

# FACTORS AFFECTING FINANCIAL PERFORMANCE AT KENYA COMMERCIAL BANKS LIMITED (KCB) MOMBASA COUNTY

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**Abstract:** *The financial performance of commercial banks in Kenya was very important as it helped to know the bank that achieved its set objectives and also its profit margin, however banks faced several challenges as they strived to achieve the performance such included; competition from other organizations, government policies, increased provisions through non-performing assets and also increased interest costs. The main objective of the study was to determine factors affecting financial performance of commercial banks in Kenya. The study's specific objectives was to evaluate effect of inflation rates on financial performance of Kenya Commercial Bank Limited Mombasa County, to examine effect of interest rates on financial performance of Kenya Commercial bank Limited Mombasa County, to determine effect of asset quality on financial performance of Kenya Commercial Bank limited, Mombasa County and to establish effect of gross domestic product on Kenya Commercial Bank limited Mombasa County. The study was guided by Friedman hypothesis theory, theory of liquidity and univariate theory. The study employed survey descriptive design and inferential research design. The target population of the study was 157 respondents from respective senior management, head of departments and cashiers/tellers from various branches of KCB Bank Limited Mombasa County. The sample size was 113 respondents which was arrived by using of slovin formula. Data collection will be done using questionnaires. Data analysis and presentation was based on descriptive statistics as well as inferential statistics using multiple regression model. Data was analyzed using statistical packaging social sciences software (SPSS) version 22 to find the relationships and averages of the data in addition to tabular presentations for understandable presentation. Analysis was done using frequency counts, percentages, means and standard deviation, regression, correlation and the information generated was presented in form of graphs, charts and tables. The study findings indicates that factors affecting financial performance (interest rates, asset quality, inflation rates & gross domestic product) had significant and positive relationship on the financial performance. The study recommends that commercial banks should enhance their strategies to mitigate risk associated with cost push inflation since this is unsystematic risk which cannot be eliminated by individual bank. The central bank should apply stringent regulations on interest rates charged by commercial banks so as to regulate their interest rate spread. Therefore policy makers and other stakeholder should formulate better policies that promote financial performance based on the gross domestic product.*

**Key Words:** *Inflation rates, Interest rates, Asset quality & Gross domestic product.*

## 1. INTRODUCTION:

### General Objective

The general objective of the study was to examine the factors affecting financial performance of commercial banks in Kenya.

### Specific Objectives

- i. To evaluate the effect of inflation rates on financial performance of Kenya Commercial banks Limited, Mombasa County.
- ii. To examine the effect of interest rates on the financial performance of Kenya Commercial Banks Limited, Mombasa County.
- iii. To determine the effect of asset quality on financial performance of Kenya Commercial Banks Limited, Mombasa County.
- iv. To establish the effect of Gross Domestic Product on the financial performance of Kenya Commercial Banks Limited, Mombasa County.

## 2. LITERATURE REVIEW:

### THEORETICAL FRAMEWORK

#### The Friedman Hypothesis

Friedman (1977) outlined an informal argument regarding the real effects of inflation. His point comes in two parts. In the first part of his hypothesis, an increase in inflation may induce an erratic policy response by the monetary authority and therefore lead to more uncertainty about the future rate of inflation. In the second aspect of Friedman hypothesis, the increasing uncertainty about inflation distorts the effectiveness of the price mechanism in allocating resources efficiently, thus leading to negative output effects. Ball (1992) formalized the Friedman argument and focused on the first aspect of the Friedman's hypothesis.

#### Theory of Liquidity

The theories of liquidity were advanced by Vayanos and Wang (2012). The theory emphasizes on illiquidity, that is, the lack of liquidity to underlying market imperfections. The theories put into consideration six main imperfections. These include participation costs, transaction costs, asymmetric information, imperfect competition, funding constraints, and search. The foregoing imperfections map into six different theories of illiquidity. Each imperfection is addressed from three perspectives. That is, how to measure illiquidity, how illiquidity relates to underlying market imperfections and other asset characteristics, and how illiquidity affects expected returns.

Participation costs imply that in the perfect market benchmark, all agents are present in the market throughout. It is exemplified that a seller can have immediate access to the entire population of buyers. However, it is argued that, in practice, agents do face costs of market participation, for instance, to monitor market movements and have ready access to a financial exchange. Transaction costs imply that agents typically pay costs when executing transactions. It is stated that transaction costs drive a wedge between the buying and selling price of an asset. Transaction costs are said to occur in various forms which include brokerage commissions, exchange fees, transaction taxes, bid-ask spreads, and price impact (Vayanos & Wang, 2012).

