DETERMINANTS OF GROWTH ON WOOD-BASED MICRO AND SMALL ENTERPRISES IN NIGERIA

MUHAMMAD BABA MUSA

DOCTOR OF PHILOSOPHY

(Entrepreneurship)

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

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DECLARATION

The study is my original work and to my understanding and knowledge, has not been presented for any degree in any University.

Signature_____   Date   _____

    Muhammad Baba Musa

This study has been submitted for examination with our approval as University Supervisors.

Signature_____   Date_____

    Dr. P. K. Ngugi
    JKUAT, Kenya

Signature _____   Date_____

    Prof. R. O. Odhiambo
    JKUAT, Kenya

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DEDICATION

To the memory of my late father, for all the sacrifices he made to ensure a future for me.

To my sons, late Umar Farouq and Ahmad, I wish you Allah's forgiveness.

To the rest of my family, for your faith in me.

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ABBREVIATIONS AND ACRONYMS

AMP	Australian Market Process
CAC	Corporate Affairs Commission
ESDFS	European Social Dialogue Fact Sheets
FR	Federal Republic
FRN	Federal Republic of Nigeria
GDP	Gross Domestic Product
IDB	International Development Bank
ILO	International Labour Organization
LGA	Local Government Authority
MSEs	Micro and Small Enterprises
SMEs	Small and Medium Enterprises
SMEDAN	Small and Medium Enterprises Development Agency of Nigeria
SMoC	State Ministry of Commerce
USAID	United States Agency for International Development

OPERATIONAL DEFINITION OF TERMS

In order to avoid any form of ambiguity by the readers of this study, peculiar terms used are hereby operationally defined:

Micro Enterprise: Refers to those enterprises employing less than 10 employees, with assets (excluding land and building) of less than five million naira (N5,000,000.00) (FRN, 2010).

Small Enterprise: According to (FRN, 2010), this refers to those enterprises employing between 10 and 49 employees, with assets (excluding land and building) of five million naira and above, but less than fifty million naira (N5,000,000.00).

Medium Enterprise: FRN (2010) refers to those enterprises employing between 50 and 199 employees with asset (excluding land and buildings) of fifty million naira and above, but less than five hundred million naira (N500m).

Enterprise growth: It involves increase in size, strength or quality of an enterprise. It equally includes diversification of products, buying of competitors, mergers and new venture addition (Barr, 1998)

Wood-based MSEs: These are enterprises employing between 1 and 49 employees that are involved in the production of wood furniture and the sale of wood products, including sawmills and construction woodworking (Daniels, 1995).

Determinants: Factors that influence a phenomenon (Aw. 2002).

ABSTRACT

Micro and Small Enterprises (MSEs) have been recognized as major sources of employment and income in many countries of the world. In Nigeria, the wood- based MSEs are estimated to constitute about 5 per cent of the total MSE sector. The study was justified mainly because of lack of empirical data in the sector, and the overall role it plays in the productive economy. The purpose of the study was to investigate the determinants of growth of wood-based MSEs in Nigeria. This is important because the survival, sustainability and growth of the wood-based MSEs would impact positively on the overall performance of the economy. The study utilized the descriptive survey design. The proportionate stratified random sampling technique was used to select the respondents of the study. The primary data of the study was collected from the field using semi-structured questionnaire. In all, a total of 346 copies of the data collection instrument (sample size) were administered, while 300 copies were properly completed and retrieved, representing 87% response rate. To ascertain the reliability and validity, the data collection instruments were piloted. The Cronbach's Alpha value for the five independent variables stood at between .603 and .844, indicating that they were reliable. The statistical analyses of the study were conducted utilizing statistical package for social scientist (SPSS) to calculate descriptive statistics, correlation, regression and trend analysis. Results indicated that the five independent variables of MSE-characteristics; Resources; Market; Relational factors and Individual entrepreneurship characteristics, individually and collectively relate positively with the growth of wood-based MSEs. Analysis of variance (ANOVA) was used to analyze the degree of relationship between the variables of the study. The overall findings indicated overwhelmingly that all the independent variables of MSE-characteristics; Resources; Market; Relational factors and Individual entrepreneurship characteristics, play important determining roles on the growth of wood-based MSEs in Nigeria, with Resources playing the leading role in determining growth. Due to importance of venture growth in enhancing profitability and sustainability, the findings of the study have established that all the independent variables influence the growth of wood-based MSEs in Nigeria. The study therefore, recommends that wood-based MSEs must adopt and sustain all the variables focused in this study especially those of business location, human/financial resources, aggressive market drive, social networks and *need for achievement* among others. The agencies of government responsible for enterprise registration should make the process less cumbersome to motivate enterprise owners to operate within the law and to remove multiple taxation/levies.

CHAPTER ONE

INTRODUCTION

1.1   Background of the Study

This study focused on the determinants of growth of wood-based Micro and Small Enterprises (MSEs) in Nigeria. The role of micro and small enterprises (MSEs) in employment and income generation is increasingly recognized and has become a major playing field for policy makers and donors with dual objective of enhancing growth and alleviating poverty (Gebreyesus,2007). MSEs are important components of the Nigerian economy, comprising a significant proportion of the country's informal sector. Before Nigeria's political independence, only a small number of industries existed in the country, mostly concerned with processing of agricultural goods for domestic and export markets. Like many developing economies, Nigeria has taken several policy steps to develop its production sector (Adibefan & Daramola, 2003).

1.1.1   Micro and Small Enterprises (MSEs)

MSEs are widely recognized as the key engine of economic development. As a result of this recognition, a central issue dominating policy debates around the world and Africa in particular has been how to stimulate economic growth through the development of MSEs (Robson, Haigh & Obeng, 2009). Both developed and developing nations focus on MSEs because it is believed that they bring great economic benefits in terms of employment creation and income generation (King & Heshmati, 2008). According to Mead and Liedholm (1998), MSEs have been recognized in many countries as a major source employment and income generation. They noted that detailed surveys in a number of countries suggest that as many a quarter of all people of working age are engaged in MSE activities. Yet, in Nigeria,

the sectors have stagnated and remain relatively small in terms of its contribution to Gross Domestic Product (GDP) or gainful employment (Aiyedun, 2004).

The catalytic roles of micro and cottage businesses have been displayed in many countries of the world such as Malaysia, Japan, South Korea, Zambia, and India among other countries. They contribute substantially to the Gross Domestic product (GDP), export earnings and employment opportunities of these countries. Micro and small scale enterprises (MSEs) have been widely acknowledged as the springboard for sustainable economic development. Apart from the fact that it contributes to the increase in per capital income and output, it also creates employment opportunities, encourage the development of indigenous entrepreneurship, enhance regional economic balance through industrial dispersal and generally promote effective resource utilization that are considered to be critical in the area of engineering economic development ((Oboh, 2004; Odeh, 2005).

In developing countries the informal sector, in which most of the MSEs lay, is a large source employment and livelihood of particularly the urban population. According to ILO (2002) estimations informal employment (outside agriculture) defined as employment that comprised of both self-employment in informal enterprises (i.e. small and/or unregistered) and wage employment in informal jobs (i.e. without secure contracts, worker benefits, or social protection) represents nearly half or more of the total non-agricultural employment in all regions of the developing world. It ranges from 48% in North Africa, to 51% in Latin America, 65% in Asia and 72% in sub-Saharan Africa. The informal sector is also a larger source of employment for women than men in developing countries, for example in sub-Saharan Africa 84% of women non-agricultural workers are informally employed compared to 63% of male non-agricultural workers.

The National Bureau of Statistics (NBS) and the Small and Medium Enterprises Development Agency (SMEDAN) (2010), defined MSEs in Nigeria relative to the overall size and structure of the domestic economy as those employing less than 10 employees, with assets (excluding land and building) of less than five million naira (N5,000,000,000). Whereas, small enterprises are those employing between 10 and 49 employees, with assets (excluding land and building) of five million naira and above, but less than 50 million naira (N50,000,000.00).

1.1.2   Growth of MSEs

Aiyedun (2004), defined growth or expansion of enterprise as involving increase in size (number of employees), strength and quality. Enterprise growth can be classed as internal, where diversification leads to the creation of more departments, and external where it leads to acquisition of additional branches and expansion of business network. However, Meagher (2010) explained that the indicator most frequently used to measure expansion is the change in the number of workers in the enterprise. The different components of change are subject to different forces and determinants.

Growth is equally used to explain changes in organizational life-cycle that takes place from early growth, rapid growth, maturity and decline (Holmes, Hunt, & Stone, 2010). Growth may be determined by   external circumstances such as industry changes, government policy on imports, higher minimum wages, and competition (Aiyedun, 2004). Growth determinants vary from sector to sector and from one country to another, but they are generally multi-dimensional (Mamman, 2008). Why do some MSEs expand rapidly while others stagnate? Nichter and Goldmark (2009) noted that, to explore this important question, it is imperative to investigate factors associated with MSE growth, which include: Individual entrepreneur

characteristics; MSE characteristics; Relational factors (such as social networks or value chains); and Contextual factors (such as the business environment).

Economic growth is critical to the existence and indeed the survival of any economy and by implications any nation. Hence it is a good indicator for assessing the potential of productive or real sectors of the economy (Nigeria, 2009). In advanced economies, the SME sector is acclaimed as the engine of economic growth and development, however against international best practices, Nigeria is poorly rated (Babajide, 2012).

According to Osotimehin, Jegede, Akinlabi, and Olajide (2012) Micro and small scale enterprises (MSEs) in Nigeria have not performed creditably well and they have not played expected significant role in economic growth. They equally have not influenced apprentice training so as to accelerate employment and poverty alleviation in order to foster Nigerian economic development. They noted that in spite of the fact that micro and small scale enterprises (MSEs) have been regarded as the bulwark for employment generation and technological development in Nigeria, this subsector is faced with enormous challenges.

1.1.3 Wood-Based Industry

Wood based processing enterprises exist in most countries. They differ from large scale wood – based industries in a number of important respects. Generally, they serve markets which are not reached by large-scale wood – based industries (King & Heshmatic, 2008).

The U.S. wood-based industry is an important and dynamic part of the nation's economic and social fabric. The industry's enterprises are mindful of the need to continuously seek innovative and forward-looking responses to rapidly changing domestic and global conditions (Ince & others 2007; Turner & others 2005). In 2007, the industry was responsible for contributing nearly $323 billion in shipment values to the nation's economy and was the workplace for more than 1.4 million Persons (Ellefson & Kilgore, 2010). Similarly, Wood

based industry of FR Yugoslavia consists of 3869 companies (officially registered) of which 1675 are in primary processing and 2194 in final processing of wood. The number of 1321 companies of the total of 1675, is situated in Serbia, and 354 in Monte Negro. Concerning the started process of privatization of public companies and growing number of private companies , the participation of companies privately owned , in the total number of companies in primary processing of wood is dominant ,and it is 95,8% or 1605 companies (Glavonjic, 2013).

In Kenya, the performance of the wood industry has continued to decline over the years. As at 2009, virtually all large sawmills had collapsed leading to the closure of Pan Africa Paper Mills, that was producing 80% of the pulp and paper products in Kenya (Nganga, Onyango, & Kere, 2011)

The Nigeria wood products sector has traversed a variety of circumstances. From being a buoyant sector in the 1960's to the early 1970's, the sector is now a shadow of its former self. Nigeria used to be a major producer of exotic furniture for export in the 1960's to 1980's in view of concrete investments in wood processing industries made by both the private investors, federal and state governments (Ogunwusi, 2012) . He further noted that the over exploitation of the wood resources has impacted negatively on the development of the wood products industry. These, coupled with several other factors such as old age of equipment, etc; has resulted in the dwindling fortune of the country's wood industry. In general, the Nigerian wood industry is gradually declining in performance, efficiency and productivity due to the reasons already highlighted. High quality saw logs and veneer logs are limited with 97% of log production factoring into the lesser used wood species (Arowosoge, 2010).Various studies RMRDC, (2003); and Oriola, (2009) have reported a decline in the performance of the wood industries in Nigeria. Thus, there is the need for constant

assessment of forest industries in Nigeria in order to promote initiation of policies that will lead to rejuvenation of the sector.

1.1.4 Wood – Based MSEs in Nigeria

Wood-based industrial operations in Nigeria include timber logging, sawmilling, wood-based panel products manufacturing (such as plywood, fiber board and particleboard), furniture/joinery making, paper making, match making, wood seasoning and the manufacture of various wooden items such as tool handles, sport goods, weaving equipment and wooden toys (Aina,2006). Furniture production, carpentry works, and sawmilling are found to be commonest among wood-based MSEs (Adedokun, Oyun, Aina, & Adetogun, 2005). They noted that the enterprises are characterized by very small size, heavy reliance on entrepreneur and family labour, and technological simplicity of operations.

In a recent study, Ogunwusi (2012), it was indicated that there are five major wood-based enterprises in Nigeria. These are the saw mill, wood based panel, furniture, safety match and the wood treatment industries, with furniture and saw mill constituting over 80% of the sector. In Nigeria, round wood processing has reached the limits of available forest resources such that the future increase in wood production and revenue could be derived from further processing of sawn wood rather than expansion in sawmill and exploitation of wood resources (Larinde, 2010). Consequently, Larinde (2008) recommended that efforts should be geared towards having most of the wood industries in Nigeria integrated to enable the wood waste or wood materials which are not suitable for one mill to be channeled to other mills that can process them.

While the domestic market for furniture is growing rapidly, the sector has not contributed significantly to foreign exchange earnings as it is dominated by small scale operators of about 3-5 workmen (RMRDC, 2009).

The small scale furniture producers are technically inefficient as they fall below efficiency level of 60% (Ako & Kuye, 2010). The implication is that the average furniture producer need 48% cost saving devices to attain the status of efficiency, while least furniture producer need about 88% cost saving devices to become an efficient producer. Most of the small scale operators in this subsector are more interested in quick profit rather than quality control and expansion (NACETEM, 2010). Other problems militating against adequate performance of operatives in this subsector are low level of demand (Arowosoge , 2010), poor workmanship (Meagher, 2010), and high level of poverty and long lifespan of furniture products. Others include the inefficiency of the ban on furniture importation due to high level of smuggling (Aku, 2010), paucity of skilled manpower and in adherence to standard drying, preservative treatment and design procedures (Ogunwusi, 2011).

The sawmill sub-sector is characterized by small scale operatives which constitutes more than 90% of the entrepreneurs in the sector. A major characteristic of the subsector is increasing number of operatives and decreasing performance. According to Ogunwusi (2012), the annual rate of return is between 15.2% and 44.3% while more than 70% of the workforces are manual laborers. The saw mills used outdated technologies while only less than 10% used advance technologies.

1.2   Statement of the Problem

Entrepreneurship plays an important economic role among nations of the world. The wood-based enterprises constitute one of the three micro and small (MSEs) sectors responsible for 75% of manufacturing enterprises in the urban areas, and nearly 90% of the manufacturing enterprises in rural areas (Mead & Liedholm, 2002). The woodworking sector comprises activities ranging from furniture making to carpentry/joinery and door manufacturing; it encompasses mechanical woodworking, sawmills, packaging, commerce and the importing of

timber and its derivatives. The sector is distinctive for its large proportion of MSEs owning to the family structure of most craft industries in the past (ESSDFS, 2010). It has been noted that inspite their importance, the MSEs in this sector are not growing either in terms of employment generation or in business expansion (Babajide, 2012).

The question as to why some firms grow while others do not is one of the most intriguing questions in the field of entrepreneurship. Researchers addressing this question have investigated a wide variety of factors that might influence firm growth (Wiklund, Patzelt & Shepherd 2009). These factors range from the characteristics of the entrepreneur to factors related to the environment in which these businesses are operating. Though some of the issues addressed in these studies have changed, the performance of the MSE sector has not yet been impressive. This suggests the need to further investigate the factors that influence MSEs growth from different angles.

Despite the importance of the wood industry in Nigeria as highlighted in the background, Ogunwusi (2012) noted that many of the MSEs in this sector suffer from high cost of production due to energy cost, obsolete equipment, and inadequate patronage with most of them producing at only 10% installed capacity and consequently inability to grow. Thus, there is the need for constant assessment of wood industries in Nigeria especially in the areas appropriate resources and market outlets among others (Babajide, 2012). The independent variables of the study are therefore justified based the fact they all influence the growth of MSEs in Nigeria. This is to further promote initiation of policies that will lead to rejuvenation and growth of the sector. This study provides one of such attempts. Failure to address some of these issues would not only hamper enterprise growth at this level, but could equally discourage enterprise owners/managers and future start-ups. This has implications on job creation and poverty reduction, thereby negating the spirit behind entrepreneurial drive.

1.3 Study Objectives

This study investigated the determinants of growth of wood-based MSEs in Nigeria.

1.3.1 General Objective of the Study

The general purpose of this study was to investigate determinants of growth of wood-based MSEs in Nigeria.

1.3.2 Specific Objectives of the Study

In order to fulfill the research aim, this study intended to:

1. Determine the influence of MSE – characteristics on the growth of wood-based MSEs.

2. Ascertain the influence of resources on the growth of wood-based MSEs.

3. Investigate the relationship between markets and the growth of wood-based MSEs.

4. Find out the influence of relational factors on the growth of wood-based   MSEs.

5. Investigate the influence of individual entrepreneur's managerial/technical competence the growth of wood-based MSEs.

1.4   Research Hypotheses

The following research hypotheses served as a guide to this study:

1. **H_0:** There is no significance influence of MSE-characteristics on the growth of wood-based MSEs.

2. H_0: Resources do not significantly influence the growth of wood-based MSEs.

3. H_0: There is no significant relationship between markets and the growth of wood-based MSEs.

4. H_0: Relational factors do not significantly influence the growth of wood-based MSEs.

5. H_0: There is no significant relationship between individual entrepreneur's managerial/ technical competence and the growth of wood-based MSEs.

1.5   Justification of the Study

There are very few studies in wood-based MSE sector in Nigeria. Therefore, apart from adding to the body of empirical knowledge, the findings of the study would benefit entrepreneurs in the wood industry; the academics; and potential investors. Entrepreneurs, both existing and those with start-up intentions would be guided by the study's findings in adequately planning for growth.

Similarly, policy making bodies, especially SMEDAN, would benefit from the findings as they are expected to guide investors in seeing growth motivation as part of the initial feasibility analysis for start-ups in this sector and indeed the MSE universe. A study on how to enhance growth in this critical sector is justified since the findings would improve the level of knowledge as well as make positive impact on the economy in general.

1.6   Scope of the Study

The study focused mainly on some selected determinants of growth of wood-based MSEs as obtained from literature review. The study was conducted in Kaduna State which had served as a regional capital for several decades with a large concentration of all types of enterprises and companies (Mamman, 2008). The State is composed of urban, semi-urban and rural populations with various categories of enterprises run by people from across the nation and foreigners. It will therefore be possible to generalize the findings to the entire country.

1.7   Limitations of the Study

The study could not cover all the known and perceived determinants responsible for growth of wood-based MSEs. However, it is hoped that the few ones covered would generate adequate understanding of the sector that may lead to appropriate intervention by all

stakeholders. Other limitations were inadequate record keeping and unwillingness by most entrepreneurs to part with information on their assets. However, this was overcome by physical observations and noting non-verbal expressions. Additionally, being a self-sponsored study, constraints of resources posed some limitations on budget and logistics.

1.8   Delimitations of the Study

Despite the earlier identified limitations of the study, a number measures were taken by the researcher to ensure that the findings of the study were not adversely affected. With the use of research assistants who are familiar with the area of study, the respondents were convinced to give adequate and needed information that enabled the study to achieve its objectives.

Despite the cost constraints on the researcher, this was overcome through an interest free loan obtained from the cooperative society based in his place of employment.

CHAPTER TWO

LITERATURE REVIEW

2.1   Introduction

The study explored the determinants of growth of wood-based micro and small enterprises (MSEs) in Nigeria. This chapter reviews the works of scholars and authors in the area of study in order to establish what has been previously covered and possible gaps requiring investigation. The review was organized under the following sub-headings: Theoretical Review; Conceptual Framework; Critical Review; Critique of the Review; and Gaps in the Literature reviewed.

2.2   Theoretical Review

A theory represents the coherent set of hypothetical, conceptual and pragmatic principles forming the general framework of reference in the field of enquiry. There are several theories that have been advanced for entrepreneurship. These theories have their roots in economics, psychology, sociology, anthropology, and management (Simpeh, 2011).

2.2.1   MSE Characteristics

The key characteristics of MSEs that are likely to survive and grow, according to Liedholm (2002), include age, initial size, and location among others. In trying to establish a relation between age and the growth of MSEs, Jovanovic (1982), proposes a *Learning Model* in which enterprise owners discover their efficient sizes of operation gradually. This theory predicts that a firm will expand quickly at first, then taper off its growth as the firm approaches its optimal size (Nichter & Goldmark, 2005). The theory has however failed to recognize the importance of experience which is gained as a result of being in practice over a period of time. Similarly, the *Life Cycle Model* is defined as an organization development

approach where time is viewed from the perspective of a focal organization, and therefore, age represents accumulated experience (Pereyi, Selvarajah & Muthaly, 2008). This theory recognizes the importance of age in enterprise development and growth. The *Classical Economics Theory* emphasized the linear nature of firm growth based on *Gibrat's Law*. The law incorporates two aspects: firm growth rate of a given period is independent of firm size; and the probability of firm growth rate is industry-specific phenomenon (Becchetti & Trovato, 2002). Therefore, the growth or otherwise of wood-based MSEs cannot be attributed to firm size and age alone. The theories have failed to capture the role of work experience on MSE growth.

2.2.2 Resources

Resources can be defined as anything that could constitute either strength or weakness of a given enterprise. Resources are tangible and intangible assets that are tied to an enterprise over substantial period of time (Gottchalk, 2007). The *Resource-based Theory* of entrepreneurship argues that access to resources by founders is an important predictor of opportunity based entrepreneurship and new venture growth (Alvarez & Busenitz, 2001). This theory stresses the importance of financial, social and human resources, and therefore, access to these enhances an individual's ability to detect and act upon discovered opportunities (Davidson & Honning, 2003).

According to Ghoshal (2002), the resource-based theory emphasizes that the firm comprises of differentiated technological skills, complementary assets, organizational routines and capabilities. Financial, social and human capitals represent three classes of theories under the resource-based entrepreneurship theories: financial capital/liquidity theory; social capital or social network theory; and human capital theory (Simpeh, 2011). The theory directly links

with objectives two-resources and four-relational factors of the study and supports their importance to enterprise growth.

Financial Capital/Liquidity Theory argues that the entrepreneurs have individual-specific resources that facilitate the recognition of new opportunities and the assembling of new resources for the enterprise (Alvarez & Busenitz, 2001). However, research shows that some persons are more able to recognize and exploit opportunities than others because they have better access to information and knowledge (Anderson & Miller, 2003; Shane, 2003). By implication, this theory suggests that people with financial capital are more able to acquire resources to effectively exploit entrepreneurial opportunities and start up enterprises with growth potentials (Causen, 2006).

Social Capital or Network Theory argues that stronger social ties to resource providers facilitate the acquisition of resources and enhance the probability of opportunity exploitation (Aldrich & Zimmers, 1986).According to Clausen (2006) entrepreneurs are embedded in a larger social network structure that constitutes a significant proportion of their opportunity structure. The relevance of this to enterprise development is the understanding that an individual may have the ability to recognize that a given entrepreneurial opportunity exists, but might lack the social connections to transform the opportunity into a business start up. It is thought that access to a larger social network might help overcome this problem (Gartner et al, 2004).

Human Capital Entrepreneurship Theory- Underlying the human capital entrepreneurship theory are two factors, education and experience (Becker, 1975). The knowledge gained from education and experience represents a resource that is heterogeneously distributed across individuals and in effect central to understanding differences in opportunity identification and exploitation (Anderson & Miller, 2003, Gartner et al, 2005) Empirical studies show that

human capital factors are positively related to becoming a nascent entrepreneur (Kim, Aldrich & Keister, 2003,Davidson & Honing,2003, Korunka et al, 2003), increase opportunity recognition and even entrepreneurial success (Anderson & Miller, 2003, Davidson&Honing,2003).

The basic conceptual model describing the resource-based firm theory is displayed in Fig. 2.1

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┌─────────────────────────────────┐
│          Resources              │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│      (Sustained) Competitive    │
│           Advantages            │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│          Performance            │
└─────────────────────────────────┘
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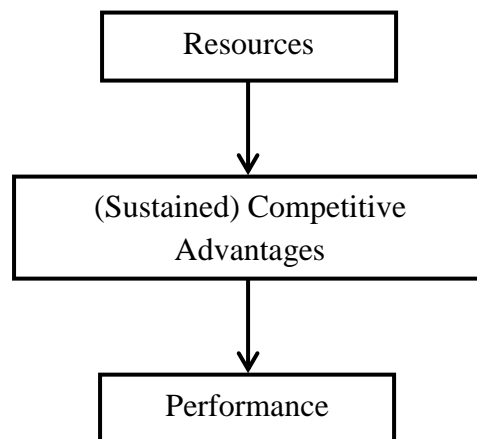
Fig. 2.1: *The resource based firm theory conceptual model*

Source: Ghoshal et al. (2002) as cited in Perenyi and Muthaly (2008)

The sources of a sustained competitive advantage can be knowledge, learning, culture, teamwork and human capital (Barney, 2001). Priem (2001) reported that resources are important antecedents of products and ultimately, firm performance. Access to appropriate resources is critical to growth of wood-based MSEs.

2.2.3 Markets

In the market, the incentive for entrepreneurial activity is largely provided by the existence of pure profit opportunities. These opportunities, in fact, correspond to gains obtained from acting in accordance with the realized future. An individual's alertness is switched on by the prospect of pure profit and that enables him/ her to find his/her way in an uncertain world.

Austrian Market Process (AMP)

The AMP model, influenced by Joseph Aloi Schumpeter (1934) concentrated on human action in the context of an economy of knowledge. Schumpeter (1934) described entrepreneurship as a driver of market-based systems. In other words, an important function of an enterprise was to create something new which resulted in processes that served as impulses for the motion of market economy.

Thus, the AMP was based on three main conceptualizations (Kirzner, 1973).The first was the arbitraging market in which opportunities emerge for given market actors as others overlook certain opportunities or undertake suboptimal activity. The second was alertness to profit-making opportunities, which entrepreneurs discover an entrepreneurial advantage. The third conceptualization, following Say (1803) and Schumpeter (1934), was that ownership is distinct from entrepreneurship. In other words, entrepreneurship does not require ownership of resources, an idea that adds context to uncertainty and risk (Knight, 1921). These conceptualizations show that every opportunity is unique and therefore previous activity cannot be used to predict outcomes reliably.

Access to market information or new technologies, on the other hand, may help firms seek or respond to new opportunities and therefore, the absence or weakness of supporting markets is often identified as a constraint on MSE growth (Nichter & Goldmark, 2009)

The Output-Demand Theory

The second theory for explaining the development of the MSE sector in developing countries is the output-demand theory. The theory postulates that a prerequisite for the development of MSEs is that there is a market for their products and services. Therefore, the MSE sector will tend to develop a cyclical relationship with the economy as a whole (Green, Kirkpatrick, & Murinde, 2006). Empirical studies based on the output-demand theory tend to focus on the

upper end of the MSE sector, particularly the manufacturing enterprises and the larger, more resourceful and successful MSEs, which have a potential to grow into the formal economy. These studies propose strengthening of the MSEs through networks or via the creation of forward linkages with the formal economy, for example franchising and sub-contracting. This approach has not had much success in Africa due to problems of poor infrastructure and lack of trust between both parties (Liedholm & Mead, 1993, and Grierson & Mead, 1995).

2.2.4 Relational Factors

According to Nichter and Goldmark (2009), relational factors of enterprise growth mainly concern social networks or value chains, noting that having an extensive social network is a valuable asset that can help an entrepreneur obtain access to information, with such information leading to profitable opportunities and resources.

Network Theories

Basically, network theories assume that actors are not atomistic, but exist within systems of actors. It is fundamentally important for the network approach to view the entrepreneur as a whole person (Larson & Starr, 1992). The principal virtue of this approach is embeddedness that is, describing entrepreneurial activity in a social context and explaining how these activities are shaped and constrained by this context.

Networks are important to enterprise growth as they provide four essential ingredients, namely, support and motivation; examples and role models; expert opinion and counseling; and finally, access to opportunities, information resources (Manning, Birley & Norbon, 1989).

2.2.5 Individual Entrepreneur's Characteristics

According to Cragg & King (1988); Rutherford & Oswald (2000) small business success has often been classified into three categories of antecedents: the individual characteristics of the

owner-manager, firm characteristics and environmental characteristics. The individual characteristics include attributes like the age, education, managerial know-how, industry experience and social skills of the owner/manager (Islam, et al, 2011).

Need for Achievement Theory

Need for achievement theory by McClelland (1961) explained that human beings have a need to succeed, accomplish, excel or achieve. Entrepreneurs are driven by this need to achieve and excel. While there is no research evidence to support personality traits, there is evidence for the relationship between achievement motivation and entrepreneurship (Wang, 2008).

