

**AN ASSESSMENT OF THE IMPACT OF SELECTED MICRO ECONOMIC  
VARIABLES ON THE PERFORMANCE OF MANUFACTURING FIRMS IN KENYA,  
MWEA RICE MILLS-KIRINYAGA COUNTY**

**BY**

**ESTHER CHEMTAI CHEPKURUI**

**BUS-G-4-0484-17**

**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE IN  
BACHELOR OF COMMERCE OF  
GRETSA UNIVERSITY**

**NOVEMBER, 2020**

### DECLARATION

This research project is my original work and has not been presented for award of a degree or for any other similar purpose in any institution.

Signature EC Date 11/12/2020

Esther Chemtai Chepkurui

BUS-G-4-0484-17

**Supervisor:** This research project has been submitted with my approval as University supervisor

Signature IK Date 11-12-2020

Irene Kinyua

Department BUSINESS

Gretsa

University

## **ACKNOWLEDGEMENT.**

I wish to express my heartfelt appreciation to my family for their unwavering support, financially and emotionally for me during my academic journey at Gretsia University. My sincere gratitude goes to my supervisor, Madam Irene Kinyua who dedicated her precious time; for her guidance and advice during the period of this research project writing to ensure my work was up to par with the requirements of the real world.

All above all, I thank the Almighty God who has seen me through up to this level, was my pillar of strength, life giver and greatest source of advice and ideas.

## Table of Contents

DECLARATION .....	<b>Error! Bookmark not defined.</b>
ACKNOWLEDGEMENT.....	ii
LIST OF FIGURES .....	viii
ABBREVIATIONS AND ACRONYMS.....	ix
OPERATIONAL DEFINITION OF TERMS .....	x
ABSTRACT.....	xi
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background to the Study.....	1
1.12 Microeconomic Factors.....	3
1.14 Performance of the Organization .....	4
1.15 The Relationship between Micro economic Variables and Organizational Performance. .	5
1.2 Statement of Research Problem .....	5
1.3 Purpose of the Study .....	6
1.4 Conceptual Framework .....	6
1.5 Research Questions .....	7
1.6 Objectives of the Study .....	7
1.61 General Objectives .....	7
1.62 Specific objectives .....	7
1.7 Hypotheses of the Study.....	7

1.8 Significance of the Study .....	8
1.9 Scope of the Study.....	8
1.10 Limitations of the Study .....	9
<b>CHAPTER TWO: LITERATURE REVIEW .....</b>	<b>10</b>
2.1 Introduction. ....	10
2.2 Empirical review .....	10
2.21 Prices.....	10
2.22 Demand .....	11
2.23 Wage Rates.....	11
2.3 Theoretical Framework .....	12
2.4. Consumer Demand Theory. ....	12
2.5 Theory of Price.....	14
2.6 Modern Theory of Wages. ....	14
2.7 Summary of identified gaps in the reviewed literature. ....	15
<b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>	<b>16</b>
3.1 Introduction .....	16
3.2 Research Design.....	16
3.3 Study Area.....	16
3.4 Target Population .....	16
3.5 Sampling Techniques .....	17

3.6 Sample Size .....	17
3.7 Measurement of Variables .....	17
3.8 Research Instruments .....	17
3.9 Validity of Measurements .....	18
3.10 Reliability of Measurements .....	18
3.11 Data Collection Techniques .....	18
3.12 Data Analysis .....	18
3.13 Logistics and Ethical Considerations .....	19
CHAPTER FOUR: FINDINGS AND DISCUSSION.....	20
1.1. Introduction .....	20
4.2 Response rate.....	20
4.3 Respondents demographic data.....	20
4.31. Gender of Respondents .....	20
4.32. Age of Respondents .....	21
4.33. Income of the Respondents .....	22
4.4. Descriptive Data.....	23
4.42. Descriptive Analysis of Demand.....	25
4.43. Descriptive Analysis of Wages .....	26
4.44 Descriptive Analysis of Firm Performance.....	27
4.5. Regression Analysis. ....	28

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS. ....	31
5.1. Introduction .....	31
5.2. Summary of Findings.....	31
5.21. Effect of Prices on Performance of Manufacturing Firms in Kenya.....	31
5.22. Effect of Demand on Performance of Manufacturing firms in Kenya.....	32
5.23Effect of Wages on Performance of Manufacturing Firms in Kenya .....	32
5.3. Conclusion.....	33
5.4. Policy Recommendations.....	33
5.4. Limitations of the Study.....	33
5.5. Suggestions for Further Research .....	34
REFERENCES .....	35
APPENDIX.....	36
QUESTIONNAIRE.....	36

## LIST OF FIGURES

Fig.1.4 Conceptual framework .....	6
Figure 2.4 Demand Curve.....	13



## **ABBREVIATIONS AND ACRONYMS**

MRM

Mwea Rice Mills Limited

NSE

Nairobi Securities Exchange

CBK

Central Bank of Kenya

## **OPERATIONAL DEFINITION OF TERMS**

**Macroeconomics** –Study of the factors of the entire economy such as inflation, rates of interests and exchange rates

**Microeconomics**-Study of the trends and behavior of individual consumers, organizations or even households such as demand, supply and wages.

**Performance**-The rate and level of profit making of a business

**Demand**-Quantity of commodities and services a consumer has the will and ability to pay for.

**Consumer Price Index**-This measures the rate at which prices increase.

## **ABSTRACT**

This research mainly aimed at assessing the relationship between selected microeconomic variables and a firm's performance. This is a case study of the Mwea Rice Mills Limited, a rice manufacturer in Kirinyaga County. The specific objectives were to relate demand, rate of wages, prices and the performance of such firms. This study was descriptive in nature and used primary data obtained through questionnaires for the primary data. The study used the multiple regression analysis to draw the relationship between these independent variables and how an organization performs. The random sampling technique was used to sample data. Demand for goods and services was measured based on the consumer's disposable income. To measure prices, this study put into consideration the cost of production and Job group qualifications for wages. The firm's performance was measured by its efficiency in performance, a non-financial measure of performance. Given the focus was on various micro economic variables, this study also addressed how these variables are interrelated and the extent of their impacts.

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background to the Study**

When an organization is established, shareholders, managers and even customers have certain expectations on the running and delivery of both goods and services. Any firm's main objective is to maximize the shareholder's assets. Similarly, customer satisfaction is given priority because they are the components of the backbone of the organization. As a way to ensure that maximization of the shareholder's wealth is met, the key factor which is firm performance, is addressed (Mutungi, 2018).

Organizational performance is a crucial subject because it portrays the achievements of an organization within a period of time. It measures the actual output against the intended output. Organizations don't just operate freely, but under the influence of various economic conditions. The conditions are not stagnant, but fluctuate from time to time. Any change in these conditions have an impact on the operations and firm performance, be it negative or positive.

