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THE CONTRIBUTION OF SMALL AND MEDIUM SCALE ENTERPRISES IN EMPLOYMENT GENERATION: A STUDY OF JOS NORTH LGA, PLATEAU STATE

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Abstract

Small and medium scale enterprises have been globally recognized as a major contributor to employment generation. The study investigated the role of Small and Medium Scale Enterprises (SMEs) in employment generation in Nigeria using Jos North LGA of Plateau State as the case study. Data was analyzed using tables, simple percentages and charts while the hypothesis was tested at 5% level of significant using a Generalized Linear Model (GLM). The result revealed that, invested amount at present, number of employees at business inception, number of employees not on payroll, and wage rate were statistically significant in employment generation as they fall below the 5% level of significance with 24.25%, 59.43%, 8.47% and 29.40% as the coefficients, whereas age of the business and start-up capital were statistically insignificant in employment generation with p-value above 0.05 with the coefficient value of -5.10% and 4.99%. The study concludes that Nigeria has enormous potentials for SMEs to grow. However, it was constrained by finance, electricity, water and roads which when not addressed will continue to affect the sector. The study therefore recommends that, loans should be made available to SMEs by the government, individuals and financial institutions at a lower interest rate (single digit) and the business should serve as collateral. Similarly, more programs and policies geared towards training the youths on skill acquisition, agriculture and manufacturing should be intensified by civil society, private individuals and the government to help them expand their businesses thereby creates more job opportunities for the unemployed youth.

Keywords: Employment, Employment Generation, SMEs, Performance, Generalized Linear Model,

JEL Classifications: JO1, L26, M2

1. Introduction

Nigeria, just like any other country is faced with the problem of unemployment as a result of rapid expansion in the educational system, increases in population and expanding admission of students/candidates into tertiary institutions over the years. The unemployment situation is worse among this segment of our population as a result of the fact that, tertiary institutions graduate more young people annually with poor skills, the new flow of entrants rather worse off the situation. Unemployment has

become a serious challenge for every successive government that has ruled the nation since the 1990s with every one of them embarking on policies they believed could reduce graduate unemployment substantially, but with little result to show for it. Unemployment in the past three decades has continued to be a “thorn in the flesh” in the Nigerian economy; this is because of the slowly changing structure and poorly performing nature of the economy, skills deficit and narrow employment opportunities (small sized labor market) as well as lack of competitiveness among

the youths hence, increase over dependency on government for job. Globally, it is estimated that 1.3 trillion people worldwide subsist on less than a dollar per day and one of the factors that led to the sudden rise in poverty and joblessness among people is lack of entrepreneurial skills which can really create a sense of self sufficiency. Graduate unemployment in terms of total unemployment rate rose in Nigeria from 1% in 1984 to 4% in 1994 and in 1997 accounted for 32% of the unemployed in the country's labour force. Conservatively put, graduate unemployment rate in Nigeria is about 60% of labor supply in the labor market. Publication by the National Bureau of Statistics (2016) show that, a total of 52 million citizens within the economically active population of Nigeria are jobless and the figure consisted mostly of graduates. In conformity with the above, Afolabi, Yusuf and Idowu (2014) argued that graduate unemployment is one of the worse problem facing Nigeria in recent time.

The potential of SMEs in job creation was seen in Mauritius in the early 1980s, when economic recession led to high unemployment rate, it was observed that SMEs could create jobs for 10.0 percent of the cost of jobs creation by larger enterprises. As a result, a package of policies targeted at large enterprises was adapted to the needs of SMEs where the Government of Mauritius spearheaded an initiative, which was supported by a wide range of institutions, credit was made available at preferential interest rates, advice was provided to SMEs, and import tariffs were waived for machinery and parts. The encouragement of SMEs reduced unemployment from 21.0 percent in 1983 to 1.6 percent in 1996. During the same period it was also observed that between the periods 1992-1996, large enterprises generated only 7000 jobs, while SMEs generated nine times in the Philippines, the SMEs comprise 99.0 percent of the total manufacturing establishments, contribute 54.9 percent in employment generation and 28.1 percent of value-added production. There is a plethora of support programs and services that addresses the compelling concerns of Philippines SMEs; these are offered by both government agencies and the private sector, including non-governmental

