

**EFFECT OF OWNERSHIP STRUCTURES ON FINANCIAL  
PERFORMANCE OF MANUFACTURING FIRMS IN KENYA**

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## DECLARATION

I, the undersigned, declare that this is my original work and has not been previously presented for the award of any degree in any other university.

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## APPROVAL

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## **DEDICATION**

I sing a song of happiness, joy and thankfulness as I honour my parents, Mr. Jared Abraham Mayoka and Mrs. Grace Mayoka. It goes without saying that I achieved this height due to your immense goodwill and all round support.

I equally gift this work to my dear husband MaozYah Liambula and precious children Yahseph Wakhongola and Daud Mukhongo. In spite of taking some significant time off our usual family schedules, to undertake this course, you understood and fundamentally encouraged me to keep striving, keep going and keep winning. I adore you all.

I similarly, dedicate this project to my close colleagues, family and friends whose contributions have enabled me to reach this level in my academic life. Thank you very much.

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## **LIST OF ABBREVIATIONS**

<b>BOC</b>	-	British Oxygen Company
<b>CEO</b>	-	Chief Executive Officer
<b>IRA</b>	-	Insurance Regulatory Authority
<b>NSE</b>	-	Nairobi Securities Exchange
<b>OLS</b>	-	Ordinary Least Squares
<b>ROA</b>	-	Return on Assets
<b>UK</b>	-	United Kingdom
<b>VIF</b>	-	Variance Inflation Factor

## **ABSTRACT**

In theory, the nexus between firm shareholding indicates that distribution of equity among various ownership categories affect firm performance. Whilst ownership structure influences decision making, the effect on firm results is not necessarily positive. Separation between management and ownership can create conflicts between owners and management as envisioned by the Agency theory. The Kenyan case evidences conceptual and contextual gaps. Accordingly, therefore, this study interrogated nexus of ownership structures and returns of corporates, specifically in manufacturing sector of Kenya. This study had four explanatory variables which were used to derive specific aims. These factors are: management ownership, foreign ownership, institutional ownership and individual ownership. In line with the variables, the study was anchored on tenets and postulates of Agency Theory, Stulz's Integrated Ownership Theory and Stewardship Theory. The main method that was used to obtain inferences was in form of a descriptive design. This study has a population of nine hundred and twenty manufacturing companies. In sampling, ninety firms were used for gathering observations for the variables for a period of eight years. Inferences evidenced that management ownership had a positive and significant effect on firm performance, foreign ownership negatively and insignificantly affected firm performance, institutional ownership positively and significantly affect performance and individual ownership negatively and insignificantly affected returns financially. It was recommended that manufacturing firms should encourage institutional and management ownership in order to increase their financial performance.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

There are dynamics occasioned by different ownership structures with respect to corporate governance of firms. Shareholders are investors who provide funds for firms and therefore have a high stake and interests in activities of firms (Tariq, 2018). Still, the ownership of firms could be concentrated or dispersed and this plays a critical role in how decisions are made. For example, institutional investors tend to offer more oversight than individual shareholders. In corporate governance discourses, ownership structure is a major field that researchers have sought to assess. Equity holders are often not routine operations of entities operations as they delegate authority and powers to management. Ownership structures refer to the partitions of equity holders in form of institutional or individuals (Mihai & Cosmin, 2013). Also, the shareholders could be local or foreign shareholders.

Global literature indicates that ownership structure vary. In United States, ownership structure is more concentrated while that of Italy is more dispersed and where shareholding is concentrated meaning that equity is closely held by a few individuals or entities, control of management is possible in contrast to dispersed ownership. Din, Arshad, Khan and Khan, (2021) note that in Pakistan, where ownership is concentrated and institutional, performance of firms improve because, decisions are sanctioned by owners before implementation. In general, where owners are capable of making decisions that seeks to maximise their wealth, there is a reduction of the agency problem.

Regionally, ownership structure has received considerable attention. According to Ohiani, Eniola and Mustapha (2018) ownership structures has a role on decisions made which in turn influence firm results and ability to make profits. It is decisions that sustain firm's competitiveness giving it a competitive edge in the market. Dynamics of ownership distribution has a bearing on firm returns since different stockholders have diverse influence on firm decisions. Firm performance is a function of decisions made by owners through the management. Among firms in Ghana, ownership structures influences performance through corporate governance given that where owners are able to demand best interests for all stakeholders, firm performance improves (Darko, Aribi, & Uzonwanne, 2016).

### **1.1.1 Ownership Structure**

Equity distribution among different categories of persons or entities is known as ownership structure (Kao, Hodgkison, & Jaafar, 2019). Ownership structure therefore identifies the various parties that have a claim to equity and capital of an entity. Publicly trading entities have varying shareholding structures. Equity holders have legal rights to decision making of firms that is done through delegated authority to management. Management has a duty to uphold the interests of owners of firms. Owners of publicly held entities have a right to receive dividends from the profits that firms make (Tariq, 2018). In this aspect, owners control management by adopting investment decisions that are for their benefit.

Ownership structure broad spectrum refers to the distribution of equity in terms of concentration and owners nature (Gugong, Arugu, & Dangago, 2014). Concentrated ownership exist where equity holders are a single lot while diffused ownership is where shareholding is distributed among several equity holders.

In regard to nature of owners, there are several classes which include government ownership, institutional ownership, foreign, individual among others. Different owners have different degree of touch with firm activities and decision making. Moreover, the type of shareholders has different relationship with management. For instance, where share ownership is concentrated, shareholders are able to exert influence on management which in turn can impact on firm financial performance (Mansur & Tangl, 2018).

Ownership structure is measured as a ratio of specific number of shares an equity holder category over total number of shares (Kao, Hodgkison, & Jaafar, 2019). In this study, various categories of owners are considered. Management shareholding depicts the amount of shares that board and management persons own. Institutional ownership refers to amount of shares owned by other entities. The entities could be incorporated or not incorporated entities. Local ownership means share ownership by local individuals while foreign ownership refers to ownership of firm by entities that are not domiciled in the country the entity is undertaking business in.

### **1.1.2 Financial Performance**

Firm output from activities expressed as monetary measures or financial terms is known as financial performance (Pervan, Pervan, & Curak, 2017). The degree of how well an entity uses its scarce resources to generate revenue and in turn make profits is known as financial performance. Financial performance represents the efficiency in resource utilisation. This is because, it characterises outputs and inputs in financial measures. It is also a focal measure of how well management discharge their duties. This is because, it quantifies firm performance in monetary or financial ratios which have a bearing on ability of the entity to remain a going concern.

At the same time, financial performance provides a good criteria for examining the competence of management especially for profit making entities (Niresh & Velnampy, 2015). Using the raised capital, firms acquire capital items like machines for production, purchase raw materials and convert them into finished products and sale them at a profit. Financial performance is expressed and measured in varying parameters that comprise of measures that indicate financial health of an entity in respect to other similar entities in the same industry or in another sector. Financial performance is reported in financial statements which show results and financial position after a certain period and at a certain date respectively (Carney, Estrin, Liang, & Shapiro, 2019).

In this study, financial performance was operationalised and expressed in form of return on assets as it relates efficiency in generation of net income by using existing resources (Simiyu & Too, 2018). This measure is deemed fit for this study due to two folds; to begin with, the study focuses on manufacturing firms that have high capital expenditure in form of plant and machinery. Secondly, return on assets indicates efficiency in resource and allows for comparison within the sector and with other entities outside the respective sector.

Financial performance of profit based entities is of great importance not only to shareholders but also to other stakeholders. Good financial performance indicates that a firm remains a going concern (Niresh & Velnampy, 2015). In this respect, shareholders undertake activities by delegating powers to management in order to ensure firms thrive and grow.

Decisions made by management are sanctioned by shareholders in various platforms such as during annual general meeting and through investor briefings and board papers. Whilst this is the case, the nature of ownership tends to influence how various decisions are made in line with the control they are able to exert to management.

### **1.1.3 Ownership Structure and Financial Performance**

Nexus between firm shareholding indicates that distribution of equity may or may not support firm performance. According to Ohiani, Eniola, and Mustapha (2018) ownership structure has a role on agency costs and vision of entities thus creating a direct effect on firm returns. In as much as routine running of entities is a mandate of management, owners have ultimate control of how resources are expended to generate revenue. Considering that management are agents of shareholders, it therefore means that business control is a function of owners and moreover it is argued that large institutional owners have a significant influence on firm activities (Mihai & Cosmin, 2013).