#### Univariate Theory

Balcaen and Ooghe (2004) point out that Beaver (2014) was the pioneer in building a corporate failure prediction model with financial ratios. He was the first researcher to apply a univariate discriminate analysis model on a number of financial ratios of a paired sample of failing and non-failing companies in order to predict company failure. In view of selecting the financial ratios to be included in his univariate model, Beaver (2014) applied a dichotomous classification test in order to identify those ratios that were the best in classifying the companies as failing or non-failing.

Beaver's study classified a company as failed when any one of the following events occurred: bankruptcy, bond default, an overdrawn bank account or nonpayment of a preferred stock dividend. Beaver concentrated on a matched pair of 79 failed and 79 non failed companies. He selected his samples using dichotomous classification test where he selected financial data of a certain number of failure cases and an equal number of corresponding successful cases. From the two cases, he used mean comparisons and likelihood analysis methods to develop a univariate model. He found that there are three valid financial ratios to forecast financial failure and they are: Cash Flow / Total Debt, Net Income / Total Assets (returns on assets) and Total Debt / Total Assets (debt ratio).

## 3. REVIEW OF LITERATURE VARIABLES:

### Inflation Rates

One of the macroeconomic factors that has been connected to performance of commercial banks is the inflation rate. It is thus the reason why researchers have endeavored to establish this relationship. There is a general concurrence that high interest rates on loans are a resultant feature of high inflation rates. This thus leads to a situation whereby commercial banks generate higher incomes. Whether inflation is unanticipated or anticipated is directly correlated to the general effects of inflation on banking performance (Swarnapali, 2014). A positive result in terms of financial performance of commercial banks is achieved in instances whereby inflation rates increases are generally anticipated and mitigating action is taken through adjusting interest rates accordingly.

### Interest Rates

According to Aleem (2002), interest rate is the price borrowers pay for the use of money borrowed from the financial institution. The amount of interest a creditor receives is a percentage of the amount of money he lent and in the same way the amount of interest that a borrower pays is a percentage of the total amount he borrowed (James, 2013). Anyone can make loan to someone and receive interest or any institution like bank can accept the deposits and pay a certain amount of interest. But typically, it's the job of banks to provide loans and accept deposits (James, 2013)

An increase in performance of commercial banks should be a resultant feature of an increase in interest rates. This is so because its eventuality is an increase in the spread between the interest rates for borrowing and the interest rates for saving. On evaluation of this relationship, it was deduced that it is particularly apparent for smaller banks in

America (Podder, 2012). It was deduced that when interest rates are lowered in recession times, there is a slow in the growth rates of bank loans coupled with increased loan losses with an increasing level of non-performing loans. It is thus clear that when market rates are on a decrease, smaller commercial banks tend to experience difficulties in maintaining their financial performance. A clear positive correlation between financial performance of commercial banks and interest rates is deduced by more studies on evaluation (Podder, 2012).

#### **Asset Quality**

Ombaba (2013), defined asset quality also referred to as loan quality as the overall risk attached to the various assets held by an individual or institution. This term is commonly used by banks to determine how many of their assets are at financial risk and how much allowance for potential losses they must make. The most common bank assets requiring a strict determination of asset quality are loans & advances. Increasing loan quality will improve the return of bank loans and reduce the costs of failure, but at the same time it will be attained at a cost that requires banks' attention to manage (Khalid, 2012).

Assets quality is a strong determinant of financial institution performance because it influences the interest incomes while and the same time reduces the cost burden of bad debts management as per the law requirements. The banks are required to set aside cash, which is deductible as an expense, to ensure they are able to absorb any losses that it may incur from loan defaults. The high the NPA ratio to the gross / net assets book the low the asset quality and vice versa and therefore it means that the trade-off between assets quality and financial performance is expected to be negative (Ombaba, 2013).

#### **Gross Domestic Product**

Gross Domestic Product is the largest quantifiable measure of the overall economic occurrence's it represents all the goods and services monetary worth made over a definite duration inside the geographical borders. The trend of GDP affects the demand for banks asset. During the declining GDP growth the demand for credit falls which in turn negatively affect the profitability of banks. On the contrary, in a growing economy as expressed by positive GDP growth, the demand for credit is high due to the nature of business cycle. During boom the demand for credit is high compared to recession (Athanasoglou et al., 2005).