organizations and community volunteer groups. There was also increasing involvement of local government units in SME assistance and development. Furthermore, government financing and international lending institutions devoted more of their lending portfolios to micro, cottage, small and medium enterprise. In Pakistan, Small and Medium Enterprises constituted 90.0 percent of business in the country and accounts for 80.0 percent of total employment and contributes 30.0 percent to GDP (Zafar & Mustafa, 2017). These SMEs which are primarily in the information sector rely on traditional technology and are linked to the large scale industries and generate 25.0 percent of the export earnings of the country. Banks shy away from financing SMEs because of lack of reliable information on borrowers, difficulties in enforcing contracts; and inadequate instruments for managing risks (CBN Bullion, 2003). In china, Chinese and foreign experts estimated that SMEs are now responsible for about 60% of China's industrial output and employ about 75% of the workforce in China's cities and town. These SME creates jobs for workers who have been laid off from state-owned enterprises due to the steady transition from communism to a market based economy.

In Nigeria, according to the NBS/SMEDAN survey 2017, there are 41,543,028 Micro, Small and Medium Enterprises (MSMEs) in Nigeria. Out of this number, Small Enterprises accounted for 71,288 entities representing 0.17 percent while Medium Enterprises were 1,793 entities representing 0.004 percent. Consequently, SMEs made up 73,081 entities (or 0.18 percent) of total MSMEs numbers. These figures were similar to the 72,838 SMEs (or 0.20 percent) reported in 2013. However, the 73,081 SMEs generated total employment of 2,889,714 persons (including owners, as at Dec. 2017), this translated to an average of 39.5 persons per entity. The government is relentless and efforts has been intensified within the last Twelve years to boost this sector of the national economy, starting from the creation of an Agency solely responsible for the promotion and development of this sector, notable among which are

Small and Medium Scale Enterprise Development Agency of Nigeria (SMEDAN), implementation of the National Enterprise Development Program (NEDEP), creation of the Micro Small and Medium Enterprise (MSME) at the national and state level, Youth with Initiative in Nigeria (YOU-WIN)s, the revised National MSME Policy and other funding access of the central bank of Nigeria and other development banks. Government also believes that unlocking the key potential of this sector also involves additional support in Agriculture and the provision of regular and affordable power supply. Several efforts are underway in boosting the generation and distribution of electricity nationwide. Credit facilities, extension services in new farming techniques, value chain addition, and enhancement in the supply of fertilizer are being pursued in the Agricultural sector (Mohammed, 2017). Despite government effort to ensure that SMEs perform effectively, graduate unemployment remains unabated in Nigeria. In light of the above, it has become pertinent to examine whether SMEs even have the potential of reducing unemployment in Nigeria.

The rest of this paper is structured as follows. Section 2 reviews theories and literatures relevant to the study. Section 3 presents an overview of SMEs and employment generations in the country while Section 4 describes the methodology of the study. The data analysis and results are presented, interpreted and discussed in light of existing studies. Section 6 concludes and presented the policy implications of the study.

2. Literature Review

2.1 Theoretical Framework

Theory of Economic Development-Based on SMEs

The theory of economic development place of small business argue that, government has begun to initiate new policies and support for SME growth and development that later turn them into large enterprises following the agitation and need for SMEs involvement in an economy. Schumpeter (1942) instigated this theoretical viewpoint which states that,

larger businesses are likely to be more productive. Monopolies (which result in larger businesses) tend to have more resources at their disposal for investing in activities such as research and development (R&D), which in turn give rise to innovations and reduce market uncertainties. All things being equal, this perspective indicates that public policies which strive to support and build big businesses would spur innovation and productivity. Conversely, the alternative theoretical perspective of Arrow (1962) contends that, smaller businesses are more productive. The author argued that, in the presence of competition (such as when a number of smaller firms are competing with each other), the monopolist tends to lose out in innovating, since the rents extracted by maintaining the monopoly power exceeds the benefits of the lower prices brought about by innovation. However, smaller firms will be able to benefit by innovating under these conditions because, the lower prices and costs resulting from innovation leads to competitive advantages in the marketplace.