Whilst ownership structure influences decision making, the effect on firm results is not necessarily positive. Ohiani *et.al.*, (2018) argue that owners delegate investment decision making to management. In this aspect, firm performance is a function of management decision more than it is for owners' decisions particularly for entities whose majority stockholders are individuals. Thus ownership structure in its own capacity may fail to realise any improvement in firm financial results. Only large block of stockholders such as institutional shareholders are capable of influencing investment decisions of firms and still this does not expressly have to lead to good results (Gurusamy, 2017).



Dispersed equity holders like individual shareholders seldom have influence on firm decisions and even if they do during annual general meeting, their participation is merely on voting and this is more often rubber stamping decisions by management.

#### **1.1.4 Manufacturing Firms in Kenya**

In general perspective, to manufacture is to turn raw materials into products through value addition. Therefore, manufacturing firms are business concerns that source for raw materials, transform them through industrial processes and form finished products with more value to consumers. Manufacturing is a resource intensive business undertaking as it requires significant investments in capital through plant and machinery. For manufacturing firms to realise tangible profits and sustained results, efficiency must be realised (Niresh & Velnampy, 2015). Transforming of raw materials into value added output require a carefully structured combination of financial resources, human resources and materials. A number of firms in Kenya have floated shares at the Nairobi Securities Exchange. These entities have their shares trading at the stock market resulting to different ownership structures.

The Kenyan manufacturing sector is robust with most firms involved in agro-processing and other industrial activities. Manufacturing firms in Kenya are key drivers of economic growth through creation of job opportunities, creates market for raw materials, and improves balance of trade and harness wealth to owners. Whilst, the sector is a crucial engine towards economic development, still there are challenges that characterises the manufacturing sector in Kenya. To start with, instances of malpractices and poor corporate governance have led to firms collapsing. Moreover, the once vibrant sector has received dismal performance.

## **1.2 Research Problem**

In theory, firm ownership may affect firm performance indirectly as it plays a role on corporate governance and this is an ongoing debate (Saidu & Gidado, 2018; Farooque, Buachoom, & Sun, 2019; Adamu & Haruna, 2020). Further, separation between management and ownership can create conflicts between owners and management as envisioned by the agency theory (Jensen & Meckling, 1976). Concentrated ownership principally reduces agency conflicts and therefore can foster returns while diverse ownership is likely to lead to management ownership conflicts (Vu, Phan, & Le, 2018). In the Kenyan perspective, this scenario has not been exhaustively reviewed.

Manufacturing firms in Kenya have diverse ownership structures. For example, Mumias Sugar is largely owned by the Government of Kenya while BOC is largely owned by foreign shareholders at the tune of 65.38 percent through BOC Holding which is a subsidiary of Linde Group, a UK company. 9.13 percent of equity is owned by institutional shareholders (BOC, 2020).

A scrutiny of reports for manufacturing firms in Kenya indicate that performance has not been good. BOC Company registered a decrease of net income by shillings 26 million to shillings 75 million earned in financial year 2019 (BOC, 2020). For instance, Eveready and Mumias Sugar Companies have exhibited poor performance for the last half a decade. Mumias Sugar Company share distribution stood at 64.71 percent local individuals, 32.57 percent local institutions and 2.72 percent foreign shareholders and still the company reported a loss per share of Kenya Shillings 9.90 and 4.43 for the financial year 2018 and 2017 respectively (Mumias Sugar Company, 2018).

Eveready East Africa Limited exhibited a loss per share of Kenya shillings 0.52 and 1.45 for the financial year 2019 and 2018 respectively even though its most owners of

Eveready East Africa are local institutions at 58.39 percent and foreign ownership 10.03 percent (Eveready East Africa Limited, 2020). This raises a question on whether ownership structures play a role on firm's wellness and stability. The identity of owners is to be interrogated further.

Outside Kenya, empirical evidence on ownership and firms' financial returns exist. Kao, Hodgkison and Jaafar (2019) undertook a study and results showed that foreign, institutional and centralised ownership boosts performance of firms in Taiwan. On the contrary, Phung and Mishra (2016) revealed that only foreign ownership significantly added value to financial returns of Vietnamese firms. This contradiction should be investigated further. The Kenyan case evidences conceptual and contextual gaps. Lastly, this study was a panel data analysis of manufacturers in Kenya which is a departure from most studies done in Kenya that have been simplistic by adopting OLS regression analysis.

### **1.3 Objectives of the study**

To assess effect of ownership structures on financial performance of manufacturing firms in Kenya.

#### **Specific objectives are:**

- i. To evaluate the effect of management ownership on financial performance of manufacturing firms in Kenya.
- ii. To establish effect of foreign ownership on financial performance of manufacturing firms in Kenya.
- iii. To examine effect of institutional ownership on financial performance of manufacturing firms in Kenya.

- iv. To find out the effect of individual ownership on financial performance of manufacturing firms in Kenya.

#### **1.4 Value of the Study**

This inquiry essentially creates application values to management practice, policy while at the same time adds to theory. Results on its aims, can be used by manufacturing firms to improve decision making that can improve firm returns. Understanding influence of ownership structure on firm results is imperative to shareholders as they are able to plan on shareholding of their firms in order to achieve superior financial returns on their investments.

The outcome of this study is equally beneficial to the policy makers such as Capital Markets Authority. The findings can aid in making of policies that relate stock owners and performance thus improving operational efficiency of manufacturing firms. Appropriate policies should be anchored on empirical evidence.

Lastly, this study has added to what is known on theory of ownership dynamics and more so in Kenya where there are few studies done on this field. In future, other researchers can use this study as a source of empirical review.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The emphasis of part two of this proposal is to present literature. To begin with, theoretical foundation is presented, followed by a discussion on determinants of financial performance and then an empirical review is done. Moreover, this chapter has conceptual framework. At the end, a summary is made.

#### **2.2 Theories of the Study**

The Agency Theory, Stulz's Integrated Theory, and Stewardship Theory provides a relevant theoretical anchorage for this inquiry.

##### **2.2.1 Agency Theory**

Origin of agency theory is from work of Jensen and Meckling (1976) who attempted to explain the existing problem between principals and agents in management. Agency theory is constructed on the argument that business owners, especially for large entities appoint managers to run firms on their behalf thereby creating an agency problem (Feng, Wei, & Zhu, 2018). In this theory, shareholders are regarded as the principals as they are the contributors of capital while managers are agents whose work is to focus on shareholders' interests. Agency problem exist where interests of shareholders and those of executives are not congruent thus limiting creating disputes. These disputes are in turn detrimental to the overall welfare of the firms. Executives perform managerial duties by use of delegated authority from shareholders (Brahmadev & Leepsa, 2017).

Principal-agency problem is major concern in ownership and management as it can foster alienation of interests (Panda & Leepsa, 2017). A firm has several stakeholders whose interests are fundamentally different. For example, shareholders largely seek financial interests. Where management may seek growth at the expense of shareholder's interests. This theory ideals that agency problem is resolved at costs (Wang, Chen, & Fang, 2018). For example, in order to encourage management to improve on cost efficiencies, performance based remuneration can be used. Nevertheless, management may falsify financial reports to showcase good performance which is not the actual position. Resolving agency problems does not expressly improve performance (Merendino & Melville, 2019).

In as much as agency theory is considered impactful in providing insights on corporate management and governance, the theory suffers from mishaps in terms of its application. It depicts that from time to time owners come into conflicts with management and this creates the need to have control mechanisms put in place. However, in order to safeguard interest of owners, appointment of other parties to protect shareholders interest may complicate the already tainted relationship between managers and owners (Merendino & Melville, 2019). It is also expensive to mediate the two parties and this means that a lot of resources are expended towards solving the conflicts instead of being used in income ventures. Moreover, agency theory predetermines a conflict that may never actually happen in the life of firms particularly where owners are the managers which then suggests that it has limited practical application. This theory is applied only for large corporations where their owners do not oversee routine activities of firms. In the event that the owners are able to man their firms, then proposition of agency theory ceases (Panda & Leepsa, 2017).

Agency theory is used to link ownership and firm performance in two ways. Foremost, managers are agents of shareholders. At the same time, managers can own shares in the company they work for. Thus, in the context of ownership structures, agency theory relates specifically with managerial ownership. Does managerial ownership improve financial returns of manufacturing firms? This study answered this question. Secondly, this theory at the overall points that ownership matters in respect to firm results. Different owners have differing degree of principal-agent problem. In order to elucidate this paradigm, this study entailed an interrogation of potential nexus or absence of it thereof between ownership and firm returns.