Kayode (2010) assert that there is close connection between commercial bank lending and economic output. This is because, ordinarily, more lending increases investment in goods and service production which by simple mathematical logic would increase the GDP of a country. On the contrary, reduced commercial bank lending would reduce investment in the production of goods and services and therefore contracting GDP. This summarizes to a positive relationship between commercial bank lending and economic growth.

### **4. RESEARCH METHODOLOGY:**

#### **Research Design**

According to Saunders, Lewis and Thornhill (2009), research design is defined as an overall plan for research undertaking. The study adopted a survey research design to obtain the empirical data to address the objectives of the study. According to Mugenda and Mugenda (2003), the survey research design helps in determining whether and to what degree a relationship existed between the quantifiable variables whereas survey research seeks to obtain information that describes existing phenomena by asking individuals about their perceptions attitudes, behaviour or value (Mugenda and Mugenda 2003). A survey design will enable the researcher to establish the extent to which that factors under study prevail while at the same time determining their effects on financial performance of commercial banks in Kenya.

#### **Sample size and Sampling Techniques**

A sample is a group in a research study on which information is gathered (Frankel 2000). The whole idea of sampling is that by selecting some of the elements in a population we may draw conclusions about the entire population (Cooper 2006). The study adopted a purposive sampling method. Mugenda & Mugenda (2003) states that purposive sampling is used in instances where the target population is known.

The sample size was an important feature of any empirical study in which the goal is to make inferences about a population from a sample (Bryman and Bell, 2015). The total sample size for this study was obtained using the Slovin formulae developed by Cooper and Schinder, (2013). The sample size was 113.

$$n = N / 1 + N (\alpha)^2$$

Where: n= the sample size,

N= the population

$\alpha$ = the margin of error (0.05%).

$$n = 157 / 1 + 157(0.05)^2 = 113$$

#### **Data analysis, Processing and Presentation**

The collected data was analyzed quantitatively and qualitatively. Descriptive and inferential statistics was done using SPSS version 22 and specifically multiple regression model was applied. Set of data was described using percentage, mean standard deviation and coefficient of variation and presented using tables, charts and graphs. Fraenkel and Wallen, (2014) argue that regression is the working out of a statistical relationship between one or more variables.

The researcher used multiple regression analysis to show the influence of the independent variables on the dependent variables.

The multiple regression equation was as follows;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Y = Represents the dependent variable, Financial Performance

$\alpha$  = Constant

$\beta_1, \beta_2, \beta_3$  &  $\beta_4$  = Partial regression coefficient

$X_1$  = Inflation Rate

$X_2$  = Asset Quality

$X_3$  = Interest Rate

$X_4$  = Gross Domestic Product

$\epsilon$  = error term or stochastic term.

## 5. RESEARCH FINDINGS AND DISCUSSIONS:

### Inflation Rates

Table 4.1 Inflation Rates

|  | N   | Mean | Std. Deviation |
|--|-----|------|----------------|
| Interest rates adjustments in Kenya negatively impacts inflation rates                           | 109 | 4.10 | .693           |
| Stability of inflation rates plays a role in the profits we make                                 | 109 | 4.07 | .742           |
| There is a negative relationship between inflation rate and bank financial performance           | 109 | 4.03 | .739           |
| Depreciation and appreciation of the Kenyan currencies is a key determinant of our profitability | 109 | 4.17 | .650           |
| Valid N (listwise)   | 109 |      |                |

On the relationship between inflation rate and financial performance, most respondents agreed that there is a negative relationship between inflation rate and bank financial performance with a mean of 4.03 and a standard deviation of 73%. This concurs with Macit (2011) who asserts that customers on the other hand avoid the consumption of bank loans when the interest rates are too high since they can either not afford to take up loans or the interest rates are too high that they just prefer to seek other cheaper alternatives such as micro finance institutions and other cheaper lending institutions. This affects negatively the ability of the commercial banks to earn interest from their customer deposits since they cannot loan them out to borrowers. Also, most respondents agreed that depreciation and appreciation of the Kenyan currencies is a key determinant of our profitability with a mean of 4.17 and a standard deviation of 65%.

