of Manufacturing Firms Listed in Nairobi Securities Exchange; Kenya

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Abstract:

The Manufacturing companies in Kenya play a vital role in the advancement of the National gross domestic product. Over the last two decades, the government of Kenya has been keen to improving infrastructure and creating an enabling environment to foster local Manufacturing sector. This has been evidenced through the 'Big four agenda' initiative where manufacturing is one of the pillars. However, despite the effects being geared to the sector, reports have shown that very little growth has been achieved. Increasing competition, high cost of inputs and inadequate contingency planning and investment decisions have contributed to the declining growth. The study sought to find out the effect of earning renewal decision and capital expansion decision on financial performance of listed manufacturing firms in Nairobi Securities Exchange. The study adopted descriptive research design. The observations were date from the year 2016 to 2020 and the population comprised of 8 companies listed in NSE under manufacturing and allied. Therefore, the study made 40 observations for 8 firms in five years. The study relied on secondary data available for the findings. Descriptive and inferential statistics were conducted to analyze the data collected. Correlation and regressions analysis was conducted as the analytical tools to enable interpretation of the relationship of the study selected variables. The analysis was conducted using STATA 15. The results indicated that asset renewal investment decision and earnings replacement investment decision have positive and significant effect on financial performance of listed Manufacturing firms at NSE. This implied that improvement in capital expansion decision and asset renewal decision would result to increase in financial performance. The study concluded that investment decisions have positive effect on financial performance of listed manufacturing firms at NSE. The study therefore recommended that that the management of listed manufacturing firms should keep the capital expansion decision at maximum in order to enhance their working capital position hence increase their financial performance, should undertake asset renewal decisions with intent to re-energize their organization financial capabilities in terms of asset operations and asset return, should base their decision on the net present value and internal rate of return of the incremental cash flows.

KeyWord: Capital Expansion Decision, Earning Replacement Decision, Financial Performance, Manufacturing Firms, Nairobi Securities Exchange.

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I. Introduction

Financial performance of manufacturing firms has elicited mixed reactions from potential investors because while some manufacturing firms record stable financial performance, others record downward performance. Investment decision involves a possibility of variation or deviation in the actual return from the expected return. The return of an investment is a major determinant of whether the investors will sacrifice their present resources or not. The investors are more interested in investments or securities that promise higher returns than those that promise lower returns Estrada (2019). During the previous two decades, the global manufacturing sector has seen significant transformation. The acceptance of technological innovation, global market competitiveness, among other internal and external environmental changes, is ascribed to the transformational nature of the developments (Adelino & Robinson, 2017). Firms all around the globe have begun to rethink and reorganize their investment strategy in order to spur economic development and boost productivity. The difficulty that managers have when arranging a company's finances is determining the impact of such structuring on the entity's performance, which is critical to the value and survival of the company (Machuki, 2014).

Investment decisions are composed of expansion decision, replacement decision, renewal decision and research and replacement decisions. The expansion decisions entail addition of new products and line of

operation, and addition of capacity or diversification of operations (Efimova, 2018). Replacement decisions on the other hand focus on improving operating efficiency and cost reduction by replacing obsolete products with new ones in respect to environmental changes (Makarim&Noveria, 2020). Renewal decisions are aimed at a change in operations in terms of products offered, methods of delivery and efficiency of operations.

In Kenya, investment in every organization is a challenge of portfolios in its operational activities at well controlled cost systems. The rate of return is demanded high because every organization wants to generate more funds than today and reduce opportunity cost of capital invested. Jagongo and Mutswenje (2014) also observed some key features that trigger individual investment decision-making at the NSE, which are as follows: the firm history and reputation over time, what the firm amounts to in that industry, the amount the company is expected to earn, incomes and situations of statement, previous performance of companies' stock, quoted price per share, the condition of the economy, and the anticipated amount in the form of dividends.