The theory is seen in two different perspectives. Firstly, that large business is more productive than small businesses and this is attributed to government programs and policies which aid its expansion through innovation. The second aspect believed that small business is more productive than the larger ones due to intensive competition which affects their Research and Development (R & D). However, public policies put in place to strive, support and build SMEs business would spur innovation and productivity.

In the light of the above, the study adopts the theory of economic development place of SMEs and Network Approach as its theoretical underpinning. The justification for the choice of the theory of development place of SMEs is that, programs and policies put in place by the government in other to enhance economic development are mostly skewed positively towards SMEs. As government intensified effort towards economic development, macro- economic goals of unemployment, poverty and price stabilization among others must be adhered to. This further provides an enabling environment for SMEs to thrive. Network

Approach is also relevant because an improvement in technology most especially in the information and communication sector will bridge the gap between the suppliers/producers, distributors, public/customers and other market actors. Furthermore, technological advancement has the potential to boost SMEs output, minimize production cost and save time.

2.2 Empirical Review

Ramsuraj (2023) examines the role and contribution of entrepreneurship industry on social and economic development through small, micro, and medium-sized businesses in South Africa. The objective of the study is to evaluate how small, medium-sized businesses (SMMs) drives economic growth by solving social issues in an area where big businesses and governments appear to be doing very little. Similarly, the study also focuses on how SMMs might help the nation to overcome persistent societal evils including poverty, inequality, and social isolation. Data was collected using desktop literature review research design on the role of entrepreneurship in South Africa, policies and practices of big business and government that exacerbate social issues in communities and impede socioeconomic development, as well as the specific roles that SMMs played in achieving socioeconomic development goals. Findings reveal that, among other development outcomes, SMMs are the vanguard of creating jobs and fostering social and political justice in the nation.

Aderemi, Opele and Okoh (2023) examined the relationship between small and medium scale enterprises and employment in Nigeria using annual data from 1991 to 2019. Data was sourced from ILO, WDI and CBN databases which were subjected to various econometric techniques. The study reveals that, commercial bank loan to SMEs stimulate significantly employment generation in Nigeria. SMEs jobs had a significant positive contribution to employment creation in the country.

Olaore, Adejare and Udofia (2021) assess the role of small and medium scale enterprises as a catalyst to all

things goods in great economies. The study focuses on SMEs and entrepreneurial development, employment generation, government policies and financial aids availability in South-Western Nigeria. The study utilizes survey design using questionnaire for data collection while percentile, Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM) was used for data analysis. The study established that a direct and statistically significant relationship exist between entrepreneurship and infrastructural development, government policies as well as employment generation. However, an insignificant relationship was found out between government policy and financial aid and accessibility.

Al-Haddad, Sial, Ali, Alam, Khuong and Khanh (2019) this study investigate the contribution of SMEs on employment generation and its impact on economic growth of Pakistan. The study employed primary data (Questionnaires) where a total number of 255 employees were selected randomly from Swat marble industries. The responses were collected and analyzed using the Statistical Package for Social Sciences (SPSS) analytical tool. The study reveals that SMEs play a vital role in employment generation. Similarly, positive relationships exist between SMEs and unemployment reduction. The result also shows that a positive relationship exist between SMEs and an increase in income level. The study was found beneficial to both SMEs practitioners and academicians.

Conversely, Michael and Chukwu (2018) investigated the role of Small and Medium Scale Enterprises in industrial growth of Nigeria. Findings of the study revealed that SMEs production has statistical significant relationship with industrial growth in Nigeria. The study implied that SMEs are capable of accelerating industrial growth through their contributions to the economy.

Shettima (2017) assessed the impact of SMEs on employment generation in Nigeria. The study did an extensive literature review where a wide scope is examined about SMEs and unemployment in Nigeria.