### **2.2.2 Stulz's Integrated Theory**

The origin of this theory can be traced to the seminar paper of Stulz (1988) who sought to theoretically discuss the role of ownership on firm performance. This theory is largely pegged on two main constructs, that is, proposition of entrenchment and takeover of firms in respect to ownership.

The theory idealises that where equity is owned by management or board the takeover bid is often higher than when few shares are owned by management or board. Integrated theory further asserts that firm efficiency is likely to be influenced by ownership concentration (Salehi & Baezar, 2011). For instance, majority shareholders who also engage in decision making are often involved in making decisions that are pertinent and of interest to themselves as opposed to interests of all stakeholders. Moreover, the theory recognises the existence of agency conflict between management and shareholders in the sense that where management pursues own gains, the achievement of interests of other stakeholders is compromised.

This theory advocates for ownership concentration in a bid to curb an existing agency problem. This is because, dispersed ownership appears to be inefficient in controlling agency problems. Thus, where there are conflicts that are in a large scale, ownership concentration is the best method for enforcing good corporate governance practices. Additionally, this theory points out that ownership concentration improves the welfare of the entity be it a profit making entity or a country at large. Whilst it is not aptly clear that ownership influence firm performance.

Malla (2013) argues that where managers own more shares, firm results are likely to decline for two causes. To begin with, where ownership is in the hands of managers, the impetus to work hard is low since the management is not under strict supervision as it would be in the case where owners are not in management (Malla, 2013). Moreover, high stakes in equity being in the hands of managers may lead to violation of interests of other stakeholders which in turn can impair performance of firms.

### **2.2.3 Stewardship Theory**

Donaldson and Davis (1989) initiated this proposition in a bid to counter shortcomings of agency theory. The main proposition of Stewardship theory is that individuals charged with governance do act in the best interest of all parties with a stake in the organisation. Stewardship theory is therefore premised in the argument that individuals are rational and that they want to do good to all people. As such, those in management make decisions not to benefit themselves but for the welfare of all stakeholders. The theory assumes that in as much as managers have their own interest, they first seek the interest of other stakeholders as the care stewards. Moreover, managers are assumed to be responsible in resource usage in such a way that resources are used for shareholders' wealth maximisation, meeting the needs of customers, employees and the government among other interests.



Stewardship theory in essence proposes that stewards do not seek selfish interest or gains but are motivated to stay cooperative and achieve goals that benefits all. It is for this reason, that this theory posits that in ideal environment, there should not exist a conflict between management, shareholders and those charged with supervisory mandates (Beata & Boguslaw, 2015). In this aspect, for example, management that believes in stewardship theory seeks to accomplish goals that grows the firm. As per the stewardship theory, firm efficiency is a result of management and directs not seeking own goals but embracing such virtues like trust, competency and desire to achieve organisational goals. When this is the case, firm efficiency is improved that in turn boost firm financial returns. At the same time, stewards adopt a behaviour that does not escalate the traditional agency problem that is common as identified by the agency theory (Keay, 2017).

Inclusion of this theory in the theoretical framework of this current study is two folds. To start with, the theory idealises that agency conflicts should not exist between shareholders and management as it follows a pro-organisation approach. The current study seeks to relate firm ownership and firm returns. Hence, understanding the maxims presented in this theory is of focal importance. Secondly, this theory negates the assumption that is presented forth by agency proposition, that is, existence of agency conflicts. This is not always the case for firms whose ownership is concentrated to a few shareholders who doubles up as managers. In realisation of this, stewardship theory presents plausible arguments that can be used to boost firm performance. Moreover, the theory views that management shareholders do not seek selfish interest but act on behalf of all stakeholders. The overall goal for this review is to empirically show presence or absence of link for ownership structures and firm results particularly for manufacturing firms in Kenya.

### **2.3 Determinants of Financial Performance of Manufacturing Firms**

A wide array of occurrences that operate internally and externally influences performance of business concerns. Among the internal factors that influence firm results are liquidity, solvency and growth opportunities (Pettinen, Rummukainen, & Mikkola, 2011) (Bawa & Chattha, 2013) (Nyugen & Nguyen, 2020). Financial results are key towards sustenance of firm's activities, continued creation of wealth for shareholders and meeting of stakeholders' interests. To keep manufacturing firms as going concern, production should be efficient and wastage of materials significantly reduced. Moreover, manufacturing firms operate in a competitive sector which then indicates that strategic alignment of resources while at the same time focusing on leverage, liquidity and size are key towards boosting of results (Egbunike & Okerekeoti, 2018).

This means that manufacturing firm's size is pertinent to improvement in production and efficiency. Considering this scenario, ownership of these firms appear to have a potential role on firm's results. Ohiani, Eniola, and Mustapha (2018) ownership structure has a role on agency costs and vision of entities thus creating a direct impact on firm performance. Large firms more often have different categories of owners such as individuals, institutional, foreign or managerial. All these classes of ownership have a different approach to management and control of firm activities (Saidu & Gidado, 2018).

## **2.4 Empirical Review**

Mahzura (2018) undertook an inquiry of firm characteristics and firm financial returns in Indonesia. In this study, the objectives entailed an assessment of whether company size, ownership, debt equity ratio and growth of firm affect firm performance. This study sourced data from public entities. In data processing, regression modelling techniques were followed in which a computer software was used. Outcome of data processing showed that institutional and managerial shareholding are not key factors of firm value and firm performance. Moreover, findings portrayed that institutional shareholding negatively affects results while managerial shareholding had a positive effect.

Saidu and Gidado (2018) investigated firm returns against managerial ownership in Nigeria. Forty manufacturers were used in the study. Causal association was proven by taking regression and correlation analyses. At the end of data processes, managerial ownership affected performance of firms financially, but negatively.

Farooque, Buachoom and Sun (2019) purposed to interrogate ownership categorisations and disparities on firm income for entities domiciled in Thailand. Moreover, they tested role of corporate boards and existence of audit committee. A sample of the 452 firms listed was used. Ordinary least squares regression shown that managerial shareholding improves firm performance.

Vu, Phan and Le (2018) reviewed performance of Vietnamese firms in respect to ownership parameters. Five hundred firms were considered. Inferential estimates were obtained by way of mathematical association estimation techniques. At the end, directorship size, shares ownership by managing director, having shares for the board actually bettered return on assets. In contrast, these three input components for the model dismally affected return on equity.

Guo and Kumara (2012) reviewed corporate governance and firm wellness in Sri Lanka. A cross-sectional data for financial year 2010 was collated from one hundred and seventy-four entities. Findings depicted that firm size and director shareholding is a significant way had a positive relationship on performances of the firms.

By focusing on Romanian firms, Oana and Cosmin (2013) interrogated causal relationship between foreign ownership and firm profits. Key data was extracted from records of firm characteristics from Bucharest stock exchange. Mathematical linear regression evidenced that foreign ownership dismally affected returns.

Adamu and Haruna (2020) interrogated firm dynamics and firm returns with key emphasis on firm ownership. Observations for variables were sourced from financial reports. Output for canonical method supported the hypothesis foreign shareholding and corporate shareholding bettered returns. However, managerial ownership had a negative correlation.

Gugong and Arugu (2014) used data from seventeen firms in Nigeria and interrogate ownership and firm returns. The firms used were drawn from insurance sector. Data findings were sought for by regression analysis. The outcome was that management shareholding boosts performance. At the same time, institutional shareholding improved performance of insurers.

Gurusamy (2017) used a panel data regression analysis among 357 listed manufacturing firm between the years 2006-2015 to interrogate firm performance in respect to corporate governance matters. At the end of processing data, findings supported that founder's ownership hampered firm results. At the same time institutional ownership seldom bettered returns.

Mansur and Tangl (2018) used content analysis method to study firm internal matters in Jordan. They centred their analysis on practices connected to corporate governance and firm performance. After summarising results, it was noted that firm ownership particularly family ownership and institutional bettered firm returns.

Mazzi (2011) was motivated to investigate the link that exists between the ownership of a firm by a family on the basis of its financial projections. Secondary data was used in this study whereby 23 articles that were selected were reviewed. It was revealed from family ownership impacts on governance which in turn influences firm wealth creation capacities.

Simiyu and Too (2018) used data from insurers in Kenya to study internal aspects and firm returns. The input variables were size, ownership distribution, capital distribution and firm age. Outcome was that individual ownership seldom bettered performance as it was for structure of capital. Moreover, age and size did not boost performance significantly.