Olweny and Kimani (2011) studied the influence of the stock market on the Kenyan economic growth established that rise in the NSE 20 share index signaled a better market, expecting of better dividends, better profits and in turn a rise in economic growth. Although such a scenario would mean more investments in the stock market, it does not always happen; meaning that there are other factors at play (cognitive biases) in making such investment decisions at the Nairobi Securities Exchange

An entity investment decision and policies set for diversification of income generations would include strategies for expansion of business operations, acquisition of new assets such as plant and machineries to aid on generation of more revenue, embracing of innovation and technology to facilitate modernization of the firm and replacement of the long term asset. Disposal of the business by either a sale or leasing is also a form investment decision aimed at generating more fund. Company decisions such as change in marketing strategies, or increase in publicity and promotion have long term impact on financial performance of the firm and therefore, may be factored in as one of the investment decisions to undertake. Investment in the long term assets also requires huge capital to be tied up in the current assets hence investment in long-term and current assets run concurrently. A firm may opt to expand its activities in order to increase its value and market position. Firms' expansion requires investment in new products, new market and new kind of production activities. Sometimes a company acquires existing firms to expand its business through forms of mergers and acquisition strategy (Machuki, 2014)

Investment decision making is a major role of any manager for the successful entities. This is because the activity involves investment decisions of a projects essentially affecting future economic performance and which can strongly contribute to the growth or collapse firm depending on the end results of that particular investment decision. The standard strategic investment decision is affected by a number of factors emanating from both the internal and external environment of the business entity (Hana, 2010). Mantrala and Naik (2007) asserts that when deciding on an investment option, there is need to conduct an intensive analysis to find out the exact financial performance of the firm. Failure to conduct an overview if the firms' background check may lead to making the wrong investment decision which may end up ruining the whole company (Thorson, 2007).

Statement of the Problem

The firms listed in the NSE are supposed to serve as investment vehicles for the public and they are supposed to be managed professionally in order to attract investor confidence and safeguard the public's interest. One of the possibilities of an investor to achieve the greatest return on investment made is to gaining understanding of the investment decision (Ronoh 2014). However, Kenya's publicly listed manufacturing entities are gradually facing imminent demise because of illiquidity problems. Many of these listed manufacturing firms are increasingly petitioning the exchequer for bailout, citing their strategic national importance. Kenya has experienced a fair share of listed manufacturing companies facing liquidity problems notable examples are Eveready Company, East Africa Packaging, Sameer Africa, Mumias sugar, Athi River Mining, East Africa Portland Cement, and the East Africa Cables. Several firms in Kenya have been delisted from NSE due to liquidity and financial health. The delisted firms include Mumias Sugar Company, Kenya Airways, East Africa Packaging and Uchumi Supermarket (Kakah, 2015; Mbaru, 2014).

Manufacturing and allied sector in Kenya has been growing at a slower rate than the economy in the country. The Economic Survey reports for the last five years also continue to confirm that firms in the sector have continued to face growth challenges. According to KAM report (2019) the share of the manufacturing sector to GDP in Kenya has been on a declining trend from 11.8% in 2011 to 8.4% in 2017. The Growth in the manufacturing sector went down to 3.5% in 2019 compared to 4.4% in the previous year 2018. Among the challenges linked to this declining performance in the manufacturing sector include; high taxation, high cost industrial inputs, high cost of financing (KAM annual report, 2018).

The government through the Big Four Agenda initiative focus on improving the local manufacturing by over 100 % in a spurn of ten years. According to the Big Four Agenda, the share of the manufacturing sector should rise to 15% of GDP by 2022. Using 2017 as a base year, Kenya has to close a gap of 6.6% by 2022 if the target under the Big Four Agenda is to be achieved. The government has focused in creating an enabling

environment to the manufactures to enable achievement of the set target. On the same the manufacturing industries have geared on making investment decisions to suit the market demand as well. However, for the last one decade since the government initiated the big four agenda, it is not clear how investment decisions have influence the performance of manufacturing firms listed in NSE.

From existing empirical literature, there are significant knowledge gaps which give this study necessary impetus. Soejono's research (2010) stated that investment decisions had no effect on financial performance while Dewi and Suardana(2015) in their research found that investment decisions affect financial performance. Besides mixed in the outcome, both studies were not conducted in Kenya leaving a significant knowledge gap which this current study seeks to fill. Besides, Ogum and Jagongo (2022) found insignificant effect of investment decisions on the financial performance of financial institutions while Musa, Oguro, Songoro and Euna (2017) showed that there were significant correlations between renewal decision and financial performance. Although both studies were conducted in Kenya, they did not focus on listed manufacturing firms leaving a significant contextual gap.