The study revealed that most of the constraints hindering SME business growth in Nigeria are lack of financial support, poor management, corruption, insecurity etc. Hence, the author concluded that government should as a matter of urgency take proactive measures in addressing some of the key constraints faced by the sector such as access to finance, weak infrastructure, inconsistency of government policies, business development services, access to market, multiple taxation and obsolete technology.

Abeh (2017) examined Small and Medium Scale Enterprises (SMEs) as a strategy for employment generation in Nigeria using selected manufacturing companies in Delta State, Nigeria. The study revealed significant relationship between SMEs product branding and marketing, finance, policies and problems, and employment generation in Nigeria.

Gbam (2017) examined the impact of SMEs on employment generation in Plateau State, Nigeria. The study revealed that SMEs had significant impact on employment generation in Plateau State through increased expansion of markets for local goods and services, improved economic growth and development, and a reduction in the unemployment problems of the state. The author concluded that SMEs remains one of the most viable tools for job creation in Plateau State. Similarly, Akanbi, Akin and Sodiq (2016) analyzed the link between Small and Medium Scale Enterprises (SMEs) Financing and Economic Growth with special interest on the way forward for Nigeria. The results suggested that there is an insignificant direct relationship between SMEs financing and Economic growth in Nigeria which can be attributed to policy inconsistencies in SMEs financing.

Ojo and Femi (2016) in Ondo State, Nigeria examined the impact of Small and Medium Scale Enterprises on Jobs Creation using simple percentage and chi-square (X^2). The results showed that promotion of SMEs leads to improvement in employment generation which

consequently enhance the sustainable development drive of the Nigerian economy.

Oyelana and Adu (2015) examined the role of Small and Medium Scale Enterprises (SMEs) in creating employment and poverty reduction in Fort Beaufort in the Eastern Cape Province of South Africa. The findings revealed, among others, that SMEs played a major role in creating employment and reducing poverty. It also revealed that lack of finance and lack of managerial skills as well as training faced in the operations of SMEs are constraints and challenges of most SMEs in African countries.

Anigbogu, Onwuteaka, Edoko and Okoli (2014) examined the Roles of Small and Medium Scale Enterprises in Community Development with evidences from Anambra South Senatorial Zone, Anambra state. Findings from the study revealed that SMEs play some roles in community development: Generation of employment, Service provision, Improve living standards and poverty alleviation.

Agwu and Emeti (2014) examined the issues, challenges and prospects of Small and Medium Scale Enterprises (SMEs) in Port-Harcourt City, Nigeria. The study adopted a descriptive research design using 120 randomly selected registered operators of SMEs in Port-Harcourt City. Data collected were analyzed using descriptive statistics. The study found that poor financing, inadequate social infrastructures, lack of managerial skills and multiple taxation were major challenges confronting SMEs in Port-Harcourt City. In a similar study that examined the determinants factors influencing the capacity of small and medium scale enterprises (SMEs) in employment creation in Lagos Nigeria, Kayode, Alfred and Illesanmi (2014) used a sample of 180 SMEs and the statistical findings revealed that majority (75%) of surveyed SMEs operating in the study area were micro-enterprises employing less than 10 workers while only (19%) and (6%) of the respondents engaged in small scale and medium scale enterprises employing between 10 and 50 workers respectively. The results also showed that there

was substantial increase (133%) in number of SMEs owners that have grown in terms of employment generation from micro-enterprises to small scale and medium firms over the span of five years. The authors suggested that business registration, business size, nature of business and sources of capital were the major factors determining both income and employment generation potentials of SMEs. The study implied that age of business, education, and sources of raw materials were only significant in influencing the capacity of SME to generate employment. In the same year, Johnmark, Zumbung and Yonla (2014) examined the entrepreneurial innovativeness in Small and Medium Scale Enterprises with lessons from selected 120 SMEs in Mangu LGA of Plateau State-Nigeria. Linear Regression model was employed to test the relationship between innovation and employment and the result showed that entrepreneurs in Plateau State have not operated innovative entrepreneurship that could enhance employment generation.