Mudi (2017) used data from listed entities in Kenya to study ownership dynamics and firm performance. In this study, two variables were focused on; managerial and individual shareholding. Significance tests showed that both factors were key determinants of firm performance.

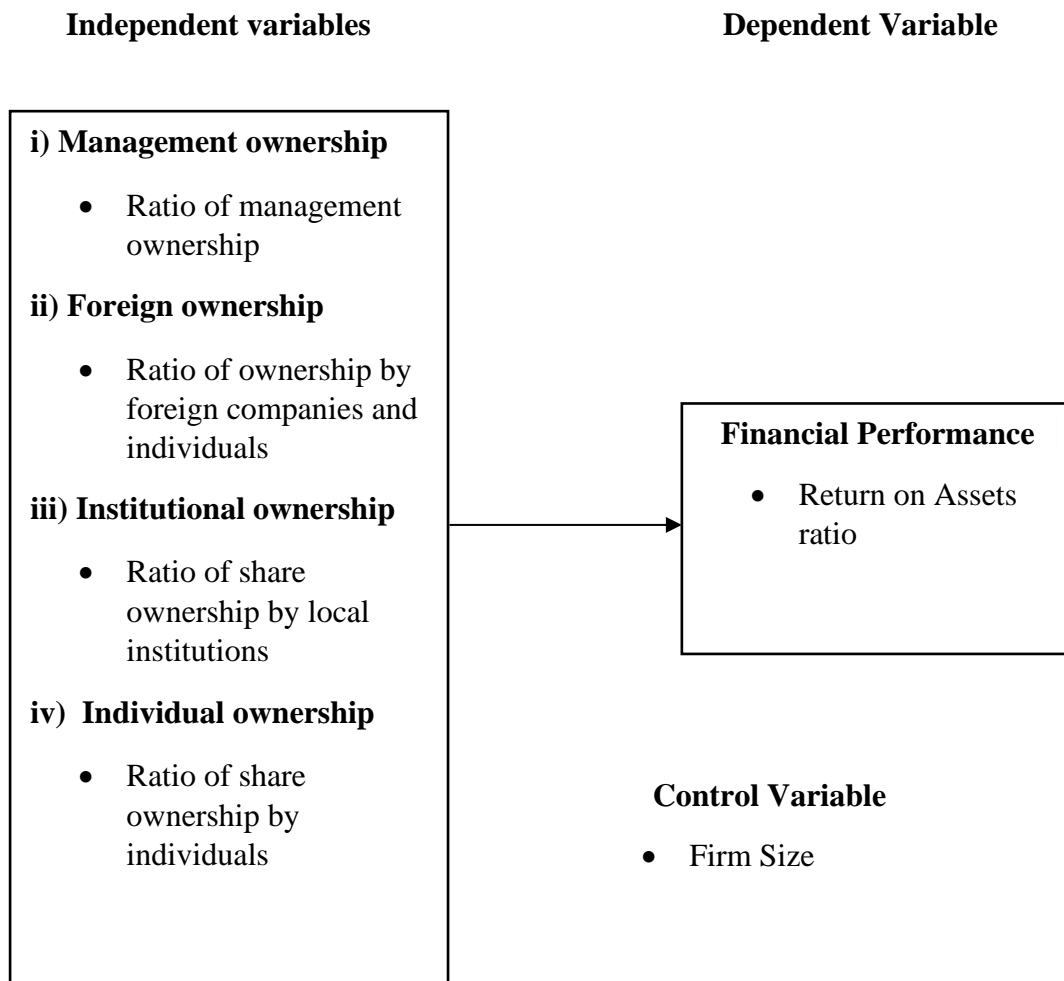
Ongore (2011) used logistic regression to process to link shareholding and firm returns in Kenya. The study dealt with listed entities. The results showed that concentrated ownership negatively impacted on results of firms. Similar finding was reported on government ownership while on the other hand, results showed that managerial ownership, institutional, foreign shareholding positively impacted on firm financial performance.

Nyagunyii, Iravo and Wanyama (2018) used mixed methods of data analysis to relate ownership structure and firm results. Financial figures for data was extracted as contained financial reports and first hand responses were sourced in a closed ended questionnaire. Findings indicate that three factors bettered performance. These were: institutional, foreign and employee ownership. On the contrary, government ownership did not impact on firm performance.

Wanjiru, Wachira and Mwenda (2013) used data from firms trading at the NSE to study shareholding and firm performance. The explanatory variables were concentrated ownership, managerial ownership, individual ownership and institutional ownership. Of the variables, only concentrated and managerial ownership bettered performance.

## 2.5 Conceptual Framework

A conceptual framework characterises different types of variables. In Figure 2.1, the variables are presented and their nature identified. This study has four explanatory and one output variable. Independent variables are management ownership, foreign ownership, institutional ownership and individual ownership.



**Figure 2.1 Conceptual Framework**

## **2.6 Summary of Literature Review**

Summarily, this part has embarked on literature review. Emphasis was on theoretical foundation, theoretical literature and empirical review. In terms of theories, the Agency theory, Stulz's integrated theory and Stewardship theory relevantly back the discussions and perspectives looked into in this study.

These three theories are relevant in providing theoretical propositions on expected link between share ownership and firm returns. In addition, empirical review was done and a conceptual framework presented. To a large extent, this study seeks to bridge a contextual gap as have critically interrogated the scenario in Kenya in the topic of ownership dynamics and firm outputs.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Vital processes, methods and data are explained in this section. Methods are steps and procedures used to attempt to sufficiently achieve its objectives. The chapter is partitioned into the following parts; research design, target population, sampling and design, instrumentation and data collection. Moreover, the section has a detailed presentation of methods for processing observations for derivation of inferences.

#### **3.2 Research Design**

A plan for conditions of data sourcing and collection is entailed in research design (Cooper & Schindler, 2014). Research design proposes how and what was done such that objectives were fundamentally achieved. Since, it is a framework for meeting objectives, research design is considered a blue print for a research.

A descriptive study in a quantitative approach was at the overall embedded in line with variables of the study. This is because, data was collected and processed, at the overall, to establish presence or absence of nexus between ownership structures and firm returns. Descriptive statistics links variables (Creswell, 2013). Moreover, data was sourced from manufacturing entities as is without controlling. Additionally, use of descriptive research design is preferred where the need is to show whether variables have significant effect on other variables.

### 3.3 Population

Population typically represents all units that inferences are made on (Krishnaswamy & Satyaprasad, 2010). Population selection is vital as it is a key delimitation for a study. The uniqueness of a population is crucial as it depicts the applicability of results for use in practice and policy. This study has a population of 920 entities. These entities were in the manufacturing sector Kenya. Moreover, the entities members of Kenya Association of Manufacturers as reported on schedule on Appendix ii.

**Table 3.1 Population**

Target Population	Number of manufacturing firms
Manufacturing firms	920

Source: Kenya Association of Manufacturers (2021)

### 3.4 Sampling Design

Sampling was done using probabilistic method using a sample size finding formula proposed by Yamane (1967) and subsequently adopted by Israel (1992) that is summarised using the connotations in the following equation;

$$n = \frac{N}{1 + N(e)^2}$$

In which lower case “n” is sample size, “N” is units in population while “e” is the level of precision. This study has a desired level of precision (e) of 10 % from 90 % confidence interval. Since, in this case “N” and “e” are known components, “n” was found to be:

$$n = 920 / 1 + 920(0.1)^2 = 90 \text{ manufacturing firms}$$

The 90 were selected using stratified sampling technique. Stratification enable all sectors in manufacturing firms to have equal chance of being selected as samples. This is distributed as shown on Table 3.2

**Table 3: 2 Sample**

<b>Category</b>	<b>Population</b>	<b>Sample Size</b>
Firms in buildings activities	47	5
Chemical Processors	81	8
Firms in Energy and Electrical Installation	49	5
Food processors and Beverages Makers	190	19
Leather tanners	17	2
Metal and associated entities	85	8
General motor vehicle assemblage and spares	54	5
Paper and related manufacturers	57	6
Pharmaceuticals and related entities	28	3
Plastic firms	82	8
Service and related entities	138	14
Textile	62	6
Timber and related entities	30	3
<b>Total</b>	<b>920</b>	<b>90</b>

Source: Researcher Computation (2021)

### **3.5 Instrumentation and Data Collection**

Data recording instruments are dictated by the type of data. This study made use of document analysis guide to extract secondary data from annual reports and financial statements of manufacturers in Kenya. The guide was structured in a way that it can collect and record observations on variables for the period under examination. Data collection was done in two phases. To start with, data was collected from annual reports in absolute figures and thereafter ratios for the variables as operationalised computed. In all cases, the variables were ratios of specific variable divided by total shares as at a specific balance sheet date. In view of the fact that data was sourced for the period of eight years for each variable, a balanced panel data set was collated.