Objectives of the Study

- i) To determine the effect of capital expansion decision on financial performance of listed manufacturing firms in NSE, Kenya.
- ii) To evaluate the effect of earnings replacement decision on financial performance of listed manufacturing firms in NSE, Kenya.

Research Hypotheses

- i. H_{01} . Capital Expansion decision has no significant effect on financial performance of listed manufacturing firms in NSE, Kenya
- ii. H_{02} . Earnings replacement decision has no significant effect on financial performance of listed manufacturing firms in NSE, Kenya

II. Literature Review

Theoretical Framework

The study was guided by Modern Portfolio Theory for capital expansion and Behavioral Finance Theory for earnings replacement decision.

Modern Portfolio Theory

Harry Markowitz invented Modern Portfolio Theory (MPT) in 1952, and it has been in use ever since. Specifically, the theory explains how investors might evaluate risk in relation to their projected return. MPT states that a business that focuses on portfolio maximization would maximize anticipated return for a given amount of portfolio risk, or, in the alternative, reduce risk for a given level of expected return, according to the theory. When pursuing a particular portfolio investment, the MPT theory recommends diversification of assets investment in order to mitigate market risk and losses as well as risks associated with a certain business (Ambrose & Vincent, 2014).

Investors gained information about portfolio management via the use of the MPT theory, which is a sophisticated investment choice technique. The MPT mathematically formulates the concept of diversification in investing, with the aim of selecting a collection of investment assets that has collectively lower risk than any individual asset. The possibility of this can be seen intuitively because different types of assets often change in value in opposite ways. But diversification lowers risk even if assets' returns are not negatively correlated- indeed, even if they are positively correlated (Taleb, 2007). The MPT theory is relevant to this study as it supports diversification of investments which may be equated to the expansion decision study variable.

Behavioral Finance Theory

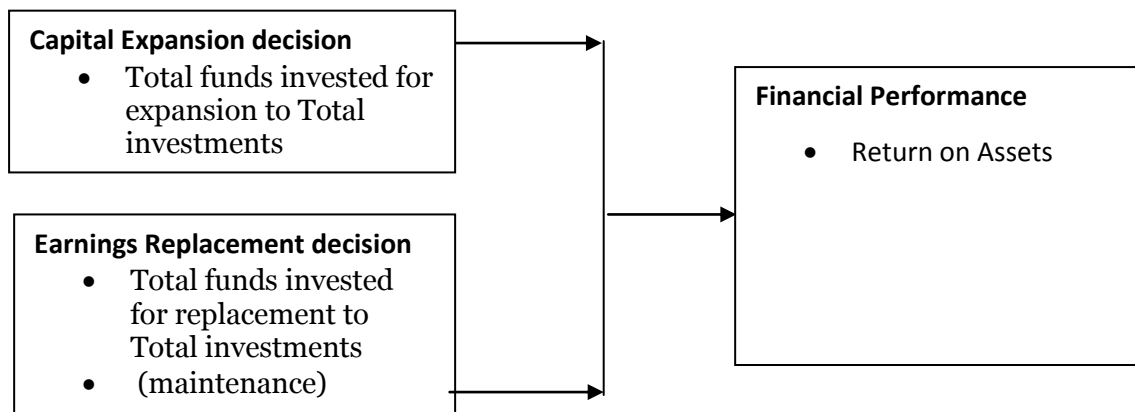
Lintner (1998) developed a behavioural finance theory that describes how individuals evaluate and act on information in order to make educated investment decisions. Investors' decision-making processes in a highly dynamic and uncertain corporate environment have been improved as a result of the theory's development of new techniques of analysis. The theory also gives fresh reasons for calling into question standard approaches of modeling determinants of investor behavior, which are already in use. According to Brabazon (2000), the limited components of behavioural finance may be divided into two categories: risk and return. The first is that of heuristic decision processes, in which an individual investor would make judgments based on his or her common sense and the information available to him or her. However, this may result in judgments that are not logical in the sense that the normal finance model dictates they should be.