Without discounting other crucial traits like education, work experience, innovativeness and risk taking, need for achievement motivation has a positive and significant influence on entrepreneurial inclination and growth (Mohar, Singh& Kishore, 2007).

2.2.6 Growth of MSEs

MSEs are an integral element of the informal sector in most developing countries. In the majority of cases, these enterprises are initially informal but gradually some of them survive and become formal businesses, thereby providing the foundation of modern private companies (Musa and Adewale, 2015; Cook and Nixson, 2005). Hence, the growth of these enterprises is part and parcel of a dynamic growth process in the corporate sector, as argued by Liedholm and Mead (1994) and Prasad et al. (2005).

Firm Growth Theory

According to Green et al (2006), firm growth theory, contends that, as a result of industrialization and economic growth, MSEs are likely to disappear and be replaced by modern large-scale industry. This theory has, however, been shown to be inaccurate in the sense that MSEs do not normally compete directly with large enterprises; rather, they often tend to remain micro and small, co-existing with large multi-national companies, which

phenomenon the World Bank (1989) has identified as the 'missing middle' (Ryan, 2005). For example in a study of Botswana, Kenya, Malawi, Swaziland and Zimbabwe, Mead (1994) found that most MSEs started with one to four employees and never expanded; less than 1% grew to exceed 10 employees. The relevance of this theory lies in preposition that the growth of MSEs can contribute to poverty reduction through employment generation.

Labour Surplus Theory

The main theory, which goes back to the seminal work by Lewis (1955), is the labour surplus theory. MSEs are expected to grow in periods of economic crisis, when the formal sector contracts or grows too slowly to absorb the labour force. However, when formal employment grows, the MSE sector is assumed to contract again and thus develops an anti-cyclical relationship with the formal economy. Particular attention has been paid to the behaviour of the MSE sector before and after the introduction of structural adjustment policies; examples include Daniels (1994) and Brand et al. (1995)for Zimbabwe and Meagher and Yunusa (1996) for Nigeria. The effect of such a theory would be similar to that of the theory of commercialization of the rural areas, namely, a continuous growth in the informal MSE sector (Green et al, 2006).

2.3   Conceptual Framework

Conceptual framework is structural from a set of broad ideas and theories that help researchers to properly identify the problem they are looking at, frame their questions and find suitable literature (Smyth, 2007). According to Miles and Haberiman (1994), it is a written or visual presentation that explains either graphically, or in narrative form, main things to be studied – the key factors, concepts or variable and the presumed relationship among them. The conceptual framework of this study therefore is based on some of the

variables obtained in the course of literature review. Thus, these constructs/variables and their

relationship are shown in figure 2.2.

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┌─────────────────────────┐
│ MSE Characteristics     │
│  ⇨ Longevity            │────────┐
│  ⇨ Legal form of bus.   │        │
│  ⇨ Location             │        │
└─────────────────────────┘        │
                                   │
┌─────────────────────────┐        │
│  Resources              │        │
│  ⇨ Human Capital        │────────┤        ┌─────────────────────────┐
│  ⇨ Finance              │        │        │ Growth of wood          │
│  ⇨ Infrastructure       │        │        │ Based Micro and         │
└─────────────────────────┘        │        │ Small Enterprises       │
                                   │        │  ⇨ Profitability        │
┌─────────────────────────┐        │───────▶│  ⇨ Sustainability       │
│  Markets                │        │        │  ⇨ No. of               │
│  ⇨ Product Demand       │────────┤        │     Employees..         │
│  ⇨ Market Share         │        │        └─────────────────────────┘
│  ⇨ Sales                │        │
└─────────────────────────┘        │
                                   │
┌─────────────────────────┐        │
│ Relational Factors      │        │
│  ⇨ Social Networks      │────────┤
│  ⇨ Access to Information │       │
│  ⇨ Value Chains         │        │
└─────────────────────────┘        │
                                   │
┌─────────────────────────┐        │
│ Individual Entrepreneur │        │
│ Characteristics         │        │
│  ⇨ Education            │────────┘
│  ⇨ Experience           │
│  ⇨ Need for Achievement │
└─────────────────────────┘
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Independent Variables   Dependent Variable

Fig. 2.2 *Conceptual Framework Model*

2.4   Review of Important Literature

2.4.1 MSE Characteristics

In many developing countries, microenterprises and small-scale enterprises account for the majority of firms and a large share of employment, mainly consisting of small firms with one person working alone or with unpaid family members. Self employment is a central element in these economies (USAID, 2006). Based on house-to-house baseline surveys in Africa and Latin America, the small firm sector is far larger than is reported. Liedholm states that estimated employment garnered from MSEs in the African countries is nearly twice that of employment rates for formally registered, large-scale enterprises (Liedholm, 2002).

William and Jones (2009) described business longevity as the duration (age) of the business, that is, time elapsed since the firm started operation. According to Lee et al. (2005) in the research

literature on entrepreneurship and organization, business longevity is discussed with in the concept of business survival, success and performance. Business longevity can be used synonymously with business survival. In order for a business to remain solvent, it has to sustain itself. Longevity can be interpreted as a measure of success (Lubinski et al. 2011). Business longevityis associated with a firm's life cycle. For a business to be in existence for a long time, it must have passed through the initial stages of the firm's life cycle. Business longevity is a measure of organization's ability to sustain its continuity (Montuori 2000; Bianchi and Winch 2012). An alternative definition of business success is longevity. The longer one can survive and prevent involuntary exit, the more successful one is (Van Praag 2003)

The relationship between firm age and small firm growth in developing countries is particularly robust (Nichter & Goldmark, 2009). Studies in both Africa and Latin America show that young MSEs are more likely to show high rates of growth compared with MSEs that have been in existence longer (Mead & Liedholm, 1998; Cassar, 2014). An IDB study reveals that the major expansion of dynamic enterprises occurs during their third year of operation (Kantis et al., 2004), and other studies suggest that the average growth rate of firms decreases with age (e.g., Burki & Terrell, 1998). In a recent study, Fatoki (2013), the results indicated six factors that can contribute to the longevity of micro enterprises. These are the entrepreneur's personal characteristics, customer satisfaction, management knowhow, finance and resources, strategy and networking.

Informality refers to businesses that are unregistered but derive income from the production of legal goods and services (Schneider, 2002). The ILO (2004), reports that the informal economy's share of the nonagricultural workforce has reached 55% in Latin America, 45–85% in Asia, and nearly 80% in Africa. Although small, informal MSEs may be able to circumvent government regulations and taxation, as they grow they risk becoming more visible, creating disincentives to expand beyond a certain size (Snodgrass & Biggs, 1996). Informal firms may therefore need to ''keep their heads down,'' ruling out large size and rapid growth as well as close relations with formal firms (Winter, 1995). For these and other reasons, informal MSEs tend to grow more slowly than do their formal counterparts.

Location can play a central role in determining MSE survival. MSEs located in urban or commercial areas are more likely to survive than their counterparts in rural areas. Dahl and Sorenson (2007) note that location also impacts on the market potential and growth opportunities of enterprises. Geographical proximity to either critical buyers or suppliers produces a form of enhanced environmental scanning that enables new firms to more easily

identify and exploit growth opportunities in the market. Geographical location has implications for access to markets and other resources such as finance, skilled labour and infrastructure. Gilbert (2008) points out that the geographical area where the firm is launched has implications for its access to markets and resources. Firms located in metropolitan areas may therefore have higher chances of success than those located in rural areas. William and Jones (2009) find that the location of the firm is a significant factor that influences longevity. Firms in rural areas are expected to have a longer life than firms in urban areas. This could possibly be reasoned that in urban areas, the level of competition is very intense. On the other hand, in rural areas, competition is less intense due mainly to the lower concentration of businesses in these areas. However, in Liedholm's profile, over half of the enterprises operate in rural areas. Those that operate in commercial districts or on roadsides typically show greater growth rates than those that are based in the home, although Liedholm points out that this can vary at the country level (USAID, 2006).

These points have shown not only the relevance of firm age and formality, but also enterprise location in the growth of wood-based MSEs.

2.4.2   Resources

The sources of a sustained competitive advantage can be knowledge, learning, culture, teamwork and human capital (Barney, 2001). Based on a resource-based view, financial resources and human capital are the most important resources for small business growth (Wiklund et al., 2007). It has been argued that securing financial resources might be particularly important in promoting firm growth (Bamford, Dean & McDougall, 1997; Sexton & Bowman-Upton, 1991). It is because financial resources can relatively easily be converted into other types of resources (Dollinger, 1999). With sufficient resources, firms are able to experiment new things, which not only increases their innovation potential but also

enables the business to pursue new growth opportunities (Castrogiovianni, 1996; Zahra, 1991). Empirical studies show that access to financial resources has a positive effect on small business growth (Cooper et al., 1994; Storey, 1994). Financial performance of a firm is a secondary input to the financial resources for firms. Profit yielded in the past can be reinvested into the firm. By this means, a firm not only relies on external funding, but instead also uses internal funds to finance investments.

Coad (2007) argues that financial performance can be expected to correspond to firm growth given the principle of 'growth of the fitter' from evolutionary theory. Following this logic, only
firms with superior financial performance can grow. *Human capital* represents knowledge, skills and experience. On a organizational level, human capital of the total workforce plays a more determined role when compared to the entrepreneur alone (Birley & Westhead, 1990; Chandler & Hanks, 1994).

Employees are considered as the most important resource for MSEs. Knowledge of individuals plays a crucial role in building competitive advantage of a firm. Small firms are more likely to engage in innovation activities due to their constraints in available resources, and therefore high quality workforce and further human resource development within the organization is rather important for such firms(Rauch, Frese & Utsch ,2005).

2.4.3 Markets

Enterprise growth can be determined by how successfully one sells products and services to the customers. Therefore, market orientation can be considered an important determinant of growth. Firms with market orientation are able to track and respond to the customer's needs and preferences. They are more likely to develop their market intelligence as well as have the ability to coordinate internal processes in order to respond quickly and effectively to

customers and external stakeholders. Consequently, market orientation enables better satisfaction of customers and stakeholders which in turn result in a firm's growth (Hult, Snow & Kandemir, 2003). According to Lintu (2006), the forestry sector tends to be very much production and product oriented. Therefore, for it to get to the consumers there is the need for the application of marketing science which is the key to the future growth and development of the sector in Nigeria.

Without adequate demand by local consumers, developing-country firms, especially MSEs, have a much lesser chance of accessing the higher margins and value-added functions associated with the international high-end market segments. MSEs may not interact directly with developed country firms, but may rather act as subcontractors to large developing-country manufacturers (Carr & Chen, 2003; Goedhuys and Sleuwaegen, 2009). In such cases, the pathways to growth may be blocked.

The efficiency with which a firm sells its products and services to the customers determines its growth establishing market orientation an important determinant of firm growth. Accordingly, market orientation results in improved satisfaction of customers and stakeholders leading to the firm's growth (Hult, Snow & Kandemir, 2003, Narver & Slater, 2004). Empirical evidence suggests that market orientation is significantly associated to the overall growth performance of a firm (Jaworski & Kohli, 2003).

2.4.4 Relational Factors

Having an extensive social network is a valuable asset, as it can help an entrepreneur obtain access to information (e.g., leads about profitable business opportunities) and resources (e.g., credit). While social networks can enhance MSE growth in any context, they can be critical to firms' growth prospects in environments with pervasive market failures, such as inordinately low levels of information and competition (Nichter & Goldmark, 2005).The term

''social networks" is used here to refer to relationships between individuals. While social networks can enhance MSE growth in any context, they can be critical to firms' growth prospects in environments with pervasive market failures (Capp, Elstrold, & Jones, 2005).

Individual firms form vertical linkages with their buyers and suppliers. Vertical linkages can facilitate MSE growth by expanding a firm's set of viable business opportunities and by improving firm capabilities. Agreements with buyers can decrease the risks and costs associated with entering new markets by providing a guaranteed flow of orders, critical information about market requirements, and in some cases, a reduced need for capital investments (Aw, 2002).

On the other hand, similar firms may group themselves or be organized by an outside party to work together—these are referred to as horizontal linkages. Among the many legal and organizational options for institutionalizing horizontal cooperation are cooperatives, associations, consortia, producer groups, and other collaborative structures.

Horizontal linkages can help MSEs overcome many of the disadvantages of being small, providing a way to consolidate production, improve their negotiating position with buyers or suppliers, access market information or services, or lobby for political or regulatory changes (Goldmark & Barber, 2005; Steen, Magnani, & Goldmark, 2005). In cases where clustered firms seek to serve the same market, both competition and cooperation can drive innovation that is critical to firm performance. Of course, the mere presence of clusters does not guarantee dynamic growth for MSEs (McCormick, 1999). However, in many cases, participation in clusters as well as investment in horizontal linkages can facilitate MSE growth**.**

2.4.5   Individual Entrepreneur Characteristics

McClleland (1961) believes that the need for achievement by an individual is a precursor of entrepreneurial activities and a strong motivation for engaging in entrepreneurship. Borkowski and Kulzick (2006), while corroborating the assumption of McClleland, contended that: an individual with a high *n*-Ach takes personal responsibility for finding solutions to problems but avoids situations where the outcome depends not on his abilities and efforts but on chance or other factors beyond his control; and tends to set moderate achievement goals and to take "calculated risks" because the individual is not a gambler.

According to Gustafson (2004) "education changes cognitive processes within the individual, which may provide new skills for solving complex problems". Thus there is a positive relation between entrepreneur's education and entrepreneurial orientation. Similarly, Nieman (2001) stressed that the skills required by entrepreneur can be classified into three main areas, "technical skills, business management skills and personal entrepreneurial skills". Fig. 2.3
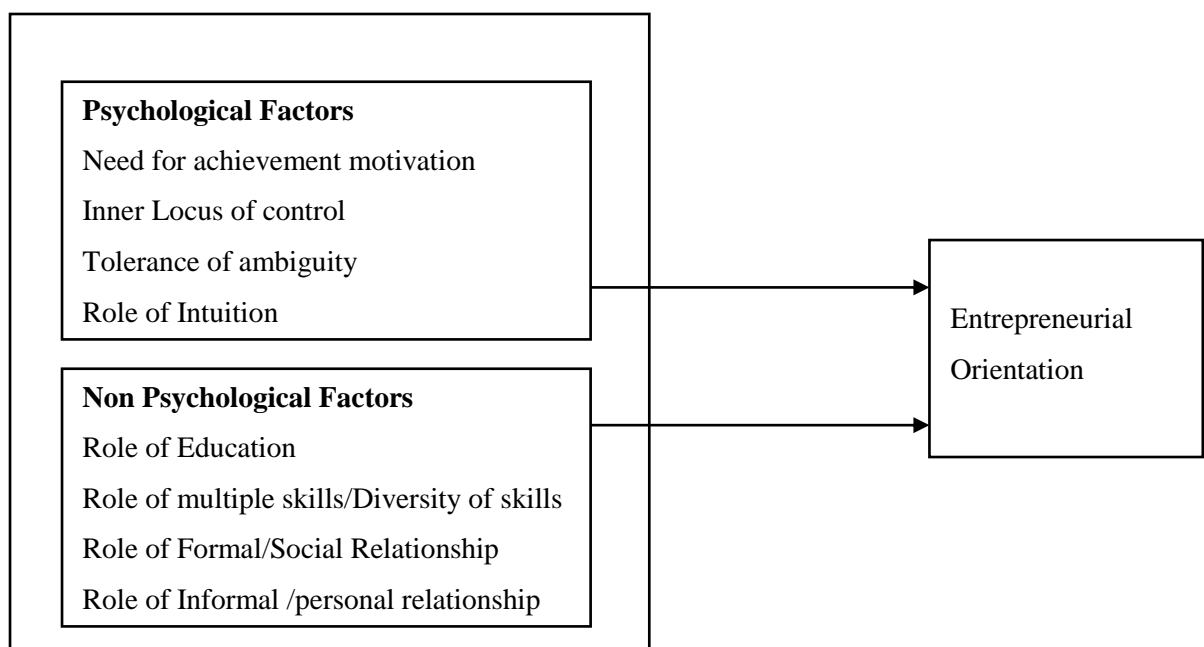
Fig. 2.3: Individual Related Psychological and Non Psychological Factors Affecting Entrepreneurial Orientation

Source: Farooq and Ahmed (2012)

According to Bula & Tiagha (2012), Entrepreneurship is a business venture that is engaged in value addition through the production and sale of goods and provision of services as an attempt to take advantage of a business opportunity that might entail some risk but that provides for self-employment and making money to support themselves and their families. He noted that more skills (both in the specific activity and in general management) possessed by entrepreneur, increases the productivity which reduces chances of failure and, therefore, may be important factors of firm's entrepreneurial orientation".

Developing-country MSE owners and workers often have relatively low levels of education. One reason is that despite recent advances, primary education completion rates remain at only 60% in Sub-Saharan Africa, 80% in South Asia, and90% in the Middle East and North Africa (World Bank, 2009). In addition, MSEs tend to have less-educated owners and workers than do larger firms (Orlando & Pollack, 2000;Soderbom & Teal, 2001). Educational disparities across firm size are especially striking at the university level: for example,21% of microenterprise owners in Chile have Bachelor's degrees, compared to 42% of small firm and 55% of medium-firm owners (Alvarez & Crespi, 2003). The lower level of educational attainment among MSE owners and workers is remarkable when contrasted with the situation in developed countries, where those with higher education are more likely to be self-employed (Woodruff, 1999). One reason for this contrast is that the poor in developing countries often create survival-oriented MSEs due to a lack of alternative employment opportunities.

While the benefits of on-the-job experience are frequently mentioned, the importance of prior work experience may be even more helpful, especially if that experience occurred within the same sector or in small-to-medium-sized enterprises. An IDB study of high-growth

entrepreneurs provides telling insights about the importance not only of skills but also of business contacts gained during past employment (Kantis et al., 2004). Among Latin American and East Asian entrepreneurs, contacts were found to be a key benefit of work experience, helpful in identifying business opportunities, obtaining financing and other resources, and alleviating management challenges. Unfortunately, some developing regions are characterized by a systematic lack of opportunities for relevant work experience. In particular, Africa has few medium-sized companies where entrepreneurs can gain work experience, a phenomenon known as ''the missing middle.'' For this and other reasons, MSE owners and workers in Ghana have an average of only five years of work experience, compared to 10 years for their counterparts in larger firms (Fafchamps, McKenzie, Quinn, & Woodruff, 2011).

Within developed countries, there is mixed evidence linking prior sector experience to small firm growth. On the other hand, a more recent panel survey of 1,000 entrepreneurs in the Netherlands found that entrepreneurs' prior experience, when in the same industry as their start-ups, improves firm growth, survival, and profitability (Bosma, van Praag, Thurik, & de Wit, 2004).

2.4.6   Growth of MSEs

African entrepreneurs face significant uncertainty with regard to demand, reliability of infrastructure, corruption, trust, prices, and so on. Most investment is held back due to risks. Some firms grow and others do not. Even many of the larger firms do not grow (Bigsten and Soderbom 2005, Tybout 2000). This can (also) be illustrated for Nigeria. Firms with six workers or fewer account for roughly 50% of all employment in Latin America and substantially more than half in Africa and Southeast Asia, with their most significant contributions being made in urban areas (Fajnzylber et al. 2006).

Furthermore, it has been observed empirically that despite the severe constraints faced by MSEs in developing countries, a significant number of them have managed to expand, indicating that they do have potential to drive economic growth. However, based on the characteristics of these successful firms there appears to be a significant number of firms that have, so far, failed to realize their growth potential (Grimm et al. 2012). According to Kruger (2013) helping MSEs to grow is desirable not only to provide employment, but also to provide better employment. Wages in small enterprises tend to be low and it is usually difficult for owners to provide workers with social security benefits unless the firm can graduate into a bigger and more efficient firm.

Similarly, Ishengoma and Kappel (2008) noted that when compared with large enterprises, MSEs are less efficient and incur high costs per unit of revenue. They use labor-intensive technologies to compensate for the lack of technical capacity in order to perform well in Uganda. However, Osotimehin et al, (2012) observed that the micro and small enterprises sector provides, on average, 50% of Nigeria's employment and 50% of its industrial output, noting that no government can afford to ignore such a high contributor to its economy. The proportion of Nigeria micro and small enterprises and their impact on the economy is pretty much similar to those in other countries of the world. However, when formal employment grows, the MSE sector is assumed to contract again and thus develops an anti-cyclical relationship with the formal economy. Particular attention has been paid to the behaviour of the MSE sector before and after the introduction of structural adjustment policies; examples include Daniels (1994) and Brand et al. (1995) for Zimbabwe and Meagher and Yunusa (1996) for Nigeria.

According to Sirivanh, Chaikeaw and Sateeraroj (2013), the factors influencing the growth of the small and medium enterprises included competitive advantage, characteristics of

entrepreneurs, entrepreneurial competencies, and business alliance as depicted in the model (fig. 2.4.):
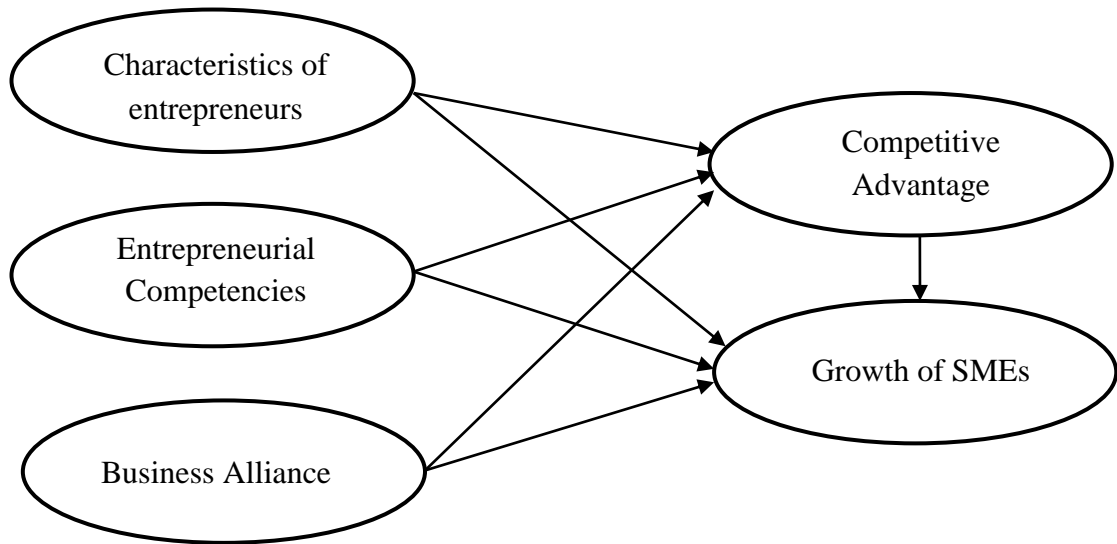
Fig. 2.4: *Factors Influencing MSE Growth*

Source: Sirivanh, Chaikew and Sateerajoj (2013)

However, Davidson et al. (2006), proposed a conceptual model to analyze factors that affect the growth of MSEs, incorporating three antecedents of small firm growth, namely: abilities; opportunities; needs, as depicted figure 2.5.
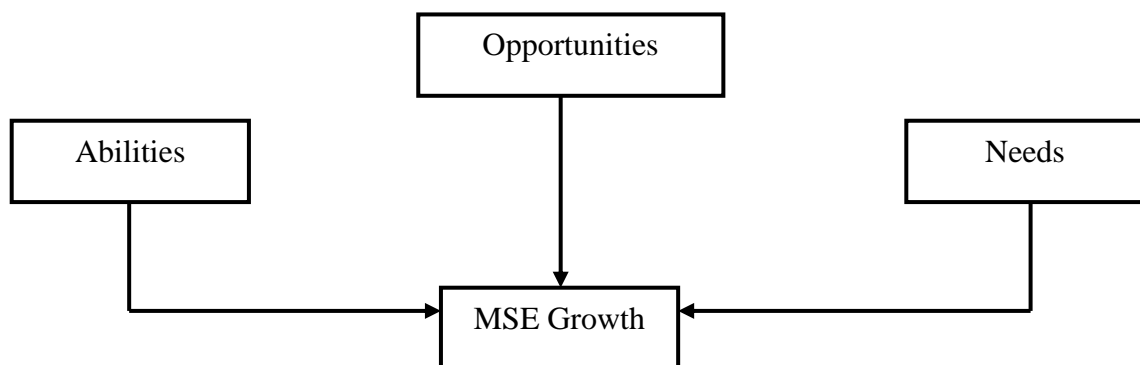
Fig 2.5: The three antecedents of firm growth

Source: Davidson et al. (2006) Modified.

Many MSEs in developing countries like Nigeria lack both profitable business opportunities and capabilities such as skills, resources, and technology. These firms demonstrate the least

proclivity toward growth, and their owners may focus instead on firm survival. Despite their lack of growth, these MSEs frequently play important social and economic roles. Even if they do not experience employment growth, they often provide essential sustenance for their owners and workers (Nichter & Goldmark, 2009).

2.5   Past Empirical Studies

2.5.1   MSE Characteristics

Islam, M. A. ;   Khan, M. A. ;   Obaidullah, A. M. & Alam, M. S. (2011). *Effect of Entrepreneur and Firm Characteristics on the Business Success of Small and Medium Enterprises (SMEs) in Bangladesh,* University Malaysia Perlis, Malaysia.

The study examined the effect of characteristics of entrepreneur and characteristics of the firm on the business success of Small and Medium Enterprises in Bangladesh. The study noted that despite the fact that some SMEs have been growing and are successful, some of others have declined or stagnant and was therefore posed to discover the factors responsible. The study is premised on these objectives:

i.   To find out whether firm's characteristics affect the business success of SMEs in Bangladesh, and

ii.   To find out whether entrepreneur's characteristics affect the business success of SMEs in Bangladesh.

The authors noted that success, in general, relates to the achievement of goals and objectives in whatever sector of human life. In business life, success is a key term in the field of management, although it is not always explicitly stated. Success and failure can be interpreted as measures of good or indifferent management. In business studies, the concept of success is often used to refer to a firm's financial performance. Using the survey design, the authors focused on SMEs characteristics such as origin of enterprise, length of time in

operation, size of enterprise, and capital sources which play important role on the business success.

The findings of the study noted that SMEs still face many challenges, domestic and external, which could hinder their resilience and competitiveness. They include: i) Ongoing difficulties in obtaining funds from financial institutions and the government. Usually the interest charges by financial institutions on loans borrowed by SMEs are high, and this is compounded by a lack of financial transparency by SMEs, ii) Lack of human capital is the most significant challenge facing SMEs. Consequently study recommended among others that the government should increase the number of centers that offer consultancy and expert services to SMEs, and engage more experts in different areas (for example IT, financial planning, marketing planning,etc.). It should ensure that SMEs get these incentives at a lower cost and in a more effective way. The efficiency and effectiveness of the delivery system of incentives are vital to their utilization.

Critique

The study revealed that Entrepreneurs characteristics are significantly related to the Business Success of SMEs in Bangladesh while the Characteristics of SMEs were found to have no significant effect on the Business Success of SMEs in Bangladesh. Both firm-internal and firm-external factors affect the firm success. This study puts all these into consideration.

2.5.2   Resources

Nganga, S. I.; Onyango, G. M. and Kerre, B. W. (2011).*Determinants of SMEs growth (wood enterprises): Infrastructure, technology and collective efficiency.* Karatina University College, Kenya.

The study explored the factors essential for the active participation of small manufacturing enterprises in contributing towards sustainable industrial development. Data was obtained

33

from wood based enterprises owner/managers (284) who were sampled from three Districts; Kericho, Nakuru and Uasin Gishu all in the Rift valley province of Kenya using multistage sampling strategy. The wood industry was used to examine the extent to which collective efficiency paradigm is used in supporting the growth of the wood enterprises and by extension SMEs. The major problem that the authors noted was that virtually all large sawmills had collapsed leading to the closure of Pan Africa Paper Mills that was producing 80% of the pulp and paper products in Kenya.

The study objective was therefore, to investigate the extent of the influence of the collective efficiency, infrastructure development and technology development on the growth of wood enterprises in urban and rural settlements in western Kenya and hence, the role they should play in planning for sustainable industrial development.

The study sourced data from owners/managers of wood enterprises located in the three districts and its findings indicate that although the extent of collective efficiency and wood enterprise growth are both low, there exists a significant logarithmic influence of the collective efforts on the wood enterprise growth and linear relationship between infrastructure and technology development. The study therefore recommended that collective efficiency would be important in informing, planning and in the development of industrial infrastructure supportive of SMEs growth.

Critique

The study established the importance of industrialization through micro enterprises promotion, in achieving sustainable development. One of the independent variables of the study was collective efficiency which relates to the concept of networking as sub-variable in this study. Human capital, technology, and infrastructure are among the major resources that impact on enterprise growth.

