Economic Environment and Sustainability of Micro, Small and Medium Manufacturing Enterprises (MSMMEs) in Jigawa Central Senatorial District, Jigawa State, Nigeria

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Abstract: **The study examined the effect of economic environment on the sustainability of micro, small and medium manufacturing enterprises (MSMMEs) in Jigawa central senatorial district, Jigawa State Nigeria. Specifically, the study examined the effect of economic environment on the sustainability of MSMEs in Jigawa central senatorial district Jigawa state, Nigeria. The design was descriptive cross-sectional survey and a researcher made questionnaire was used to collect data from the 350 managers/owners who were selected using stratified, purposive and simple random sampling techniques. Mean, standard deviation and Pearson Linear Regression were used to analyze data collected. The findings revealed a significance relationship between economic environment and sustainability of MSMMEs (adjusted R^2 = 0.142, F = 55.567, p = 0.000, Beta = 0.380, and t-stat. 7.454), hence rejecting the null hypothesis. This led to the conclusion that MSME managers/owners have high potentials on economic and environmental sustainability because economic environment has a significant and positive effect on the sustainability of MSMEs. The researcher recommends that MSME managers/owners need to develop marketing strategies and intelligence systems to accumulate information about competitors and customer demand. Managers and owners need to clearly understand the economic environment by focusing keenly and responding to competitive forces in the market, take time to understand customers and to develop effective marketing intermediaries through which they can channel their products to final consumers.**

Key words: **Economic Environment, Sustainability, Micro, Small and Medium Manufacturing Enterprises.**

I. INTRODUCTION

The economic environment of business refers to overall state of the country's economy. It has significant impact on the business structure and profitability of individual firms [11]. Economic environment entails the character and direction of economic system within which the firms operate. According to [13], economic environment consist of all those economic factors which have a bearing on the functioning of a business unit. Business depends on the economic environment for all the needed inputs. The survival of business and industry largely depends on the purchasing power of the people which is dependent on economic environment. It also depends on the economic environment to sell the finished goods [17]. [13] Also opined that economic environmental factors can either aid or impede the survival and growth of an organization. Naturally, the dependence of business on the economic environment is total and it is not surprising because, as it is rightly said, business is one of the total economies [14]

[9] Explains that economic environment includes broad factors like structure and nature of the economy, the stage of development of the economy, economic resources, the level of income of the economy, economic policies, structure of the economy, and economic conditions.

[3] have classified economic environment into two; micro economic environment, which affects business decision making – such as individual actions of firms and consumers and the macroeconomic environment, which affect an entire economy and all its participants. Macro-economic factors that either directly or indirectly affect the entire economy and the small businesses include; interest rate, taxes, inflation, currency exchange rates, consumer discretionary income, saving rates, unemployment rate, recession and depression. Whereas microeconomic factors influencing a business include; marketing intermediaries, customers, competitors, suppliers and public. From the above discussions it can be posited that, micro-economic environment refers to the economic factors which affect the firms decision on how to satisfy its consumers, whereas macro-economic environment concerned about economic decision of a country on the firm.

II. LITERATURE REVIEW

There are a number of different views on what comprises SMEs and there is no standard or universal definition of SMEs [15]. This dilemma is exacerbated because small business' definition differs from country to country and between industry or sectors. While this lack of certainty creates difficulties for researchers, it is entirely appropriately given that what comprises a small business is usually determined by the context in which it exists. In other words, what is accepted as a small business in Nigeria is not necessarily regarded as a small business in other countries or settings.

Nevertheless, small businesses are usually defined using quantitative and/or qualitative factors The quantitative factors include the number of employees, annual turnover and/or the total assets of an enterprise. On the other hand, qualitative factors focus on the particular characteristics such as having a relatively small share of the market, being independently owned (and not a subsidiary of a larger enterprise) and the management of the enterprise having a close personal involvement in all aspects of decision making. Although there are some inconsistencies in understanding what comprises a micro, small and medium enterprises, the quantitative and qualitative factors briefly outlined above have been consistently applied in most contexts.

In contrast, the Department of Trade and Industry in the UK states that a business is small if it satisfies at least two of the following quantitative and qualitative factors. In terms of quantitative criteria, small firm turnover should not be more than £2.8 million, the total assets must not be more than £1.4 million and the number of employees must not exceed 50 [4]. While qualitative factors focus on specific characteristics such as a relatively small share of its market, being independent and not a subsidiary of a larger firm and that management has a close personal involvement in all aspects of decision making. In addition, a medium enterprise is defined as having total assets of not more than £5.6 million, turnover of not more than £11.2 million and the number of employees should not exceed 250.