According to Brabazon (2000), these choice processes are ones in which investors seek to use mental 'shortcuts' to make better decisions. In the survival race, these shortcuts have proved critical, particularly when decision-making time is limited. Statman (1999) explained that being duped into making investment

decisions based upon this imperfect theory of small numbers is something that the standard finance investor would never do; that an investors regarding past performances of stocks as evidence of future returns is a realistic possibility contrary to the standard finance model of an investor. This explains why some investors opt for renewal or expansion decision in an investment. The theory supports earnings replacement decision.

Conceptual Review

According to Waiganjo (2013) conceptual framework refers to a diagrammatic presentation of variables showing the relationship between the independent variables of a study and the dependent variables. The independent variable for this study are renewal decisions and expansion decisions whereas the dependent variable was financial performance as represented in Figure 1.0 below.



Independent variables

Dependent variable

Figure1.0:ConceptualFramework

The decisions to expand may relate to the purchase of new products as a new line of operation, or they may simply refer to the diversification of corporate activities via new enterprises with a comparable level of capital commitment (James & John, 2010). In their study, James and John (2010) found that organizations pursue growth strategies for a variety of reasons, including diversification of portfolios and taking advantage of new future markets. Some of the most important benefits of diversification are increased market potential for development, economies of scale, and a wider geographic reach, as well as pooling key capabilities and sourcing resources with others.

Replacement decisions refer to a firm's decision to entirely forsake one investment decision in favor of another that seems to provide superior returns on the investment. Replacement choices are made with an eye on enhancing cost-cutting strategies by replacing some of the old assets with new ones that are more in tune with current environmental changes and advances (Pandey, 2008). The term "renewal" may also refer to "modernization," which refers to actions that are intended at re-energizing an organization's capabilities, which includes decisions that affect both asset operations and personnel performance. Firms must adapt their operations to the present dynamic business climate in order to maintain a competitive advantage and stay up with their rivals.

Financial performance can be termed as a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. According to Fullerton and Wempe (2019), financial performance can be measured using proxies like profitability, return on equity, liquidity, solvency, and sales growth and all these can be extracted from the financial statements and/or reports. Information on financial performance is useful in predicting the capacity of the enterprise hence analyzing how well or poorly an enterprise is doing against its set objectives.

Empirical Review

Balarabe (2020) investigated expansion decision and its implication on firm's growth in Nigeria. The data generated from annual reports and accounts of the selected firms was analyzed through Eviews Version 8, and multiple regression analysis was used to analyze the data. The findings show that there is insignificant relationship between the independent variables (capital expansion) and dependent variable (return on asset). Literatures on previous studies were also reviewed and the study concluded that expansion decision has no implication on firm's growth in Nigeria. Ogum and Jagongo (2022) examine the impact of investment decisions

on the financial performance of DT-SACCOS in Nairobi City County. A causal research design of research and a target populace of 40 DT-SACCOS is going to be relied on. In terms of the sample size, all the 40 DT SACCOS are going to be studied. Secondary data matrices were used in collecting data from the finance managers. Adherence to the ethical considerations was also guaranteed at every stage. The study showed that expansion decision has insignificant inverse effect on the financial performance of DT-SACCOS in Nairobi City County.

Otanga (2021) sought to establish the relationship between corporate risk management, investment decisions and financial performance of DT-SACCOS in Western Kenya. Expansion investment decisions had positive significant effect on financial performance indicating that unit increase in investment decision leads to 20.38% increase in financial performance. The study concludes that expansion investment decisions are important when considered alongside corporate risk management.

Murniati, Mus, Semmaila and Nur (2019) analyzed the effect of investment decisions on value of the firm mediated by profitability. The sample technique was purposive sampling by pooling data. Data were analyzed by Structural Equation Modeling. The results showed that capital expansion investment decisions have a positive and significant effect on profitability and value of the firm so that the main objective of the company is to maximize the welfare of company owners by increasing value of the firm through increased profitability. Toni and Sumarsan (2019) sought to get an understanding on the effect of the investment decision on financial performance and the implication on value of a company using structural equation model (SEM). This analysis was based on target population of 513 companies and the samples of 315 public companies in Indonesian Stock Exchange. The expansion investment decision has a direct and indirect positive effect on each other's.