The economic conditions in question could be of two categories; Microeconomic factors and Macroeconomic factors. Microeconomic variables are those internal variables that affect an individual firm or even a household, and not an economy as a whole. The management of the organization has ability to control how these factors affect the operation of activities within the firm (Mutemi, 2015). Macroeconomic variables affect the economy as a whole and not just an individual organization. They could be natural, political or fiscal. Such factors are like inflation, economic outputs, unemployment levels and government policies and may trigger a series of outcomes from a firm's performance.

Microeconomic conditions, as earlier stated, affect an individual firm and those effects are controllable. They affect the day to day running of operations and influence both short term and long term strategies and policies. The decision making by both shareholders and managers heavily rely on the prevailing microeconomic conditions and their current impact on how factors like production or even delivery of goods and services are carried out. The microeconomic factors that affect operations more so in the manufacturing sector include; Competition, supply and demand, price, market, availability of employees, wages, size of an organization and influence from customers.

There has been an established relationship between these microeconomic factors and the profitability of the business run by the firm. Some of these factors could have a positive impact on the performance of an organization, while some degree of it has adverse effects on the performance of the manufacturing process.

The firm management has the responsibility to identify which of the factors are crucial to the production and manufacturing process. Respective mitigation and control measures could then be formulated to ensure that the business realizes high returns. Good customer relationships can be forged through Customer Relationship management which will ensure the business attracts new customers and retains existing customers. This could in turn help boost factors like the demand of the product, rice as for the case of Mwea Rice Mills Ltd. Demand in turn affects the production and supply, and returns from the sales in turn could determine the wage rates of the firm. These factors are evidently interrelated in that one factors triggers another and the final result being an effect on production and overall performance.

Company performance could be measured theoretically, empirically or even from a managerial point of view. This study aims at evaluating how the various economic conditions affect the

performance of the organization and the firms' financial status. The research will be of great help to shareholders and corporation managers in decision making and even policy making. Students of economics and Finance will also get to understand the relationship between economic variables and organizational performance.

### **1.12 Microeconomic Factors**

Microeconomic variables are those that affect an individual firm and even a consumer or a single household. These factors mostly affect consumer behavior (Zimmemannova, 2019), and patterns in supply and demand. Examples of microeconomic variables include competition, price of commodities, Quantity of goods produced, number of employees, supply and demand.

This study focuses on price, supply and demand, and wages. Price of a commodity is the payment by the consumer in return for goods or services. Fluctuations in price of commodities affect consumption patterns and production in return. Various factors determine the pricing of a commodity.

Supply and demand are interrelated components of microeconomics where fluctuations in demand may trigger equal degree of supply. Price on the other hand also affects the production of rice and in turn the profitability of the company. This study aims at assessing such relationship between variables.

Moreover, there is a clear interrelationship between these variables in that a change in one of the microeconomic factors affects the other, either equally, negatively or positively. Such a relationship is like the increase in price of rice when supply is low and drop when the supply goes up. The demand also quite goes up when the wages of an individual rises since their purchasing power goes up.

Various theories have been used to explain the relationship between the microeconomic environment and a firm's performance (Mutung2018). Such theories are like The Consumer Demand Theory which explains demand in the economy and the Modern Theory of Wages that explains wage rates. The price concept of microeconomics was explained by the Theory of Price. These microeconomic conditions, which for quite a long time, have been given less attention have stirred interests among economists to try to understand them and just how much they influence an organization's performance.

#### **1.14 Performance of the Organization**

Achievements of an organization over a period time is the performance of the organization. Performance of an organization can be measured financially or nonfinancial. Financial ratios and analysis of accounting data are used to analyze financial performance of the organization (Rotich, 2016). Usually, at the end of a given period, say annually or monthly, a firm would like to evaluate its financial position. To do this, the required information is extracted from the related balance sheet, income statements and other financial records over that period of time.

The performance of an organization is usually attached to the profits made within the period under evaluation.

Non-Financial analysis of performance include ways like efficiency. This measure of performance mainly addresses the minimization of costs to avoid wastage in terms of raw materials, energy, money, labour and time. It measures to what extent the inputs are utilized to make outputs. Efficiency can be quantitatively measured using ratios of total inputs and total outputs. It is calculated by total output in relation to total input. Performance is usually measured to 100%. This study used the non-financial aspect through measure of efficiency in performance.

### **1.15 The Relationship between Micro economic Variables and Organizational Performance.**

Usually, many researchers have looked into the impact of the economic factors on performance of various sectors individually. This study posed an indifference to this because these variables are all interconnected in a way or another, directly or indirectly and the aftermath is the effect on the performance of the firm.

Direct relationship refers to a situation in which one variable stimulate the other, that is, growth in one variable leads to growth in another, such as the supply function. Indirectly related means that a growth in one variable leads to a decline in another variable, like the relationship between price and demand. In addition, there could be a neutral relationship between these variables in that they are all independent of each other, and growth or decline in one has absolutely no effect on the other (Zimmermannova, 2019)

These factors affect the output of an organization, be it in goods or services, in the end. The interrelationship between price and demand affect the final quantity and quality of output of an organization, hence the measure of performance.

### **1.2 Statement of Research Problem**

So much research has been focused on the economic variables separately, either macroeconomic or microeconomic. There has been a spike in the interest as to how these variables work and how they affect operations and performance of a firm. Globally, a lot has been done except that in Kenya, this issue has been less looked into. Clearly, there is need for satisfaction in this area with the attempt to understand the relationship between these variables and overall performance

Performance of organizations has been observed to drop significantly over the recent years (Rotich, 2016). Increase in price of essential commodities and drop in purchasing power have



reduced demand for products greatly. Local industries have been left to deal with effects of high interest rates from lenders and this has really led to a drop in production. This case study sought to look into the performance of organizations like MRM whose performance dropped so much that the firm was almost affected to oblivion. Corruption has been a menace that has ravished such organizations sucking it almost dry. These however has not been as major as the general economic variables, both macro and micro. Some of the studies into this fields are like the study on The Effect of Selected Microeconomic Variables on Exchange Rates in Kenya, (Mani, 2016). Others are by researchers including Rotich, (2016), Bor (2018) and even Ndegwa *et al*, 2017. These are some of the local studies conducted in Kenya in relation to Organizational performance and economic variables.