### 3.6 Data Analysis and Presentation

To analyse data refers to the process of converting raw data into forms that are specifically relevant in making inferences. Data analysis is pertinent in research as it forms the basis of answering research questions. Once data was summarised, it was imported into STATA in order to compute statistics that can be used to make inferences.

#### 3.6.1 Analytical Models

The study entailed an estimation of variable coefficients and significance of the model. The multiple regression in a panel data is set as shown in equation 1.

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e_{it} \dots\dots\dots 1$$

Where:

$Y_t$  = financial performance

$\beta_0$  = y-intercept for constant in the estimated equation

$\beta_1, \beta_2, \beta_3$  and  $\beta_4$  = Coefficients of  $X_1$  to  $X_4$  respectively.

$X_{1t}$  = management ownership at time t

$X_{2t}$  = foreign ownership at time t

$X_{3t}$  = institutional ownership at time t

$X_{4t}$  = individual ownership at time t

$e_t$  = error

t = time

i = individual firm

### 3.6.2 Operationalisation of Study Variables

This study has three types of variables: independent, dependent and control variables.

Table 3.3 summarizes operationalization of the variables.

**Table 3: 3 Operationalization of Study Variables**

<b>Variables</b>	<b>Operational Definition</b>	<b>Nature of Variable</b>	<b>Measurement Scale</b>	<b>Data Analysis</b>
Management ownership	This is proportion of share capital owned by managers and full time directors.	Independent Variable	Ratio of management ownership Ratio scale	Quantitative
Foreign ownership	This is ownership of companies by foreign individuals and companies other than those in the country of domicile	Independent Variable	Ratio of ownership by foreign companies and individuals	Quantitative
Institutional ownership	This refers to shares ownership by local institutions	Independent Variable	Ratio of share ownership by local institutions Ratio scale	Quantitative
Individual ownership	This is ownership by local individuals who are citizens of countries where the companies are domiciled in	Independent Variable	Ratio of share ownership by individuals Ratio scale	Quantitative
Firm size	This is capacity to undertake income earning operations	Control Variable	Total Assets Nominal scale	Quantitative
Financial performance	This is measure of outcomes of companies' activities in financial terms	Dependent Variable	Return on Assets ratio Ratio scale	Quantitative

**Source: Researcher (2021)**

### **3.7 Diagnostic Tests on Data and Residuals**

This study undertook multicollinearity, correlation analysis and normality to validate the data as fit for linear regression. On residuals, autocorrelation and heteroskedasticity were examined. This study used Hausman specification procedure in identifying if RE or FE model was appropriate.

#### **3.7.1 Multicollinearity**

Where independent variables influence each other, the situation is known as multicollinearity (Melo & Kibria, 2020). Multicollinearity lowers reliability of both model significance and coefficients as it indicates strong correlation for the predictors. This study used variance inflation factor to examine multicollinearity. VIF tests the level of correlation that predictors have relative to others. VIF of less than 10 for all variables qualifies all variables as fit for use in the same model. Where VIF values are more than 10 for specific variables, such variables can be omitted or standardised to at least lower the collinearity. Equally, transforming observations into natural logarithms can lower multicollinearity.

#### **3.7.2 Normality**

Normality is a situation that exists where data is asymmetric in that most values are on either side of the mean. Normal distribution is a condition that must be met for linear regression to be undertaken. In this study, normality testing was done by use of skewness and kurtosis. Typically, skewness statistics of negative 10 to positive 10 accompanied by kurtosis statistics of negative 3 to positive 3 depict normality.

### **3.7.3 Autocorrelation**

Autocorrelation is a condition that is inferred where residuals or error terms fails to be independent of each other for each subsequent regression especially for longitudinal or panel data (Meijer, Ockowski, & Wansbeek, 2021). Residual correlation shows skewness of data which statistically significantly impairs the model efficacy. Whilst, autocorrelation is harmful it does not collapse the model since standard errors can be smoothed by use of robust standard errors model such as Prais Winstein regression. In this study, autocorrelation was evaluated by use of Wooldridge test. Conventionally, null hypothesis fails to hold and is rejected where p-value of the statistics is less than 0.05 if data analysis is performed at 95 % confidence interval and 0.1 for analysis done at 90% confidence interval. Therefore, autocorrelation does not exist where p-value for Wooldridge test statistic is less than 0.05 for data analysis performed at 95 % confidence interval and 0.1 for analysis done at 90% confidence interval.

### **3.7.4 Heteroskedasticity**

Where there is non-constant of variance of residuals, the data is said to have heteroskedasticity (Arvanitis, 2018). Heteroskedasticity is therefore in essence absence of homoscedasticity. It, as it is for autocorrelation lowers model efficacy. In testing for heteroskedasticity, this study used Modified Wald test. The Modified Wald indicates that data is not homoscedastic and thus null hypothesis fails to hold and is rejected where p-value for the statistic is less than 0.05 for an analysis seeking to achieve 5 % level of precision and 0.1 for analysis done at 90% confidence interval.

### **3.7.5 Model Specification**

In panel data analysis, two methods are at the disposal of the researcher. These are random effects model and fixed effects model. RE model tenet is that there could be at least a single specific feature in the panel is not fixed but has random variables (Baltagi & Liu, 2015). Moreover, random effects model takes into account any unobserved heterogeneity that can be attributed to time invariant components or parameters. It therefore means that RE assumes that unobserved heterogeneity does not have correlation with predictors. Fixed effects model idealises that there are time invariant aspects and therefore correlated with predictors.

In this study model specification was undertaken by Hausman test in which there the associated p-value is 0.05 for analysis done to achieve 5 % desired level of precision and 0.1 at for analysis done at 90% confidence interval, then the null hypothesis for no heterogeneity specific parameters is rejected thus revealing that the best model to use is random effects model (Bollen & Brand, 2010).



## CHAPTER FOUR

### DATA ANALYSIS, FINDINGS AND INTERPRETATION

#### 4.1 Introduction

This fourth chapter entails a presentation of outputs from data analysis on this study that purposed to provide the nexus between ownership structure and firm financial returns for manufacturers in Kenya. Observations for the variables were gathered for a period of eight years from 2012 to 2019. A panel data set from 51 manufacturers was used. Data analysis was done using STATA software.

#### 4.2 Summary Statistics

The study has three types of variables; independent, dependent and control variables. The descriptive (summary) statistics covering the mean and standard deviation for the variables are presented in this section.

##### 4.2.1 Summary Statistics for Dependent Variable

The dependent variable was financial performance of manufacturing firms in Kenya. Table 4.1 shows the summary statistics for this variable.

**Table 4: 1 Summary Statistics; ROA**

Variable	Mean	Std. Dev.	Min	Max	Observations
Return on Assets overall	.1666056	1.079472	-14.44928	9.403376	N = 408
between		.6189631	-2.740501	2.148845	n = 51
within		.8881064	11.54217	7.540166	T = 8

As shown on Table 4.1, average financial performance as proxied by return on assets was 0.167 whose standard deviation was 1.07. Worst performing firm had a negative return on assets of -14.45 and best performing firm has 9.40.

From these statistics several inferences can be drawn. Foremost, there is a wide variation in financial performance of manufacturing firms in Kenya. Some firms are performing well while some exhibited losses during the period between 2012 and 2019. Secondly, it is evidence from these statistics that financial returns for the manufacturers was low. In fact, some firms exhibited financial losses which indicated a sectoral challenge. However, a majority of the firms recorded a positive return on assets even though the ratio was low as indicated by the average.

#### 4.2.2 Summary Statistics for Independent and Control Variables

This study had input variables namely management ownership, foreign ownership, institutional ownership and individual ownership. One control variable, firm size, was included in the estimation model. Table 4.2 has results for descriptive statistics for the variables.