Triani and Tarmidi (2019) examine the impact of investment decisions on the firm value in companies listed on the Indonesia Stock Exchange from 2013 to 2016 especially property and real estate sector. By multiple linear regression analysis using the SPSS software it was found that replacement decisions and dividend policies have a significant impact on firm value. This research implies that in optimizing firm value can be achieved through the application of financial management functions as well as dividend policy, where one decision can attract investor interest and have an impact on the firm value. Murniati, Mus, Semmaila and Nur (2019) analyzed the effect of investment decisions on value of the firm mediated by profitability. The results showed that replacement investment has a positive and significant effect on profitability and value of the firm so that the main objective of the company is to maximize the welfare of company owners by increasing value of the firm through increased profitability, while dividend policy has a negative and not significant effect on profitability and value of the firm directly and indirectly

Kemuma (2014) sought establish the Effect of Investment Decision on the performance of firms listed in the Nairobi Securities Exchange. The study utilized panel data which consisted of time series and cross-sections. Results revealed good, significant and positive correlations between ROA and replacement investment decision. Jan et al. (2014) conducted a study to establish how performance expectations affect replacement decisions. The study found out that a unit change in standard deviation of performance expectation caused a double change on dismissal probability. Mark and Robert (2008), investigated the effect of managerial succession on firm financial performance. The duo compared the cost benefits of replacing management from inside the organization versus external contracting or recruitment. The study argued that relative performance improvements are positively related to institutional shareholding and are greater when successor managers are hired from outside the firm than when they are hired internally.

III. Material and Methods

The descriptive research methodology was adopted in this study. The population of interest in this study was manufacturing firms listed in NSE, whose number stood at 8 as at 30th Dec, 2020. With the list of 8 listed manufacturing companies in Nairobi Securities Exchange, the sampling frame consisted of all of these companies from which sample were drawn. This study took the entire population of the eight listed manufacturing firms using census technique. This study used secondary data, which is the data collected from audited financial reports of individual firms, from website of NSE and CMA of selected firms. The data cut across a five-year period, 2016-2020 to ensure a trend can be established across time and reasonable conclusions can be drawn from the analysis. Data analysis included both descriptive and inferential statistics where model specification estimation and rationale of variables were done. Descriptive statistics included mean, standard deviation, maximum and minimum. The study used inferential statistics which are regression analysis and correlation analysis to test null hypotheses using STATA 15. The study undertook several diagnostic tests to evaluate the suitability of the research model. Some of the diagnostic tests computed were normality, test for linearity, multicollinearity, autocorrelation, and heteroscedasticity.

IV. Result and Discussion

The objective of the descriptive analysis was to describe the properties of the data and to identify any unusual observations that may cause problems during inferential analysis. Thus, initial exploration of the data using simple descriptive tools was provided to describe and summarize the data generated for the study. The descriptive statistics of interest included mean, standard deviation, minimum and maximum as presented in table 1.

Table 1: Descriptive Statistics

	Capital expansion decision	Earnings replacement decision	Financial Performance
Observation	40	40	40
Mean	0.308383	0.395829	0.070307
Median	0.242477	0.548828	0.088897
Maximum	0.917145	0.992086	0.466957
Minimum	0.042400	0.019462	-1.24019
Standard Deviation	0.253114	0.305932	0.263443
Skewness	-3.07758	1.148484	1.195009
Kurtosis	2.663	1.15041	5.388902
JarqueBera	2.681	3.345	5.61
Probability	.2618	.1877	.0605

From Table 1, capital expansion decision was calculated by taking ratio of capital expansion decision to total investments. From 2016 to 2020, capital expansion decision ranged from 0.0420 to 0.917 with a mean of 0.3038 and standard deviation of 0.253. Earning replacement decision was calculated as by taking ratio of earning replacement decision to total investments. Between 2016 and 2020, earnings replacement decision ranged from 0.0194 to 0.9920 with a mean of 0.3958 and standard deviation of 0.3059. Financial performance which is the dependent variable was determined using returns on Assets. From Table 1, observing overall statistics as obtained from panel data, between 2016 and 2020, financial performance ranged from -1.240 to 0.466 with a mean of 0.070 and standard deviation of 0.2634. The distribution mean standard error was 0.4666 with a coefficient of variance of 1.706. Further, all variables have Skewness less than 2. This implies that are normally distributed and the data was adequate and met the assumption of normality. This observation was also supported by kurtosis values which were less than 6. The study also used a more robust technique known as Jarque-Bera (JB) to further ascertain the normality. The study failed to reject the null hypothesis since the probability value for Jarque-Bera was greater than 5% for study variables.