### Asset Quality

Table 4.2 Asset Quality

|  | N   | Mean | Std. Deviation |
|--|-----|------|----------------|
| The level of non- performing loans by the bank will affect its profitability     | 109 | 4.14 | .673           |
| High collateral reduces credit risk exposure of commercial banks                 | 109 | 4.19 | .687           |
| The high level of loan defaulters affects profitability                          | 109 | 4.09 | .646           |
| Risk attitudes of various customers determine their ability to repay their loans | 109 | 4.21 | .639           |
| High loans and advances may affect the financial performance of the bank         | 109 | 4.14 | .645           |
| Valid N (listwise)   | 109 |      |                |

Most of the respondents agreed that the level of non- performing loans by the bank will affect its profitability. It obtained a mean of 4.14 and a standard deviation of 67%. Most respondents agreed that high collateral reduces credit risk exposure of commercial banks with a mean of 4.19 and a standard deviation of 69%. Most respondents also agreed that the high level of loan defaulters affects profitability by obtaining a mean of 4.09 and a standard deviation of 65%. This supports Ombasa (2013), who asserts that assets quality is a strong determinant of financial institution performance

because it influences the interest incomes while and the same time reduces the cost burden of bad debts management as per the law requirements. The banks are required to set aside cash, which is deductible as an expense, to ensure they are able to absorb any losses that it may incur from loan defaults. The high the NPA ratio to the gross / net assets book the low the asset quality and vice versa and therefore it means that the trade-off between assets quality and financial performance is expected to be negative.

**Interest Rates**

**Table 4.3 Interest Rates**

|  | N   | Mean | Std. Deviation |
|--|-----|------|----------------|
| High interest rates limits people to borrow thus affecting profitability | 109 | 4.35 | .644           |
| Interest rate charged to customers are a source of revenue to the bank   | 109 | 4.30 | .601           |
| Absence of interest regimes affects profitability                        | 109 | 4.30 | .631           |
| High interest rates affects Loan repayment by customers                  | 109 | 4.25 | .626           |
| Valid N (listwise)   | 109 |      |                |

The respondents agreed that interest rate charged to customers are a source of revenue to the bank with a mean of 4.30 and a standard deviation of 60%. This agrees with CBK (2013), interest for commercial banks is influenced by interbank interest rate and this is how commercial banks earn their profit. When there is an increase in interest rate businesses pay more hence banks profitability increase. On interest regimes, most respondents agreed that absence of interest regimes affects profitability by obtaining a mean of 4.30 and a standard deviation of 63%. Also, most respondents agreed that high interest rates affects Loan repayment by customers with a mean of 4.25 and a standard deviation of 63%.

**Gross Domestic Product**

**Table 4.4 Gross Domestic Product**

|   | N   | Mean | Std. Deviation |
|---|-----|------|----------------|
| Income approach is one of the best indicator of gross domestic product            | 109 | 4.24 | .622           |
| Most banks use expenditure as an indicator of gross domestic product              | 109 | 4.25 | .683           |
| Use of technology has provided service proximity to customers of commercial banks | 109 | 4.24 | .651           |
| GDP has led to economic stability of banks  | 109 | 4.11 | .657           |
| Valid N (listwise)  | 109 |      |                |

On technology, most respondents agreed that the use of technology has provided service proximity to customers of commercial banks by obtaining a mean of 4.24 and a standard deviation of 65%. Also, most of the respondents agreed that GDP has led to economic stability of banks with a mean of 4.11 and a standard deviation of 66%. This supports Athanasoglou et al. (2005) who states that the trend of GDP affects the demand for banks asset. During the declining GDP growth the demand for credit falls which in turn negatively affect the profitability of banks. On the contrary, in a growing economy as expressed by positive GDP growth, the demand for credit is high due to the nature of business cycle. During boom the demand for credit is high compared to recession

**Regression**

**Regression Coefficient Analysis**

**Table 4.5 Regression Coefficient Analysis**

| Model |                 | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|-----------------|-----------------------------|------------|---------------------------|-------|------|
|       |                 | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant)      | 20.663                      | 2.781      |                           | 7.430 | .000 |
|       | Inflation Rates | .130                        | .063       | .223                      | 2.066 | .000 |

|  |                        |      |      |      |       |      |
|--|------------------------|------|------|------|-------|------|
|  | Asset Quality          | .085 | .104 | .093 | .818  | .000 |
|  | Interest Rates         | .116 | .090 | .138 | 1.291 | .000 |
|  | Gross Domestic Product | .083 | .091 | .089 | .905  | .000 |
| a. Dependent Variable: Financial Performance |                        |      |      |      |       |      |

The results of the regression in table 4.5 show how inflation rates, asset quality, interest rates and gross domestic product and the financial performance as dependent variable. The data show that the unit increase in interest rates will lead to a 0.130 positive increase in financial performance, where as a unit increase in asset quality activities will lead to increase of 0.085 financial performance and a unit increase in interest rates activities will lead to a 0.116 increase in financial performance and finally a unit increase in gross domestic product will increase financial performance by 0.083 units. At a 5% level of significance and 95% level of confidence, financial activities had a 0.000 level of significance.