### 1.3 Purpose of the Study

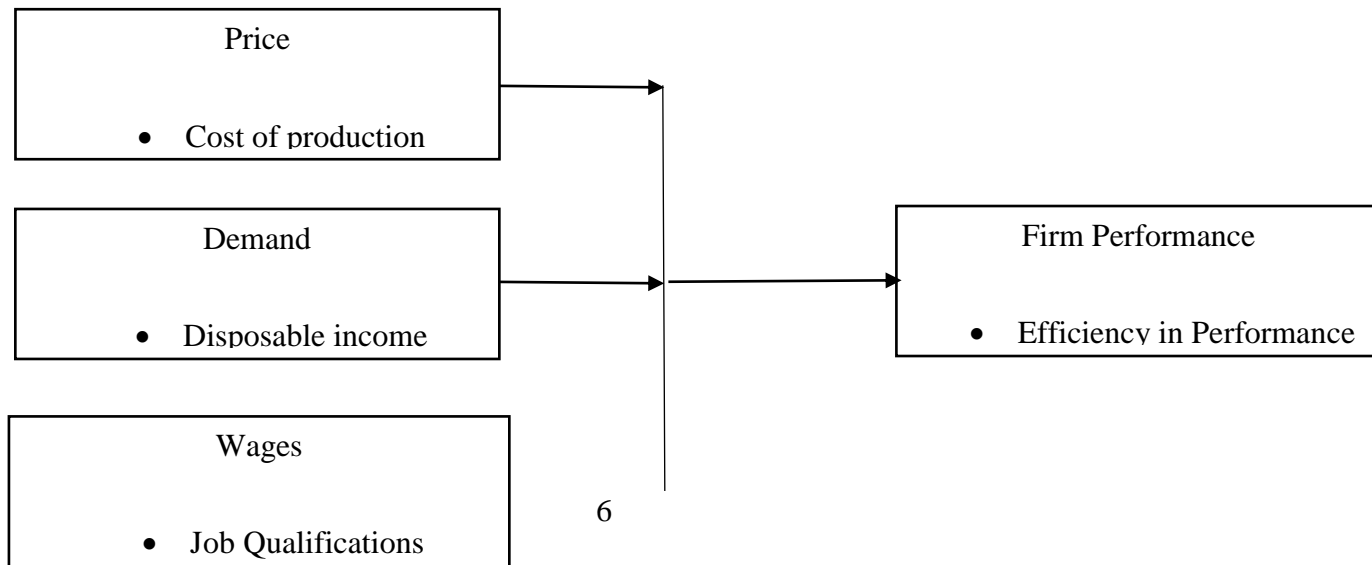
This study aimed at assessing the effect of selected microeconomic variables on an organization’s performance

### 1.4 Conceptual Framework

**FIG.1.4 CONCEPTUAL FRAMEWORK**

Independent variable

Dependent Variable





## **1.5 Research Questions**

What micro economic factors affect the performance of an organization?

How does price affect a firm's performance?

Does demand for goods and services affect how an organization performs in the economy

Does wage rates determine an organization's performance

## **1.6 Objectives of the Study**

### **1.61 General Objectives**

This study aimed at analyzing how selected microeconomic factors affected the performance of an organization.

### **1.62 Specific objectives**

The specific objectives of this study are;

To determine the effect demand have on the performance of an organization.

To find out the effects of prices on an organization's performance.

To find out the effect of wage rates on the performance of an organization.

## **1.7 Hypotheses of the Study**

The null hypotheses of the study are;

Ho<sub>1</sub>: There is no significant effect of demand on the performance of an organization

Ho<sub>2</sub>: There is no significant influence of wage rates on an organization's performance.

Ho<sub>3</sub>: Price of commodities and services has no effect on performance of an organization.

### **1.8 Significance of the Study**

This study aimed at drawing the connection between economic conditions, specifically micro economic factors, which influence operations and performance on an organization. This will be useful to shareholders and investors in making investment decisions. It will also be useful since a shareholder would be interested to know how their assets are being utilized in a way that earns maximum profits.

The study will come handy not only to shareholders, but also managers. Corporate managers are interested in making maximum profits in a way that will leave the shareholder satisfied. There will be need for accurate decision making and this needs an understanding in the trends of the economic conditions. There is a huge and vital connection between the organization and customers such that whatever affects the organization affects the customer, directly or indirectly. Company performance will help a customer to know whether their needs will be adequately satisfied.

This research study will also be a great asset to entrepreneurs planning to enter the industry as it will arm them with what to expect and how to handle various situations. Scholars and economists studying how macroeconomic and microeconomic variables affect performance of a firm could also find this study very useful.

### **1.9 Scope of the Study**

This study evaluated the effect of prices, wage rates and demand for goods and services on the performance of an organization, between the years 2010 and 2015. The study was of Mwea Rice Mills Limited, a rice manufacturing company in Kirinyaga. The study looked at the interrelationship between these variables.

### **1.10 Limitations of the Study**

Time was a major factor of concern in this study. Collection of data was a time consuming process, not forgetting the cost of collection and analysis of the data. Moreover, the accuracy of the data collected also posed a major concern in the study. The data obtained from questionnaires was prone to biasness from the respondents.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction.**

The economic environment has been an area of interest for some time now. There have been a number of studies into the microenvironment and their effects on economic performances. This chapter addressed some of the literature works done on the effects of prices, wages and demand on the performance of organizations. It also looked into some of the theories that explain the relationship between these variables and organizational performance.

The theories that were focused on in this study are like The Consumer Demand Theory, The Modern Theory of Wages and the Theory of Price.

### **2.2 Empirical review**

#### **2.21 Prices**

Olawale et al, 2018, studied how pricing policies have affected Nigerian non-financial firms .The authors used ten different sectors listed in the Nigerian 2013 NSE. This was with the intention of having and comparing the diverse information. Using demand, competition, perception from consumers and market segment as the dependent variables, the research found a positive significant relationship between demand and company performance. Competition and market segment on the other hand were found to have an insignificant effect on the performance of the firms. Furthermore, the research recommended a reduction in the cost of production so as to maximize profits. Strategizing on ways to increase demand for their products and penetration into new markets & expansion of existing markets would also guarantee the firms more profits hence better performance.

Griffin, 2019, looked into the pricing strategy theory and the research drew a relationship between the price of a commodity and its quality. The strategies of determining price attaches

worth on the commodity based on cost and profit goals, the demand by the consumers by the product, and competition from producers of similar products. The minimum price of the commodity is determined by the minimum profit expected. The profit is drawn from what remains of the revenue after all costs incurred have been considered. Demand on the other hand, determines the maximum price to sell the product. Griffin gave priority to pricing advantages, psychological factors and the existence and relationship between multiple products.

### **2.22 Demand**

Anning-Dorson, (2017) studied how demand affects an organization's culture on innovation and performance. He analyzed just how much demand effects performance and one of the mitigation factors that could help with that. He applied the Causal Modelling Method to analyze how these variables are related. From this study, he found out that there is more of a negative relationship between demand and innovation which is a setback to an organization. This can be mitigated by encouraging and supporting innovations.

Parasibu et al, (2020) studied how customer demand and supplier affects performance on a firm's competitive strategy. He analyzed 38 businesses. He used the Partiality Least Square method and his findings were that customer demand affects competitiveness negatively while the performance on the suppliers end had a positive effect on performance.

### **2.23 Wage Rates**

In 2016, Elizabeth Mensah and Kwesi Tawiah compared employee motivation and on performance of mining companies in Ghana. This exploratory research showed a positive relationship between the two variables. Due to the risks in the sector, the motivation of health safety gave a boost to the overall performance.