The European Union categorizes small firms into small, medium and micro enterprises. In this context, small enterprises are defined as businesses which employ fewer than 50 workers and whose annual turnover or annual total asset does not exceed €10 million. A medium sized enterprise is defined as a business which employs fewer than 250 workers and which does not have either an annual turnover exceeding €50 million or total assets exceeding €43 million. Micro enterprises are defined as enterprises which employ fewer than 10 workers and whose annual turnover or annual total assets do not exceed €2 million [4].

The World Bank defines SMEs in quantitative terms as follows; small enterprise up to 50 employees, total assets and total sales of up to $3 million; medium enterprise up to 300 employees, total assets and total sales of up to $15 million [1]. This definition provides a general context for understanding all SMEs studies.

The Australian Bureau of Statistics [2] defines Australian small businesses as an activity trading business with 1 – 19 employees and a medium – sized business as an activity with 20 – 199 employees. Thus, the two common ways of defining an Australian small business is by annual turnover and the number of employees or a combination of the two. [15] report several definitions of SMEs based on different African countries. In Ghana, SMEs referred to firm that have six to 99 number of employees and have not more than 2.5 billion Ghana Cedi of fixed assets (excluding land and buildings). In South Africa, SMEs are defined as distinct and separate business entities, including cooperative enterprises and non-governmental organizations that are self-managed by a single owner or more which includes its branches and subsidiaries, if any. In Cameroon, SMEs are defined as firms that have turnover value of not less than 1 billion Cameroons Franc (cfr), and accrued investments are not more than 500 million (cfr), its short term credit is not more than 200 million cfr, and it has at least 5% owners of the capital and the managers are Cameroonians. While the Ghanian and Cameroonian definition emphasized the asset value the South African definition is more qualitatively defined to include, cooperatives and non-governmental enterprises.

The definition or classification of small and medium enterprises in Nigeria is in terms of capital employed, turnover and number of employees. The Central Bank of Nigeria (CBN) communiqué No. 69 of the special monetary policy committee meeting of April 15, 2010 acknowledged the existence of several definitions of SMEs. One of such definitions/classification states that an enterprise that has an asset base (excluding land) of between N5 million to N500 million and labour force of between 11 and 300 belongs to the SME sub-sector. This definition is what the Small and Medium Enterprises Credit Guarantee Scheme (SMECGS) adopted [9]. The Small and Medium Enterprises Equity Investment Scheme (SMECGS), defined small and medium enterprise as any enterprise with a maximum asset base of N1.5 billion (excluding land and working capital) with no lower or upper limit of staff [4].

The National Policy on Micro, Small and Medium Enterprises (MSEMS) adopts a classification based on dual criteria: employment and assets (excluding land and building) as follows

Table 1: Classification of MSMEs

	Size Category	Employment	Assets (N Million) (excluding land and buildings)
1	Micro enterprises	Less than 10	Less than 5
2	Small enterprises	10 – 49	5 - >5
3	Medium enterprises	50 – 199	50 - >500

Source: National Policy on MSMEs, 2016.

This study defined economic environment as micro economic factors such as marketing intermediaries, customers and competitors which are uncontrollable in nature and influence the decision of a business firm.

2.1 Marketing Intermediaries: These are the firms that help the enterprise to promote, sell and distribute its goods and services to the final buyers [12]. They include middlemen, physical distribution firms, marketing services agencies and financial intermediaries. Middlemen such as wholesalers and retailers buy merchandize and resells, physical distribution firms such as warehouses and transportation firms help the firm to stock and move goods from their point of origin to their destination. Marketing services agencies such as marketing research firms, advertising agencies and marketing consulting firms help the firm in targeting and promoting its products to the right markets. Financial intermediaries such as banks, credit companies and insurance companies help in financial transactions or insure against the risks associated with the buying and selling of goods. The business has to develop strong relationship with all these for the successful operation of its business.

According to [3] marketing intermediaries are business people and organizations who channel goods and services from producers to consumers. Marketing intermediaries simplify the transactions between the customer and the original producers. Without these intermediaries, the buying and selling process would be an expensive time-consuming experience. [3] further maintain that intermediaries are instrumental in creating three forms of utility; place utility, time utility, and possession utility. By transferring products from the producer to the customer, intermediaries ensure that goods and services are available at a convenient time and place. They also simplify the exchange process.