Inferential Analysis

Inferential analysis entailed correlation and regression analysis. The purpose also conducted stationarity test using Im, Pesaran and Shin (IPS) and choice of model using Hausman test.

Unit Root (Stationarity Test)

The study used Im, Pesaran and Shin (IPS) to test for the presence of unit roots in panels that combine data from the dimension of the time series with that of the cross-section dimension, so that fewer time observations are required for power to be available for the test. The results are indicated in Table 2.

Table 2: Unit Root Tests

Variable	Im, Pesaran and Shin (IPS) unit-root Test
Financial Performance	11.938** 0.0000
Capital Expansion decision	6.337* 0.0110
Earnings Replacement decision	17.734** 0.000

* sig at 5% level, ** sig at 1% level

A p-value above 0.05 indicates the presence of unit roots, whereas a p-value under 0.05 indicates that the unit roots were not present for Im, Pesaran and Shin (IPS) tests. The results indicated that there was absence of unit root for the study variables. This showed that all variables are stationery, there was no problem of unit root, and the results can proceed for further inferential statistics.

Hausman Test (Choice of Model)

A Hausman test was carried out to determine whether to use the fixed effect or random effect model to address objectives of this study. The appropriate approach of choosing between fixed and random effect model

is running a Hausman specification test to determine the more efficient model (Borenstein, Hedges, Higgins, & Rothstein, 2010). Under the test, the null hypothesis is that there is no significant correlation between the individual effects and the independent variables. A rejection of the null hypothesis confirms the argument in favor of the fixed effect against the random effect model. The results are as shown in Table 3.

Table 3: Hausman Test

	(b) Fixed	(B) Random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Capital Expansion decision	0.40538	0.34397	0.06141	0.065498
Earnings Replacement decision	0.11397	0.05134	0.06263	0.029436

b = consistent under Ho and Ha; obtained from xtreg
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg
 Test:Ho: difference in coefficients not systematic
 $\chi^2(4) = (b-B)[(V_b-V_B)^{-1}](b-B)$
 = 14.713
 Prob>chi2 = 0.0061

Results in the table 3 indicated a prob>chi2 value of 0.0061 which is less than critical P value at 0.05 level of significance which implies that the null hypothesis that a random effect model is the best was rejected. The study hence adopted a fixed effect regression model.

Correlation Analysis

Correlation analysis provides a value that shows whether changes in the dependent variable are caused by changes in the independent variable. Table 4.0 shows the outcomes of the study.

Table 4.0: Pearson Correlation Analysis

		Financial Performance
Capital expansion decision	Pearson Correlation	0.3616
	Sig. (2-tailed)	0.0219*
	N	40
	Pearson Correlation	0.5658
Earnings replacement decision	Sig. (2-tailed)	0.0001**
	N	40

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

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

The results indicated that the capital expansion decision has a significant positive weak effect on the financial performance of listed manufacturing firms at NSE ($r = 0.3616, P=0.0219$). The findings are in agreement with Otanga (2021) showed that expansion investment decisions had positive significant effect on financial performance indicating that unit increase in investment decision leads to 20.38% increase in financial performance. The study concludes that expansion investment decisions are important when considered alongside corporate risk management. However, Balarabe (2020) investigated expansion decision and its implication on firm’s growth in Nigeria. The findings show that there is insignificant relationship between the independent variables (capital expansion) and dependent variable (return on asset).