In the Journal of Labour Economics, 2018, Bell et al assessed how minimum wages affect a firm's value. Their study revealed a high level of uncertainty in the cases of low wages and fall in stock in the long run. Low wages led to poor performance, hence the need for firms to put up adequate wage policies.

### **2.3 Theoretical Framework**

Over the years, there has been a number of theories used to explain the impact of both microeconomic and macroeconomic variables and their effects on the performance of organizations. This study majored on the effects and degree of impact of prices, demand, and wages on the profitability and productivity of manufacturing firms in Kenya. To understand these economic variables, the theories that were used include: The Consumer Demand Theory, Theory of Price and The Modern Theory of Wages.

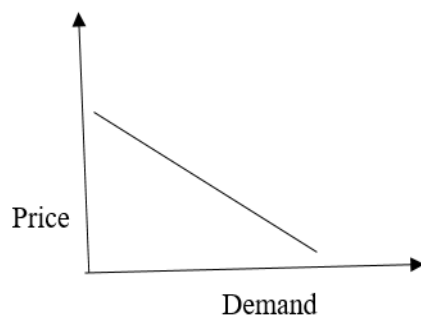
### **2.4. Consumer Demand Theory.**

Demand is the amount of goods and services that a consumer has the will and ability to pay for. The consumer demand theory relates a consumer's preferences and the demand for the goods and services in question, which in turn affects the price of the commodity. From this theory, consumption of a good or services, other than being able to pay, is attached to the utility derived from it.

From the quantity demanded, a firm is able to meet the production and supply of the quantities of the commodities as required. Demand, in turn, initiates supply. There could emerge states of imbalances when it comes to demand. In some cases there could be more demand than what can be availed for the consumer. In such a case there is scarcity of the commodity. In some other situations, whatever is supplied is more than what is demanded hence surplus. When supply and demand are equal, the situation is described as being at equilibrium.

This theory shows how supply and demand are interconnected. Moreover we cannot speak of supply and demand and ignore price. When the price of the preferred commodity is high, the demand goes down. In such a state there will be a low stock turnover since less of the goods produced will be sold to the consumer. This harms the firm's profitability since the costs of production will not be recovered. In case the quantity produced does not meet the quantity demanded, this will prompt a rise in the price of the goods or services in question.

From the law of demand, (there is an inverse relationship between the price and quantity of goods demanded, given that all factors are constant), increase in price leads to a decrease in demand, as explained by the demand curve below. (Fig. 2.4)



*Figure 2.4 Demand Curve*

A drop in price of a good leads to rise in demand, given the guarantee of the same satisfaction. This means the consumer has to spend less, and is applicable to normal goods only. Shifting in the demand curve might be influenced by income or substitutes. In case of substitutes, a consumer shifts to a less costly good that could satisfy the same need. Cheaper substitutes spike demand. Increase in income raises the consumer's purchasing power hence a rise in demand.



## **2.5 Theory of Price**

This theory draws a relationship between price of a commodity or service and supply & demand for the same good and service. An optimum price is attained when utility obtained from consumption of the goods meets the marginal cost of the seller. Supply, on the other hand, is subject to factors like demand, availability of raw materials and if the target customers can afford the commodity or service.

This theory aims at drawing an equilibrium situation for the supply and demand. Price is not just constant but fluctuates with movements in market conditions. In case of high prices, the consumption of the good or service could be avoided by the consumers hence a state of disequilibrium, more supply than what is actually bought.

## **2.6 Modern Theory of Wages.**

This theory is an improvement on the Classical Theory of Wages. The Classical Theory of Wages, (Subsistence theory, Wages Fund theory, Residual Claimant Theory and Tausig's Theory of Wages), was insufficient in determining wage level, which necessitated the Modern Theory of Wages. This theory focuses on demand and supply of labor. A wage is the cost of the service rendered by an employee to the employer.

The theory indicates a high dependence of wages on the demand and supply of it. To begin with, demand for labour also has dependency on factors like: demand for commodities involved, marginal productivity and factors of production. Rise in the demand for a commodity definitely raises the demand for labour. In this case, there is the anticipated demand and the actual demand, well it is the anticipated demand that determines the demand for labour. Demand for labour, in respect to marginal productivity, refers to the situation where an employer needs more labour with the aim of raising his profitability. The employer however employs new employees to

guarantee a rise in output but at a diminishing rate. When it comes to factors of production, costly factors of production would mean a high demand for labor and vice versa. Technological improvements on the other hand leads to a lower demand given that more human dependent processes would be replaced by computers.

Supply of labour is the time spent in the economy in question. It is influenced by factors like rate of wages, employee training, age factors and even security issues. In the short run, the supply is expectedly less elastic due to the dependence on how accessible workers are and their will to work extra hours. The short run is the opposite. Higher wages, safety and training opportunities attract more labour.

## **2.7 Summary of identified gaps in the reviewed literature.**

This chapter addressed some of the previous studies that have touched on the relationship between the variables in the microenvironment. Most of these studies viewed the variables separately, that is without drawing the relationship between the variables themselves. The variables are interrelated in that changes in one affect the other, just like demand and prices.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter addressed the methods as well as procedures for collecting data and analysis of the data regarding variables in the study. The research design was the guide on the techniques most suitable for assessing how macro and micro economic variables affect how a firm performs.

### **3.2 Research Design**

This study made use of quantitative data which took the descriptive approach. As proposed by McComber, (2019), descriptive research design ensured systematic and accurate studying of the economic variables as specified in the objectives of the study. This design, was the most suitable since the study aimed to evaluate the relationship between prices, wages, demand and the performance of a firm.

### **3.3 Study Area**

This research study was a case study of the Mwea Rice Mills Limited, a rice manufacturer in Kirinyaga County. The study used MRM as its case study since it is the major manufacturer in the region and nationwide, and has been in the industry since the early 1960s. MRM has been exposed to a number of economic factors, both microeconomic and macroeconomic, thus was considered the best choice for the study.

### **3.4 Target Population**

This study targeted MRM, a rice manufacturing firm. The manufacturing sector contributes highly to Kenya's economy. In the day to day running of their operations, these firms have to deal with the changes and economic fluctuations. The study considered and targeted a population of 100 employees and 30 customers. Over this period of time, the firm has dealt with a lot of fluctuations in the economy among them the variables mentioned previously. The targeted population were the customers and employees at Mwea Rice Mills Limited.

### **3.5 Sampling Techniques**

A sample is a section of the entire population, (Singh, 2018). Sampling techniques on the other hand, are the methods that were used to obtain a sample from the entire population. This study applied the Stratified Sampling, a Probability Sampling technique where the population in my study was divided into strata. The point of study required data from the management, employees and customers at the MRM hence the Stratified Sampling. The customers were further divided into those farmers milling their rice at MRM, those entities, institutions and households purchasing processed rice from MRM.