**Table 4: 2 Summary Statistics for Independent and Control Variables**

Variable		Mean	Std. Dev.	Min	Max	Observations
Management~Shares	overall	.2405543	.2163257	0	.85	N = 408
	between		.2177664	0	.85	n = 51
	within		.0137915	.1055212	.3373203	T = 8
Foreign~Shares	overall	.2467929	.2152261	0	.8564919	N = 408
	between		.2156249	0	.8146045	n = 51
	within		.0250569	-.095558	.3995905	T = 8
Institutional~Shares	overall	.287026	.2086186	0	.9544095	N = 408
	between		.2085146	0	.9544095	n = 51
	within		.0281277	.1520455	.530692	T = 8
Individual~Shares	overall	.2256268	.1935142	0	.7995293	N = 408
	between		.1934412	0	.7995293	n = 51
	within		.0259199	-	.4443652	T = 8
Firm_Size	overall	16.55402	2.31142	10.82381	22.29821	N = 408
	between		2.300061	11.35802	22.18661	n = 51
	within		.3786415	14.20092	20.39714	T = 8

Output statistics on Table 4.2 shows that management ownership had an average of 24.1 % with standard deviation of 0.216. Some firms had zero shares owned by management. Moreover, highest managerial ownership recorded was 85%. Foreign ownership had a mean of 24.7 % with a standard deviation of 0.215. Most firms had institutional owners as the average was the highest among the parameters at 28.7 % at a standard deviation of 0.208. Individual ownership showed an overall average of 22.6% with a standard deviation of 0.193.

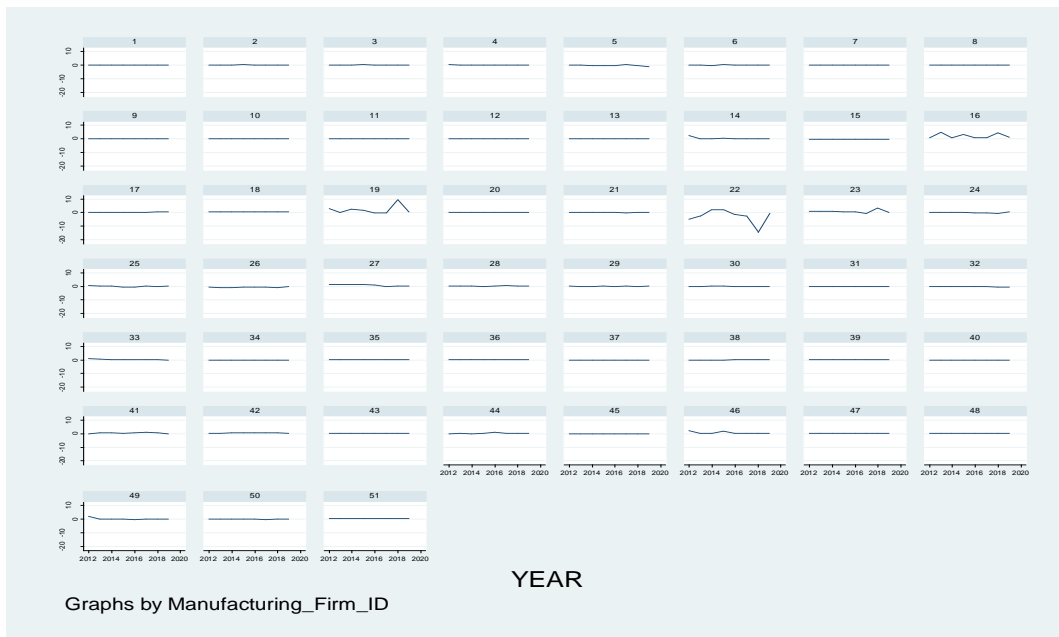
These summary statistics pointed that most manufacturing firms have different types of ownership structure. The observations for the input variables indicates variability in ownership with most firms having institutional ownership. On firm size, the variable was measured in terms of natural logarithms. The average score was 16.55, and the smallest manufacturer had a size of 10.82 and largest showed a natural logarithm scale of 22.29. In reference to this output, participant manufacturers were large. It can be construed that they had a significant capacity to undertake large scale operations.

### **4.3 Exploratory Analysis**

Panel data requires performance of exploratory analysis on dependent factor in order to evaluate existence or absence of time related fixed effects. Time related fixed effects are unobserved effects that change with time. They affect efficacy of regression model. It is for this reason that panel data is tested for existence of time related longitudinal effects. Panel data has time and individual item characteristic. Two spaghetti graphs were plotted; within firms and overlain graphs for between firms.

## Within Companies Spaghetti Graph

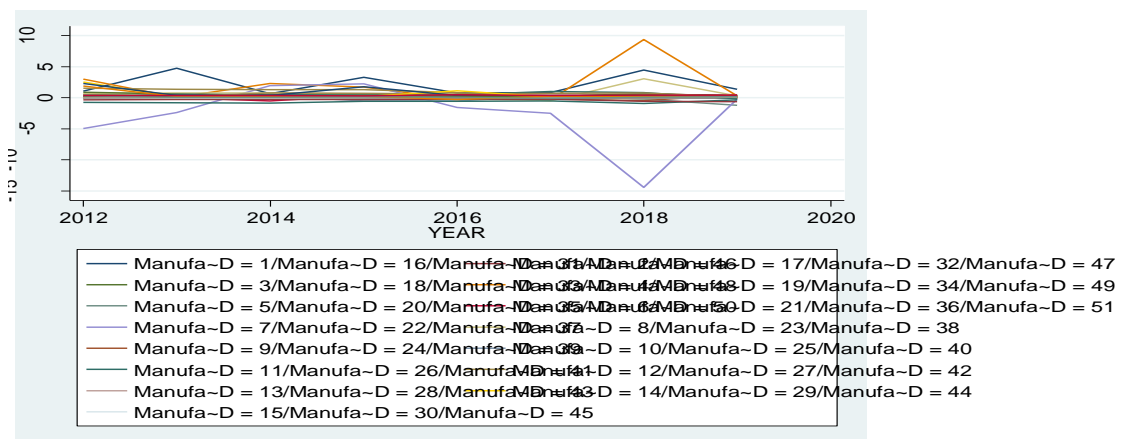
As shown on Graph 4.1, except for manufacturing firm number 19 and 22 whose return on assets zigzagged across the trend in the period under analysis, all others showed constant trend negating chances of time related fixed effects.



**Figure 4: 1 Within Company Spaghetti Graphs**

## Between Company Spaghetti Graphs

An overlay graph was plotted to examine the dependent further in respect to existence of time related fixed effects. Figure 4.2 has the outcome.



**Figure 4: 2 Between Company Spaghetti Graphs**

Figure 4.2 shows absence of significant time related effects as Y-intercepts were within the same range. Without time related fixed effects, panel estimation can be done as opposed to use of pooled ordinary least square regression method. Moreover, the graphs have almost similar y-intercepts eliminating likelihood of correlation between individual panels and explanatory variables.

#### 4.4 Correlation Analysis

Correlation analysis was done to test whether variables were similar. The outcome of correlation analysis is shown on Table 4.3

**Table 4: 3 Matrix of Correlations**

Variables	Management	Foreign	Institutional	Individual	Firm size
(1)Managerial_Share	1.000				
(2) Foreign_Shares	-0.336	1.000			
(3) Institutional_Share	-0.335	-0.420	1.000		
(4) Individual_Share	-0.383	-0.285	-0.237	1.000	
(5) FirmSize	-0.075	0.111	-0.108	0.077	1.000

Table 4.3 indicates low correlation between variables. Managerial ownership correlated negatively with foreign ownership, institutional ownership, individual ownership and firm size at -0.3357, -0.3352, -0.3831 and -0.0752 respectively.

Foreign ownership had a negative correlation with institutional ownership and individual ownership at -0.4195 and -0.2846 respectively. However, there was a positive correlation between foreign ownership and firm size at 0.1113.

Moreover, institutional ownership had a negative correlation with individual ownership and firm size at -0.2367 and -0.1080 respectively. Lastly, a positive correlation between individual ownership and firm size was noted at 0.0772. Considering that the

correlation values were small, there was no significant linear relationship among the predictors and thus all were factored in modelling the coefficients and model estimates. Low correlation coefficients between predictors does not impair regression estimates.

#### **4.5 Panel Data Analysis Results**

A panel data set of 408 observations was collated from 51 manufacturing firms for a period of eight years. The panel variable was company 1 to company 51 and time variable was 2012 to 2019. Delta was 1. In order to obtain model estimates that high efficacy in predicting firm financial performance for the manufacturers, a number of diagnostic tests and model specifications were done. Panel observations were as follows; management ownership was measured as a ratio of management shares over total shares, foreign ownership was measured as a ratio of foreign shares over total shares, institutional ownership was measured as a ratio of institutional shares over total shares and individual ownership was measured as a ratio of individual shares over total shares.