Earnings replacement decision has a moderate positive and significant effect on the financial performance of listed manufacturing firms at NSE ($r =0.5658, P-0.0001$). The findings are in tandem with Triani and Tarmidi (2019) found that replacement decisions and dividend policies have a significant impact on firm value. This research implies that in optimizing firm value can be achieved through the application of financial management functions as well as dividend policy, where one decision can attract investor interest and have an impact on the firm value. However, Riyadi (2018) showed that replacement decisions don’t effect significantly to efficiency, replacement decisions effect significantly to financial performance, replacement decision effect significantly to value of firm.

Linear Regression

Regression analysis was done to determine the influence of independent variables on the dependent variable. These analyses yielded R which is the coefficient of correlation and R square which is the coefficient of determination. The results are as follows:

Influence of Capital Expansion Decision on Financial Performance

The study sought to examine the effect of Asset renewal decision on financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya. The first null hypothesis denoted, H_{01} : There is no significant relationship between capital expansion decision and financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya. Having gone by the fixed effect model basing on the Haussmann LM test, the results of the fixed effect model are presented in Table 5.0.

Table 5.0: Regression Fixed Effect of Capital expansion decision on Financial performance

Fixed-effects (within) regression		Numberofobs =	40
Groupvariable: FIRMID		Numberofgroups =	8
R-sq:		Obs per group:	
within=	0.0785	min =	5
between=	0.1612	avg=	5
overall=	0.1307	max=	5
		F(1,31) =	4.59
corr(u_i, Xb)=0.0904		Prob> chi2 =	0.0401

Financial Performance	Coef.	Std. Err.	T	P>t	[95% Conf. Interval]
Capital Expansion	0.09233	0.043086	2.14	0.040	0.004455 0.18020
_cons	3.40901	0.482026	-7.07	0.000	-4.39211 -2.42591

The analysis shows that the panels were strongly balanced for this bivariate analysis as shown by the number of observations per group. There were a total of 40 observations used in this analysis considering 8 groups of entities implying strongly balance panels. The minimum, maximum and average numbers of observations per groups were all equal to 5.

The R² is generally a measure of the variation of the dependent variable profitability that is explained by the variation of the predictors in the model. The result obtained from fixed effect model indicated that capital expansion decision accounted for 13.07% (Overall R square=0.1307 of the variation in financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya. The ANOVA statistics measure the general significance of the model. The F-statistic to the model shows is 4.59 which is greater than 0 implying that the estimated parameters in the model are at least not equal to zero. This infers that capital expansion decision has an effect on financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya.

The estimated coefficient of capital expansion decision is significantly not equal to zero ($\beta=0.09233$, $t=2.14$, $p\text{-value}=0.040$). The P-value is less than 0.05 which implies that the estimated coefficient is significant at 5% significance level. The estimated coefficient of capital expansion decision here implies that a unit increase in capital expansion decision would cause the levels of financial performance to increase by 0.092 units. The p-value of the constant is less than 0.05 which shows a significant constant term. The regression model is as shown below

Financial performance= 3.40901+0.09233 Capital Expansion Decision

The study therefore rejected the null hypothesis that capital expansion decision does not affect financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya and hence that there is significant effect of capital expansion decision on financial performance. This implies that increase in capital expansion decision would results to increase in financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya. The results confirm with Murniati, Mus, Semmaila and Nur (2019) who showed that capital expansion investment decisions have a positive and significant effect on profitability and value of the firm so that the main objective of the company is to maximize the welfare of company owners by increasing value of the firm through increased profitability. Further, Toni and Sumarsan (2019) showed that expansion investment decision has a direct and indirect positive effect on each other's regards to 315 public companies in Indonesian Stock Exchange. However, Ogum and Jagongo (2022) examine the impact of investment decisions on the financial performance of DT-SACCOS in Nairobi City County. The study showed that expansion decision has insignificant inverse effect on the financial performance of DT-SACCOS in Nairobi City County.

Influence of Earnings replacement decision on Financial performance

The study sought to determine the effect of earnings replacement decision on financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya. The second null hypothesis denoted, **H₀₂**: Earnings replacement decision does not effect on financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya. Having gone by the fixed effect model basing on the Haussmann LM test, the results of the fixed effect model are presented in Table 6.0.