### **3.6 Sample Size**

The sample size refers to the respondents in a research. This study involved thirty respondents at the mill, at all the levels of management: the top level management, middle level management and the subordinate staff. Customers of the MRM also took part in the survey.

### **3.7 Measurement of Variables**

The variables that this study addressed were prices, demand and wages as the independent variables and company performance as the dependent variable. Demand was measured by the consumer's disposable income and how they affect the will and ability to pay. On the other hand, price was evaluated by the costs of production, and wages by the various job qualifications of the different staffs and the performance was measured by efficiencies in performance.

### **3.8 Research Instruments**

This study made use of primary data. Primary data was reliable as it was cheap, easy to obtain data, and also it provided a chance for a one on one interaction with the respondents hence capturing important information. It was also easier to cover a larger number of respondents within a relatively shorter time period by use of questionnaires. This entailed data on wage rates,

prices and demand. The data was collected effectively to exhaust the variables in the required way to help in accurate drawing of conclusions.

### **3.9 Validity of Measurements**

Validity is the extents of the representation of the variables by the measure as intended. This research ensured the sources were reliable and credible.

### **3.10 Reliability of Measurements**

The study acquired data from the people directly affected by the economic factors. These micro economic variables affected their daily consumption patterns and even their income levels. Therefore the respondents of the study's questionnaires were able to relate to the questions and answer them to the best of their capacity. This way, the data collected was credible as it could be attached to the respondents' daily lives.

### **3.11 Data Collection Techniques**

Methods of collecting data was highly dependent on the nature of my study, (Mbachu, 2018). In this study, primary data was obtained through questionnaires. This way, the respondents gave their responses based on how they felt the effect of the variables in question on their daily activities.

### **3.12 Data Analysis**

Data during study was quantitative and required coding and descriptive statistics calculated. Data collected was obtained by running the data in the Statistical Package for Social Sciences version 25. Given that this study sought to identify how the four independent variables relate to firm performance, multiple regression analysis was applied.

The independent variables were expressed as  $x$  and the dependent as  $y$

The variables demand, wages, price were therefore be expressed as;  $(x1)$   $(x2)$  and  $(x3)$

The equation of the analysis was as follows;

$$Y=B_0+ B_1X_1+B_2X_2+ B_3X_3$$

The b part of the equation represented the coefficients of regression.

### **3.13 Logistics and Ethical Considerations**

This study upheld all the regulations and the code of conduct highly adhered to. Important and sensitive information shared by any of the respondents was treated with utmost respect and confidentiality due to their trust given to me. Moreover, the respondents were informed that it was their will to participate and that they were guaranteed of privacy. The data from my research was presented as collected without any alterations to uphold their authenticity an originality. Most importantly, it was made clear that this study is purely academic.

## CHAPTER FOUR: FINDINGS AND DISCUSSION

### 4.1 Introduction

This chapter addresses the findings as per the study conducted, analysis of the data and its interpretation. This research looked at how selected micro economic variables which were price, demand and wages affect the performance of manufacturing firms.

### 4.2 Response rate

This research targeted 30 respondents to investigate how price of rice, its demand and rate of wages have affected the performance of Mwea Rice Mills. Out of the thirty questionnaires issued, only 26 were duly filled and submitted for analysis. This places the response rate at 86.7%.

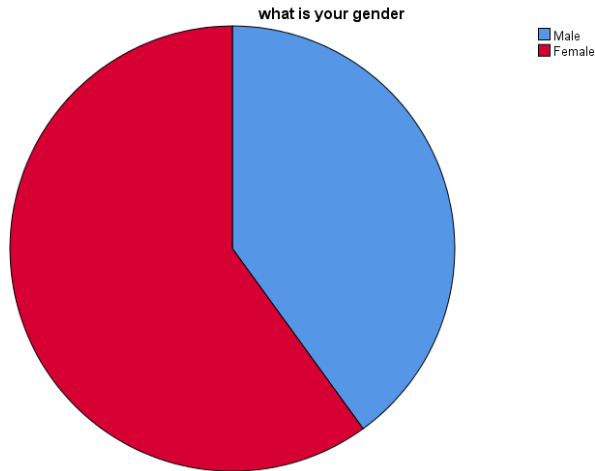
### 4.3 Respondents demographic data

This section of the research addressed the respondent's distribution in terms of gender and age as per the responses that were given.

#### 4.3.1. Gender of Respondents

**Table 4.31**

what is your gender		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	12	40.0	40.0	40.0
	Female	18	60.0	60.0	100.0
	Total	30	100.0	100.0	



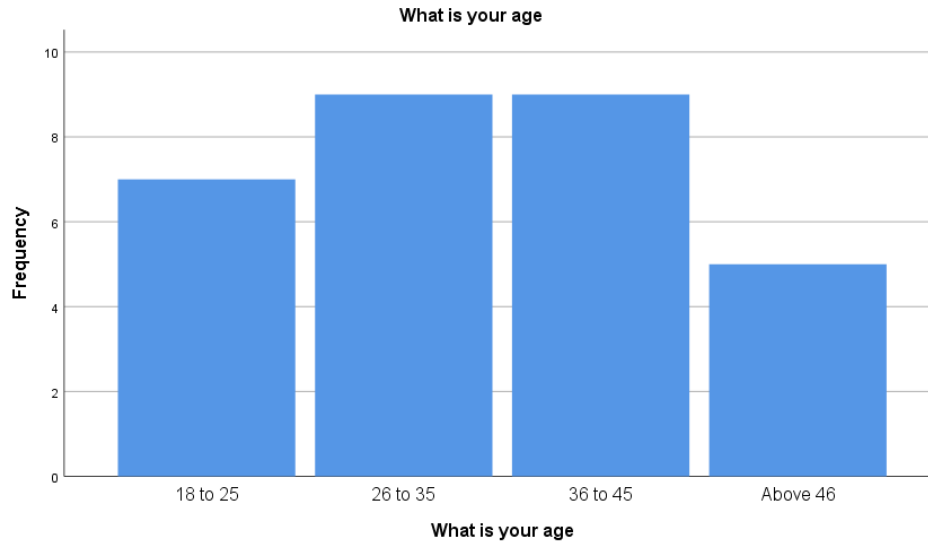
From the research, of the thirty respondents, 40% were male and 60% were female. This research considered both males and females, despite being that more females were more involved in the rice and rice business than males.