PI = Inflation Rates, IR = Asset Quality, AQ= Interest Rates IR = Gross Domestic Product GDP

The general regression model arrived at was  $Y = 20.663 + 0.130 + 0.085 + 0.116 = 0.083$

Where

$X_1$ = Inflation Rates (IR),  $X_2$  = Asset Quality (AQ),  $X_3$ = Interest Rates (IR),  $X_4$  = Gross Domestic Product (GDP) and  $Y$ = Financial Performance.

**Regression Analysis**

The study conducted a multiple regression analysis in order to investigate factors affecting financial performance of commercial banks in Kenya. In this model, coefficients of determination explain the extent to which changes in dependent variable can be explained by the changes in the independent variables or percentage of variation in dependent variable (financial performance for this study) that is explained by all four independent variables (inflation rates, asset quality, interest rates and gross domestic product).

**Table 4.6 Regression Model Summary**

| Model   | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|-------------------|----------|-------------------|----------------------------|
| 1   | .262 <sup>a</sup> | .069     | .036              | 2.85079                    |
| a. Predictors: (Constant), Inflation Rates, Asset Quality, Interest Rates, Gross Domestic Product |                   |          |                   |                            |

The four variables studied explain 69% of variance in the factors affecting financial performance of commercial banks in Kenya as represented by the R<sup>2</sup>. This means that, the other factors not studied contribute 31% of variance in dependent variable which calls for further studies to assess factors affecting financial performance of commercial banks in Kenya.

**Analysis of Variance (ANOVA)**

**Table 4.7 Analysis of Variance (ANOVA)**

| Model   |            | Sum of Squares | df  | Mean Square | F     | Sig.              |
|---|------------|----------------|-----|-------------|-------|-------------------|
| 1   | Regression | 68.863         | 4   | 17.216      | 2.118 | .000 <sup>b</sup> |
|   | Residual   | 934.604        | 115 | 8.127       |       |                   |
|   | Total      | 1003.467       | 119 |             |       |                   |
| a. Dependent Variable: Financial Performance  |            |                |     |             |       |                   |
| b. Predictors: (Constant), Inflation Rates, Asset Quality, Interest Rates, Gross Domestic Product |            |                |     |             |       |                   |

The F critical at 5% level of significance was at 2.85 since F calculated was greater than F critical (value = 2.11) this shows that the overall model was significant. The significance is less than 0.05, thus indicating that the predictor variables (inflation rates, asset quality, interest rates and gross domestic product) explain the variation in the dependent variable which is financial performance.

## 6. CONCLUSION:

From the study it can be concluded that asset quality measures (non-performing loans & loans and advances) had significant and positive influence on financial performance (market share, profitability & return on equity). The regression results reveals statistically significant positive relationship between asset quality and financial performance. The results reveals that asset quality plays a significant part in any given bank so that it can meets its performance targets.

From the study it can be concluded that gross domestic product measures (income approach & expenditure) had significant and positive influence on financial performance (market share, profitability & return on equity). The regression results reveals statistically significant positive relationship between gross domestic product and financial performance.

## 7. RECOMMENDATIONS:

On the basis of the findings of the study it recommends that superior financial performance in commercial banks can be achieved by improving their investment assets levels and improving assets quality by reducing the rate of nonperforming loans through credit risk identification, measurement, monitoring and controlling. Thus it can be concluded that financial performance in the Kenyan banking sector is largely driven by asset quality management. GDP information clearly has a strong impact on the economy and it is used widely as a tool in economic policy- making. This leads to the situation where the policies have an agenda which is ultimately set by GDP. Therefore policy makers and other stakeholder should formulate better policies that promote financial performance based on the gross domestic product.

The central bank should apply stringent regulations on interest rates charged by commercial banks so as to regulate their interest rate spread.

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