2.5.3 Markets

Razzak, W. A. (2010). *An Empirical Glimpse on MSEs For MENA Countries.* Arab Planning Institute, Kuwait.

The Economic Research Forum (ERF) produced an in depth survey of micro & small private enterprises (MSE) in a number of Middle East and North African countries (MENA). It contains sufficient information to fit a production function and additional information about the owner's education type; the scope of the market; and the type of technology. The author noted that very little was known about MSEs in the Middle East and North African

Countries (MENA) let alone empirical research in this area. The objective was to provide information to policymakers about the factors that potentially have positive effects and those which constraint output per worker in MSEs. Further, the data also allow us to examine among other factors, the effect of the scope of the market on output per worker, to test whether there are different effects on output per worker from selling output in a local market versus a regional, national or international market.

The survey established among other findings that the market scope exhibits a positive effect, especially selling at the national level. The effect of the market scope seems to be an important factor in all countries with minor differences. The wider the openness is the higher the productivity level. Selling at local markets is always insignificant or negative. Also on average, selling in local markets adversely affects output per worker; selling in bigger markets positively affects output per capita. Egyptian MSEs benefit from selling in regional and national markets while Morocco's benefit the most from selling in international markets. The author therefore recommended that it might be advisable that governments in developing countries try to anticipate (estimate) the probability of survival of MSEs and then adopt policies to ensure higher productivity to survived firms.

Critique

The study was silent about growth probably because it is a comparative survey of different countries, however, the coverage as well as analysis of the study objectives was quite elaborate and supports the key place of access to market for any venture to survive. Some of the issues covered will be beneficial to this study.

2.5.4   Relational Factors

Berrou, J.-P. and Combarnous, F. (2009). *Measuring entrepreneurs' social networks and their economic impact in an informal African urban economy.* GREThA - UMR CNRS 5113, University of Bordeaux.

Social relations and networks constitute a major form of social regulation in informal African urban economies. To explore this subject, the paper focused on social or personal network of entrepreneurs rather than inter-firm ties. The paper noted that the current framework of informal urban economies, and in the African context of state failure and modern institutional failure, social networks and personal relations inevitably play an important part in structuring economic activities. Indeed, they may facilitate access to a variety of useful resources for entrepreneurs, including information, ideas and knowledge (about markets, activities, and skills) or financial and material support (especially in times of crisis). In the case of informal activities, it is of special importance since it compensates for the weakness of the internal resources of small firms in Bobo-Dioulasso (Burkina Faso).

The paper posited that the content of social relations that compose entrepreneurs' personal networks can be divided into three salient dimensions: social role, resource or exchange content and strength. In the case of the first two dimensions, the proportion of professional ties in networks and the proportion of tangible resources among conveyed resources have been considered. The first important outcome of the paper was that, surprisingly, LN (linking

social capital) had no significant impact on the economic performance of entrepreneurs in the informal economy of Bobo-Dioulasso. However, the study emphasized that resources conveyed by closer status individuals may be of greater utility. For example, it is especially relevant for administrative support and noted that its more useful for informal entrepreneurs to have relations with some field agents in fiscal administration rather than with managers or executives. The paper concluded that while further investigations on the subject are evidently required, one important methodological conclusion was that specific network data needed to be more frequently collected.

Critique

Though the paper could not come up with recommendations, the discussions following data presentation were quite exhaustive torching on the significance social network, access to market information and value chain collaborations to MSE growth and development. Consequently, this study will benefit from the work of the authors immensely.

2.5.5 Individual Entrepreneurship Characteristics

Adegbite, S.A.; Ilori, M.O.; Irefin, I.A.; Abereijo, I.O. and Aderemi, H.O.S. (2006). *Evaluation of the Impactof Entrepreneurial Characteristics on the Performance Small Scale Manufacturing Industries in Nigeria.*Obafemi Awolowo University, Ile-Ife, Nigeria.

The research study evaluated the impact of entrepreneurial characteristics on the performance of small-scale manufacturing industries in Nigeria. This was with a view to identifying these entrepreneurial characteristics and the factors that influence their translation to optimum business performance. Primary data, through structured questionnaire, were collected from the samples of 100 firms randomly selected from among the small-scale manufacturing industries engaged in food and beverage; textile and wearing apparel; wood and wood products; chemical and pharmaceuticals; and fabricated metal products.

The authors made an extensive review and noted that certain individual behaviors are attributed to entrepreneurial success and that the following are the most relevant: need for achievement, creativity and initiative, risk taking and setting objectives, self-confidence and internal locus of control, need for independence and autonomy, motivation, energy, commitment and persistence. In addition, other background factors or human capital related to individual personality were discussed. Some of which included previous employment; family background; age, gender, education and religion.

The study found that human resource factors and the sales revenue were inadequate and severely inhibited the potential of the entrepreneurs for performance and growth. However, length of years in business and working experience were found to have positive contribution on their performance. The study therefore, recommended the need to develop a crop of potential entrepreneurs among the youths by incorporating entrepreneurship education into the school curriculum at all levels of the educational system. And that specialized training programs in entrepreneurship be organized to expose potential and existing entrepreneurs to risk-taking strategies inherent in self-employment and wealth creation.

Critique

The study found the critical role played by and the importance education, training, relevant technical experience and planning in enterprise growth and development. The study will therefore, be helpful to the current study.

2.6   Summary and Research Gaps

The major objective of this chapter was to make both theoretical and empirical review of relevant literature on determinants of growth of wood-based micro and small enterprises. Quite a number of researchers/authors have written on several aspects/sectors of MSE growth. It is obvious that the bulk of these studies were conducted in the developed

economies, with a comparatively few of them in the developing countries like Nigeria. In Nigeria, the wood-based MSEs are very visible in their contributions to employment, job creation, and general well-being. However, because most of these enterprises operate at informal level, there is scarcity of literature documenting their development and growth. Therefore, it is only proper to fill this gap considering the contribution of this sector to overall GDP growth.

At both regional and global level, the study sought to fill these specific gaps: There are no records to show empirically, if MSE characteristics determine the growth of wood-based MSEs; There is no evidence of any research on appropriate resources as determinants of growth of wood-based MSEs; There is no record of any research on supporting markets as determinants of growth of wood-based MSEs; There is no evidence of an existing research on relational factors as determinants of growth of wood-based MSEs. Thus, the study attempted to fill these gaps.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1   Introduction

This chapter presents the methodology and approach that was used in carrying out the study. The main objective of this study was to investigate the determinants of growth of wood-based micro and small enterprises in Nigeria. The sub-headings in the chapter are: research philosophy; research design; population of the study; sampling techniques; data collection techniques; pilot testing; procedure for data collection; procedure for data analysis and ethical issues.

3.2   Research Philosophy

A research philosophy is a belief about the way in which data about a phenomenon should be gathered, analyzed and used. Philosophy is a vital aspect of the research process as it opens researchers' minds to other possibilities, which can lead to both an enrichment of their research skills and an enhancement in their confidence that they are using the appropriate methodology. Central to the questions of "How to research?" and "What to research?" is the researcher's perspective on "Why research?" (Holden & Lynch, 2004).

Two major research philosophies have been identified in the Western tradition of science, namely positivist (sometimes called scientific) and interpretivist (also known as antipositivist) (Galliers, 1991).

The study of phenomena in their natural environment is key to the interpretivist philosophy, together with the acknowledgement that scientists cannot avoid affecting those phenomena they study. Being a social science based study therefore, this study adopts the interpretivist philosophical approach.

3.3   Research Design

The study utilized the descriptive survey design. Research design is a plan or blueprint which specifies how data relating to a given problem should be collected and analyzed (Mugenda,. & Mugenda, 2012). The design equally provided the outline for the conduct of any given investigation. The descriptive survey design was considered appropriate for this study because the objective was to investigate the determinants of growth of wood-based MSEs. A descriptive survey attempts to picture or document current conducts or attitudes, that is, to describe what exists at the moment (Tayie, 2005).

The attractions of a descriptive survey (Cohen *et al,* 2007) lie in its appeal to generalizability or universality within given parameters, its ability to make statements which are supported by large data banks and its ability to establish the degree of confidence which can be placed in a set of findings. Similarly, Gall et al (2007) defined descriptive research as a type of quantitative research that involves making careful descriptions of phenomena. The study was aimed at establishing if any or all the independent variables determine the growth of wood-based MSEs.

3.4   Study Population

Population refers to the entire group of people, things, events or phenomenon of interest that a researcher wishes to investigate. Kothari (2011) defined population as the researchers "universe, while Sekarau (2010) and Komb and Tromp (2011) observed that a population is the total collection of elements about which one wants to make inferences on. The population of this study comprises all the wood-based MSEs in Nigeria. However, for this study, the target population will consist of the 3,460 registered wood-based MSEs in Kaduna State

(SMoC, 2010). A population may be finite or infinite. Finite population consists of countable number of sampling of registered voters in a particular city in a particular year (Nachimias & Nachimias, 2009).

3.5   Sample Frame and Sampling Techniques

A sample frame is a portion of the population that is investigated and upon which generalization can be made to the target population (Ary *et al*, 2010). It is the source material from which a list of all elements within a population that can be sampled is drawn. Indeed it is a physical representation of the target population and comprises all the units that are potential members of a sample (Kothari, 2011). It is impossible and unnecessary to reach the nooks and corners of the Nigerian Federation, due to time and cost factors. Secondly, by choosing Kaduna State wood based MSEs, as accessible population, the findings will be generalizable because of the cosmopolitan nature of Kaduna as an old regional capital.

According to Gay (1981), ten percent of study (accessible) population is adequate. Providing further justification Kerlinger (1986) indicates that a sample size of 10% of the target population is large enough so long as it allows for reliable data analysis and allows testing for significance of differences between estimates. The sample size depends on what one wants to know, the essence of the investigation, what is at stake, what was useful, what had credibility and what can be done with available time and resources (Paton, 2002). The sample size for the study was 346 wood-based MSE owners/managers spread across the four strata of sawmill enterprises; timber marketing enterprises; furniture making enterprises and carpentry/joinery enterprises. An updated list (sample frame) was obtained from SMoC and wood based MSEs professional associations in Kaduna State.

The study adopted proportionate stratified random sampling technique to select 346 respondents which is 10% of the population of interest as identified in Table 3.1.

Table 3.1: Sampling Table

Area	Target Population	10% (Sample)
Kaduna North	800	80
Kaduna South	1300	130
Zaria	420	42
Kafanchan	305	31
Birnin Gwari	160	16
Chikun	220	22
Igabi	125	12
Kachia	130	13
Total	3460	346

3.6   Data Collection Instrument

According to Victor (2014) citing Oso and Onen (2011), data is anything given or admitted as a fact on which a research inference will be based. Furthermore, Cooper and Schindler (2011) and Mugenda and Mugenda (2012) defined data instrument as the tools and procedures used in measurement of variables in research. This study collected basically primary data. Primary data for this study was collected from the field using the structured questionnaire.. According to Gall et al (2007), questionnaires are used extensively in educational research to collect data about phenomena that are not directly observable, inner experience; opinions; values; interest; and the like. The study adopted the face to face instrument administration for the administration of the questionnaire. The services of trained research assistants was sourced, which enabled the study achieved its objectives in this direction. The main advantage of directly administering questionnaire is the high response rate, which is typically close to 100 percent (Ary, *et al,* 2007).

However, secondary data for this study was collected through reviews of professional journals, textbooks, e-books, and the worldwide web (www). The advantage of the secondary data is to compare findings from the field investigation with the existing body of knowledge. The findings are therefore expected to either corroborate or disagree with existing body of knowledge as reviewed from the different sources (Cohen, *et al,* 2007).

3.6.1 Questionnaire

The study employed an open and structured questionnaire as the major instrument for data gathering. According to Gall et al (2007), the questionnaire is more commonly used in educational research because it is standardized, highly structured in design and compatible with quantitative methods. Also, the questionnaire is useful when factual information is desired, and it can be used to obtain facts about the past, present and anticipated events, as well as opinions about prevailing conditions and practice (Osuala, 1982).

The questionnaire for this study comprised mainly open-ended questions to enable respondents express their views without being restricted by predetermined choices (Ngugi, 2010). Thus, the questionnaire comprised the following sections:

i.   *MSE Characteristics*

This section generated items to find out how such MSE characteristics of age or longevity, legal form of business and location influence the growth of wood-based enterprises.

ii.   *Resources*

The items generated in this section sought to establish the relationship between: human capital; finance and infrastructure and wood-based MSEs' growth.

iii.   *Markets*

This section came up with items that established how such variables as product demand, market share, and product sales determined MSE growth.

iv.   *Relational Factors*

This section generated items that sought to establish how elements such as social networks, access to information and value chain influenced MSEs' growth.

v.   *Individual Entrepreneur Characteristics*

The items generated in this section sought to find the effects of the individual entrepreneur characteristics such as education, work experience, and need for achievement on the growth of wood-based MSEs.

3.6.2   Administration of Research Instrument

The services of trained and competent research assistants were sourced and involved in the distribution, interpretation, completion and retrieval of the questionnaire.

3.7   Pilot Study

A pilot study has several functions, principally to increase the validity, reliability and practicability of the questionnaire (Wilson & Mclean, 1994). By definition, it is a trial run with a few subjects to assess the appropriateness and practicability of the procedures and data – collecting instruments (Ary, *et al,* 2010). It was equally emphasized by (Oppenheim, 1992) that everything about the questionnaire should be piloted, including the type, face or the quality of paper. It is for the above reasons that the questionnaire for this study was piloted on a small segment of the population that was not part of the study sample. According to Ary, *et al* (2010), a pilot study indeed is conducted when a questionnaire is given to just a few people, with the intention of pre – testing the research.

3.7.1   Validity and Reliability of Research Instrument

Validity is defined as the extent to which an instrument measures what it claimed to measures. In the words of Ary, Jacobs and Sorensen (2010), validity is the most important consideration in developing and evaluating measuring instruments. Hence validity is used to check whether questionnaire is measuring what it purports to measure. Indeed validity according to Patton (2002) is the best available approximation to the truth or falsity of a given inference proposition or conclusion. The focus of recent views of validity is not in the instrument itself but on the interpretation and meaning of the scores derived from the instrument. This study subjected the instrument to the experts vetting, such experts included experts in research, measurement and evaluation and in MSEs' management that ensured construct, content and face validity were attained.

Reliability is the consistency of a set of measurements, or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects. According to Cohen, Maurion and Morrison (2011) reliability is essentially a synonym in dependability, consistency and replicability over time, over instruments and over groups of respondents. It is concerned with instrument precession and accuracy. A reliable instrument for a piece of research will yield similar data from similar respondents over time.

The researcher used one of the most widely known internal consistency technique known as Cronbach's Alpha. Researchers use Cronbach's Alpha when research instruments have items that are not scored dichotomously – right or wrong such as attitude of rating scales, questionnaire similar to the tool used in this research.

The item score may take in a range of values, for example on a Likert attitude scale the individual may receive a score from 1 to 5 depending on which option was chosen. According to Victor (2014) citing Bramble and Mason (1997) observed that instruments with

a reliability index of 0.5 and above can be used to collect data, while Berthoud (2000) posits that a reliability index of 0.7 or 70% is satisfactory for any research instrument. The closer is Cronbach's Alpha is to 1, the higher the internal consistency (Sekarau, 2010). It is suggested that reliability is a necessary but insufficient condition for validity in research; reliability is a necessary precondition of validity, and validity may be a sufficient but not necessary condition for reliability (Ary, et al, 2010).

3.8   Data Analysis

The section is based on the statistical techniques that were used to analyze and interpret the data as well as subject the research hypotheses into testing of significance. The collected responses from the completed questionnaires were subjected to some processing procedures that included editing, coding, entering the data into Excel and transporting into the statistical package for social sciences (SPRS) software for thorough clearing. The data collected were analyzed using both descriptive and inferential statistics. The demographic data and other nominal research variables were analyzed and interpreted using frequency, percentage, mean and standard deviations, other statistical devices used included scatter plots, histogram, pie charts and statistical tables and figures.

3.8.1   Regression Analysis

Furthermore, ANOVA, simple Linear and Multiple Regression Analyses were performed to regress the growth of wood – based MSEs against the five variables as determinants.

Each hypothesis was analyzed separately to determine the relationship between the independent variables and dependent variable of the study.

The study used the following regression model equation.

Y   = $B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + \mu$

were   Y   =   Growth of wood – based MSEs (dependent variable)

B_0	=	Constant (Coefficient of intercept)
$B_1 \dots B_5$ =		Regression coefficient of independent variables
X_1	=	MSE Characteristics
X_2	=	Resources
X_3	=	Markets
X_4	=	Relational Factors
X_5	=	Individual Entrepreneur Characteristics
μ	=	Environ term

CHAPTER FOUR

FINDINGS, DATA ANALYSIS AND DISCUSSION

4.1   Introduction

The purpose of this study was to determine the determinants of Growth of Wood – Based Micro and Small Enterprises in Nigeria. This chapter presents the empirical findings on the five independent variables: MSE characteristics; Resources; Markets; Relational factors; and Individual entrepreneurship characteristics. Responses collected were collated and organized in relation to the study specific objectives. Findings arrived at are corroborated with conceptual and empirical literature reviewed from chapter two of this study. Summary descriptive statistics, Regression and Analysis of variance (ANOVA) are presented for each study variable, supported with a fitted model. A trend analysis was equally conducted on each indicator or sub-variable. At the end of the chapter, a suitable model that takes into account, all the study variables is also fitted and presented.

4.2   Research Findings and Results

The study explores the determinants of growth of wood-based micro and small enterprises (MSEs) in Nigeria. The independent variables of the study are: MSE-characteristics; Resources; Markets; Relational factors; and Individual entrepreneur's managerial/technical competence.

4.2.1   MSE Characteristics

This study sought to determine whether MSE - characteristics influenced the growth of wood-based MSEs.   Three sub-variables were investigated: Longevity; Legal form of enterprise; and Location.

4.2.2   Longevity

This section sought to investigate the relationship between longevity and the growth wood-based MSEs. The section therefore, conveys the descriptive analyses based on the results and findings obtained from the study. As can be seen in Table 4.1, and Fig. 4,1, respectively, majority of the respondents 223 (74%) agreed that longevity assists in the growth of the wood-based MSEs, while 77 (26%) expressed no to this assertion.

Table 4.1: Would you say that longevity has assisted in the growth of the enterprise?

Response	Frequency	Percent
Yes	223	74.3%
No	77	25.7%
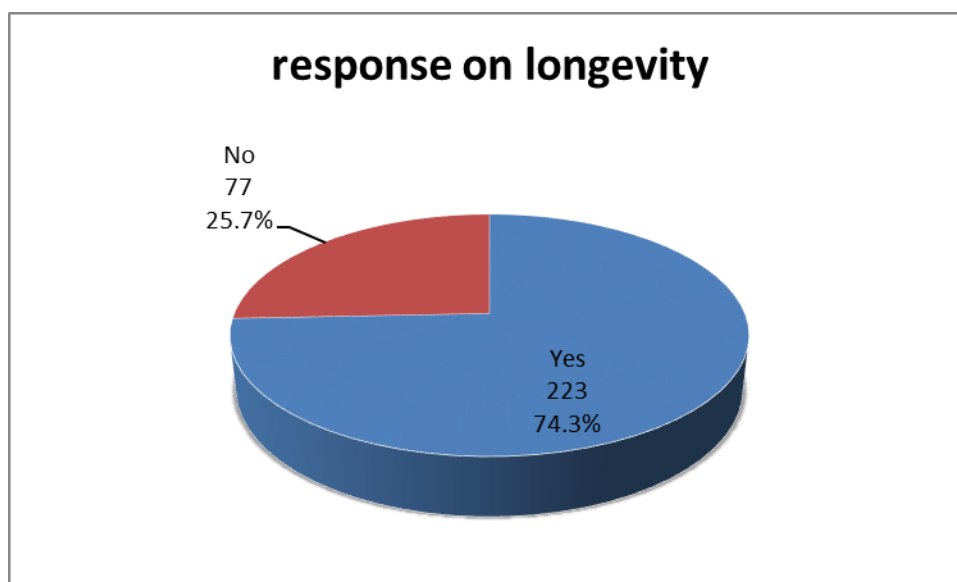
Fig. 4.1: Pie Chart of Response on Longevity

The key characteristics of MSEs that are likely to survive and grow, according to Liedholm (2002), include age, initial size, and location among others. The relationship between firm

age and small firm growth in developing countries is particularly robust (Nichter & Goldmark, 2009).

Much as these findings are in agreement with Nichter & Goldmark (2009), who asserted that the relationship between firm age and small firm growth in developing countries is particularly robust, the findings failed to corroborate those of Mead & Liedholm (1998) who reported that in both Africa and Latin America, young MSEs are more likely to show high rates of growth compared with MSEs that have been in existence longer. This study views these varied positions as normal, going by the dynamics of the business environment occasioned by increased influence by technology.

The findings have indicated that the overwhelming majority of the respondents (74.3%), agreed that longevity assisted in the growth of wood-based MSEs, while 25.7% disagreed. It can therefore be deduced that longevity plays a significant role in assisting the growth of MSEs.

Consequently, it can be concluded that longevity has a significant influence on the growth of wood-based MSEs.

4.2.3   Legal Form of Enterprise

This section sought to investigate if the legal form of wood-based MSEs influenced growth. The results/findings on this variable is depicted in Table 4.2 and Figure 4.2 respectively. The results indicated that 38.7% (89 respondents) agreed that the legal form of the enterprises assisted its growth while 61.3% (141 respondents) expressed negative opinion on this position.

Table 4.2: Has the legal form of enterprise assisted it to grow?

Response	Frequency	Percent
Yes	89	38.7
No	141	61.3
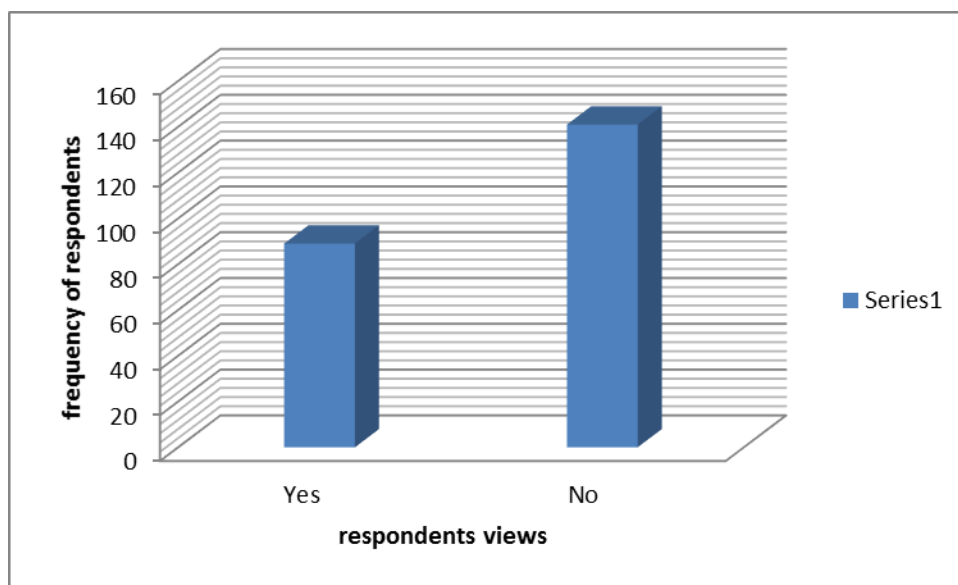
Fig. 4.2: Bar Chart on Legal Form of Enterprise

The ILO (2004), reports that the informal economy's share of the nonagricultural workforce has reached 55% in Latin America, 45–85% in Asia, and nearly 80% in Africa. The findings in this study agree with other previous studies such as Snodgrass & Biggs (1996), who noted that, although small, informal MSEs may be able to circumvent government regulations and taxation, as they grow they risk becoming more visible, creating disincentives to expand beyond a certain size. Similarly, Winter (1995), noted that informal firms may therefore need to ''keep their heads down,'' ruling out large size and rapid growth as well as close relations with formal firms. For these reasons, informal MSEs tend to grow more slowly than do their formal counterparts.

The findings indicated that majority of the respondents (61.3%), did not agree that legal form of an enterprise played any role in MSE growth. While 38.7% said it does. It can therefore be deduced that legal form does not influence the growth of wood-based MSEs..

4.2.4 Location

This section sought to investigate whether the growth of wood-based MSEs is enhanced by enterprise location. The results on this variable are presented in Table 4.3 and Figure 4.3. The results/findings indicated that 61% (161 respondents) agreed that the location of an enterprise helps to enhance its growth while 40% (105 respondents) disagreed to this assertion.

Table 4.3: Does the enterprise location enhance it growth?

Response	Frequency	Percent
Yes	161	60.5
No	105	39.5
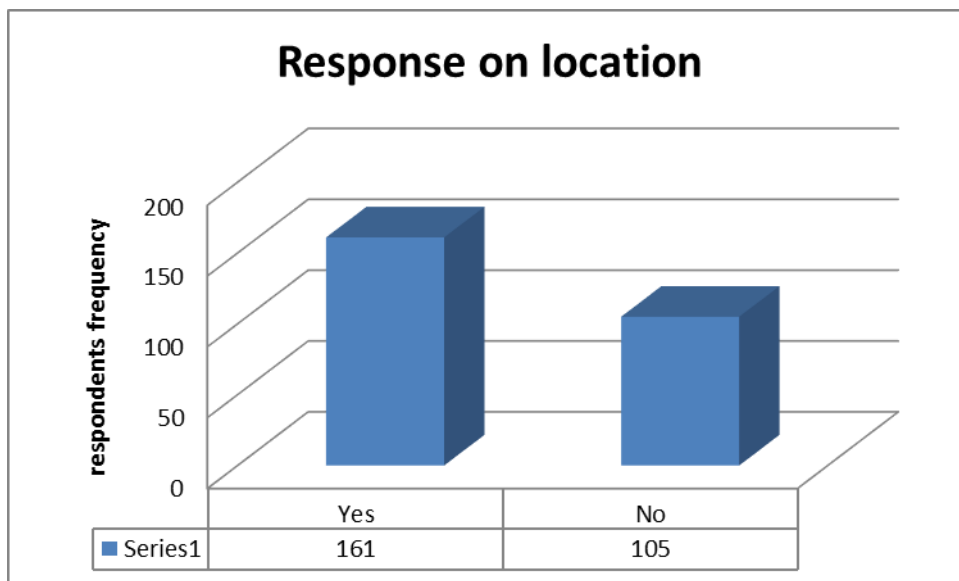
Fig. 4.3 Bar chart location of enterprise

These findings are similar to those of Liedholm (2002), that the key characteristics of MSEs that are likely to survive and grow include age, initial size, and location among others.

Location can play a central role in determining MSE survival. MSEs located in urban or commercial areas are more likely to survive than their counterparts in rural areas. However, in Liedholm's profile, over half of the enterprises operate in rural areas. Those that operate in commercial districts or on roadsides typically show greater growth rates than those that are based in the home, although Liedholm points out that this can vary at the country level (USAID, 2006).

Generally, the findings have indicated that majority of the respondents (74.3% and 60.5%) agree to longevity and location respectively as having positive relation with the growth of wood-based MSEs, while majority (61.3%) disagree that the legal form of MSEs influence growth. It can therefore be concluded that MSE characteristics of longevity, and enterprise location positively influence growth of wood-based MSEs.

Inferential Analysis

4.2.5 Linear regression model of growth of wood based MSEs and MSE Characteristics

The linear regression analysis models the relationship between the criterion (dependent) variable which is the Growth of wood – based MSEs and the predictor (independent) variable is MSE Characteristics. The coefficient of determination (R^2) and Correlation Coefficient (R) shows the degree on association between MSE characteristics and growth of wood – based MSEs in Nigeria. Table 4.4 shows the results of the linear regression indicating that $R^2 = .385$ and R = .620.

Table 4.4: Model of Wood – Based MSEs Growth/MSE Characteristics

Model Summary	
R	R. Square
. 620	. 385

This is an indication that there is a linear relationship between MSE Characteristics and Growth of Wood – Based SME in Nigeria, for this variable alone can explain up to 39% of the variation in the dependent variable, growth of wood – based MSEs.

Furthermore, Table 4.5 shows the results of ANOVA test which revealed that MSE Characteristics have significant effect on the growth of wood – based SMEs. Since the P value is equal to .000, which is less than .05 level significance, this then demonstrated that the model is statistically significant F (1.298) = 186.56, P<.01.

This can be shown by linear regression model $Y = BO + B_1 X_1 + E$ where X_1 is the MSE Characteristics.