##### **4.5.1 Diagnostic Statistics**

Diagnostic tests done were multicollinearity and normality to validate the data as fit for linear regression. On residuals, autocorrelation and heteroskedasticity tests were examined. This study used Hausman specification procedure to determine whether fixed effects model or random effects model is applicable.

##### **4.5.2 Multicollinearity**

On running initial regression to link financial performance and the predictors, individual ownership was omitted due to collinearity. To address this problem, natural logarithms of the predictors were taken. Running the regression again showed that all explanatory variables had low Variance Inflation Factors as shown on Table 4.4

**Table 4: 4 Variance Inflation Factor**

	VIF	1/VIF
Institutional Ownership	1.312	.762
Foreign Ownership	1.275	.784
Management Ownership	1.069	.935
Individual Ownership	1.047	.955
Mean VIF	1.176	.

Outputs on Table 4.4 shows variance inflation factor of 1.31, 1.28, 1.07 and 1.05 for institutional ownership, foreign ownership, management ownership and individual ownership respectively. Tolerance measures were 0.762, 0.784, 0.935 and 0.955 for institutional ownership, foreign ownership, management ownership and individual ownership respectively. Rule of thumb is  $VIF < 10$  and  $tolerance > 0.1$  indicates acceptable levels of multicollinearity.

### 4.5.3 Normality

Normality is a situation that exist where data is asymmetric in that most values are on either side of the mean. In this study, normality testing was done by use of skewness and kurtosis. Results of normality are illustrated on Table 4.5

**Table 4: 5 Skewness and Kurtosis**

Variable	Skewness/Kurtosis		Tests for Normality		
	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	joint Prob>chi2
Return_on_~s	408	0.0000	0.0000	.	0.0000
Foreign_Ow~p	368	0.0000	0.0000	72.09	0.0000
Management~p	392	0.0000	0.0000	.	0.0000
Insitituti~p	400	0.0000	0.0000	.	0.0000
Individual~p	400	0.0000	0.0295	39.37	0.0000
Firm Size	408	0.0389	0.1763	6.07	0.0481

Skewness and kurtosis for return on assets, foreign ownership, institutional ownership and individual ownership were 0. Firm size had skewness and kurtosis of 0.0389 and

0.1763 respectively. Typically, skewness statistics of negative 10 to positive 10 accompanied by kurtosis statistics of negative 3 to positive 3 depict normality. Moreover, departure from normality does not invalidate model estimates such as coefficients and significance of the model.

#### 4.5.4 Autocorrelation

Autocorrelation is a condition that is inferred where residuals or error terms fail to be independent of each other for each subsequent regression especially for longitudinal or panel data. Autocorrelation is also known as serial correlation. In this study, autocorrelation was evaluated by use of Wooldridge test. Results of this are shown on Table 4.6.

**Table 4: 6 Wooldridge test for autocorrelation in panel data**

Wooldridge test for autocorrelation in panel data	
H0: no first-order autocorrelation	
F( 1, 43) =	78.781
Prob > F =	0.0000

Null hypothesis was set as; there is no autocorrelation in idiosyncratic error terms. The hypothesis was rejected where  $p\text{-value} < 0.05$  if data analysis is performed at 95 % confidence interval and  $p\text{-value} < 0.1$  for analysis done at 90 % confidence interval. Thus, there was serial correlation in the data set. It was thus concluded that there was serial correlation in residuals. Therefore, model estimates were obtained by use of robust standard errors method.

#### 4.5.5 Heteroskedasticity

Where there is non-constant of variance of residuals, the data is said to have heteroskedasticity. In testing for heteroskedasticity, this study used Modified Wald test



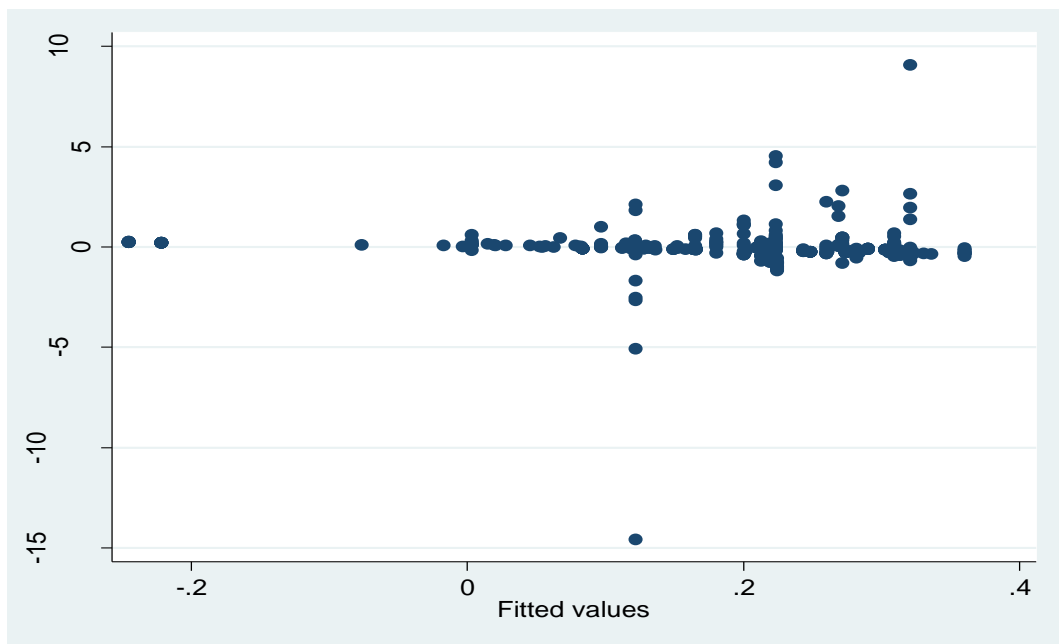
whose output is shown on Table 4.7. Modified Wald test statistic measures both cross-sectional units and across units and thus evaluates groupwise heteroskedasticity.

**Table 4: 7 Modified Wald test for groupwise heteroskedasticity**

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model
H0: $\sigma(i)^2 = \sigma^2$ for all i
Prob>chi2 = 0.0000

The Modified Wald indicates that data is not homoscedastic and thus null hypothesis fails to hold and is rejected where p-value for the statistic is less than 0.05 for an analysis seeking to achieve 5 % level of precision. In this case, data is not homoscedastic as p-value of  $0.0000 < 0.05$  which leads to decisive rejection of null hypothesis. As a result, robust standard errors method was employed.

Moreover, residual plot shown on Figure 4.3 indicates a pattern for the residuals and therefore idiosyncratic errors were not homoscedastic.



**Figure 4: 3 Plot for Residuals Against Plotted Values**

#### 4.5.6 Model Specification Test

A hybrid cross-sectional-longitudinal data is analysed using random effects model or fixed effects model. RE model tenet is that there could be at least a single specific feature in the panel is not fixed but has random variables. Random effects model takes into account any unobserved heterogeneity that can be attributed to time invariant components or parameters. In this study, model specification was undertaken by Hausman test.

**Table 4: 8 Hausman Test**

	Coef.
Chi-square test value	.139
P-value	.998

Table 4.8 shows that Hausman test established a chi-square statistic value of 0.139 whose p-value was 0.998. Where p-value < 0.05. The null hypothesis is that random effects model is appropriate model.

In view of the outcome therefore, null hypothesis cannot be rejected as p-value is greater than 0.00 supporting that FE model was fit. However, fixed effects could not be used since data had both autocorrelation and groupwise heteroskedasticity. In turn, robust standard errors method was used.

#### 4.6 Regression Coefficients and Hypothesis Testing

In violation of classic assumptions of absence of autocorrelation and homoscedastic of residuals, this study used panel corrected standard errors regression coefficients. In essence, this provided remedy for the two violations. Output for the regression is shown on Table 4.9. Moreover, the model with firm size as a control variable did not show

better results and thus final regression was reported without firm size as shown on the table.

**Table 4: 9 Prais-Winsten regression, heteroskedastic panels corrected standard errors**

Return_on_Assets	Coef.	St.Err	t-value	p-value	Sig.
Foreign Ownership	-0.186	0.145	-1.28	0.201	
Management Ownership	0.088	0.033	2.67	0.008	***
Institutional Ownership	0.923	0.374	2.47	0.014	**
Individual Ownership	-0.091	0.128	-0.71	0.477	
_cons	1.517	0.502	3.02	0.003	***
Mean dependent variance	0.191	SD dependent var		1.151	
R-squared	0.095	Number of obs		352.000	
Chi-square	10.614	Prob > chi2		0.031	

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Output statistics on Table 4.9 shows that the model was significant as p-value was 0.0313. Model is significant where p-value for probability is greater than chi square is less than 0.05. Hence, the model is suitable for assessing variations in firm returns for manufacturers in Kenya. An R<sup>2</sup> of 0.095 was established.