Ogbuabor, Malaolu and Elias (2013) empirically examined Small Scale Enterprises, Poverty Alleviation and Job Creation in Nigeria with lessons from Burnt Bricklayers in Benue State. The study used survey method whereas descriptive statistical tools such as tables, charts and simple percentages, as well as logistic regression were used to present and analyze the data. The results indicated that burnt bricklaying has significant positive impact on poverty alleviation, job creation, and income generation in Nigeria.

Onuoha (2013) X-rayed the role of Small and Medium Scale Enterprises (SMEs) in poverty reduction in Nigeria using simple linear regression model. The authors also found that SMEs' income captured by their contributions to GDP, are statistically significant in explaining the level of employment and poverty reduction. Also, funding of SMEs and the level of government participation are not significant to the growth of SMEs measured by their level of income (SGDP). The study suggested that government should provide mechanism for SMEs to have access to loans with long payback period; and that interest rate should

be reduced to a single digit to encourage entrepreneurs' innovativeness which helps SMEs to develop capacity.

Kadiri (2012) examined the contribution of Small and Medium Scale Enterprises to Employment Generation in Nigeria with special attention on the role of finance. The study used survey method for data collection and Binomial Logistic Regression Analysis was employed as tools for statistical analysis. The study observed that SMEs was unable to achieve the goal of employment generation due to its inability to obtain adequate business finance. It was also observed that virtually all the SMEs that were sampled relied on the informal sources of finance to start their business. A number of studies reviewed used the analytical tools of ANOVA, OLS, Chi-square, Simple regression and Descriptive statistics. This study adopted a different methodology: the Generalized Linear Model (GLM) to investigate the role of SMEs on employment generation in Nigeria.

3. Methodology

This study used the survey research design. The target population for this study includes SMEs owners and employees operating within Jos North Local Government Area irrespective of how long they have been in existence or their mode of operation as long as they fall into the category of SMEs as defined by SMEDAN. For determining representative sample size for simple random sampling technique, Smith (1983) suggested a simplified formula for sample size determination for a continuous variable or data. This is synonymous to the unknown SMEs population in Jos North LGA due to the fact that, Jos North population has been on the rise thereby making it difficult to determine the exact number of people within the study area who are into SME business hence, the adoption of continuous population data. The formula is presented as:

$$n_0 = \frac{Z^2 P (1-P)}{e^2}$$

Where; e^2

n_0 = Sample size of the population

Z^2 = is the abscissa of the normal curve that cuts off an area α at the tails, equal the desired confidence level at 95%

e = is the desired level of precession (0.05) 5%

P = is the estimated proportion of an attribute that is present in the population. The assumption of this study held that, 11.2% (0.112) of SMEs population in Jos North was captured.

The value of Z is found in statistical table which contains the area under the normal curve, where Z is 1.96% for 95% confidence level.

$$n_0 = \frac{1.96^2 (0.112) (0.888)}{0.05^2}$$

$$n_0 = \frac{3.8416 (0.0995)}{0.0025}$$

$$n_0 = \frac{0.3833}{0.0025}$$

$$n_0 = 152.896$$

$$n_0 = 153$$

The data generated for this study were sourced basically from primary sources of information. The data were obtained from the sampled population of the study who were SMEs owners and employees through structured questionnaires that were administered. The structured questionnaire was designed in a clear, precise and understandable manner in order to obtain factual information from the respondents. Research assistants were engaged under the supervision of the researchers in order to effectively administer these questionnaires to the sampled group.

The study employed the use of Generalized Linear Model (GLM) as its quantitative analysis technique. GLM does not assume a linear relationship between the dependent variable and the independent variables, but it assumes linear relationship between the transformed response in terms of the link function and the explanatory variables.

The non-linear specification of the study model is presented in equation (1):

$$EMP_i = \exp (\beta_0 + \beta_1 NEI_i + \beta_2 WAG_i + \beta_3 NEnP_i + \beta_4 SUC_i + \beta_5 IAP_i + \beta_6 AOB_i) + \varepsilon_i \quad (1)$$

Where:

EMP = number of jobs created through SMEs business

NEI = number of employees at inception

WAG = monthly wages paid to employees

NWnP = number of SME workers not on payroll

SUC = start- up capital

IAP = invested amount at present

AOB = age of the business

β_0 is the intercept, β_i $i = 1, 2, \dots, 6$ are the parameters/coefficients to be estimated and ε is the error term.