#### 4.32. Age of Respondents

**Table 4.32**

What is your age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 to 25	7	23.3	23.3	23.3
	26 to 35	9	30.0	30.0	53.3
	36 to 45	9	30.0	30.0	83.3
	Above 46	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

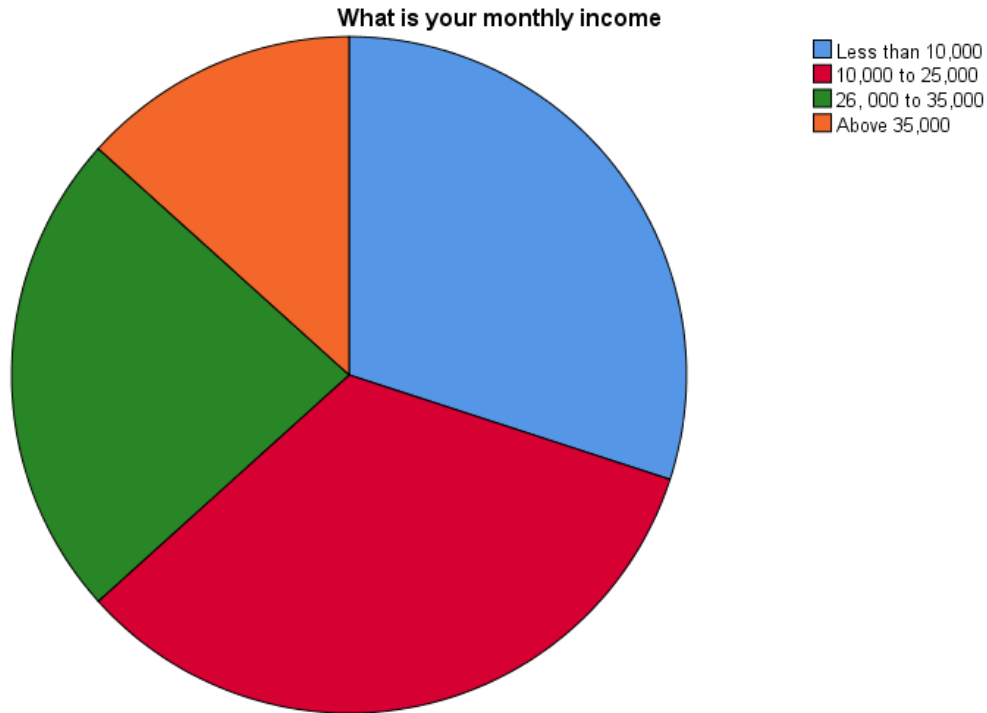




From the research findings, most of the respondents were aged between 26 to 45; with 30% aged between 26 to 35 and those between 36 to 45 being 30% too. 23.3% of the respondents were aged between 18 to 25 and the rest 16.7% being of ages above 46. The domination of the people aged between 26 and 45 was as a result of their years of experience in rice farming, rice production and the entire rice business

#### 4.33. Income of the Respondents

What is your monthly income					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 10,000	9	30.0	30.0	30.0
	10,000 to 25,000	10	33.3	33.3	63.3
	26, 000 to 35,000	7	23.3	23.3	86.7
	Above 35,000	4	13.3	13.3	100.0
	Total	30	100.0	100.0	



From the study, the income distribution of the respondents was found to be; 30% earned less than kshs.10,000, 33.3% earned between kshs.10,000 to 25000, 23.3% ranged at kshs26,000 to 35,000 and 13.3% earned above kshs.35,000. The dominated income range was between kshs.10,000 to 25,000. This was attributed to the job qualification factors like job experience and skills and knowledge of the job.

#### **4.4. Descriptive Data**

Analysis of the data collected from the research was done based on the variables of the study; Price, Demand, Wages and Performance of manufacturing firms.

##### **4.4.1. Descriptive Analysis of Price**

To analyze how price as a variable affects performance, the respondents were asked on the supply of rice paddy, the supply of the manufactured rice itself and what they thought of the quality of rice. Using the Likert scale of 1 to 5, the responses ranged as follows;1-Strongly Disagree, 2- Disagree, 3-Neutral, 4-Agree and 5-Strongly Agree.

<b>Descriptive Statistics</b>			
	N	Mean	Std. Deviation
The supply of rice has been a steady	30	3.83	1.020
The quality of rice from MRM is satisfactory	30	3.83	1.289
There has been sufficient supply of rice paddy	30	3.93	1.112
Valid N (list wise)	30		

From the scale based on the mean of the responses, 1-2.4 stood for ‘Strongly Disagree’ and ‘Disagree’, 2.5-3.4 symbolized ‘Neutral’ and 3.5-5 stood for ‘Agree’ and ‘Strongly Agree’.

The findings of this research showed that there has been a sufficient supply of rice paddy to a moderate degree (Mean 3.83), The quality of rice from MRM has been satisfactory to a moderate extent (Mean 3.83) and that there has been a steady supply of rice to a moderate degree too (Mean 3.93). The aggregate mean of the findings of this research (Mean 3.86) showed that the price of rice had a major impact on the performance of Mwea Rice Mills.

The findings of this study go hand in hand with those Of Toni, 2017, who looked at how pricing strategies had an impact on corporate profitability. Using theories like the customer value- based pricing theory, cost based and competition based theories, this research found a significant relationship between pricing and corporate profitability. Use of stronger and more efficient resources would therefore guarantee affirm competitive advantage. Choice of the best pricing strategy also gave a higher profit margin.

#### 4.42. Descriptive Analysis of Demand

The Linkert scale of 1-5 was also applied on the measure of demand where 1 represented Strongly Disagree, 2 Disagree, 3Neutral, 4 Agree and 5 Strongly Agree. Table 4.42 shows the findings of the research.

<b>Descriptive Statistics</b>			
	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
Which is your favorite brand of rice	30	3.07	1.143
Your monthly consumption of rice is more than 5 kilograms	30	3.23	1.104
You have been a customer of MRM for more than 5 years	30	3.90	.885
Disposable income supports provision of basic needs	30	3.93	1.015
Valid N (list wise)	30		

From the scale based on the mean of the responses, 1-2.4 represented ‘Strongly Disagree’ and ‘Disagree’, 2.5-3.4 symbolized ‘Neutral’ and 3.5-5 stood for ‘Agree’ and ‘Strongly Agree’. From the study, an average number of respondents agreed to consuming more than 5 kilograms of rice monthly (Mean 3.23) and consumption of the Mwea Aromatic Pishori rice among the favorite brands consumed (Mean 3.07). A higher number of the respondents have been customers of MRM for more than five years (Mean 3.90). In addition, there was a moderate response to the respondents’ disposable income satisfying their basic needs (Mean 3.93). The aggregate mean of data collected on demand (Mean 3.53) shows that Mwea Rice Mills needs to broaden the brands of rice it produces so as to give their customers more variety of choice.

The findings of this study concur with previous studies by Pettinger, 2017. He studied the factors that affect the profitability of firms. Among the factors addressed was demand. From the study it was found that during periods of high demand, firm performance went up and there was tremendous growth in market share. The excessive profitability could however trigger excessive supply hence savoring the increased demand in the market for the product, hence reduced performance.

#### 4.43. Descriptive Analysis of Wages

The respondents' data on wages were analyzed using the same scale as the other variables; 1 being Strongly Disagree, 2 being Disagree, 3 being Neutral, 4 being Agree and 5 being Strongly Agree. Analysis of data was done based on their strengths from the respondents' choices.