Table 4.5: ANOVA for Wood – Based MSEs Growth/MSE Characteristics

Model	Growth Square	df	Mean Square	F	Sign
Regression	32.334	1	32.334	186.555	.000
Residual	51.650	298	.173		
Total	**83.983**	**299**			

a   Dependent variable: Growth of Wood – Based MSEs

b.   Predictions: (constant), MSE Characteristics

Table 4.6: Model for MSE Characteristics

Model	Coefficients		Sign
	B	**Std Error**	
1 (Constant)	.737	.054	.000
MSE Characteristics	.738	.054	.000

Using the summary presented in Table 4.6, a linear regression model can be fitted thus:

Y = 0.737 + 0.738 (MSE Characteristics)

Based on the empirical result presented in table 4.5, the null hypothesis is hereby rejected and the conclusion reached is that MSE Characteristics have a statistically significant role in the growth of wood – based MSEs in Nigeria.

Figure 4.4 shows the result of MSE characteristics on the growth of wood – based SME in Nigeria. In a scatter diagram, it indicates a positive gradient which is an indication that MSE characteristics influence the growth of wood – based MSEs.
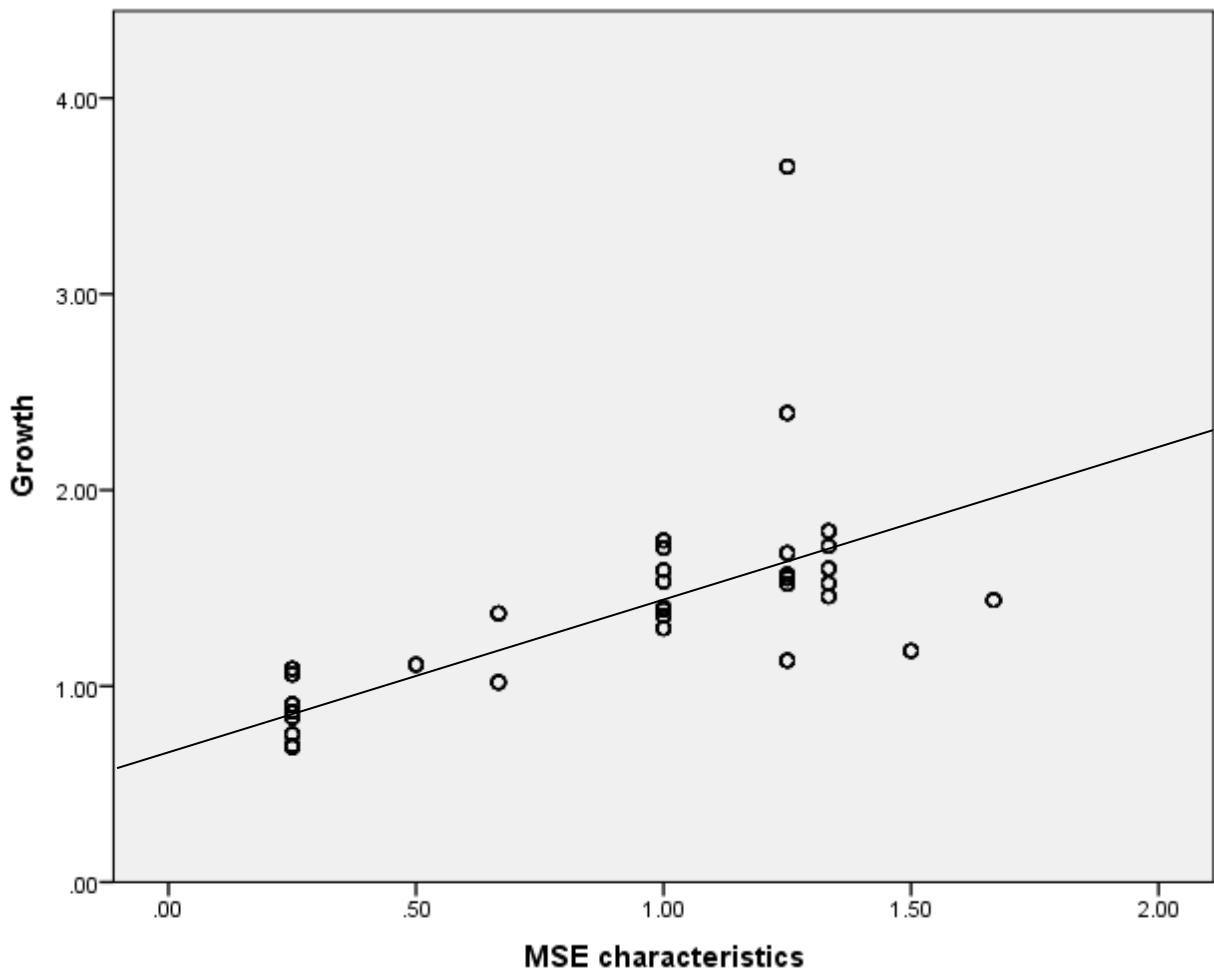
Fig. 4.4: Scatter Diagram of MSE Characteristics

With respect to the three sub-variables under this specific objective, individual trend analysis was conducted on them as well Pearson Chi-square on response cross tabulation on the independent variable to determine the rate of contribution of each sub-variable.

4.2.6   Longevity

The *Trend Analysis* indicated in Figure 4.5 shows a positive relation between longevity and growth of MSEs, which corroborates with the findings of Nichter & Goldmark (2009), as cited earlier. For the following years of operation, kindly indicate the average profit on investment in percentages. - Mean data obtained:

Year	Average Profit (%)
2008	8
2009	11
2010	12
2011	15
2012	20
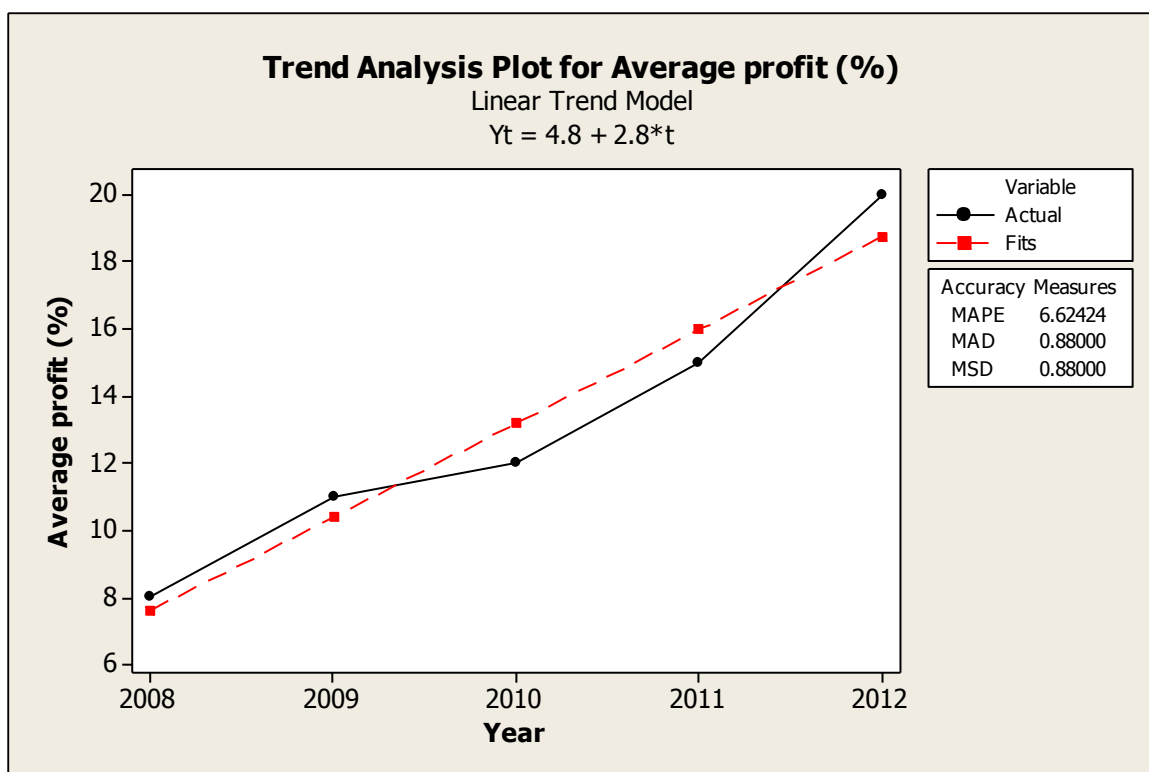
Fig. 4.5 Trend Analysis of profit growth influenced by longevity

4.2.7 Legal form of business

The *Trend Analysis* in Figure 4.6 indicates that a positive relation exists between legal form of business and employee growth. This goes contrary to the descriptive data but agrees with the position of Winter (1995) that informal MSEs tend to grow more slowly than their formal counterparts. For the enterprise sustainability, as a result of annual turnover, indicate the number of employees in the past three years. Mean of responses:

Year	No. of Employees (Mean value)
2011	5
2012	8
2013	13
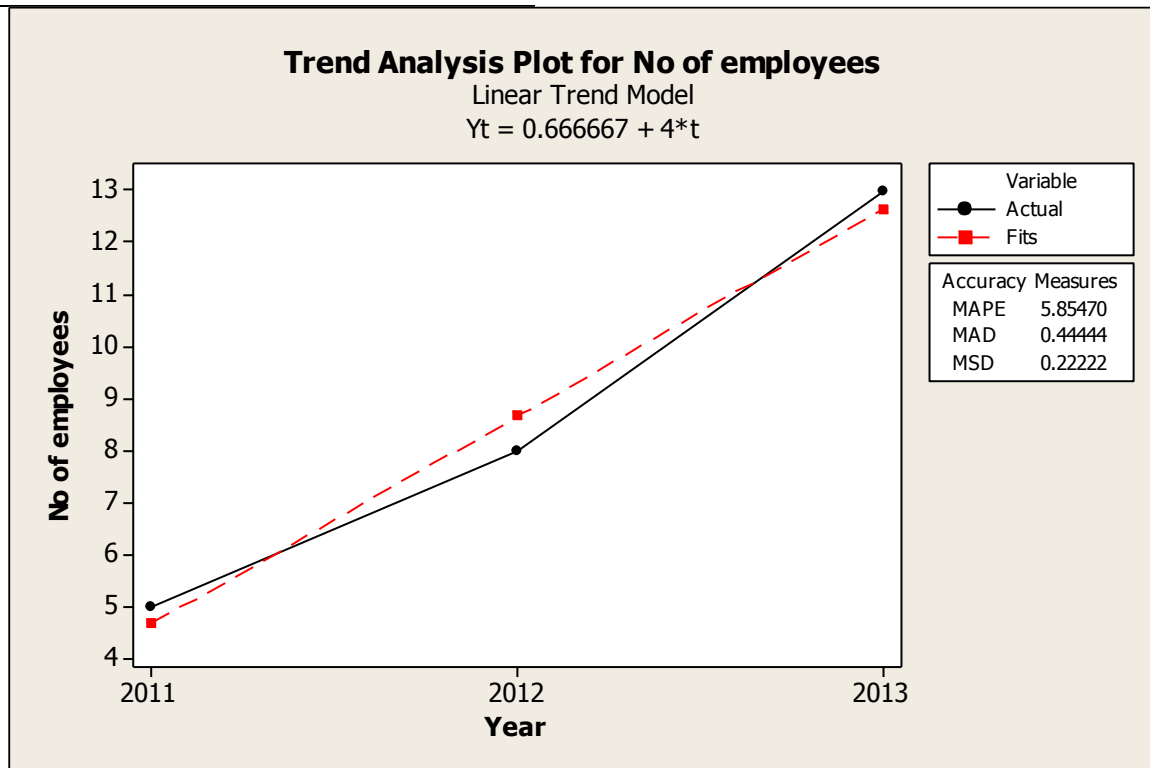
Fig. 4.6 Trend Analysis of Employee strength influenced by legal form of business

4.2.8 Location

The analysis contained in Figure 4.7 indicated that business location positively influenced profitability (growth) of MSEs as the five years period showed. These findings are similar to those of Liedholm (2002), that the key charcteristics of MSEs that are likely to survive and grow include age, initial size, and location among others. Please indicate how location has enhanced your profitability as a percentage on investment in the following years. Mean responses:

Year	Profitability (%)
2008	5
2009	8
2010	9
2011	12
2012	18
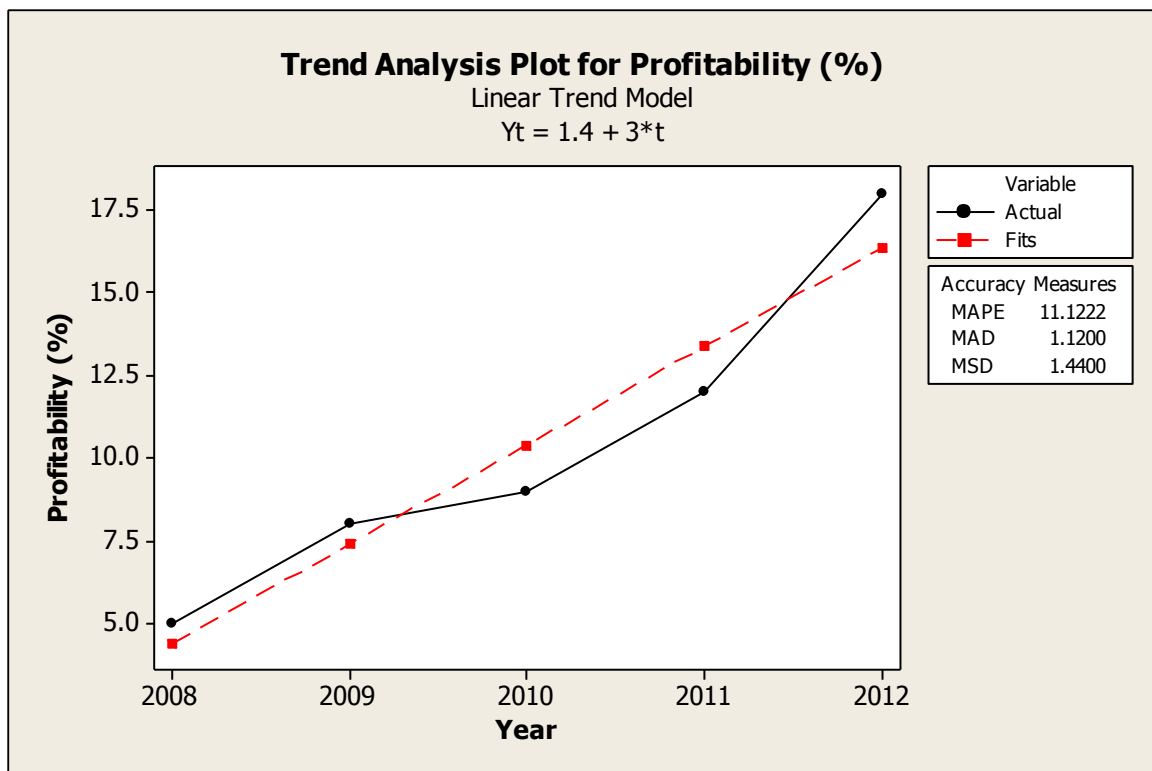
Fig. 4.7: Trend analysis of MSE profitability as influenced by business location

Finally, a cross tabulation on MSE characteristics was performed using Chi-square tests. As can be seen in Table 4.7, the p-value of the Pearson chi-square is 0.000 which signified that growth of MSEs is significantly influenced by longevity, legal form, as well as location of the enterprise.

Table 4.7: Chi-square Tests on MSE Characteristics.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	68.775[a]	2	.000
Likelihood Ratio	69.464	2	.000
Linear-by-Linear Association	12.817	1	.000
N of Valid Cases	796		

4.3 Resources

This study sought to ascertain if resources influenced the growth of wood-based MSEs. Three sub-variables were investigated: Human Capital; Finance; and Infrastructure.

4.3.1 Human Capital

This section sought to investigate the relationship between human capital and the growth of wood-based MSEs. From Table 4.8 and Figure 4.8, it can be observed that most of the respondents-223 (74.33%) said they gave priority to possession of relevant skills during employee recruitment, while the remaining 77 (25.67%) said no to this question.

Table 4.8: Do you give priority to possession of relevant skills during employee recruitment?

Response	Frequency	Percent
Yes	223	74.33
No	77	25.67
Total	300	100
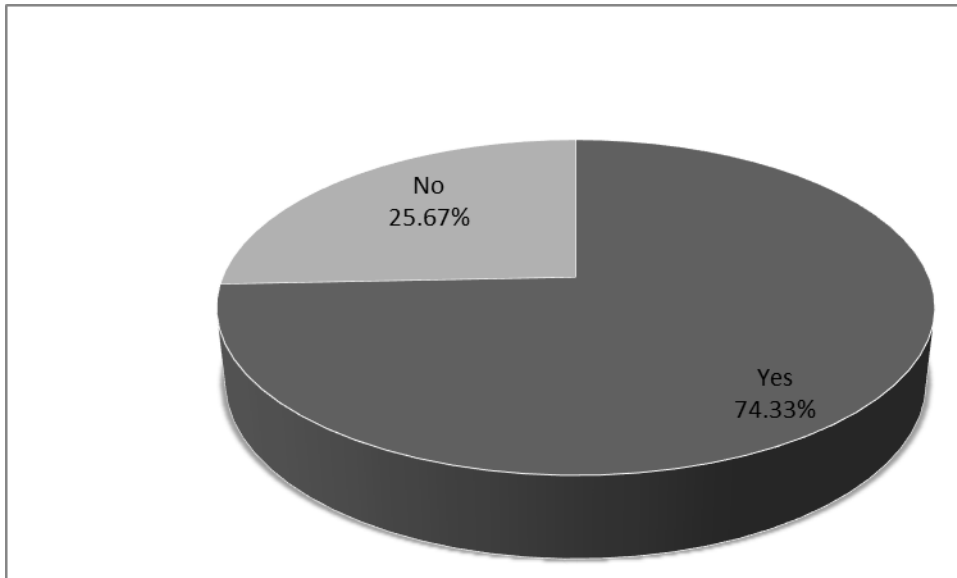
Fig. 4.8: Pie Chart of Response on Human Capital

Human Capital Entrepreneurship Theory- Underlying the human capital entrepreneurship theory are two factors, education and experience (Becker, 1975). The knowledge gained from education and experience represents a resource that is heterogeneously distributed across individuals and in effect central to understanding differences in opportunity identification and exploitation (Anderson & Miller, 2003, Gartner et al, 2005) Empirical studies showed that human capital factors are positively related to becoming a nascent entrepreneur (Kim, Aldrich & Keister, 2003,Davidson & Honing,2003, Korunka et al, 2003), increase opportunity recognition and even entrepreneurial success (Anderson & Miller, 2003,Davidson &Honing,2003).

The overwhelming majority of the respondents (74.3%) agreed that possession of key relevant skill was critical in employee recruitment, while the rest (25.7%) did not agree. It can therefore be deduced that possession of relevant industry skills is essential to the human capital needed to achieve MSE growth.

4.3.2   Finance

This section sought to investigate if Finance influenced the growth of wood-based MSEs. From Table 4.9 and Figure 4.9, it can be seen that most of the respondents-237 (79.00%) said that they do not have access to finance from any bank or other financial institutions, while the remaining 63 (21.00%) said they had.

Table 4.9: Do you have access to finance from any bank or other financial institutions?

Response	Frequency	Percent
Yes	63	21.00
No	237	79.00
Total	300	100
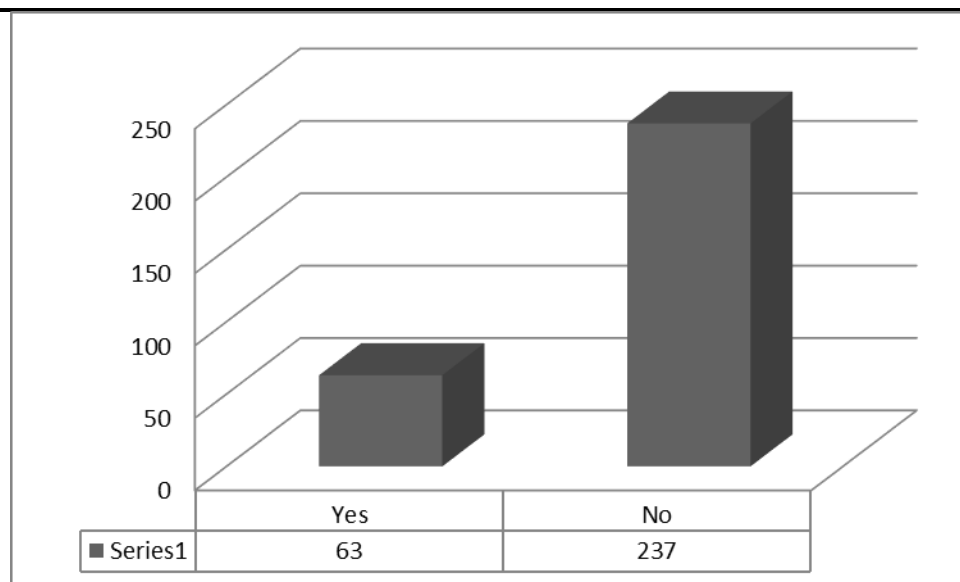
Fig. 4.9: Bar Chart of Response of Finance

Financial Capital/Liquidity Theory argues that the entrepreneurs have individual-specific resources that facilitate the recognition of new opportunities and the assembling of new resources for the enterprise (Alvarez & Busenitz, 2001). However, research shows that some persons are more able to recognize and exploit opportunities than others because they had

better access to information and knowledge (Anderson & Miller, 2003; Shane, 2003). By implication, this theory suggests that people with financial capital are more able to acquire resources to effectively exploit entrepreneurial opportunities and start up enterprises with growth potentials (Causen, 2006). Financing is needed for new firms to start and expand operations, develop new products, invest in new staff or production facilities. Thus access to bank and trade credit can be vital to the longevity of micro enterprises.

However, a huge majority of the respondents (79%) indicated lack of access to banks and other financial institutions, with only 21% indicating access. This finding has serious implications for growth and sustainability in this sector.

4.3.3   Infrastructure

This section sought to investigate the relationship between infrastructure and the growth of wood-based MSEs. From Table 4.10 and Figure 4.10, it can be seen that most of the respondents-156 (52.00%) said that their enterprises did not have basic processing equipment, while the remaining 144 (48.00%) said they had.

Table4.10: Does your enterprise have basic processing equipment?

Response	Frequency	Percent
Yes	144	48.00
No	156	52.00
Total	300	100
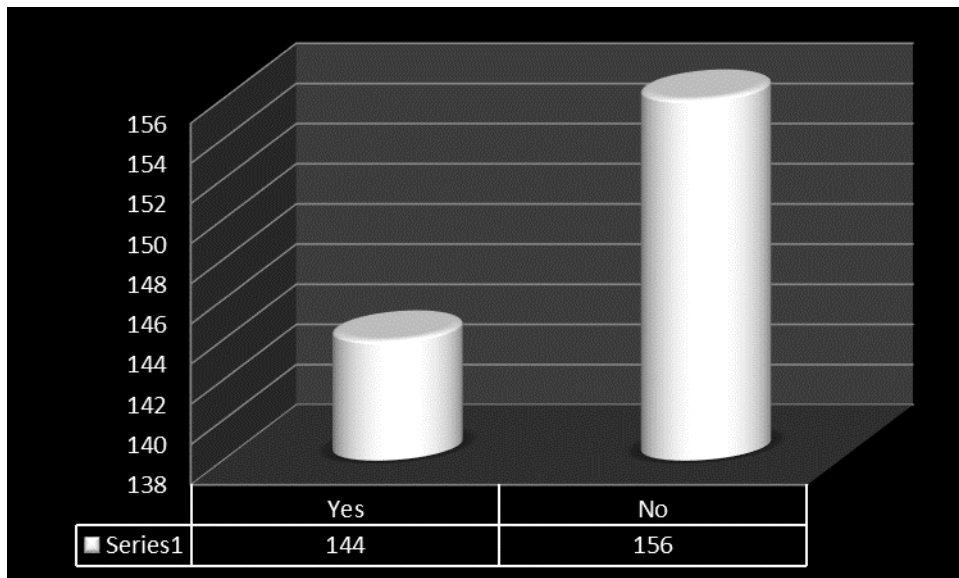
Fig. 4.10: Bar Chart of Response on Infrastructure

Resources can be defined as anything that could constitute either strength or weakness of a given enterprise. Resources are tangible and intangible assets that are tied to an enterprise over substantial period of time (Gottchalk, 2007). The *Resource-based Theory* of entrepreneurship argues that access to resources by founders is an important predictor of opportunity based entrepreneurship and new venture growth (Alvarez & Busenitz, 2001).

The sources of a sustained competitive advantage can be knowledge, learning, culture, teamwork and human capital (Barney, 2001). Priem (2001) reported that resources are important antecedents of products and ultimately, firm performance. Access to appropriate resources is critical to growth of wood-based MSEs.

The findings of this study showed that only 48% of the respondents possessed basic processing equipment, while the majority-52% could not boast of basic processing equipment. This result implies that the MSEs in the wood sector had serious challenges of infrastructure.

Inferential Analysis

4.3.4 Linear Regression Model of Growth of Wood – Based MSEs and Resources

Table 4.11 contains summary of the regression results, indicating the values of R as .932 and R^2 as .869 respectively. The R value of .932 implies a very strong positive linear correlation between resources and the growth of wood – based MSEs in Nigeria. Similarly, the R^2, being the coefficient of determination of 0.869 implies the explanatory power of the independent variables. This means that about 89% of the variation in the growth of wood – based MSE is explained by resources.

Table 4.11: Model of Growth of Wood – Based MSEs / Resources

Model Summary	
R	**R^2**
.932	.869

In addition, Table 4.12 revealed the results of ANOVA test which indicated that resources have significant effect on the growth of wood – based MSEs. This table, showed that the sign. value (P) is equal to .000, which is less than .05 alpha, demonstrating that the model is statistically significant - F (1,298) = 1976.37, P<.01. This can be shown by linear regression model $Y = B_0 + B_2 X_2 E$, where X_2 (Resources).

Table 4.12: ANOVA for Growth of Wood-Based MSEs/Resources

Model	Growth Square	df	Mean Square	F	Sign
Regression	72.979	1	72.979	1976.374	.000
Residual	11.004	298	.037		
Total	**83.983**	**299**			

a DV: Growth of Wood – Based SME
b. Predictors: (constant), Resources

Table 4.13: Model for Resources

Model	Coefficients		Sign
	B	**Std Error**	
1 (Constant)	.476	.024	.000
Resources	.225	.056	.000

Utilizing the summary presented in table 4.13, a linear regression model can be fitted thus:

$$Y = 0.476 + 0.225\ X_2$$

Based on the results presented in Table 4.12, the Null hypothesis is thus rejected for the alternative. The conclusion reached was that resources played a significant role on the growth of wood – based MSEs in Nigeria.

Figure 4.11 further showed the results of resources on the growth of wood – based SMEs in Nigeria. The scatter diagram indicates a positive gradient which is an indication that resources do influence the growth of wood – based MSEs.
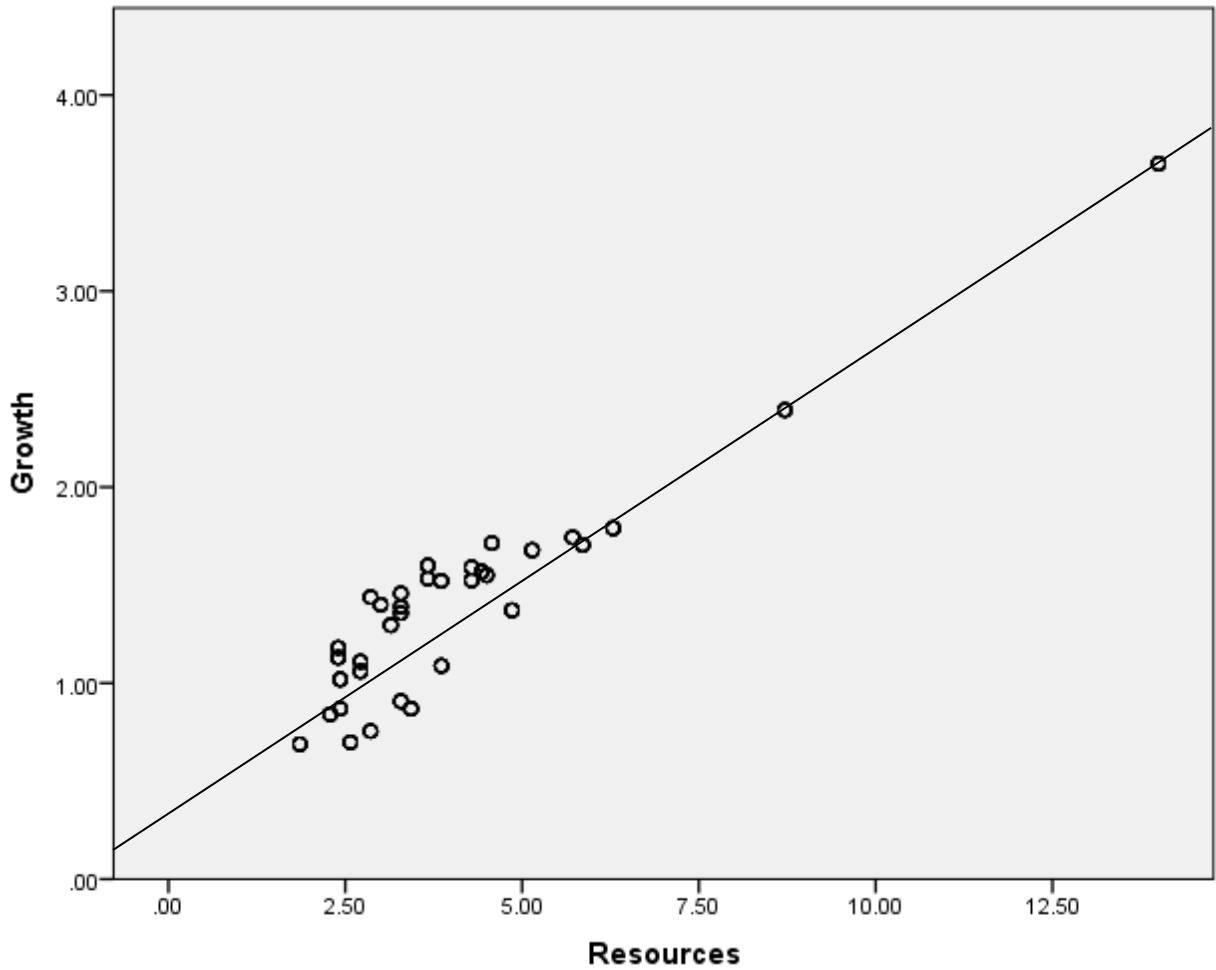
Fig. 4.11: Scatter Diagram of Resources

With respect to the three sub-variables under this specific objective, individual trend analysis was conducted on them to determine the rate of contribution of each sub-variable.