2.2 Customers: Customers refers to the potential sales volume for a product or service in a given period of time. In order to forecast customer demand a marketing manager should be conscious of population trends, income patterns, and buying behavior of consumers. Population is the underlying market factor for consumer demand for a product or service in a given period of time. Rather than looking at total population, however, it is more significant for a marketing manager to segment the population by age, groups, geographical location, and income. The marketing manager should also seek information about the income pattern of customers when making decision. Personal income is the most important source of consumer purchasing power. Since consumers make the final decision on the products and brands to be purchased, it is important for a marketing manager to have an understanding of buying intentions and consumer behaviour [12] According to every business enterprise must study its customer markets closely. The success of an enterprise depends upon its ability to create and sustain markets viz., consumer markets, business markets, reseller markets, government market, and international market. A consumer market consists of individuals and households. They buy goods and services for personal consumption. Business market consists of producers and organizations who buy goods and services for further processing or for use in their production process. Reseller markets buy goods and services with a view to sell at a profit. Government market consists of government agencies who buy goods and services to others who need them. International market consists of foreign buyers including consumers, producers, resellers and government.

2.3 Competitors: The success of an enterprise depends upon its ability to satisfy the needs and wants of consumers better than its competitors. Hence, the business concern should gain strategic advantage by positioning its goods strongly against the competitor's goods in the minds of consumers. When customer value firm's offering more than that of its competitors, the firm attains competitive advantage. The strategist should examine the state of competition the firm must face. The following three factors should be analyzed: entry and exit of major competitors substitute and complements for current products/services and major strategic changes by current competitors [8].

Competitive advantage is a determining factor of the firm's success, and firms need to respond to global competition [8]. [3] Defines competitive advantage as the degree to which a firm has reduced costs, exploited opportunities and neutralized threats. Competitive advantage is the capability of an organization to carry out its activities in a way or in different ways that others cannot imitate [7]. A competitive advantage exists when a firm has a product or a service that is perceived by its market customers as better than that of its competitors [5].

III. METHODOLOGY

The study employed a cross sectional survey design where data was collected at once with an aim of making generalization of findings on the larger population. A survey research is used to quantitatively describe specific aspects of a given population. It is also well suited to gathering data that describe the composition of the sample [10]. Surveys are inclusive if the types and number of variables that can be studied, require minimal investment to develop and administer, and are relatively easy for making generalization (Bell, 1996). The population of the study was 2800 manufacturing MSMEs in the seven (7) local government areas that constitute Jigawa central senatorial district [11]. A sample was statistically determined using sloven's formula to 350. The study focussed on managers/owners of MSMEs in manufacturing sector only who provided responses to the questions.

IV. DATA MANAGEMENT

The data collected were processed by coding all data questionnaires, entering them into the computer using the Statistical Package for Social Sciences (SPSS), summarizing them using frequency tables and editing them to remove errors. To establish validity, face validity, content validity index (CVI) and constructs validity were conducted in the study. The supervisors checked the questionnaire and the interview guide as face validity. Content validity was conducted in the study where the researcher seeks expert opinion on the relevance, wording and clarity of the items in the instrument developed before data was collected, in line to that 7 experts checked the instrument. For constructs validity, Kaiser-Meyer-Olkin (KMO) Test was used and the results for economic environment (IV) revealed 0.754 and it was interpreted as middling, while for sustainability of MSMMEs (DV) the KMO value was 0.725 and interpreted as middling also [5]. To establish reliability Cronbach's alpha was used and the result shows 0.849 for economic environment (IV) and interpreted as good while for sustainability it was 0.800 also interpreted as good. The data analysis involved descriptive, correlation and regression analyses. The descriptive analysis involved percentages from the frequency tables, mean and the standard deviation. In correlation, the dependent variable (DV) sustainability was correlated with the (IV) economic environment and using regression as well the DV was regressed with the IV using multiple regression analysis.

V. FINDINGS

Table 2: Mean and standard deviation on how respndents rated the effect of economic environment on the sustainability of MSMEs in Jigawa State, Nigeria

Variables	Mean	Standard deviation	Interpretation
Market intermediaries	3.8873	.64678	Effective
Customers	3.7843	.74671	Effective
Competitors	3.2633	.70611	Moderate
Overall average	**3.5663**	**.69987**	**Effective**
Sustainability	3.6568	.54704	Effective

Table 2: shows the result of descriptive statistics of the effect of economic environment on sustainability of MSMEs in Jigawa central senatorial district of Jigawa state, Nigeria. The result revealed that the managers of MSMEs rated the influence of economic environment as effective determinant of the sustainability of MSMEs, this is indicated by a mean of 3.566 and a standard deviation of .670. The three elements that measure economic environment, marketing intermediaries is more effective in explaining the sustainability of MSMEs. This is indicated by a mean of 3.887 and standard deviation of .647. this suggest that market intermediaries provides avenue for reaching the target market at the right time and right place and thus simplify the transaction between the consumer and the producer of goods and services. The result also revealed that marketing intermediaries are effective in identifying new customers and their preferences. This would help to sustain the existence of a business enterprise. The result shows that advertising agencies and direct selling have a moderate effect on growth of business firm with a mean of 2.909 and 2.659 respectively.