This infers that in estimation, 9.5 % of variations in firm returns (return on assets) is accounted for by changes in management ownership, institutional ownership, foreign ownership and individual ownership. It means that 90.5 % of variations in return on assets is influenced by changes in other variables that were not included in the model.

The model was estimated as follows:

$$Y_{it} = 1.517_{it} + 0.088X_{1it} - 0.186X_{2it} + 0.923X_{3it} - 0.091X_{4it}$$

Where 1.517 is financial performance of manufacturing firms in Kenya in the event that predictors are not factored, +0.088 is an increase in financial performance where

management ownership increases in one unit, -0.186 is a decrease in financial performance following an increase in foreign ownership by one unit, 0.923 is the increase in firm performance occasioned by an increase on institutional ownership and lastly -0.091 is a decrease in financial performance following an increase in individual ownership by one unit.

#### **4.7 Discussion of Findings**

This study had sought to assess ownership structures on financial performance of manufacturing firms in Kenya. The results showed that the model was significant in assessing ownership structures and financial performance. The p-value was 0.031 less than 0.05. What this infers is that the model linking ownership structures and firm performance is statistically fit.

The first objective sought to establish whether management ownership affects firm performance. It emerged that there was positive effect of management ownership and financial performance among manufacturers. This inference is drawn from the coefficient of 0.088. Additionally, management ownership had significant influence on return on assets. This is because the null hypothesis was rejected as p-value of  $0.008 < 0.05$ . Thus, an increase in management ownership betters firm performance for manufacturers.

The second objective interrogated effect of foreign ownership on financial performance. Outcome was that there was a negative effect of foreign ownership on financial performance as the coefficient was -0.186. Moreover, foreign ownership insignificantly affected firm returns as p-value of  $0.201 > 0.05$  meant that null hypothesis could not be rejected.

The third objective sought to establish the role of institutional ownership on financial performance of manufacturers in Kenya. It emerged that institutional ownership had a positive effect on financial performance as the coefficient was 0.923. Further, effect of institutional ownership was significant as p-value of  $0.014 < 0.05$  indicating that null hypothesis was decisively rejected. This infers that institutional ownership betters returns of manufacturers.

The last objective focused on interrogating role of individual ownership on financial performance. It emerged that individual ownership had a negative effect on firm financial results as the coefficient was -0.091. Moreover, the association between individual ownership and firm performance was insignificant as p-value of  $0.477 > 0.05$  and therefore null hypothesis was not rejected.

## **CHAPTER FIVE**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

Pertaining to contents of this section, findings are elaborated in respect to findings reported on chapter four. Moreover, this chapter summarises results of the study for each objective and further recommends on what needs to be done to significantly boost firm performance in respect to variables assessed. Also, limitations for the study are documented and at the end, a suggestion for further studies is made.

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

In summary, data analysis evidenced significant influence of firm ownership structures on financial returns as proxied by return on assets. The study had four predictors namely management ownership, foreign ownership, institutional ownership and individual ownership.

##### **5.2.1 Effect of Management Ownership on Financial Performance**

Pertaining the role of management ownership on financial performance of manufacturing firms in Kenya, results showed management ownership has a positive and significant effect on firm performance. Moreover, it emerged that managerial ownership improves firm performance. Management ownership was proxied as ratio of management shares over total shares. It therefore means that management ownership works in the premises pointed out by stewardship theory. Where management own stakes in the firms, they prudently work as stewards as losses incurred also affects their stake. Management ownership equally boost efficiency of production, cost savings and reduction of wastage thus boosting firm results as evidenced by the results of this study.

### **5.2.2 Effect of Foreign Ownership on Financial Performance**

This study found out that foreign ownership had a negative effect on financial performance of manufacturers in Kenya. Moreover, there was an insignificant effect of foreign ownership on firm financial results. It infers that in as much as foreign ownership is common with large firms, it does not yield much benefits to firms. Foreign ownership may not yield much benefits where profits are repatriated to offshore countries instead of being ploughed back into the business. This is a reflection that foreign ownership in as much as has potential of bringing new technologies, it does not necessarily result into higher performance.

### **5.2.3 Effect of Institutional Ownership on Financial Performance**

It emerged that institutional ownership had a positive effect on firm performance of manufacturers in Kenya. It therefore meant that institutional ownership boosted firm returns. In addition, results showed that the positive association between institutional ownership and firm performance was statistically significant. Institutional ownership refers to amount of shares owned by other entities that could be incorporated or not incorporated entities. In essence, institutions are able to offer more and effective oversight thus boosting efficiency and quality of investments decisions. In turn, this improves firm performance.

### **5.2.4 Effect of Individual Ownership on Financial Performance**

This study found out that individual ownership has a negative effect on financial performance of manufacturing firms in Kenya. This meant that individual ownership does not improve financial results of firms in the manufacturing sector. Individuals may not have powers to influence decisions especially in large manufacturers. This is because, their decisions are only heard at the annual general meeting and are more often than not management decisions.

### **5.3 Conclusions**

Pegging on findings reported, the following conclusions were decisively made. To start with, ownership structures affected firm financial performance among manufacturing firms that participated in this study. On whether, management ownership influenced financial performance, it was concluded that it did in a significant way. Pertaining to role of foreign ownership and firm performance, it was concluded that foreign ownership negatively and insignificantly influences firm performance. Thirdly, it was concluded that institutional ownership affected firm performance in a positive and significant manner. Lastly, it was concluded that individual ownership negatively affected firm performance in an insignificant manner.

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

Limitations of this study majorly relates to sampling shortcomings. This study sampled ninety respondent firms from nine hundred and twenty entities that were members of Kenya Association of Manufacturers. Sample selection has an inherent limitation that those firms not selected to participate could yield different results and therefore findings of the current study may not be applicable to them. Secondly, data was sourced from audited financial statements of the firms. It was assumed that the data was correct and up to date in which a variation in the data could presumably alter the results reported in this inquiry.

### **5.5 Recommendations**

This study recommends more of management ownership in order to enhance firm financial performance. This is because, the study found out that management ownership positively and significantly enhances financial returns. Managers who have shares in the firms they manage, have incentive to make efficient and appropriate decisions.



Where interests of managers and those of other stakeholders are in congruent, conflicts are likely to reduce thus promoting making of best decisions and this can improve firm returns.

The study further recommends that firms should encourage institutional ownership as this can enhance performance. Results showed that institutional ownership enhances performance. In this aspect, institutions that own stakes in the investment firm offer oversight and enable establishment of long term objectives that boosts short term and long term strategic goals.

Thirdly it is recommended that foreign ownership and individual ownership should be relooked at as the two factors impaired firm performance. In the case of foreign ownership, firms in Kenya should only seek investors that are capable of boosting their efficiency in order to in turn better performance.

## **5.6 Suggestions for Further Research**

This study assessed the effect of ownership structures on financial performance of manufacturing firms in Kenya. Four input variables were used; management ownership, foreign ownership, institutional ownership and individual ownership. Another study can be done still on manufacturing firms but to include government ownership and local ownership.

In addition, a similar study could be done with dependent variable being financial performance proxied by return on equity or profits. Moreover, a study could also be done to capture ownership structures' effect on non-financial performance measures. Lastly, a study can be done using primary data as this enables comparison of results and improves policy recommendations.

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## APPENDICES

### Appendix i: Data Sheet

<b>Year</b>	<b>Managerial shares</b>	<b>Foreign shares</b>	<b>Institutional shares</b>	<b>Individual shares</b>	<b>Total shares</b>	<b>Net income</b>	<b>Total assets</b>
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019							

## Appendix ii: Population

<b>Category</b>	<b>Population</b>
Firms in buildings activities	47
Chemical Processors	81
Firms in Energy and Electrical Installation	49
Food processors and Beverages Makers	190
Leather tanners	17
Metal and associated entities	85
General motor vehicle assemblage and spares	54
Paper and related manufacturers	57
Pharmaceuticals and related entities	28
Plastic firms	82
Service and related entities	138
Textile	62
Timber and related entities	30
<b>Total</b>	<b>920</b>

Source: KAM (2021)