4.3.5 Human Capital

The *Trend Analysis* in Figure 4.12 shows from the actual variable line (in black colour) that in 2009 the production volume was 15%, in 2010 the production volume increased to 19%, in 2011 the production volume increased to 29%, in 2012 the production volume increased to 30% and it increases continuously up to 35% in 2013.

The linear trend model is Yt = 10.3 + 5.1*t which was used to forecast the production volume in percentage using time. The forecast for the sixth year which was 2014 was: Yt = 10.3 + 5.1*6 = 40.9. Therefore, the production volume was approximately 41% in 2014.

Kindly indicate how the employees have enhanced production volume in percentage over these years.

Year	Average Production Volume %
2009	15
2010	19
2011	29
2012	30
2013	35
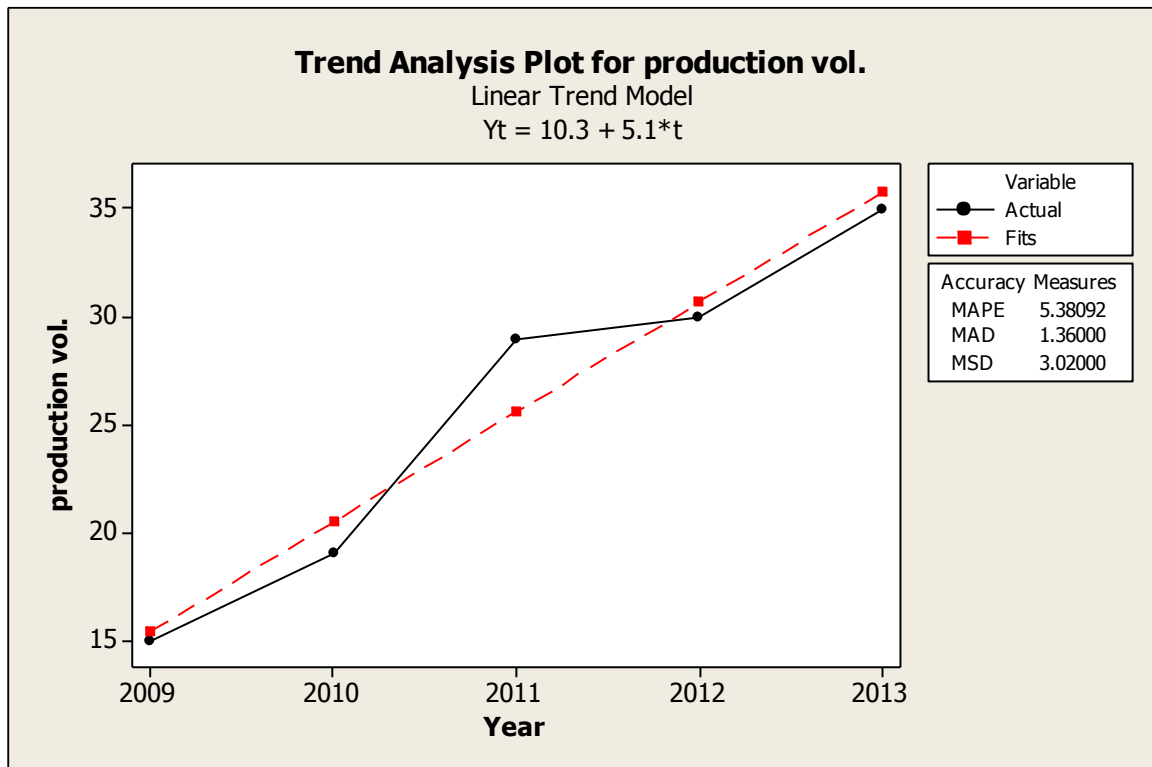
Fig. 4.12: Trend analysis of production volume influenced by human capital

4.3.6   Finance

The *Trend Analysis* in Figure 4.13 shown from the actual variable line (in black colour) that in 2009 the increase in profit margin was 10%, in 2010 the increase in profit margin was 12%, in 2011 the increase in profit margin was 30%, in 2012 the increase in profit margin was 35% and the profit margin increases continuously up to 40% in 2013.

The linear trend model is $Yt = 0.5 + 8.3*t$ which was used to forecast the increase in profit margin in percentage using time. The forecast for the sixth year which was 2014 was: $Yt = 0.5 + 8.3*6 = 50.3$. Therefore, the increase in profit margin was approximately 50% in 2014.

Please indicate percentage increase in profit margins that is attributable to availability of finance in these years.

Year	Increase in Profit Margin %
2009	10
2010	12
2011	30
2012	35
2013	40
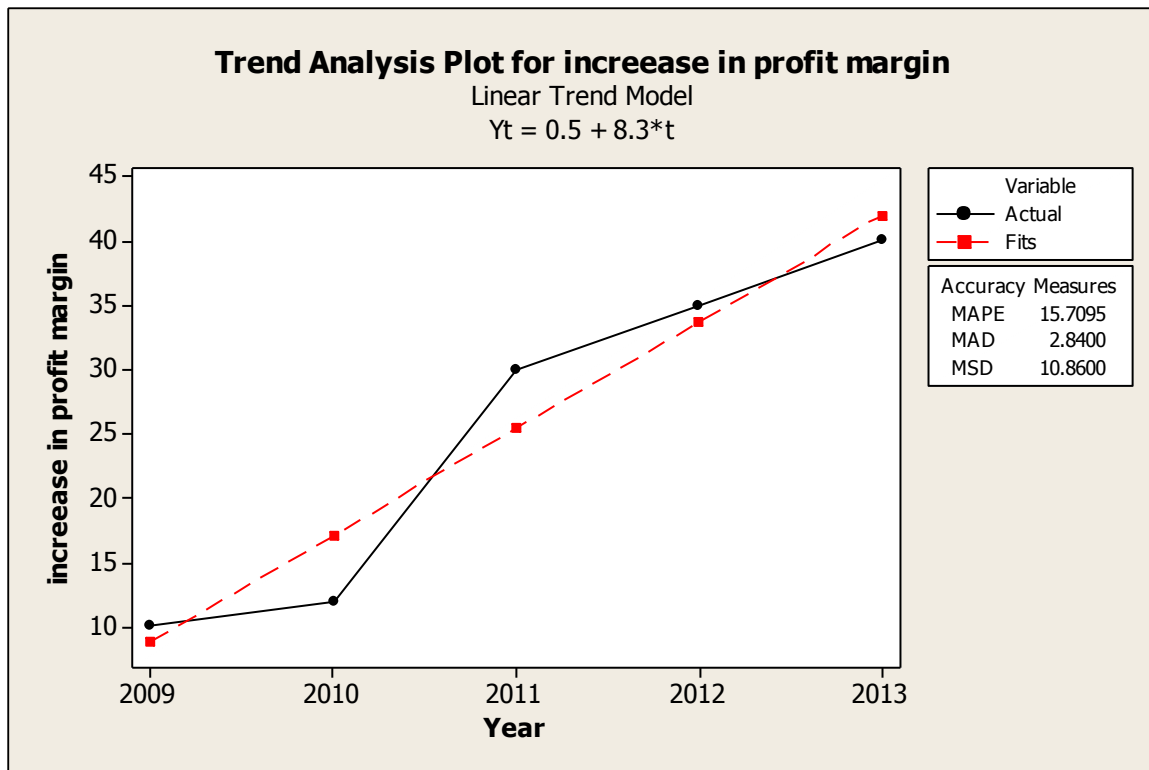
Fig. 4.13: Trend Analysis increase in profit margin influenced by finance

4.3.7 Infrastructure

The respondents were requested to compare between their start-ups and presently in terms product varieties associated to possession of adequate equipment. ***Paired Samples*** test was used for the analysis, the result obtained in Table 4.13a, showed that the mean start-up of product varieties for the possession of adequate equipment was approximately 4.205 while presently is 3.96 indicating that the result are statistically insignificant showing a stagnant possession of equipment.

		Mean
Pair 1	Startup	4.2055
	Presently	3.9616

Table 4.13a: Kindly indicate the number of product varieties of your enterprise that was made possible by your possession of adequate equipment comparing start-up and now:

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	startup – presently	.24400	3.01900	.27445	-.29940	.78740	.889	299	.376

4.4 Markets

The study sought to investigate the relationship between markets and the growth of wood-based MSEs. Three sub-variables were investigated: Product demand; Market share; and Sales.

4.4.1 Product Demand

This section sought to investigate the relationship between product demand and the growth of MSEs. From Table 4.14 and Figure 4.14, it was noted that most of the respondents-229 (76.33%) said that the products of their firms were in high demand in the market, while the remaining-71 (23.67%) said no to this question.

Table 4.14: Are the products of your firm in high demand in the market?

Response	Frequency	Percent
Yes	229	76.33%
No	71	23.67%
Total	300	100%
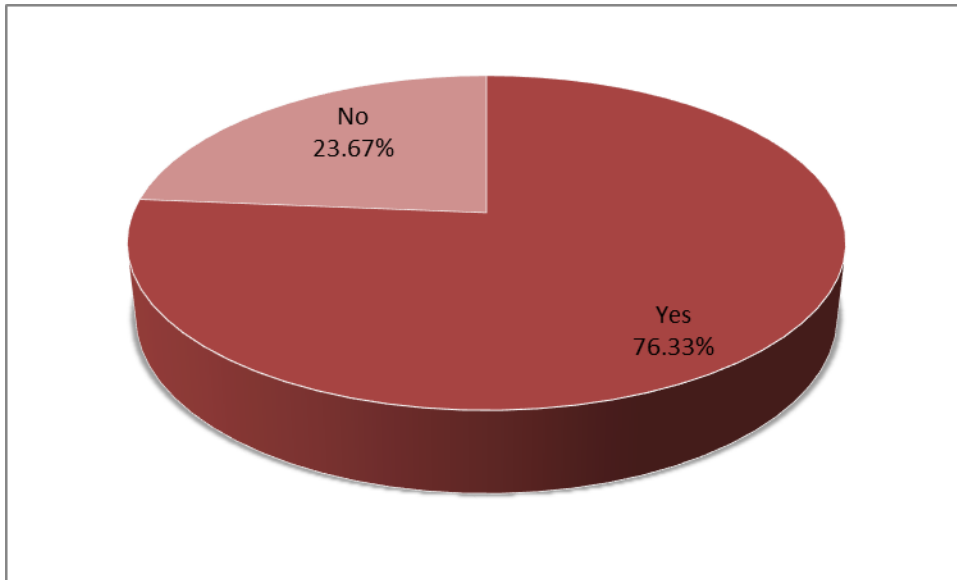
Fig. 4.14 Pie Chart on product demand

The second theory for explaining the development of the MSE sector in developing countries is the output-demand theory. The theory postulates that a prerequisite for the development of MSEs is that there is a market for their products and services. Therefore, the MSE sector will tend to develop a cyclical relationship with the economy as a whole (Green, Kirkpatrick, & Murinde, 2006). Empirical studies based on the output-demand theory tend to focus on the upper end of the MSE sector, particularly the manufacturing enterprises and the larger, more resourceful and successful MSEs, which have a potential to grow into the formal economy. These studies proposed strengthening of the MSEs through networks or via the creation of forward linkages with the formal economy, for example franchising and sub-contracting. This approach has not had much success in Africa due to problems of poor infrastructure and lack of trust between both parties (Liedholm & Mead, 1993, and Grierson & Mead, 1995).

The findings indicated that a huge majority (76.3%) of the respondents agreed to have demands for their products in the market, while the minority (23%) disagreed to having adequate patronage for their products. It can therefore be concluded that wood-based MSEs

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have high demands for their products, which is a good indication for growth and sustainability.

4.4.2   Market share

This section sought to investigate the relationship between market share and the growth of wood-based MSEs. From table 4.15, it can be seen that most of the respondents about 64.33% of the total respondents said that their enterprises could be described as enjoying a comfortable market share when compared with their competitors, while the remaining 35.67% said no as indicated in Fig. 4.15:

Table 4.15: Can you enterprise be described as enjoying a comfortable market share when compared with your competitors?

Response	Frequency	Percent
Yes	193	64.33
No	107	35.67
Total	**300**	**100**
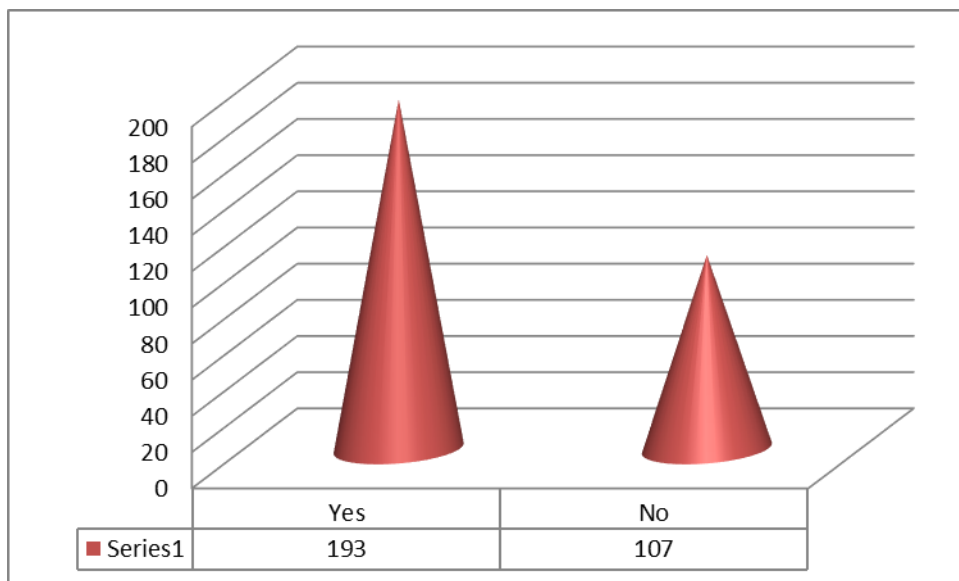
Fig. 4.15: Bar Chart on market share

Schumpeter (1934) described entrepreneurship as a driver of market-based systems. In other words, an important function of an enterprise was to create something new which resulted in a processes that served as impulses for the motion of market economy. Access to market information or new technologies, on the other hand, may help firms seek or respond to new opportunities and therefore, the absence or weakness of supporting markets is often identified as a constraint on MSE growth (Nichter & Goldmark, 2009).

According to Lintu (2006), the forestry sector tends to be very much production and product oriented. Therefore, for it to get to the consumers there is the need for the application of marketing science which is the key to the future growth and development of the sector in Nigeria. Empirical evidence suggests that market orientation is significantly associated to the overall growth performance of a firm (Jaworski & Kohli, 2003).

The study findings indicated that majority of the respondents (64.3%), agreed that they were enjoying confortable market share for their products, while the remaining (35.7%) responded in the negative. It can therefore be concluded that wood-based MSEs enjoyed a confortable market share which is positive for enterprise growth.

4.4.3 Sales

This section sought to investigate the relationship between product sales and the growth of wood-based MSEs. From Table 4.16 and Figure 4.16, it can be observed that most of the respondents-241 (80.33%) said that their enterprises had sales units, while the remaining-59 (19.67%) responded in the negative.

Table 4.16: Is your enterprise having a sales unit?

Response	Frequency	Percent
Yes	241	80.33%
No	59	19.67%
Total	300	100%
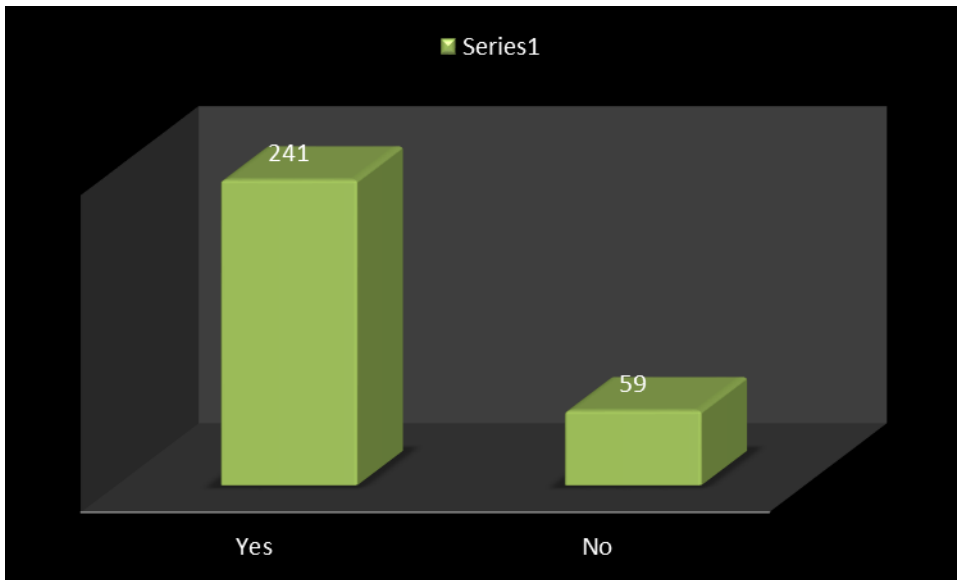
Fig. 4.16: Bar Chart on sales

Ajare (2004) defined MSEs growth as an average change in sales. However, according to Gupta (1996) cited in Voulgaris et al 2003, enterprise performance and profitability is not related to growth of sales, since some companies may be able to maintain high profits ,even with a declining growth rate Some analysts of the growth of small businesses suggested the need to define how employment affects the context and aspirations of the potential beneficiaries. Poor jobs, which required few skills, and are short term, intermittent and lowly paid may still be better than nothing for the unemployed and underemployed.

Inferential analysis

4.4.4   Linear Regression Model of Growth of Wood – Based MSEs and Markets

The simple linear regression analysis was carried out in order to determine whether the independent variable, market can be relied on in sustaining the change in the dependent variable, growth of wood – based MSEs. The coefficient obtained indicated that the correlation coefficient (R) between the independent variable and growth of wood – based in Nigeria was .475 which is a positive correlation relationship. Table 4.17 showed a coefficient

of determination (R^2) of .225 which means that this variable alone can explain up to 22.5% of the variations in the dependent variable, growth of wood – based SMEs in Nigeria.

Table 4.17: Model of Wood – Based Growth/Markets

Model Summary	
R	**R^2**
.475	.225

In addition, an ANOVA test was performed on the variable, markets and the results were presented in Table 4.18. The table showed that the variable has a P value equal to .000, demonstrating that the model is statistically significant in sustaining the change on the dependent variable $F_{(1,298)}$, = 86.71, P<.001. This can be shown by a linear regression model $Y = B0 + B_3 X_3 + E$ where X_3 is the market. Based on the result presented in Table 4.18, the null hypothesis is thus rejected, and the alternative is upheld. This implies that market played a significant role in the growth of wood – based MSE in Nigeria.

Table 4.18: ANOVA for Markets

Model	Sum of Square	df	Mean Square	f	Sign
Regression	18.928	1	18.928	86.705	.000
Residual	65.055	298	.218		
Total	**83.983**	**299**			

a   Dependent Variable: Growth of Wood – Based MSEs

b.   Predictors: (constant), Resources

Table 4.19: Model for Markets

	Coefficients		Sign
	B	**Std Error**	
1 (constant)	.775	.073	.000
Markets	.835	.090	.000

a.Dependent Variable

$Y = 0.775 + 0.835 X_3$

Figure 4.17 further showed the results of market on the growth of wood – based MSEs in Nigeria. This scatter diagrams indicates a positive gradient which is an indication that markets do influence the growth of wood – based MSEs.
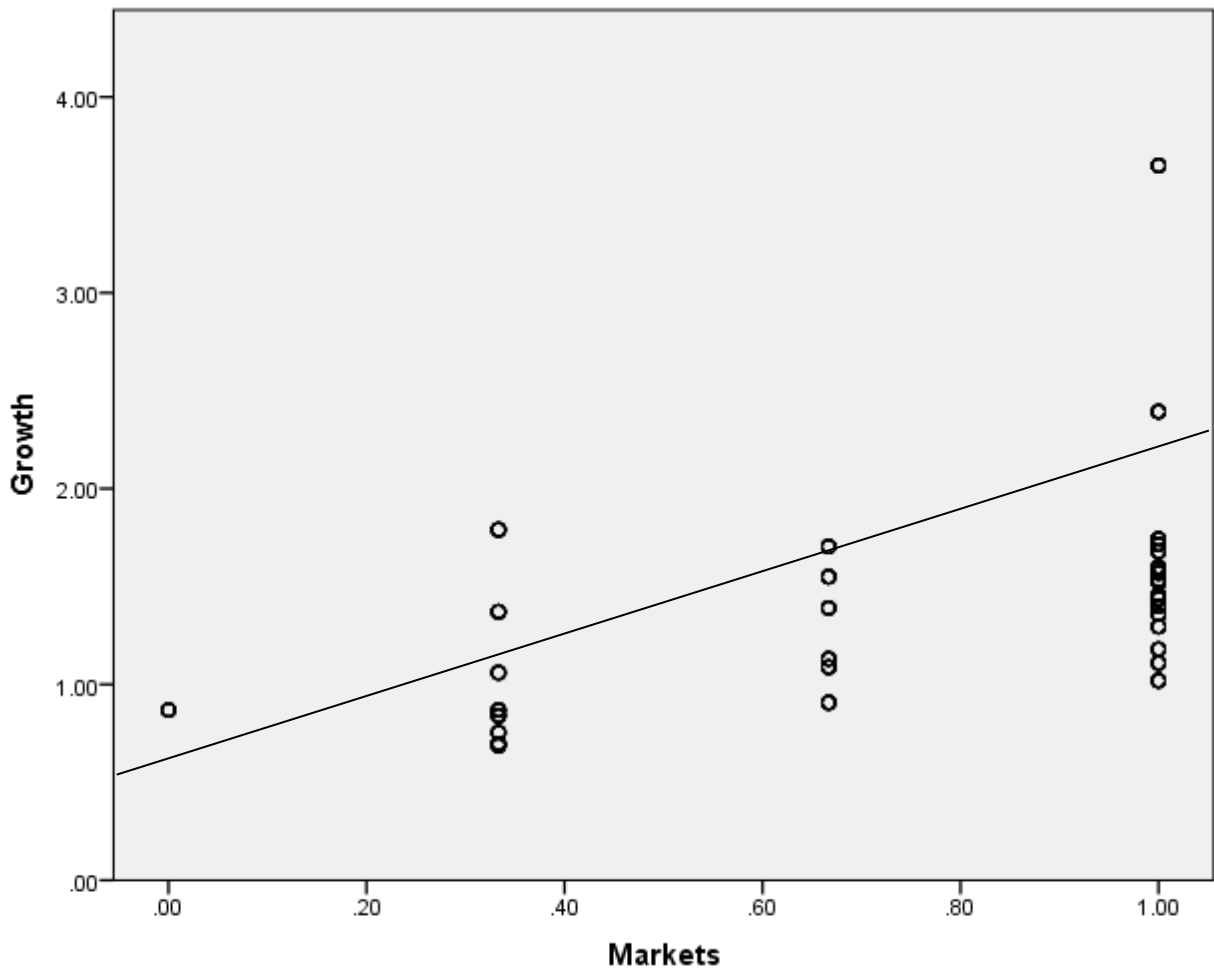
Fig. 4.17: Scatter Diagram on Markets

With respect to the three sub-variables under this specific objective, individual trend analysis was conducted on them to determine their rates of contribution.

4.4.5 Product demand

The *Trend Analysis* in Figure 4,18 showed from the actual variable line (in black colour) that in 2009, the growth rate was 15%, in 2010, the growth rate increased to 20%, in 2011, the growth rate increased to 24%, in 2012, the growth rate increased to 26%, and the growth rate increased to 27% in 2013. The linear trend model is $Yt = 13.4 + 3*t$ which is used to forecast the increase in growth rate in percentage using time. The forecast for the sixth year which was 2014 is: $Yt = 13.4 + 3*6 = 31.4$. Therefore, the growth rate would have increased to approximately 31% in 2014.

Kindly indicate the percentage growth rate of the annual demand for your firm's products over the last five years.

Year	Growth rate %
2009	15
2010	20
2011	24
2012	26
2013	27
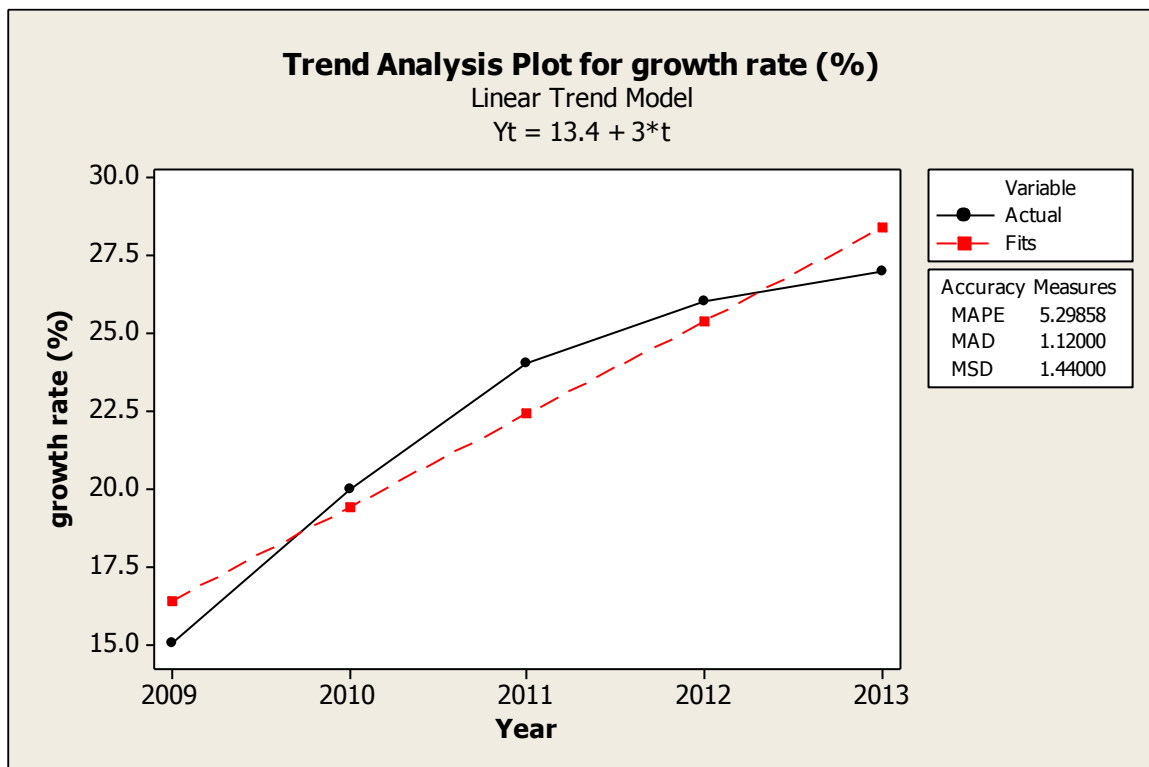
Fig. 4.18: Trend Analysis of growth rate influenced by product demand

4.4.6 Market share

The *Trend Analysis* in Figure 4.19 showed from the actual variable line (in black colour) that in 2009, the market share ratio was 9%, in 2010 the market share ratio increased to 15%,

in 2011 the market share ratio increased to 19%, in 2012 the market share ratio increased to 25% and the market share ratio increased to 30% in 2013.