The results in table 2: also indicate that the customers of an enterprise were effective in measuring the sustainability of MSMEs. This is indicated by the mean score of 3.784 and standard deviation of 0.747, of the elements that measure this construct business strategies to identify customer's needs and want are more effective in explaining the sustainability of MSMEs. The result also revealed that customer's demand is determined by the social class and disposable income of the customers. Hence for a firm to create and maintain its growth potentials it need to identify the income and social class of its customers. However, the result indicate that customers credit purchase and business customers are effective in determining the sustainability of MSMEs in Jigawa central senatorial zone.

Lastly, the result in table 2 revealed that competitors have moderate effect on the sustainability of MSMEs. The mean rating of 3.566 and standard deviation of 0.670 which is interpreted as moderate in the response rating suggest that managers of MSMEs have moderate resources and knowledge to satisfy its customers better than its competitors.

5.1 Test for Hypothesis

The study assumed the null hypothesis on no significant effect between economic environment and sustainability of MSMEs. This was tested by running a linear regression model. The results suggest that there is significant effect between economic environment and sustainability of MSMEs, thus rejecting the null hypothesis. The results are indicated in table 3.

Table 3: Regression Analysis for Economic Environment and Sustainability

Variable	Adjusted R Square	F	Sig.	Interpretation	Decision rule	Durbin Watson
Economic environment and sustainability	.142	55.567	.000	Significant	Reject	1.857
Coefficient	Beta	t				
Constant	2.697	20.475				
Economic environment	.380	7.454	.000	Significant	Reject	

R = .380, $R^{2 =}$ 1.44, standard error = 0.05068

Table 3: presents the results of the regression analysis estimates of the effect of economic environment on MSME sustainability in Jigawa central senatorial district in Jigawa state, Nigeria. The results indicate that economic environment has significant and positive effects on sustainability of MSMEs in Jigawa state, Nigeria at the 5% significance level. This is clear from the significance of the F statistics = 55.567 greater than theoretical value (1.96) and t-statistics p–value = 0.000 which is less than the study significance level (0.05). The results indicate that the null hypothesis earlier formulated which shows there is no significant effect between economic environment and sustainability of MSMEs is rejected. Also it was found that the adjusted R^2 value is 0.142, indicate that 14% of the total variation in MSMEs sustainability in Jigawa central senatorial district is explained by changes in the economic environment.

In addition the Durbin Watson statistics computed to investigate whether autocorrelation exist in the error term of the regression of economic environment on sustainability, shows absence of autocorrelation. This is glaring as the Durbin Watson coefficient (1.86) approximates to two (2). Hence the linear regression is adequate to explain the effect of economic environment on MSME sustainability in Jigawa central senatorial district of Jigawa state, Nigeria.

The outcome of test of hypothesis confirm to the fact that economic environment is a predictor of MSMEs sustainability and the linear regression analysis yielded the following model;

MSMEs sustainability $\beta_{0\ +\ \beta 1\ \mathrm{EE},\ \beta 0\ +\ \beta 0}$ where $\beta_{0\ =}$ constant and EE independent variable (economic environment) and EE = 0.380, $\beta_{0\ =}$ 2.697 + 0.380 (economic environment).

The result in table 3 implied that considering other factors constant, one unit increase in one's economic environment is likely to increase MSME sustainability by 0.380. To determine the model fit for the regression analysis, Durbin Watson statistics value was used in table 3

VI. CONCLUSION

The study examined the effect of micro economic environment on the sustainability of micro, small and medium enterprises. The findings of the study revealed that micro economic factors; marketing intermediaries, customers and competitors have significant effect on the success and survival of MSMEs. From the results of the study it is concluded that marketing intermediaries have a strong influence on sustainability of MSMEs because they contribute in pooling clients to the business and creating awareness of company products. Survival of businesses is therefore partly influenced by effective marketing intermediaries. Customers are a sense of being for any business, when customers perceive the quality of the product as good, they continue buying such a product, which eventually see the business having survival. Competitors cause competition in the market and this leads to improvement in the quality of products and efficiency in the utilization of resources. Because of this, it is prudent to further conclude that competitors influence the survival of MSMEs. Therefore, the micro economic factors considered in this study significantly affect survival of MSMEs in Jagawa state, Nigeria.

VII. RECOMMENDATION

To achieve a sustainable development of business MSMEs managers/owners need to embrace the services of marketing intermediaries and to develop marketing strategies and intelligence systems to accumulate information about competitors and customer demand. Knowledge about how to satisfy the needs and wants of customers better than competitors gives a firm a competitive advantage. To catch up with changing nature of customer demand and competition managers/owners should ensure production of quantity and quality products, be more proactively innovative and current with changing nature of the external business environment.

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