<b>Descriptive Statistics</b>			
	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
You have worked with MRM for more than 5 years	30	3.77	1.194
MRM promotes membership in trade unions	30	3.83	1.053
The mill provides for paid leaves and holidays	30	4.00	1.017
The mill provides and supports training programs from time to time	30	4.07	1.048
Valid N (list wise)	30		

Of the questions asked, the range 1-2.4 represented 'Disagree' and 'Strongly Disagree', which were moderate responses, 2.5-3.4 showed neutral responses and 3.5-5 part of the scale was an

indication of ‘Agree’ and ‘Strongly Agree’. The findings of the research showed that an average number of respondents had worked with MRM for more than five years (Mean 3.77), there was an average response that MRM supported membership in trade unions (Mean 3.83), an average number of response being that the mill provided for paid leaves and holidays (Mean 4.00), and that the mill provided and supported training programs from time to time (Mean 4.07). The aggregate mean of these responses (Mean 3.92) indicated wages being a variable that affected efficiency in performance to a high level.

The result from this study agrees with that of Muthengi, 2017, where the study looked at how compensation strategy affected the performance of Kenya’s Auditor General’s office. From the research, strategic compensation and plans on salaries, training and insurance policies was a motivation factor which enhanced the performance of the office.

#### **4.44 Descriptive Analysis of Firm Performance.**

The study aimed at finding out how performance of the Mwea Rice Mills was affected by the tested variables; prices, demand and Wages. The Likert scale was used where 1 represented Strongly Disagree, 2 was Disagree, 3 being Neutral, 4 was Agree and 5 Strongly Agree. The scores were as indicated in table 4.44 below.

<b>Descriptive Statistics</b>			
	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
MRM Makes use of automated systems	30	3.60	1.192
There is short period between order and delivery of the rice at MRM	30	3.63	1.033
Management at MRM is efficient and helpful in performing tasks	30	3.70	1.088

Valid N (list wise)	30		
---------------------	----	--	--

The mean of the responses, 1-2.4 represented ‘Strongly Agree’ and ‘Agree’, 2.5-3.4 was ‘Neutral’ and 3.5-5 stood for ‘Disagree’ and ‘Strongly Disagree’.

The research finding showed that the respondents agreed to a moderate level that MRM uses automated systems in their operations (Mean 3.60). There was an average response on the short period between order and delivery of rice at MRM (Mean 3.63) and that the management at MRM was efficient and helpful in performing task to an average degree {Mean 3.70). The aggregate mean of the findings 3.64 indicated that there is a positive degree of efficiency in operations at the mill. The mill should consider more automation of their operations to cut on costs, time and labour.

Mutunga, 2017, looked at the micro factors that affect the performance of manufacturing g firms in Kenya. With a target population of 180 CEOs from various manufacturing firms in Kenya and using various micro variables like management practices, the study found that performance is subject to factors and changes in the microeconomic environment. These variables affected performance such that efficiencies in management, costs and operations led to better performance.

The findings of my study also found Performance to be subject to fluctuations in demand rates, price levels of rice and wage levels.

#### **4.5. Regression Analysis.**

This study applied regression analysis to determine the relationship between the independent variables price, demand and wages, and the dependent variable performance of manufacturing Firms. Given the variables under study were four, the study used multiple regression analysis.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2
1	.777 <sup>a</sup>	.604	.558	.47004	.604	13.193	3	

a. Predictors: (Constant), Wages, Price, Demand

The R Square coefficient of this study 0.604 which shows the extent to which the independent variables affect the dependent variable. This means that the variables price, demand and wage levels contribute to up to 60.4% to performance of the Mwea Rice Mills. Other factors not addressed by this study influence 39.6% of the performance. Further studies therefore need to be conducted to fill the gap of the other micro economic factors that affect performance of manufacturing firms.

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.745	3	2.915	13.193	.000 <sup>b</sup>
	Residual	5.744	26	.221		
	Total	14.489	29			

a. Dependent Variable: Performance

b. Predictors: (Constant), Wages, Price, Demand

ANOVA results from the study showed a significance level of 0.00 hence showing the regression model used was significant. Moreover, F being 13.19 at 5% level of significance indicate a



significant relationship between the independent variables and performance of manufacturing firms.

		<b>Coefficients</b>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.824	.716		2.793	.049	.528	
	Price	-.121	.138	-.109	-.881	.012	-.405	
	Demand	.997	.211	.658	5.225	.001	.670	
	Wages	.574	.131	.550	4.379	.000	.843	

a. Dependent Variable: Performance

From the coefficients table, price had a significance level of 0.012, demand 0.001 and wages 0.010. At 95% level of significance, the B values of the independent variables were - 0.121 for price, 0.997 for Demand and 0.574 for Wages. The p values of the variables; Price 0.012, demand 0.001 and wages 0.00 indicate a significant relationship between the variables and the performance of an organization.

With the regression model being  $Y=B_0+ B_1X_1+B_2X_2+ B_3X_3$ , the equation of this study was;

$$Y= 1.824- 0.121X_1+ 0.997X_2+ 0.574X_3$$

## **CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.**

### **5.1. Introduction**

This chapter addresses the summary of the research findings, the conclusions drawn from the study as well as recommendations by the researcher. This chapter will also address the limitations to the study and recommendations for further research.

### **5.2. Summary of Findings**

This study majorly aimed at examining how the selected micro economic variables affected the financial performance of manufacturing firms. The independent variables studied were Prices, Demand and Wage levels while the dependent variable was performance of manufacturing firms.

#### **5.2.1. Effect of Prices on Performance of Manufacturing Firms in Kenya.**

The first specific objective of the research was to determine the effect of price on performance of an organization. The Null Hypothesis for this objective was that there is no significant effect of prices on performance of an organization. The findings of this study rejects the null hypothesis  $H_0$ . This is because there has been indicated changes in performance with changes in price levels of rice. Given the b value for price was -0.121, this indicated that an increase in prices led to a decrease in performance levels of the firm.

This was attributed to the fact that high prices discouraged consumption. A sufficient supply of the rice paddy which is the raw material to the rice manufacturing meant that there was no excess costs in procuring raw materials hence higher performance. In addition, adequate supply of rice into the market regulated the price levels. Also, from the study, most respondents considered the rice from MRM being of high quality. This means the willingness to pay for the rice is motivated

hence good productivity and performance. Therefore, Price has a significant Effect on Performance of Manufacturing Firms.

### **5.22. Effect of Demand on Performance of Manufacturing firms in Kenya**

The study also sought to examine the effects of demand on performance of manufacturing firms in Kenya. The Null Hypothesis  $H_{02}$  for this variable was that there is no significant effect of demand on performance of an organization. The research findings however reject this hypothesis given that it was observed that fluctuations in demand affected the performance.