The linear trend model is $Yt = 4 + 5.2*t$ which is used to forecast the increase in market share ratio in percentage using time. The forecast for the sixth year which was 2014 is: $Yt = 4 + 5.2*6 = 35.2$. Therefore, the market share ratio would have increased to approximately 35% in 2014.

Kindly provide your market share ratio in the indicated years.

Year	Market share ratio %
2009	9
2010	15
2011	19
2012	25
2013	30
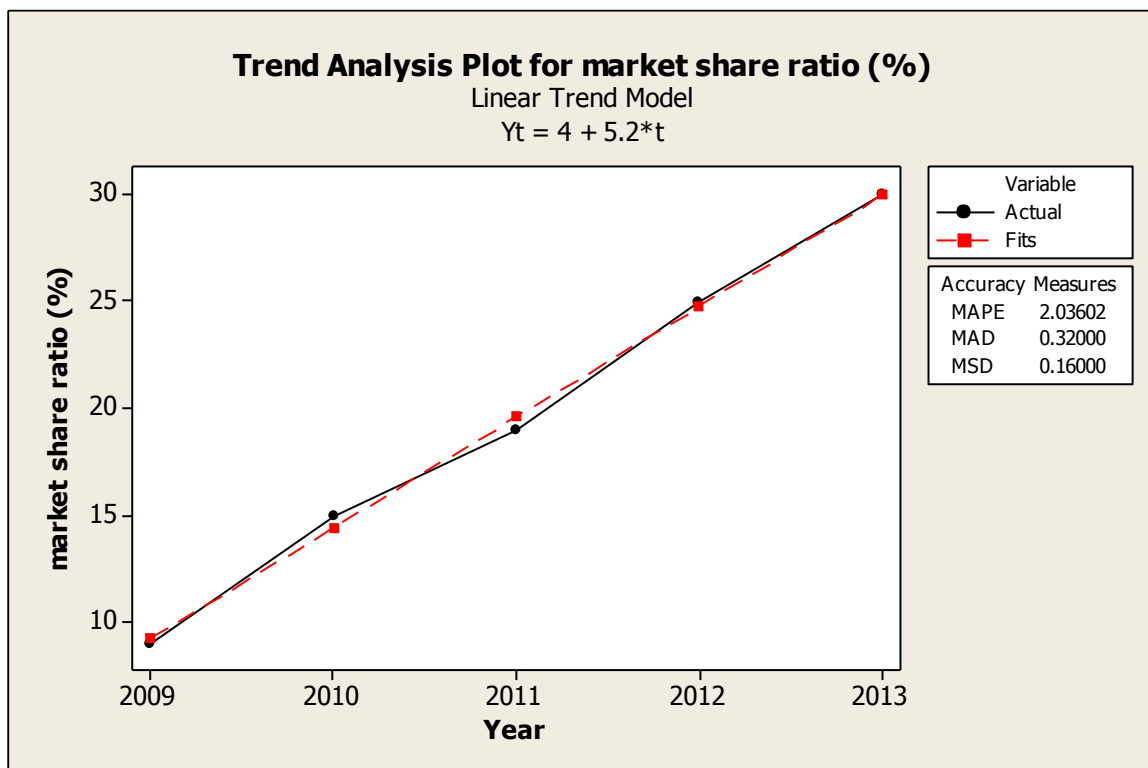
Fig. 4.19: Trend Analysis of the growth of market share

4.4.7   Sales

The ***Trend Analysis*** in Figure 4.20 showed the actual variable line (in black colour) that in 2009, the rate of sales was 60%, in 2010 the rate of sales increased to 75%, in 2011 the rate

of sales increased to 79%, in 2012 the rate of sales increased to 83% and the rate of sales increased to 87% in 2013.

The linear trend model is Yt = 58.2 + 6.2*t which is use to forecast the increase in rate of sales in percentage using time. The forecast for the sixth year which was 2014 is; Yt = 58.2 + 6.2*6 = 95.4. Therefore, the rate of sales would have increase to approximately 95% in 2014.

Kindly indicate the annual rate of sales for the past five y ears.

Year	Rate of sales %
2009	60
2010	75
2011	79
2012	83
2013	87
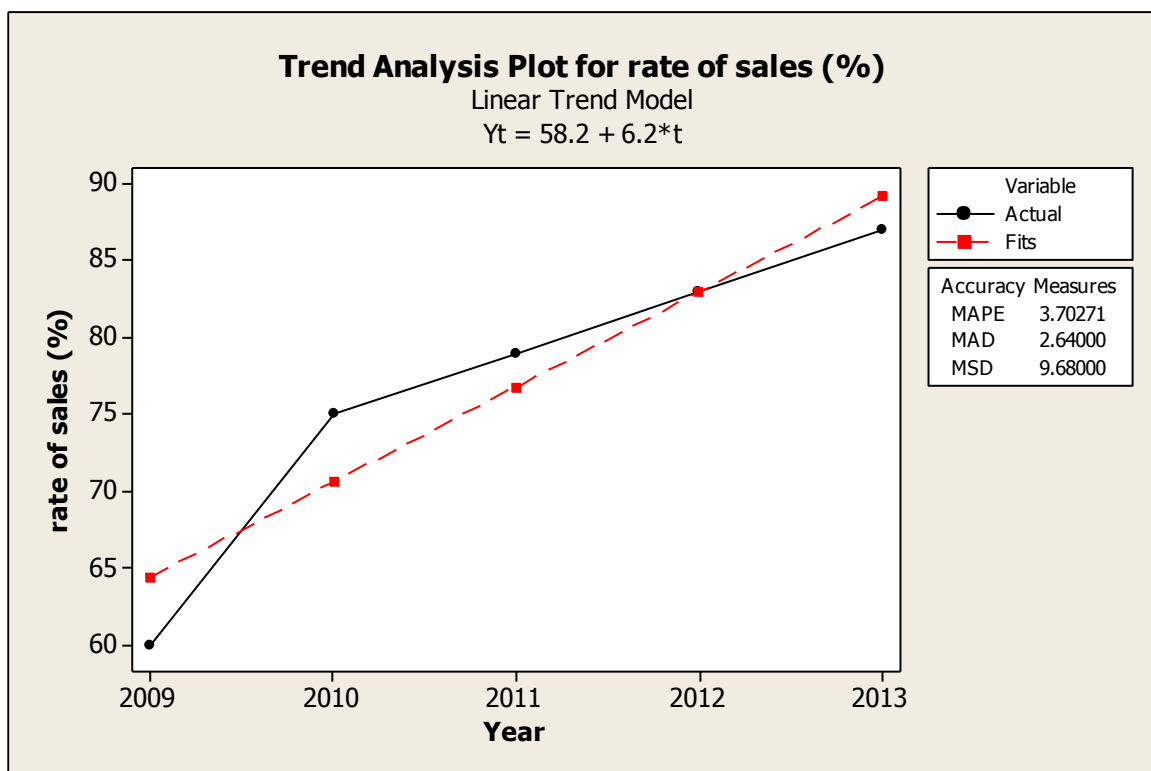
Fig. 4.20: Trend Analysis of sales influenced by market

4.5   Relational Factors

This study sought to find out the influence exerted by the relational factors on the growth of wood – based MSEs. Three sub-variables were investigated: Social Network; Access to Information; and Value Chains.

4.5.1   Social Network

This section investigated the relationship between social networks and the growth of wood-based MSEs. From Table 4.20 and Figure 4.21, it can be seen that most of the respondents-152 (50.67%) said that their enterprises belonged to at least one social organization within their cluster, while the remaining-148 (49.33%) said no.

Table 4.20: Does your enterprise belong to any social organization within your cluster?

Response	Frequency	Percent
Yes	152	50.67%
No	148	49.33%
Total	300	100%
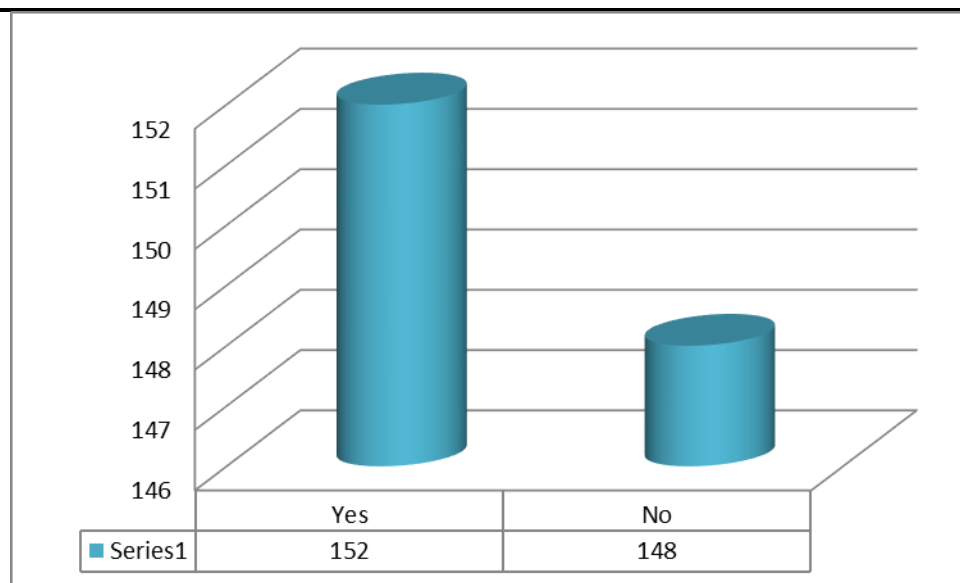
Fig. 4.21: Bar Chart on Social Networks

Networks are important to enterprise growth as they provide four essential ingredients, namely, support and motivation; examples and role models; expert opinion and counseling;

and finally, access to opportunities, information resources (Manning, Birley & Norbon, 1989).

In addition, networking (social capital) can impact on firm longevity. Coulthard and Loos (2007) described networking in a small firm context as an activity in which entrepreneurially oriented MSE owners build and manage personal relationships with particular individuals in their surroundings. In general, networking includes the exchange of affect (liking, friendship), information, benefit and influence. Entrepreneurial firms may use networking to exploit opportunities Okten and Osili (2004) find that networking has an influence on the growth of an SME, especially through contacts with other entrepreneurs. Shane and Cable (2002) agree that networking can be used to reduce information asymmetry in creditor/debtor relationships. Social influence venture finance decisions. Shane and Cable (2002) argue that social ties interject expectations of trust and reciprocity into the economic exchange that, in turn, activate a cooperative logic of exchange. Ngoc et al. (2009) pointed out that in the absence of effective market institutions; networks play an important role in spreading knowledge about a firm's existence and its practices, the character as well as the capacity of small entrepreneurs. Networking can also help MSEs to access other kinds of debt finance apart from bank loans and trade credit.

The study findings indicate that only slightly above half of the respondents (50.67%) belonged to any social organization, while the remaining (49.33) did not belong to any social organization at all in their business area. It can then be concluded that only about half of the owner/managers in the wood based MSEs take advantage of several benefits in networking.

4.5.2   Access to Information

This section investigated whether access to information exerted influence on the growth of wood-based MSEs. From Table 4.21 and Figure 4.22, it can be seen that most of the respondents-153 (51.00%) said that their enterprises had access to business information, while the remaining-147 (49.00%) said no to the question.

Table 4.21: Does your enterprise have access to business information?

Response	Frequency	Percent
Yes	153	51.00%
No	147	49.00%
Total	300	100%
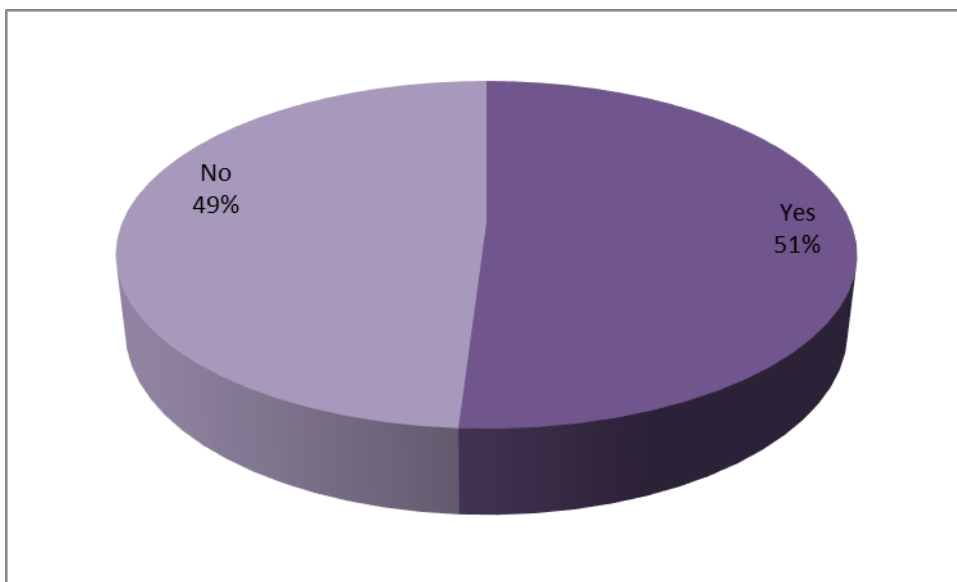
Fig. 4.22: Pie Chart on Access to Information

Basically, network theories assume that actors are not atomistic, but exist within systems of actors. It is fundamentally important for the network approach to view the entrepreneur as a whole person (Larson & Starr, 1992). The principal virtue of this approach is embeddedness that is, describing entrepreneurial activity in a social context and explaining how these activities are shaped and constrained by this context.

Having an extensive social network is a valuable asset, as it can help an entrepreneur obtain access to information (e.g., leads to profitable business opportunities) and resources (e.g., credit). While social networks can enhance MSE growth in any context, they can be critical to firms' growth prospects in environments with pervasive market failures, such as inordinately low levels of information and competition (Nichter & Goldmark, 2005).

Expectedly, only about half of the respondents (51%) agreed to have access to business related information, while the remaining (49%) did not have access to business related information. This may not be unrelated to the results obtained from membership of social networks. It can then be concluded that only about half of the owner/managers in the wood based MSEs take advantage of several benefits in information access, this has implications for enterprise growth and sustainability.

4.5.3 Value Chain

This section sought to investigate the influence of value chain arrangement with suppliers on the growth of wood-based MSEs. From 4.22 and Figure 4.23, it can be observed an overwhelming number of respondents-226 (75.33%) responded that their enterprises procured semi − processed materials from their suppliers, while the remaining-74 (24.67%) responded in the negative.

Table 4.22: Does your enterprise procure semi – processed materials from your suppliers?

Response	Frequency	Percent
Yes	226	75.33%
No	74	24.67%
Total	**300**	**100%**
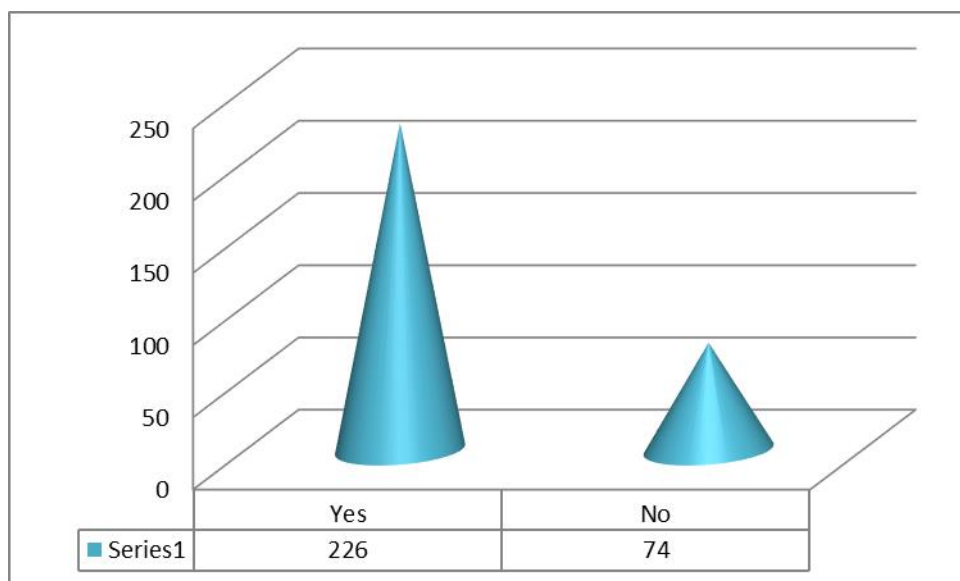
Fig. 4.23: bar Chart on Value Chains

A value chain refers to the entire sequence of activities required to bring a product or service to the end use (Gereffi 1991; Sturgeon 2001; Ribit, in Itika 2009). The chain includes the discrete yet interrelated activities of design, input-sourcing, production, marketing, distribution, and support to the final consumer (Kaplinsky, in Barrintos 2001; McCormick 2001; Sturgeon 2001). The fundamental contribution of value chain analysis is thus its capability to embrace the entire aspects of "the process of production, distribution and retailing" across the chain (Barrientos 2001). Value chain analysis imparts the key

dimensions of value chains, namely, input/output structure, geographic spread and chain governance (McCormick 2001).

The wood-work value chain constitutes a range of activities that take raw materials and other inputs through the production process to marketing and distribution till the product reaches final consumers. All activities (both primary and secondary) at each segment of the chain involve a number of micro and small enterprises (MSEs) and such MSEs, in turn, contribute their part to local economic development (LED) in different ways, including, employment creation, production of tradable goods, income generation, promotion of entrepreneurship, and mobilization and utilization of local resources, etc. The entire value chain involves three key sectors (Kuzilwa & Ngowi 2009):

(i)   the "extractive sector", i.e., the primary sector, engaged in extracting cut logs;

(ii)   the "industrial sector", the secondary sector, engaged in manufacturing, i.e., producing and   assembling furniture; and

(iii)   the "service sector", the tertiary sector, engaged in marketing and distribution, including retail and whole-sale outlets for furniture and related commodities.

The findings indicated that an overwhelming majority (75.33%) were involved in the procurement of semi-processed materials (value chain), while the remaining (24.67%) were not involved. This finding compensates the earlier one where most of the respondents were reported as lacking basic processing equipment.

Inferential analysis

4.5.4 Linear Regression Model of Growth of Wood-based MSEs and Relational Factors

A linear regression analysis was carried out on relational factors to determine whether the variable could be relied on in explaining the change in the dependent variable, growth of wood – based MSEs in Nigeria.

Table 4.23 presents the summary of the regression results indicating the value of R as 0.193 and R^2 as .037. The R value of 0.193 represents the correlation between relational factors and the growth of wood – based MSEs. The R^2 indicates the explanatory power of the predictor variable which is .037. This means that 3.7% of the variation in growth is explained by the predictor variable of relational factors.

Table 4.23: Model of Wood – Based MSEs Growth/Relational Factors

Model Summary	
R	**R square**
.193	.037

- **Predictor (constant):** Relational Factors
- **Dependent variable:** Growth

In addition, Table 4.24 shows the empirical results of ANOVA test which revealed that relational factors have significant effect on the growth of wood – based MSEs; since the P value is equal to .001, which is less than .05 level of significance, this then demonstrates that the model is significant statistically $F (1,298) = 11.510$, $P<.01$. This can be shown by linear regression model $Y = B_0 + B_4 X_4 + E$, where X_4 is the relational factors.

Table 4.24: ANOVA for Relational Factors

Model	Sum of Square	Df	Mean Square	F	Sign
Regression	3.123	1	3.123	11.510	.001
Residual	80.860	298	.271		
Total	**83.983**	**299**			

a Dependent Variable: Growth of Wood – Based MSEs
b. Predictors: (constant), Relational factors

Table 4.25: Model for Relational Factors

	Model Coefficients		
	B	Std Error	Sign
1 (Constant)	1.216	.063	.000
Relational factors	.323	.093	.000

a. Dependent Variable Growth
b. $Y = 1.216 + 0.323 X_4$

Based on the results presented in Table 4.24, the null hypothesis is hereby rejected (not supported) for the alternative. The conclusion arrived at is that relational factors play a significant role on the growth of wood – based MSEs in Nigeria.

Figure 4.24 further shows the results of relational factors on the growth of wood – based MSE in Nigeria. The scatter diagram indicates a positive gradient which is an indication that relational factors do influence the growth of wood – based MSEs.
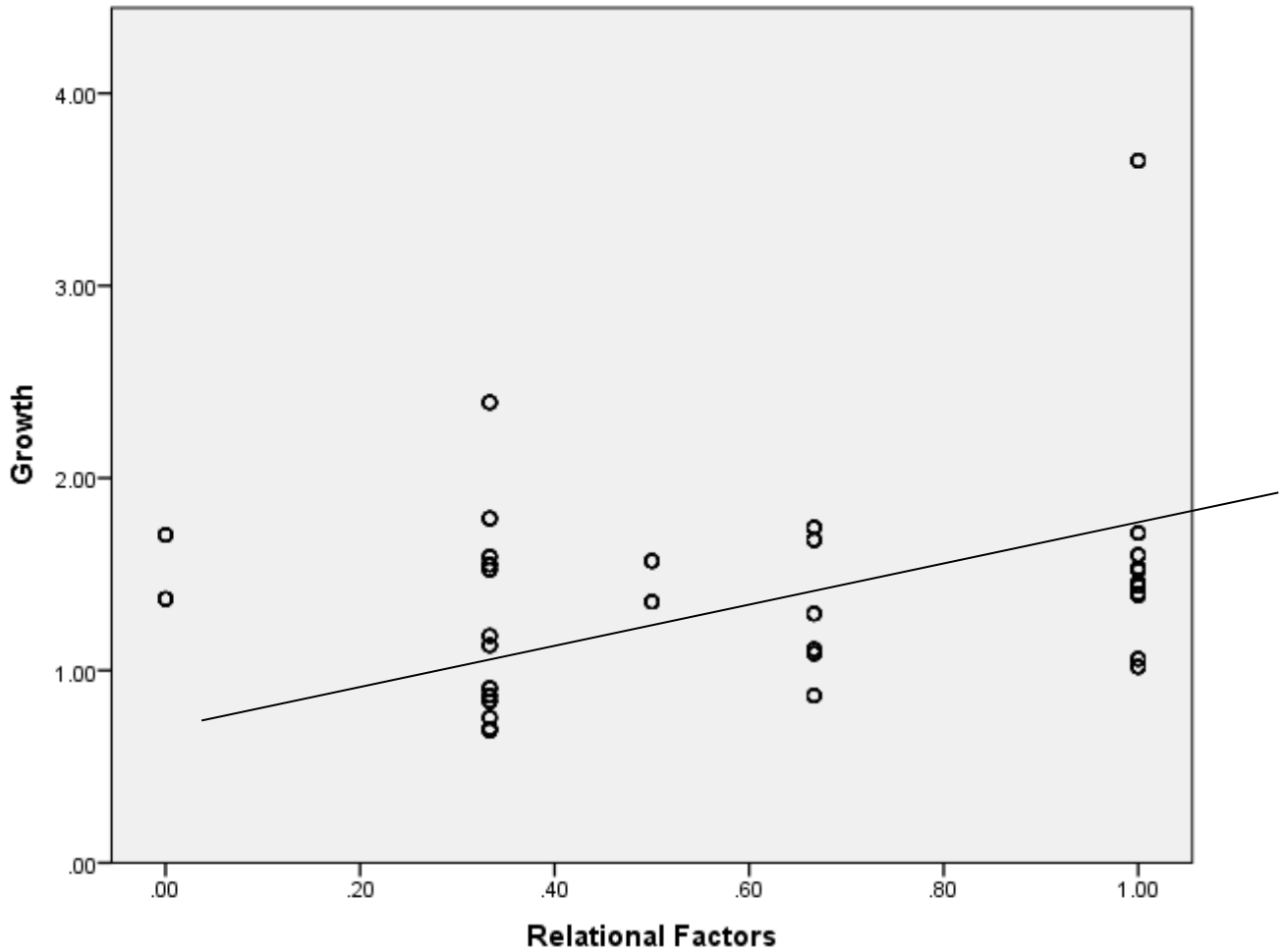
Fig. 4.24: Scatter Diagram of Relational Factors

Focusing on the three sub-variables under this specific objective, individual trend analysis was conducted on them to determine the rate of contribution of each sub-variable.

4.5.5 Social networks

The *Trend Analysis* in Table 4.26 and Figure 4.25 shown from the actual variable line (in black colour), that in 2009 the annual production increase was 7%, in 2010 the annual production increased to 14%, in 2011 the annual production increased to 19%, in 2012 the annual production increased to 22% and the annual production increased to 25% in 2013.

The linear trend model is Yt = 4.2 + 4.4*t which is used to forecast the increase in annual production in percentage using time. The forecast for the sixth year which was 2014 is: Yt = 4.2 + 4.4*6 = 30.6. Therefore, the annual production would have increased to approximately 31% in 2014.

Please indicate the percentage of your annual production increase that can be attributed to your membership of social organizations in these years.

Year	Annual Production Increase %
2009	7
2010	14
2011	19
2012	22
2013	25
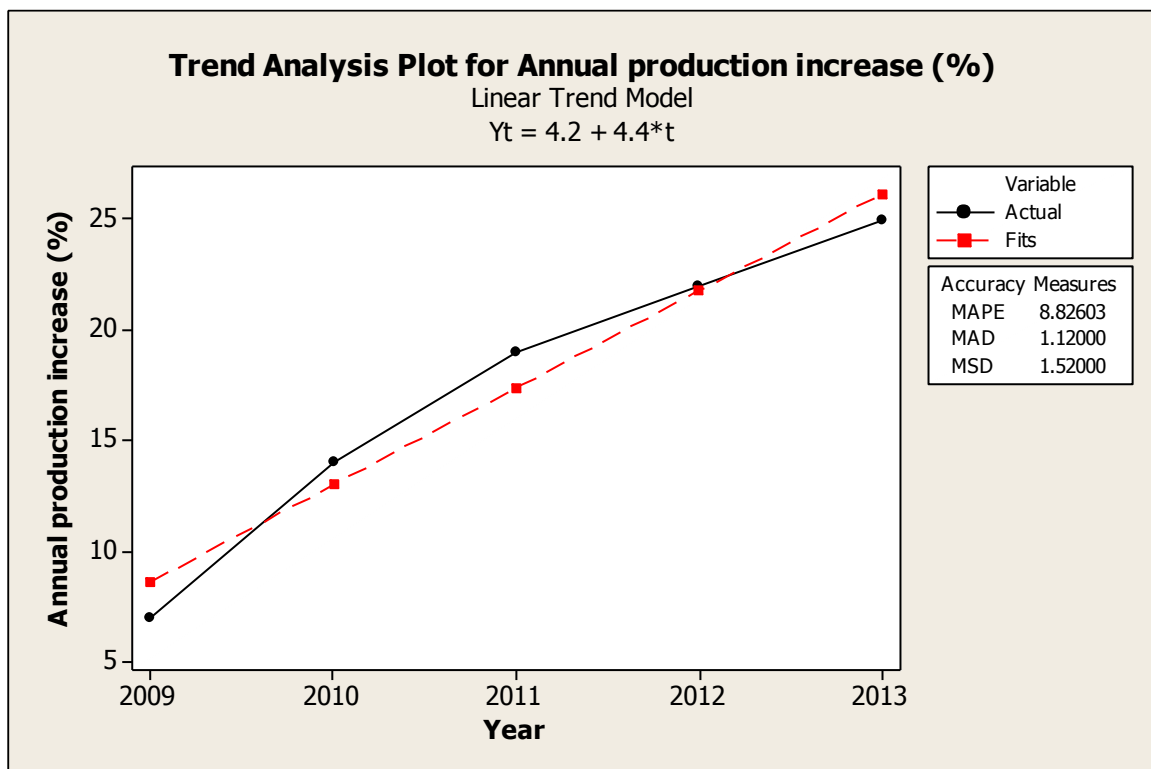
Fig. 4.25: Trend Analysis of production increase due to membership of Social Organization

4.5.6   Access to Information

The *Trend Analysis* in Table 4.25 and Figure 4.24 shows the actual variable line (in black colour) that in 2009 the number of business opportunities was 10, in 2010 the number of business opportunities increased to 15, in 2011 the number of business opportunities increased to 17, in 2012 the number of business opportunities increased to 20 and the number of business opportunities increased to 25 in 2013.

The linear trend model is $Yt = 6.9 + 3.5*t$ which is used to forecast the changes in number of business opportunities using time. The forecast for the sixth year which was 2014 is; $Yt = 6.9 + 3.5*6 = 27.9$. Therefore, the number of business opportunities would have increased to approximately 28 in 2014.

Kindly indicate the annual number of business opportunities attributable to information access in these years.