Table 6.0: Regression Fixed Effect of Earnings replacement decisions on Financial performance

Fixed-effects (within) regression		Numberofobs =	40
Group variable: FIRMID		Numberofgroups =	8
R-sq:		Obs per group:	
within=	0.1575	min =	5
between=	0.4853	avg=	5

overall=	0.3504	max=	5
corr(u_i, Xb)=0.2161		F(1,31) =	5.79
		Prob> chi2 =	0.0222

Financial Performance	Coef.	Std. Err.	T	P>t	[95% Conf. Interval]	
Earning Replacement	0.07876	0.032721	2.41	0.022	0.01255	0.14503
_cons	0.058559	0.040562	1.44	0.159	-0.02417	0.14128

The result obtained from fixed effect model revealed that earnings replacement decision accounted for 35.04% (Overall R square=0.3504) of the variation in financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya. The ANOVA statistics measure the general significance of the model. The F-statistic to the model is 5.79 which is greater than 0 implying that the estimated parameters in the model are at least not equal to zero. This postulates that earnings replacement decision has an effect on financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya. This effect is significant at P<0.05.

The estimated coefficient of earnings replacement decision is significantly not equal to zero ($\beta=0.07876$, $t= 2.41$, $p\text{-value}= 0.022$). The P-value is less than 0.05 which implies that the estimated coefficient is significant at 5% significance level. The estimated coefficient of earnings replacement decision here implies that a unit increase in earnings replacement decision would trigger the levels of financial performance to increase by 0.07876 units. The p-value of the constant is less than 0.05 which shows a significant constant term. The regression model is as shown below

Financial performance =0.058559+0.07876Earning Replacement Decision

The study therefore rejected the third null hypothesis that earnings replacement decision does not affect financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya and thus that there is an effect of earnings replacement decision on financial performance. This implies that increase in earnings replacement decision would results to increase in financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya. Murniati, Mus, Semmaila and Nur (2019) analyzed the effect of investment decisions on value of the firm mediated by profitability. The results showed that replacement investment has a positive and significant effect on profitability and value of the firm so that the main objective of the company is to maximize the welfare of company owners by increasing value of the firm through increased profitability. Kemuma (2014) sought establish the Effect of investment decision on the performance of firms listed in the Nairobi Securities Exchange. Results revealed good, significant and positive correlations between ROA and replacement investment decision. This supports Mark and Robert (2008) study which compared managerial replacement decisions and firm performance and concluded that managerial replacement has a positive impact on firm performance. However, this is not in support of Trevor (2015) study on firm financial performance following system replacement which stated that firm replacement decision was not financially significant to firm performance.

V. Conclusion and Recommendation

In line with the first objective, effect of capital expansion decision on financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya the study concluded that capital expansion decision has significant positive effect on financial performance. The capital expansion increased from 2016 to 2017, slightly reduced to 2018 then reduced sharply to 2019 before increasing marginally in 2022. Overall there was reduction in capital expansion from 2016 to 2022. An increase in capital expansion decision would results to significant increase in financial performance. Therefore, the study concluded that listed manufacturing firms are able to increase their financial performance when they improve their capital expansion decision. The earnings replacement reduced from 2016 to 2017; afterwards, it increased from 2017 to 2022. Overall there was increase in earnings replacement from 2016 to 2022. From the linear and multiple regression results, the study concluded that earnings replacement decision has significant positive effect on financial performance. An increase in earnings replacement decision would results to significant increase in financial performance. Therefore, earnings replacement decision is a significant predictor of financial performance of manufacturing firms listed at Nairobi Securities Exchange, Kenya.

The study recommended that management of listed manufacturing firms should keep the capital expansion decision at maximum in order to enhance their working capital position hence increase their financial performance. To achieve this, during capital investment decision, management of listed firms should focus on increased expenses, increased levels of inventory, increased plant and equipment capacity, increased working capital levels, increased marketing costs, business acquisition capital, and transaction costs. The study also recommended that during earning replacement decision, management of listed manufacturing firms should base their decision on the net present value and internal rate of return of the incremental cash flows, i.e. the

difference between periodic net cash flows if the existing earnings stream is kept and the periodic net cash flows if the existing earnings stream is replaced.

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