The B value for this variable was found to be 0.997 which meant that an increase in demand of rice led to an increase in performance of the rice mill. Most respondents consumed the Aromatic Pishori Rice which is the leading brand at MRM. Moreover, the respondents indicated to having been customers of MRM for more than five years. The monthly consumption of the rice by respondents was found to be more than 5 kilograms. This therefore means that the study found that levels of demand affect the performance of an organization.

### **5.23 Effect of Wages on Performance of Manufacturing Firms in Kenya**

The null hypothesis of this variable  $H_{03}$  was that there is no significant effect of Wages on performance. The findings of this study reject the null hypothesis given that the B value was found to be 0.574. The respondents indicated that MRM supported and promoted membership in trade unions, facilitated training, allowed for leaves and that most had a high job experience. These factors indicated a motivation of the employees hence improving performance. More experience also qualified the employees' higher wages. This therefore means that Wages have an effect on Performance of Manufacturing Firms in Kenya

### **5.3. Conclusion.**

This study concluded that there was an inverse relationship between prices and performance of manufacturing firms. This means that increase in prices means that there will be lower performance level.

Demand on the other hand portrayed a positive relationship with organizational performance. Increase in demand increased the level of performance and rice production in the organization. As for wages, there was also a positive relationship. The more training the employees receive the more motivation they got the better the performance of the firm.

All these having been indicated, the performance of manufacturing firms was found to be subject to the indicated micro economic variables; prices, demand and wages. These variables had a significant effect on performance of manufacturing firms.

### **5.4. Policy Recommendations.**

This research investigated the effect of demand, prices and wages on performance of an organization. From the findings, the variables affected the production of rice significantly. The mill however should consider increasing the variety of their brands of rice manufactured so as to give their consumers more variance of choice. The mill should also consider increasing training programs, automation of operations coming up with strategic and efficient plans in coverage of different processes like procurement of rice paddy, pricing strategies and setting of right wage levels. This way, there would be efficiencies in all aspects of the organization.

### **5.4. Limitations of the Study**

This study made use of primary data which involved respondents answering questions on the questionnaire. Some of the respondents found some of the questions personal or were not in a position to respond to some of the questions. The researcher however assured the respondents that the data would be treated with confidentiality and that it was purely for academic purposes. The respondents were of various departments and categories which also required the researcher

to personally reach them which was quite time consuming. However, with determination, the data was sufficiently collected for analysis.

### **5.5. Suggestions for Further Research**

This study used primary data collected by use of questionnaires. This narrowed the analysis given that the data could have been collected by use of interviews too. Furthermore, the research was a case study of Mwea Rice Mills, which is one of the various Rice millers in Kirinyaga. Further research to cover these gaps should be made to include the other data collection methods and other geographical areas. Further studies should also consider other economic factors that affect the performance of manufacturing firms.

## REFERENCES

- Mutunga, (2018). Effects of Micro Factors on Financial Performance of Manufacturing Firms in Kenya
- Mutemi, (2018). The Relationship Between Microeconomic Variables and Institutional Efficiency of Companies Listed at the Nairobi Securities Exchange in Kenya.
- Mohammed et al, (2140, The Measurement of Firm Performance's Dimension; *The Asian Journal of Finance & Accounting*, 2014, vol. No.1
- Gujrat, (2015), Microeconomic and Macroeconomic: Issues and Effects on Economic Growth; *International Journal of Recent Scientific Research*.
- Elizabeth Tiekue, (2016). An Examination of the Effects of Macroeconomic Variables on Ghana Stock Market Returns in Ghana.
- Totonchi, (2011). Macroeconomic Theories of Inflation.
- Kaya, (2016). Wage Theories and Applicable Wage Model Proposal for Turkey's Labour Markets.
- Njoroge et al, (2016). Does External Environment Influence Organizational Performance the Case of Kenyan State Corporations?
- Manuel, (2015). Cost and Relative Price Competitiveness of the Mexican Manufacturing Industry in the US Market.
- Agubata (2014). Effect of Exchange Rates Fluctuations on the Financial Performance of the Nigerian Manufacturing Firms. Evidence from Food, Beverages and Tobacco sector.
- Kruger (2015) Macroeconomic Development and the Life Cycle of the German Automobile Industry.
- Thuan *et al*, (2015). Impact of Macroeconomic Variables on Manufacturing Sector Growth in Malaysia.
- Kinyua, (2018). Effects of Micro Factors on the Financial Performance of Listed Insurance Companies in Kenya
- Lang (2017). The Effect of Exchange Rate Movements on Corporate Profitability of Firms Listed AT the NSE.
- Enu *et al*, (2014). The Manufacturing Sector of Ghana: Are there any Macroeconomic Disturbances?
- Mugenda & Mugenda, 2003. Research Methods Qualitative and Quantitative Approaches.

## APPENDIX

### QUESTIONNAIRE

This survey is part of my study for the partial fulfillment for the award of a degree in Finance at Grets University Thika. This information will be used only for academic purpose and will be treated with a lot of confidentiality. For sections that you will not be comfortable answering you may skip. Your time and participation will be so much appreciated.

#### PERSONAL INFORMATION (Tick where appropriate)

Gender: Male  Female

Age

18 to 25                       26 to 35                       36 to 45                       46 and above.

Monthly Income

Below 10,000                       10,000 -25,000                       26,000 -35,000                       Above 35,000

#### PART B

- I. How long have you worked with MRM?
- More than 15 years
  - 11 to 15 years
  - 6- 10 years
  - 1-5 years
  - Less than 1 year
- II. Mwea Rice Mills Promotes Membership in trade unions
- Strongly Agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree
- III. The mill provides for paid leaves and holidays
- Strongly Agree
  - Agree
  - Neutral

- Disagree
- Strongly Disagree
- IV. The mill supports and provides training programs from time to time
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree

**PART C**

- I. There has been a sufficient supply of rice paddy
  - Strongly Agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree
  
- II. There has been a steady supply of rice over the past one year
  - Strongly Agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree
  
- III. Disposable income from MRM supports provision for basic needs
  - Strongly Agree
  - Agree
  - Neutral
  - Disagree



Strongly disagree

**PART D**

I How long have you been a customer at MRM?

More than ten years

6 to 10 years

1 to 5 years

Less than a year

II. Which is your favorite brand of rice

Aromatic Pishori

Kenya's Select Pishori

Sindano Rice

MRG Classic

IV. About how many kilograms of rice do you consume per month

More than 25 kgs

16 to 25 kgs

6 to 15 kgs

1 to 5 kgs

V. The quality of rice from MRM is satisfactory.

Strongly agree

Agree

Neutral

Disagree

Strongly disagree

VI. The Mwea Rice Mills makes use of automated systems various tasks.

Strongly agree

Agree

Neutral

Disagree

Strongly disagree

VII. There is a short period between order and delivery of rice at MRM

Strongly agree

Agree

Neutral

Disagree

Strongly disagree

VIII. The management at MRM is efficient and helpful in performing tasks.

Strongly agree

Agree

Neutral

Disagree

Strongly disagree