Year	Number of business opportunities
2009	10
2010	15
2011	17
2012	20
2013	25
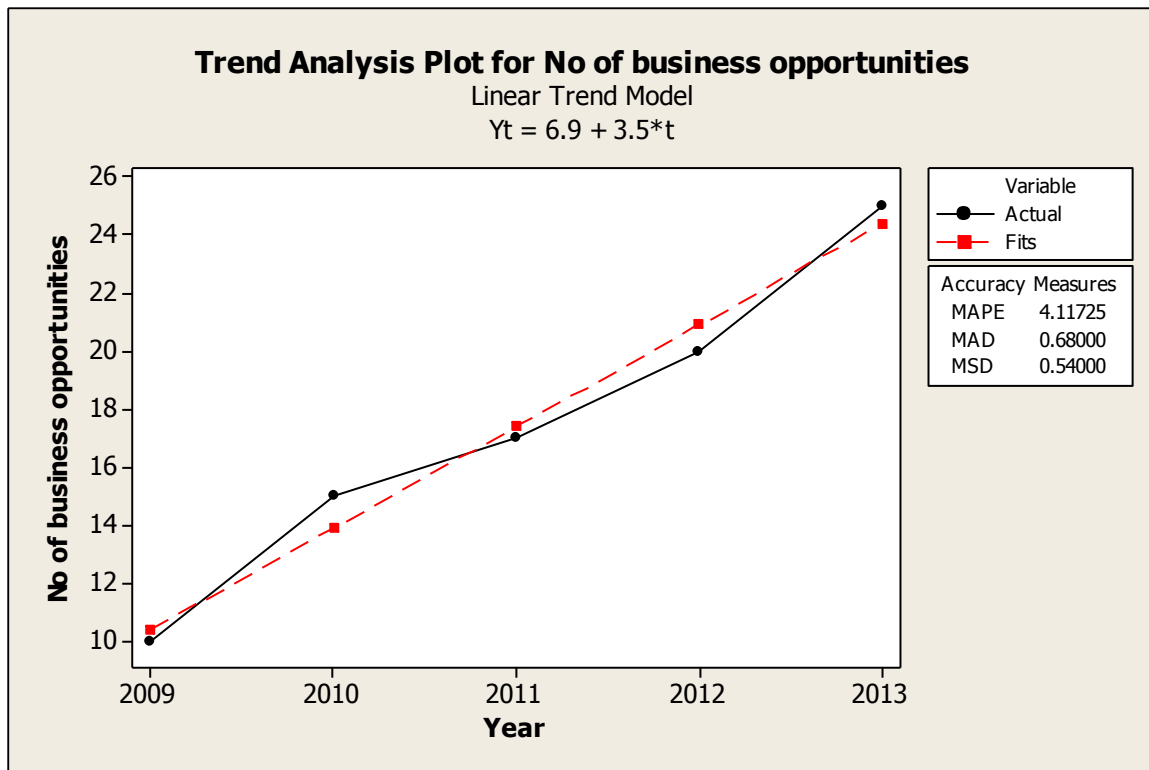
Fig. 4.26: Trend Analysis business opportunities due to access to information

4.5.7 Value Chains

The *Trend Analysis* in Table 4.26 and Figure 4.27 shows from the actual variable line (in black colour) that in 2009 the semi processed material was 8%, in 2010 the semi processed material increased to 13%, in 2011 the semi processed material increased to 19%, in 2012 the semi processed material increased to 25% and the semi processed material increased to 32% in 2013.

The linear trend model is Yt = 1.4 + 6*t which is used to forecast the increase in semi processed material in percentage using time. The forecast for the sixth year which was 2014 is: Yt = 1.4 + 6*6 = 37.4. Therefore, the semi processed material would have increased to approximately 37% in 2014.

Please indicate the percentage of semi processed materials procured against total volume of materials in the past five years.

Year	Semi-processed materials %
2009	8
2010	13
2011	19
2012	25
2013	32
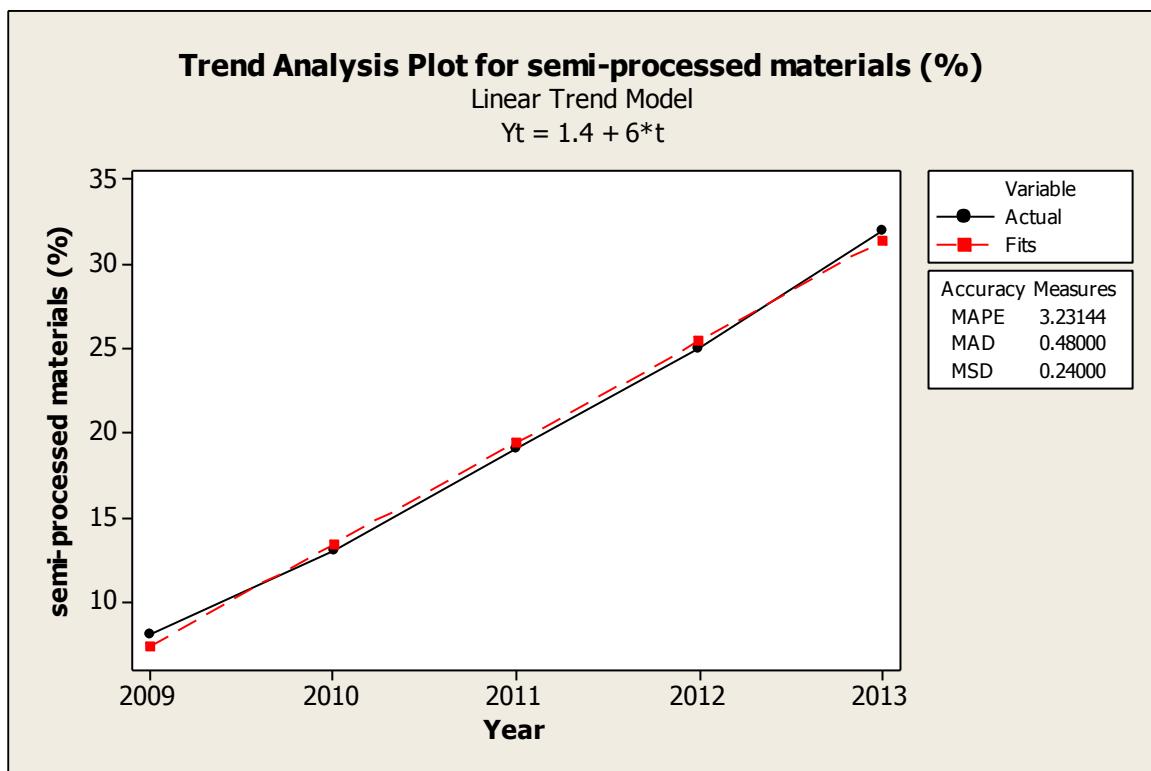
Fig. 4.27: Trend Analysis of materials growth due to Value Chain

4.6 Individual Entrepreneurship Characteristics

The study sought to investigate whether individual entrepreneur's managerial/technical competence influences the growth of wood-based MSEs. Three sub-variables were investigated: Education; Experience; and Need for Achievement.

4.6.1 Education

This section sought to investigate whether entrepreneur's level of education influenced the growth of wood-based MSEs. From Table 4.26 and Figure 4.28, it can be seen that most of the respondents-160 (53.33%) that the founder(s) of their enterprises was/were well educated, while the remaining-140 (46.67%) said no.

Table 4.27: The founder(s) of the enterprise is/are well educated?

Response	Frequency	Percent
Yes	160	53.33
No	140	46.67
Total	300	100
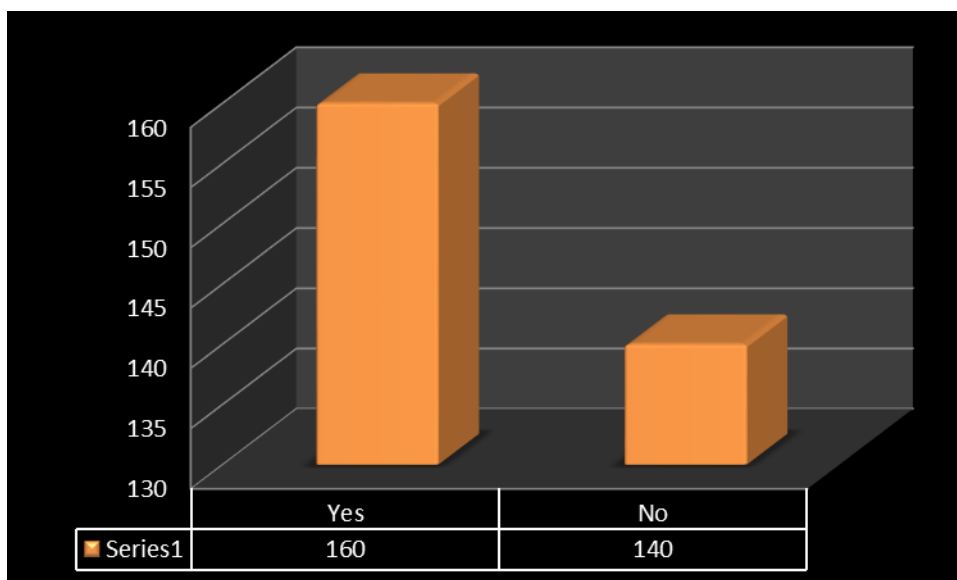
Fig. 4.28: Bar Chart of Owners/Managers' level of Education

According to Gustafson (2004) "education changes cognitive processes within the individual, which may provide new skills for solving complex problems". Thus there is a positive relation between entrepreneur's education and entrepreneurial orientation. Similarly, Nieman (2001) stressed that the skills required by entrepreneur can be classified into three main areas, "technical skills, business management skills and personal entrepreneurial skills".

Bula, and Tiagha (2012) said that more skills (both in the specific activity and in general management) possessed by entrepreneur, increases the productivity which reduces chances of failure and, therefore, may be important factors of firm's entrepreneurial orientation".

Developing-country MSE owners and workers often have relatively low levels of education. One reason is that despite recent advances, primary education completion rates remain at only 60% in Sub-Saharan Africa, 80% in South Asia, and90% in the Middle East and North Africa (World Bank, 2009). In addition, MSEs tend to have less-educated owners and workers than do larger firms (Orlando & Pollack, 2000; Soderbom & Teal, 2001). Educational disparities across firm size are especially striking at the university level: for example,21% of microenterprise owners in Chile have Bachelor's degrees, compared to 42% of small firm and 55% of medium-firm owners (Alvarez & Crespi, 2003). The lower level of educational attainment among MSE owners and workers is remarkable when contrasted with the situation in developed countries, where those with higher education are more likely to be self-employed (Woodruff, 1999). One reason for this contrast is that the poor in developing countries often create survival-oriented MSEs due to a lack of alternative employment opportunities.

The findings in this study indicates that majority of the respondents (53.33%) were reported to be well educated, while the remaining (46.67%) were reported not well educated. It can

then be deduced that only about half of owners/managers in the wood-based MSEs were well educated, and this has implications for enterprise management and growth.

4.6.2 Experience

This section investigated the influence of related work experience of entrepreneurs on the growth of wood-based MSEs. From Table 4.27 and Figure 4.29, it can be observed that most of the respondents-198 (66.00%) said that the owners of their enterprise possessed relevant experience to the enterprise operations, while the remaining-102 (34.00%) said no.

Table 4.27: Do owners of the enterprises possess relevant experience to the enterprise operations?

Response	Frequency	Percent
Yes	198	66.00%
No	102	34.00%
Total	300	100%
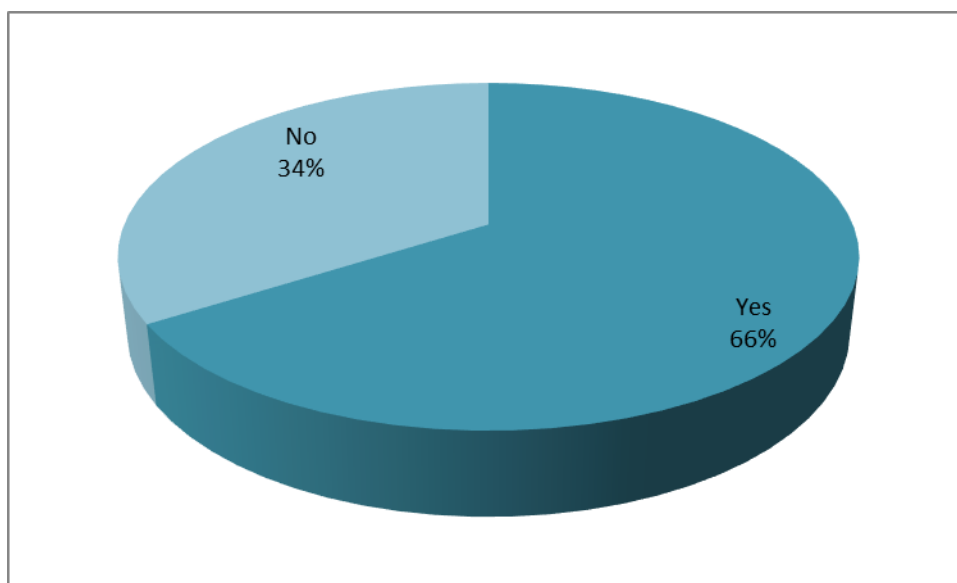
Fig. 4.29: Pie Chart on Experience of Owners

While the benefits of on-the-job experience are frequently mentioned, the importance of prior work experience may be even more helpful, especially if that experience occurred within the same sector or in small-to-medium-sized enterprises. An IDB study of high-growth entrepreneurs provides telling insights about the importance not only of skills but also of business contacts gained during past employment (Kantis et al., 2004). Among Latin American and East Asian entrepreneurs, contacts were found to be a key benefit of work experience, helpful in identifying business opportunities, obtaining financing and other resources, and alleviating management challenges. Unfortunately, some developing regions are characterized by a systematic lack of opportunities for relevant work experience. In particular, Africa has few medium-sized companies where entrepreneurs can gain work experience, a phenomenon known as ''the missing middle." For this and other reasons, MSE owners and workers in Ghana have an average of only 5 years of work experience, compared to 10 years for their counterparts in larger firms (Fafchamps, et al. 2011).

Within developed countries, there is mixed evidence linking prior sector experience to small firm growth. On the other hand, a more recent panel survey of 1,000 entrepreneurs in the Netherlands found that entrepreneurs' prior experience, when in the same industry as their start-ups, improves firm growth, survival, and profitability (Bosma, van Praag, Thurik, & de Wit, 2004).

The results here indicate that a sizeable number of the respondents (66%) had enterprise related experience, while the rest (34%) did possess such enterprise related experience. It can therefore be concluded that a good majority of wood-based MSEs owners/managers have relevant experience, which could enhance enterprise growth.

4.6.3 Need for Achievement

This section sought to investigate whether by exhibiting the *need for achievement* trait, owners/managers influenced growth of wood-based MSEs. From Table 4.28 and Figure 4.30 it can be seen that most of the respondents-225 (75.00%) said that the owners/managers of their enterprise exhibit *need for achievement* trait, while the remaining-75 (25.00%) said that they did not exhibit the trait.

Table 4.28: Do the owners/managers of the enterprise exhibit Need for achievement
trait?

Response	Frequency	Percent
Yes	225	75.00%
No	75	25.00%
Total	300	100%
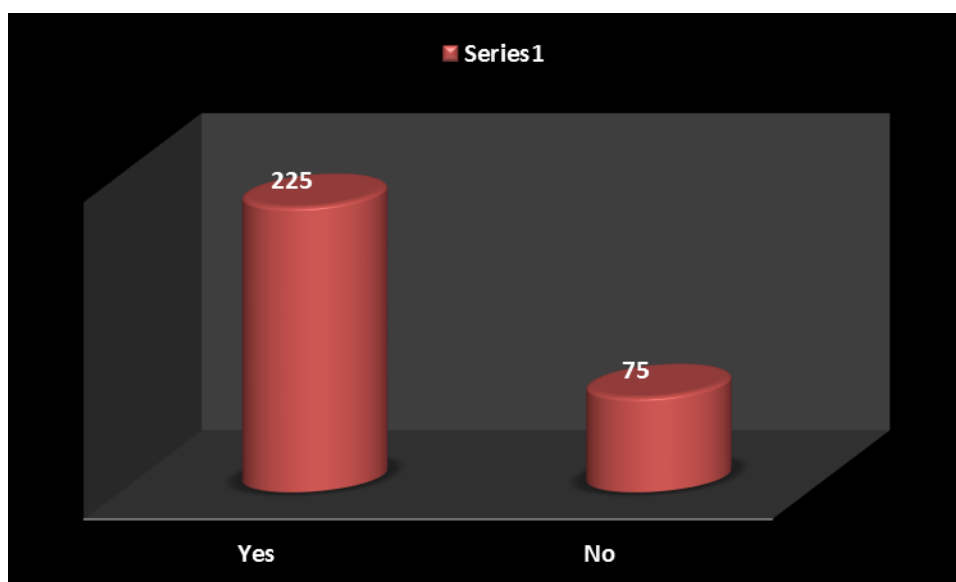
Fig. 4.30: Bar Chart on Need for Achievement of owners/managers

McClleland (1961) believes that the need for achievement by an individual is a precursor of entrepreneurial activities and a strong motivation for engaging in entrepreneurship.

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Borkowski and Kulzick (2006), while corroborating the assumption of McClleland, contend that: an individual with a high *n*-Ach takes personal responsibility for finding solutions to problems but avoids situations where the outcome depends not on his abilities and efforts but on chance or other factors beyond his control; and tends to set moderate achievement goals and to take "calculated risks" because the individual is not a gambler.

A research study evaluated the impact of entrepreneurial characteristics on the performance of small-scale manufacturing industries in Nigeria. This was with a view to identifying these entrepreneurial characteristics and the factors that influence their translation to optimum business performance (Adegbite; Ilori; Irefin; Abereijo; and Aderemi; 2006)**.** This was with a view to identifying these entrepreneurial characteristics and the factors that influence their translation to optimum business performance.

The authors made an extensive review and noted that certain individual behaviors are attributed to entrepreneurial success and that the following are the most relevant: need for achievement, creativity and initiative, risk taking and setting objectives, self-confidence and internal locus of control, need for independence and autonomy, motivation, energy, commitment and persistence.

The results indicate that the greater majority of the respondents (75%) agreed that owners/managers exhibit the *need for achievement* trait, while the remaining (25%) said no. It can therefore, be concluded majority of wood-based MSEs owners/managers exhibit the *need for achievement,* which enhance enterprise growth.

Inferential Statistics

4.6.4   Linear Regression Model of Growth of Wood – Based MSEs and Individual Entrepreneurship Characteristics

A simple linear regression analysis was carried out on individual entrepreneurship characteristics to determine whether the independent variable can be relied on in explaining the change in the dependent variable growth of wood – based MSE in Nigeria. The results presented in table 4.29 showed the values of R and R^2 as .334 and .112 respectively. The R value of 0.334 represents a strong positive linear relationship between individual Entrepreneurship Characteristics and the growth of wood – based MSEs, to the point of 33.4%. The coefficient determination R^2 of .112 indicates that the explanatory power of the independent variable is up to 11.2% of the change in the growth of wood – based MSEs in Nigeria.

Table 4.29: Model of Wood – Based MSEs Growth/Ind. Entrep. Characteristics

Model Summary	
R	**R^2**
.334	.112

a.   **Predictor (constant):** Ind. Entrep. Characteristics
b.   **Dependent variable:** Growth

In addition, table 4.30, similar to the other four independent variables, the ANOVA test was performed on individual entrepreneurship characteristics which reveals that it has a significant effect on the growth of wood – based MSEs. A careful look reveals that since P value is equal to .000, which is less than .05 alpha level, this then demonstrates that the model is significant statistically F (1,298) = 37.539, P<.01. This can be shown by linear

regression model. $Y = B_0 + B_5 X_5 + E$, where X_5 is the individual entrepreneur characteristics.

Table 4.30: ANOVA for Individual Entrepreneur Characteristics

Model	Sum of Square	df	Mean Square	F	Sign
Regression	9.396	1	8.396	37.539	.000
Residual	74.588	298	.250		
Total	**83.983**	**299**			

a   Dependent Variable: Growth of Wood – Based MSEs.
b.   Predictor (constant), Ind. Entrepreneur Characteristics

Table 4.31: Model for Individual Entrepreneur Characteristics

Model	Coefficients		Sign
	B	Std Error	
1 (constant)	1.096	.058	.000
Ind. Entrep. Characteristics	.467	.076	.000

a.   Dependent Variable, Growth

   $Y = 1.096 + 0.467 X_5$

Based on the empirical values presented – Table 4.31, the null hypothesis is thus rejected for the alternative hypothesis. The conclusion reached is that individual entrepreneurship characteristics do have significant role in the growth of wood – based MSEs in Nigeria.

Figure 4.31 further shows the results of individual entrepreneurship characteristics on the growth of wood – based MSEs in Nigeria. The scatter diagram indicates a line of best fit designed to determine how well the individual entrepreneurship characteristics fitted the data in question. A line of best hit is one of the key indicators of the predictive accuracy of the

model (Andassu, et al, 2002). The figure thus shows that there is a positive gradient – a positive linear relationship between individual entrepreneurship characteristics and growth of wood – based MSEs in Nigeria.
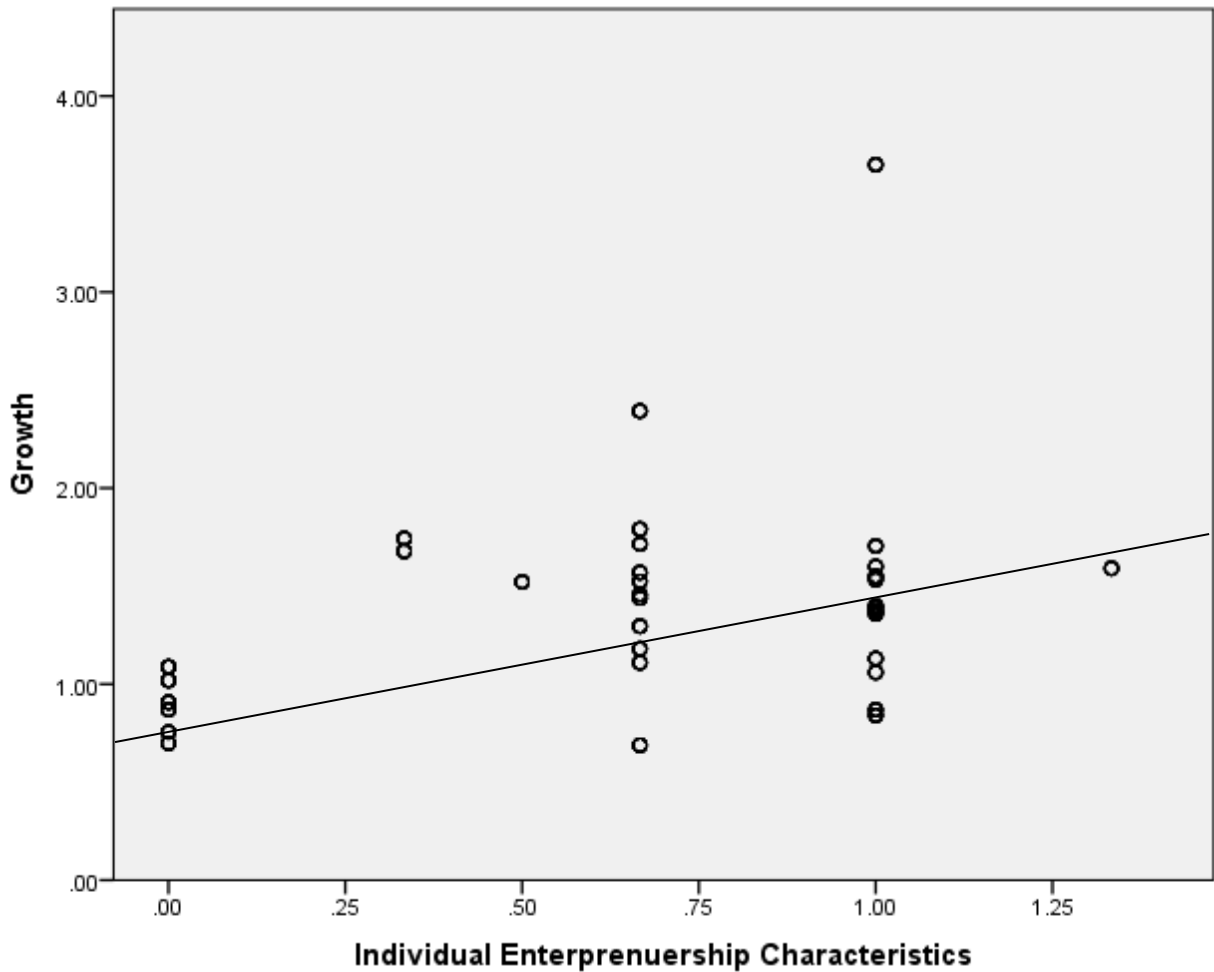
Fig. 4.31: Scatter Diagram of Individual Entrepreneurship Characteristics

Regarding the three sub-variables under this specific objective, individual trend analysis was conducted on them to determine the rate of contribution of each sub-variable.

4.6.5 Education

The ***Trend Analysis*** in Figure 4.32 shows from the actual variable line (in black colour) that in 2009 the overall growth was 12%, in 2010 the overall growth increased to 15%, in 2011

the overall growth increased to 19%, in 2012 the overall growth increased to 25% and the overall growth increased to 32% in 2013.

The linear trend model is Yt = 5.6 + 5*t which is used to forecast the change in overall growth in percentage using time. The forecast for the sixth year which was 2014 is; Yt = 5.6 + 5*6 = 35.6. Therefore, the overall growth would have increased to approximately 36% in 2014.

By what percentage can the educational attainment levels of owners/managers be said to have enhanced overall growth in the last five years.

Years	Overall growth %
2009	12
2010	15
2011	19
2012	25
2013	32
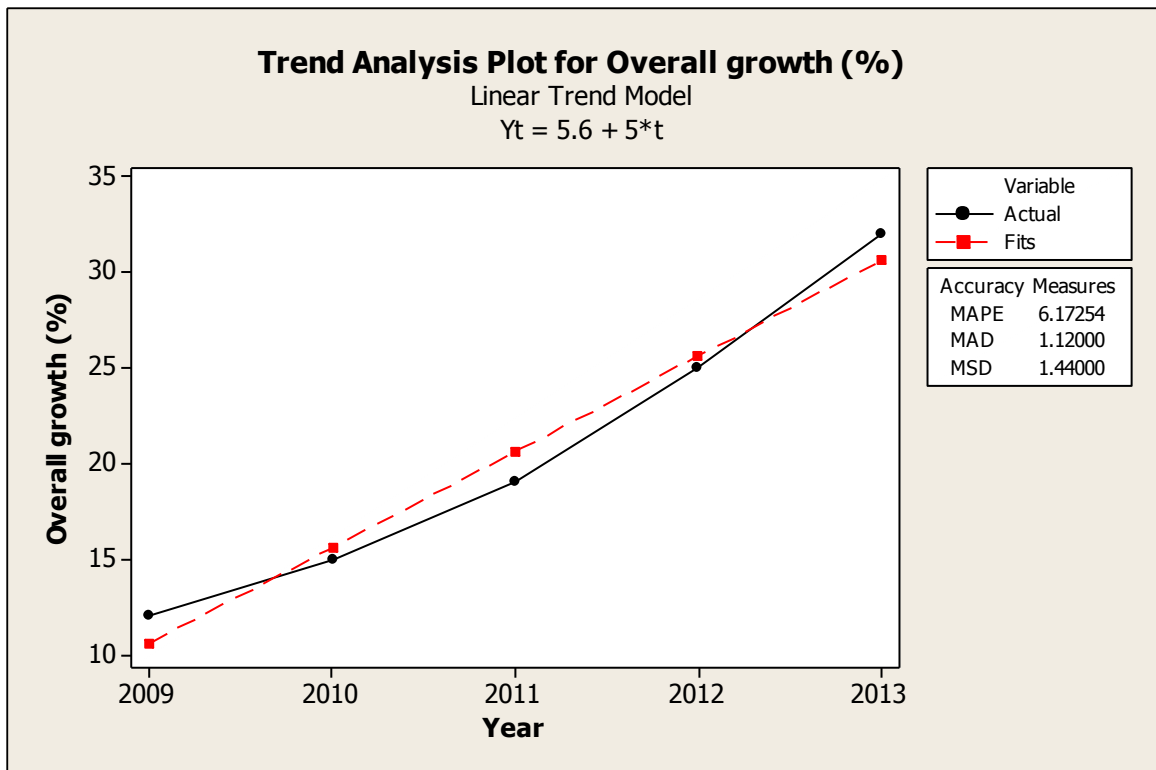
Fig. 4.32: Trend Analysis of Education level of entrepreneur and Growth

4.6.6   Experience

The *Trend Analysis* in Figure 4.33 shows from the actual variable line (in black colour) that in 2009 the impact on sustainability was 15%, in 2010 the impact on sustainability increased to 19%, in 2011 the impact on sustainability increased to 24%, in 2012 the impact on sustainability increased to 29% and the impact on sustainability increased to 34% in 2013.

The linear trend model is $Yt = 9.8 + 4.8*t$ which is use to forecast the change in impact on sustainability in percentage using time. The forecast for the sixth year which was 2014 is; $Yt = 9.8 + 4.8*6=38.6$. Therefore, the impact on sustainability would have increased to approximately 39% in 2014

Kindly indicate the percentage impact on enterprise sustainability attributable to owners/managers experience in the following years.

Year	Impact on sustainability %
2009	15
2010	19
2011	24
2012	29
2013	34
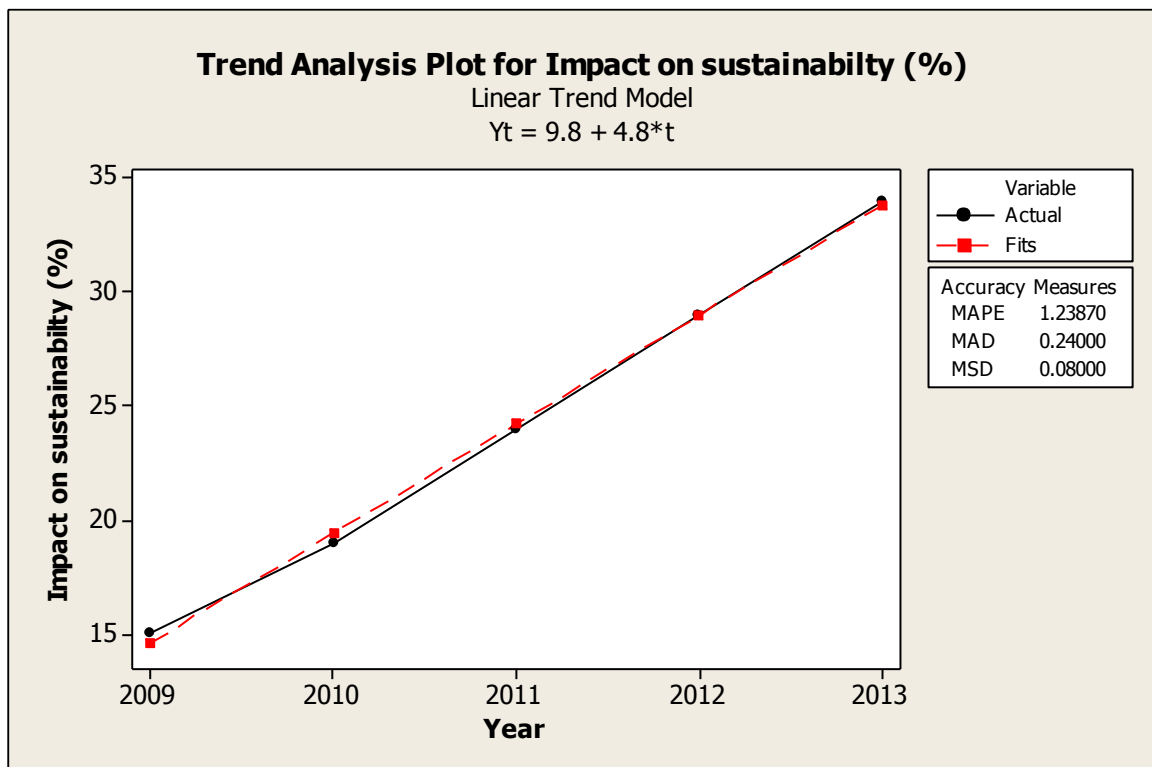
Fig. 4.33: Trend Analysis of Entrepreneur's Experience on Sustainability

6.6.7   *Need for Achievement*

The *Trend Analysis* in Figure 4.34 shows from the actual variable line (in black colour) that the contribution of increase in employee motivation was 6, the increase in product varieties

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and increase in suppliers' confidence both had contribution rating of 8, the contribution rating of increase in profitability and that of increase in number of employees were 5 each.

The linear trend model is Yt = 7.9 – 0.5*t.

Resulting from the owners/managers possession of the *need for achievement* trait and on a scale of 1 to 10, kindly indicate how these traits have contributed to the following indices over the last five years.

Indices	Rating of Contribution (1 to 10)
Increase in employee motivation	6
Increase in product varieties	8
Increase in suppliers' confidence	8
Increase in profitability	5
Increase in number of employees	5
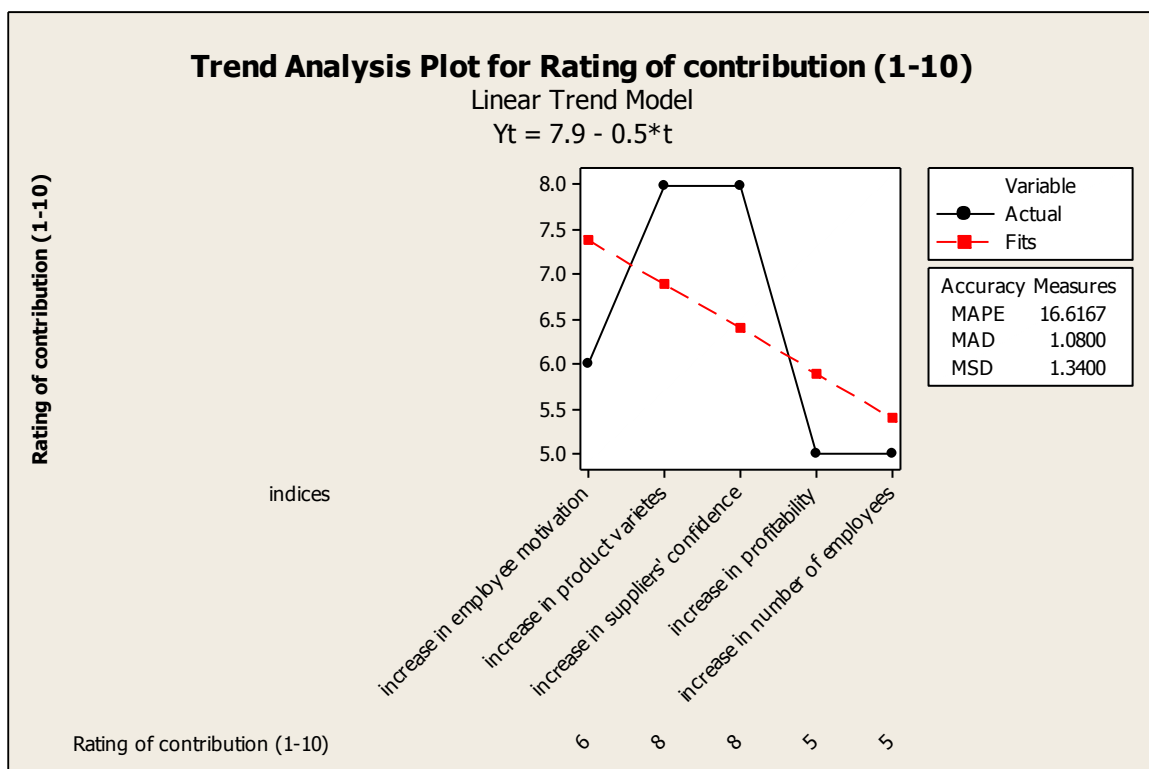
Fig. 4.34: Trend Analysis of Owners/managers' need for achievement on growth

Still on the same sub-variable, ***One-Sample Statistics*** was performed and the result reveals that the mean rating scale is approximately 6 indicating that the contribution is insignificant since the p- value (0.108) is not less than the α value (0.05) signifying insignificant contribution to growth by owners/managers possessing the *Need for Achievement* trait.

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Rating	5	6.4000	1.51658	.67823

Table 4.32:   One-Sample Test

Test Value = 5

	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Rating	2.064	4	.108	1.40000	-.4831	3.2831

4.7   Overall Multiple Regression Analysis

A multiple regression analysis was finally performed to model the linear relationship between the dependent variable which is growth of wood – based MSEs and the independent (predictor) variables which are MSE characteristics, Resources, Markets, Relational Factors and Individual Entrepreneurship Characteristics.

Table 4.33: Multiple Regression Model for the Predictor Variables for Growth of Wood – Based MSEs

Model Summary	
R	**R^2**
.991	.982

According to Pallant (2010), in standard of simultaneous multiple regression, all the independent (or predictor) variables are entered into the equation simultaneously. Each independent variable is evaluated in terms of its predictive power, over and above that offered by all the other independent variables. This is the most commonly used multiple regression analysis, hence used in research of this nature. The results presented in Table 4.33 reveals an R of .991 and an R^2 of .982, indicating the degree of association between predicator variables and growth of wood – based MSEs in Nigeria. The result is an indication that there is a strong relationship between MSE characteristics, Resources, Markets, Relational Factors and Individual Entrepreneurship Characteristics and the growth of wood – based MSEs in Nigeria. Accounting for 98.2% of the changes of variation in the growth of wood – based MSEs.

Table 4.34: ANOVA for all Predictor Variables

Model	Sum of Square	df	Mean Square	F	Sign
Regression	3.143	1	3.123	11.510	.001[b]
Residual	80.880	298	.271		
Total	**84.023**	**299**			

a   Dependent Variable: Growth of Wood – Based SMEs

b.   Predictors: (constant), MSE Characteristics, Resources, Markets, Relational Factors, Individual Entrepreneurship Characteristics.

Table 4.35: Model for all Predictor Variables

	Model Coefficients			Sign
	B	**Std Error**	**T**	
1 (Constant)	.014	0.14		
MSE Characteristics	.189	.014	13.677	.000
Resources	.194	.002	97.467	.000
Markets	.227	.020	11.303	.000
Relational factors	.194	0.15	13.336	.000
Individual Entrepreneurship Characteristics	.199	.012	16.641	.000

a.   Dependent Variable: Growth

Table 4.34 shows an ANOVA test performed on all the predicator variables which reveals that they have significant effects, influencing the growth of wood – based MSEs in Nigeria. The results of the ANOVA test demonstrated that the p value is equal to .000 which is less than .05 level of significance, indicating that the model is statistically significant, F (11.510)

In addition, using the data summarized in table 4.38, a linear model can be shown thus:

$$Y = B_0 + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + E.$$

Subtracting the values into the equation model will give:

Growth = 0.014 + 0.189 MSE Characteristics + 0.194 Resources + 0.227 Markets + 0.19 Relational factor + 0.199 Individual Entrepreneurship Characteristics. The P. values for each of the independent variable is .000 less than .05 level of significance which invariably means that the model is statistically significant. Therefore, based on this study, one may come to the

conclusion that, taken together, all the predicator variables have a significant positive effect on the change in the criteria variable, growth of wood – based MSEs in Nigeria at 95% level as confidence.

In addition, consistent with the model predicted based on the standardized beta Coefficient, resources play the strongest role, followed by MSEs characteristics, Individual Entrepreneurship Characteristics, Markets and Relational Factors in that order.

4.7 Revised Conceptual Framework

Based on the model for all predictor variables, it can be observed that all the five independent variables positively influence the growth of wood-based MSEs. Using the **t-value,** the Conceptual Frame-work model is revised in hierarchy of the weight of contribution of each independent variable to the dependent variable.

| Resources |
| ⇨ Human Capital |
| ⇨ Finance |
| ⇨ Infrastructure |

| Individual Entrepreneur |
| Characteristics |
| ⇨ Education |
| ⇨ Experience |
| ⇨ Need for Achievement |

| MSE Characteristics |
| ⇨ Longevity |
| ⇨ Legal form of bus. |
| ⇨ Location |

| Relational Factors |
| ⇨ Social Networks |
| ⇨ Access to Information |
| ⇨ Value Chains |

| Markets |
| ⇨ Product Demand |
| ⇨ Market Share |
| ⇨ Sales |

| Growth of wood |
| Based Micro and |
| Small Enterprises |
| ⇨ Profitability |
| ⇨ Sustainability |
| ⇨ No. of |
| Employees.. |

Dependent variable

Independent variables

Fig. 4.35 Revised Conceptual Framework

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CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1   Introduction

The purpose of the study was to investigate determinants of growth on wood-based Micro and Small Enterprises (MSEs) in Nigeria. This chapter summarized the findings of the study based on the specific objectives and research hypothesis tested under units of analysis. It described determinants of Growth of Wood – Based Micro and Small Enterprises in Nigeria consisting of MSE characteristics, Resources, Markets, Relational factors and Individual entrepreneurship characteristics. Data from these study variables were interpreted and the results of the findings were correlated with both empirical and conceptual literature reviewed. The conclusions relate directly to the specific objective/research hypotheses. The recommendations were based on conclusion and discussions on the findings.

5.2   Summary of Findings

The section summarized the findings of the study on the basis of the specific research hypothesis of the study.

5.2.1: Research Hypothesis One: *There is no significance influence of MSE-characteristics on the growth of wood-based MSEs*.

The finding of the study revealed that MSE characteristics positively influence the growth of wood – based MSEs in Nigeria. Based on the empirical result presented in table 4.5, the null hypothesis is hereby rejected and the conclusion reached was that MSE Characteristics have a statistically significant role in the growth of wood – based MSEs in Nigeria.

Results of the inferential statistics such as Pearson Correlation and ANOVA indicated that MSE characteristics as being an important determinant play a major positive significant contribution towards the growth of wood – based MSE in Nigeria. This further confirms that

wood – based organizations that utilized MSE characteristics judiciously did indeed experience a significant effect on the growth of their small and medium sized enterprises in Nigeria.

5.2.2: Research Hypothesis Two: *Resources do not significantly influence the growth   of wood-based MSEs.*

The study established that resources have a great positive influence on the growth of wood – based MSEs in Nigeria. Based on the results presented in Table 4.12, the Null hypothesis was thus rejected for the alternative. The conclusion reached was that resources played a significant role on the growth of wood – based MSEs in Nigeria.

 The research findings emphatically revealed that resource was an important determinant of the growth of wood – based MSEs. Resources in terms raw materials and human capital help an entrepreneur in undertaking risk – taking, creative and innovative initiatives in an enterprise. These are crucial characteristics of an ideal entrepreneur that should be possessed and developed for the growth of the wood – based MSEs in Nigeria.

5.2.3: Research Hypotheses Three: *There is no significant relationship between markets and the growth of wood-based MSEs.*

The findings of the study established that appropriate markets influence the growth of wood – based MSEs in Nigeria. Based on the result presented in Table 4.18, the null hypothesis was thus rejected, and the alternative is upheld. This implies that market played a significant role in the growth of wood – based MSE in Nigeria. According to the findings of the study, market is an important determinant that exerted positive influence on the growth of wood – based MSEs. Whatever an entrepreneur was able to produce without suitable markets for such products to be consumed, growth can never be enhanced and sustained. Thus, wood –

based entrepreneurs should develop new ideas, novelty experiment and be creative resulting in new products for the wood – based MSEs markets in Nigeria.

5.2.4: **Research Hypothesis Four:** *Relational factors do not significantly influence the growth of wood-based MSEs.*

Based on the findings, relational factors as a determinant influenced the growth of wood – based MSE in Nigeria. And in line with the results presented in Table 4.24, the null hypothesis was thereby rejected (not supported) for the alternative. The conclusion arrived at was that relational factors played a significant role on the growth of wood – based MSEs in Nigeria.

The finding was a pointer to the critical role that relational factors such as social organizations and positive interrelationship between and among enterprises influence the growth of wood – based MSEs. Such relational interactions are significant and should be sustained in order to enhance the growth of wood – based MSEs sector in Nigeria.

5.2.5: **Research Hypothesis Five:** *There is no significant relationship between individual entrepreneur's managerial/technical competence and the growth of wood-based MSEs.*

The study established that Individual Entrepreneurship Characteristics influenced the growth of wood – based MSEs in Nigeria. Based on the empirical values presented – Table 4.31, the null hypothesis was thus rejected for the alternative hypothesis. The conclusion reached was that individual entrepreneurship characteristics did play significant role on the growth of wood – based MSEs in Nigeria.

According to these findings, individual entrepreneurs that were well educated, influenced the proper management of their wood – based MSEs positively leading to growth. This indicated that owners/managers of wood – based MSEs are able to carry out managerial operations

succinctly leading to the growth of the enterprises. Based on this finding, owners/managers should able to utilize the individual need for achievement trait, being an important characteristic, exerted significant influence on the growth of wood – based MSEs in Nigeria.

5.2.6 The Overall Effect of the Variables

The study findings showed a significant influence of all the five predictor variables on the growth of wood – based MSEs. The study revealed that 98.2% of the change in variation is accountable for the growth of wood – based MSEs in Nigeria, for the corresponding change in all the five predictors simultaneously. Test of the overall significance of all the five variables jointly: MSE characteristics, resources, markets, relational factors and individual entrepreneur characteristics utilizing ANOVA and simultaneously multiple regression model indicated that the model is statistically significant, which implies that they exerted positively and significantly on the growth in wood – based MSEs in Nigeria.

5.3 Conclusions

The main focus in this study was to explore the influence of some selected determinants on the growth of wood – based of MSEs in Nigeria. Based on the empirical studies, these determinants were expected to exert positive relation on the growth of wood – based MSEs in Nigeria. The output of the research findings revealed that there was a positive significant relation between the determinants, namely MSE characteristics, resources, markets, relational factors and individual entrepreneurship characteristics with growth of wood – based MSEs.
In line with the specific objectives the study made this conclusion:

1. The findings revealed that MSE – characteristics have positive relation with the growth of wood – based MSE's in Nigeria.

2. Resources play a significant role on the growth of wood – based MSE's in Nigeria.

3. Based on the results, market is an important determinant that can exert positive influence on the growth of wood – based MSE's. Without suitable markets, whatever an entrepreneur was able to produce cannot be sold.

4. Based on the findings, relational factors influence the growth of wood – based MSE's. Social organizations and positive interrelationship between and among enterprises influence the growth of wood – based MSE's.

5. Based on the findings, growth of wood – based MSE's is influenced by individual entrepreneurship characteristics of education, work experience and the need for achievement trait.

The findings clearly demonstrated that resources when properly assembled and mobilized, coupled with sound managerial abilities of entrepreneurs, growth of wood – based MSEs can be enhanced greatly in Nigeria.

5.4   Recommendations

This study provided justification for the fact that an entrepreneur in wood – based enterprises with suitable resources, well – educated in the area of entrepreneurship, having good managerial knowledge, exceptional entrepreneurial qualities and skills supported by suitable markets, business networks and entrepreneurial trait is well disposed to achieve growth.

Specifically, the study puts forward the following recommendations in line with study objectives:

1. Entrepreneurs need to be focused and exhibit endurance to secure only advantageous business location

2. Ensure that the enterprise is properly registered to attract desired patronage.

3. Wood – based entrepreneurs that are growth focused must endeavour to invest in resources because the study has established that recourses play the most significant role in determining MSE growth.

4. Wood – based entrepreneurs should develop new ideas, novelty experiment and be creative resulting in new products for the wood – based MSE's markets.

5. Wood – based entrepreneurs should take initiative to belong to social/business groups due to the obvious advantage in securing opportunity information as well as enhancing value chain collaborations that have capacity to grow business.

6. To promote profitability and sustainability, MSE owners/managers should attach high priority to individual entrepreneurship characteristics of relevant education/skills, adequate work experience and the trait of need for achievement. There is a significant relationship between these variables and growth of wood – based MSE's.

7. The government should initiate policies that make it easy and less cumbersome for MSE owners to register their enterprise.

8. Government should avoid multiple taxation and levies/charges in order to motivate MSE owners in their job creation and poverty reduction efforts.

5.5   Suggestions for Future Studies

Based on the findings of the study and observations during field work, the following suggestions are made for future studies.

- Effect of multiple taxation/levies on the growth of MSEs in Nigeria

- Impact of basic infrastructural facilities on business cost for rural-based MSEs in Nigeria.

- The Role of Entrepreneurship Education on the development of MSE sectors in Nigeria.

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APPENDIXES

I: LETTER OF INTRODUCTION

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

NAIROBI, KENYA

MUHAMMAD BABA MUSA

To whom it may concern:

Dear Sir/Madam

REF: PhD Research

I am a student of the above University, undergoing a PhD programme in Entrepreneurship. As part of the requirements of the programme, I am conducting a research on the **"Determinants of Growth of Wood – Based Micro and Small Enterprises in Nigeria".**

I therefore, request you to kindly respond to each questionnaire item honestly. Please, be assured that information given to us in the course of the study will be treated with utmost confidentiality. Try your best to complete all the items.

Thank you, for your kind facilitation and indeed, for being part of the study.

Yours faithfully,

…………………….
M.B. Musa
(Student))

NOTE: MSEs stands for Micro and Small Enterprises

II: QUESTIONNAIRE/INTERVIEW GUIDE

NAME OF ENTERPRISE (Optional) ……………………………………………….

Instruction: Please, tick [✓] the appropriate box or make comments in the spaces provide

MSE – CHARACTERISTICS

I.   i.   For how long have you being running the enterprise? [   ]

    ii.   Would you say that longevity has assisted in the growth of the enterprise?
Yes [   ]   No [   ]

    iii.   If Yes, how? …………………………………………………………………..
…………………………………………………………………………………

    iv.   For the following years of operation, kindly indicate the average profit on investment in percentages

Year	Average Profit (%)
2008	[ ]
2009	[ ]
2010	[ ]
2011	[ ]
2012	[ ]

II.

i.   What is legal form of the enterprise?
Sole proprietorship [ ]   Partnership [ ]   Limited company [ ]

ii.   Has the legal form of the enterprise assisted it to grow? Yes [   ] No [   ]

iii.   If yes, how? …………………………………………………………………...
…………………………………………………………………………………

iv.   For the enterprise sustainability, as a result of annual turnover, indicate the number of employees in the past three years.

Year	No. of Employees
2011	[ ]
2012	[ ]
2013	[ ]

III.
    i.   Where is your enterprise located?   Rural [   ]   Urban [   ]

    ii.   Does the enterprise location entrance its growth? Yes [   ] No [   ]

    iii.   If Yes, in what ways? ……………………………………………………………

…………………………………………………………………………………………..

    iv.   If No, why is the location not enhancing enterprise growth?

……………………………………………………………………………………….

………………………………………………………………………………………

    v.   Please indicate how location has enhanced your profitability as a percentage on investment in the following years.\

Year	Profitability (%)
2008	[ ]
2009	[ ]
2010	[ ]
2011	[ ]
2012	[ ]

RESOURCES

I.   i.   What is the number of employees of the enterprise at start–up? [   ]

    ii.   How many do you have presently?   [   ]

    iii.   Do you give priority to possession of relevant skills during employee recruitment?

        Yes [   ]   No [   ]

    iv.   If yes, how do such employees help your enterprise to grow?

……………………………………………………………………………………

……………………………………………………………………………………

    v.   Kindly indicate how the employees have enhanced production volume in percentage over these years.

Year	Production Volume (%)
2009	[ ]
2010	[ ]
2011	[ ]
2012	[ ]
2013	[ ]

II   i.   What are the sources of financing the enterprise? …………………………..

………………………………………………………………………………………

    ii.   Do you have access to finance from any bank or other financial institutions?

        Yes [   ]   No [   ]

    iii.   If yes, how has it enhanced the growth of your enterprise? ....

………………………………………………………………………………………

    iv.   If no, how has it affected the enterprise growth? ……………………………

………………………………………………………………………………………..

    v.   Please indicate percentage increase in profit margins that is attributable to availability of finance in these years.

Year	Increase in Profit Margin (%)
2009	[ ]
2010	[ ]
2011	[ ]
2012	[ ]
2013	[ ]

III   i.   Does your enterprise have basic processing equipment?
             Yes [   ]   No [   ]

       ii.   If Yes, how has this enhanced growth? ……………………………………
             ………………………………………………………………………………

       iii. If No, how has it affected your enterprise growth? …………………………
             ………………………………………………………………………………

       iv.   Kindly indicate the number of product varieties of your enterprise that is made possible by your possession of adequate equipment comparing your start–up and now: Start – Up   Presently
             No of product Varieties   [   ]   [   ]

MARKETS

I.   i.   Are the products of your firm in high demand in the market?
             Yes [   ]   No [   ]

       ii.   If yes, how have demands for the products influenced the growth of your firm?
             …………………………………………………………………………………..
             ………………………………………………………………………………….

       iii. If no, in what ways is lack of demands affecting your enterprise growth?
             …………………………………………………………………………………...

       iv.   Kindly indicate the percentage growth rate of the annual demand for your firm's products over the last five years:

Year	Growth Rate (%)
2009	[ ]
2010	[ ]
2011	[ ]
2012	[ ]
2013	[ ]

II.   i.   Can your enterprise be described as enjoying a comfortable market share when compared with your competitors? Yes [   ] No [   ]

       ii.   If yes, how has this enhanced the growth of your enterprise? ………………..
             …………………………………………………………………...…………………

iii.   If no, in what ways in this affecting growth? ………………………………………
       ………………………………………………………………………………………

iv.   Kindly provide your market share ratio in the indicated years:

Year	Market Share Ratio
2009	[ ]
2010	[ ]
2011	[ ]

2012   [   ]
2013   [   ]

III   i.   Is your enterprise having a sales unit?   Yes [   ] No [   ]

       ii.   If yes, how has this unit contributed to the growth of your enterprise?
....

       iii.   If no, how has it affected the growth of the enterprise? ………………………..
....

       iv.   Kindly indicate the annual rate of sales for the past five years.

Year	Rate of Sales (%)
2009	[ ]
2010	[ ]
2011	[ ]
2012	[ ]
2013	[ ]

RELATIONAL FACTORS

I.   i.   Does your enterprise belong to any social organization within your cluster?
Yes [   ] No [   ]

       ii.   If yes, how has your membership of such organization enhanced the enterprises growth?..……………………………………………………………..
……………………………………………………………………………………..

       iii.   If no, in what ways has this affected the enterprise growth? ………………
………………………………………………………………………………………

       iv.   Please indicate the percentage of your annual production increase that can be attributed to your membership of social organization in these years.

Year	Annual Production Increase (%)
2009	[ ]
2010	[ ]
2011	[ ]
2012	[ ]
2013	[ ]

II.   i.   Does your enterprise have access to business information?
Yes [   ]   No [   ]

       ii.   If yes, how has this enhanced the growth of your enterprise? ………………...
………………………………………………………………………………………

       iii.   If no, how has this affected the growth of your enterprise? ………………….
………………………………………………………………………………………

       iv.   Kindly indicate the annual number of business opportunities attributable to such information access in these years.

Year	No of Business Opportunities
2009	[ ]
2010	[ ]
2011	[ ]
2012	[ ]

2013   [   ]

III   i.   Does your enterprise procure semi – processed materials from your suppliers?
              Yes [   ]   No [   ]
       ii.   If yes, how has this enhanced the growth of your enterprise? ……………...........
              ………………………………………………………………………………………
       iii.   If no, how has it affected the growth of your enterprise? ………………….
              ………………………………………………………………………………………
       iv.   Please indicate the percentage of semi – processed materials procured against total volume of materials in the past five years.

Year	Semi-Processed Material (%)
2009	[ ]
2010	[ ]
2011	[ ]
2012	[ ]
2013	[ ]

INDIVIDUAL ENTREPRENEURSHIP CHARACTERISTICS
I   i.   The founder(s) of the enterprise is/are well educated?   Yes [   ] No [   ]
       ii.   If yes, how has such education contributed to enterprise growth …………….
              ………………………………………………………………………………………
       iii.   If no, how has lack of education affected enterprise growth ……………….
              ………………………………………………………………………………………
       iv.   By what percentage can the educational attainment levels of owners/managers be said to have enhanced overall growth in the last five years?

Year	Overall Growth (%)
2009	[ ]
2010	[ ]
2011	[ ]
2012	[ ]
2013	[ ]

II   i.   Do the owners of the enterprises possess relevant experience to the enterprise operations?   Yes [   ]   No [   ]
       ii.   If yes, how has such relevant experience enhanced the growth of the enterprise
              ………………………………………………………………………………………
       iii.   If no, how has this affected enterprise growth ………………………………
              ………………………………………………………………………………………
       iv.   Kindly indicate the percentage impact on enterprise sustainability attributable to owners'/managers' experience in the following years

Year	Impact on Sustainability (%)
2009	[ ]
2010	[ ]
2011	[ ]
2012	[ ]
2013	[ ]

III   i.   Do the owners/managers of the enterprise exhibit *Need for Achievement* trait?

                  Yes [   ]   No [   ]

       ii.   If yes, how has this enhanced the growth of the enterprise? …………………
………………………………………………………………………………..…..

      iii.   If no, how has this affected enterprise growth? ……………………………..
………………………………………………………………………………………

      iv.   Resulting from the owners'/managers' possession of the *Need for Achievement* trait and on a scale of 1 to 10, kindly indicate how this trait has contributed to the following indices over the last five years?

Indices	Rating of contribution (1 to 10)
Increase in employee motivation	[ ]
Increase in product varieties	[ ]
Increase in suppliers' confidence	[ ]
Increase in profitability	[ ]
Increase in number of employees	[ ]