A Priori Expectation

The coefficients β_1 , β_4 , β_5 and β_6 are expected to be positive while the coefficients β_2 and β_3 are expected to be negative.

Decision Rule: Reject the null hypothesis if the probability value of the Wald Chi-square is less than 0.05 (5%) level of significance.

4. Result and Discussions

This section focused on the presentation, analysis and discussion of data collected from the field survey. A total of one hundred and fifty three copies of the questionnaires were administered while 146 questionnaires were retrieved from the respondents.

4.1 Demographic Information of Respondents

This section contains demographic/personal information of respondents who are into Small and Medium Scale Enterprises in Jos North LGA of Plateau State. Table 1 contains the distribution of these SMEs operators in terms of gender, age, religion, marital status and educational level. The table shows that the response rate of SME operators in terms of gender constituted 50% each. This shows that the ratio of male and female SMEs' owners are the same. Distribution of respondents in terms of age shows that majority of SME operators in the study area are within the age of 21-30yrs followed by those operators who fall within 31-40yrs, and the least SME operators are those within 51yrs and above. This implies that the sector is dominated by youths who engage in SME business. Youths involvement in SME business can help reduce youth restiveness among other vices for an idle mind is a devil workshop. Distribution based on religion revealed that Christianity accounted for 69.2%, traditional had 11% while Islam had 19.9% respondents. On the outcome of respondents on marital

status, majority of the respondents who are into SME business in the study area are singles. This result further attest to the fact that, being single does not prevent someone from venturing into business nor does it mean that one does not have needs, though less, compared to the married category. The study also take into account the educational level of the respondents, the study

shows that majority of the SME operators in the study area are Secondary school holders while HND/First Degree holders constitute the second majority. This implies that qualification is not a major determinant factor in SME business; this is also seen among respondents who had no formal education.

Table 1: Demographic and Personal Information of Respondents

Items	Frequency	Percentage %
Gender		
Male	73	50
Female	73	50
Age		
Below 20	10	6.8
21 – 30	65	44.5
31 – 40	46	31.5
41 – 50	22	15.1
51 and above	3	2.1
Religion		
Christianity	101	69.2
Traditional	16	11
Islam	29	19.9
Marital status		
Single	70	47.9
Married	57	39
Divorced	11	7.5
Widowed	6	4.1
Separated	2	1.4
Educational level		
No formal	14	9.6
Primary	11	7.5
Secondary	43	29.5
ND/NCE	35	24
HND/First Degree	38	26
M.Sc./others	5	3.4

Source: Field survey, 2020

The survey also examined business information of respondents who are (SME) operators presented in Table 2. Business ownership structure as shown in Table 2 revealed that majority of SME operators in Jos North LGA of Plateau State are into sole proprietorship as depicted by 80.1% of the respondents. This shows that, most of the businesses are owned, manage and control by an individual or one man. Distribution based on the kind/type of business of respondents showed that, 19.2%

of the respondents are into manufacturing, 45.9% respondents are into services, 22.6% are into agriculture whereas I C T and others had 6.8% and 5.5% respectively. The result shows that SMEs are dominated by services provision, followed by agriculture and manufacturing with others constituting the minority. The table also revealed that majority of the respondents who are into SMEs business in Jos North LGA fall within 1-4yrs of operation whereas the second majority is made

up of those from 5-10yrs. Also, the table revealed that majority of the sampled businesses does not belong to any SMEs association/group. The result further revealed

that most of the SME operators were schooling before joining SMEs business.

Table 2: Business Information of Respondents

Questions	Frequency	Percentage%
What is the ownership structure of your business?		
Sole proprietorship	117	80.1
Partnership	25	17.1
Limited liability	3	2.1
Others	1	0.7
What kind of business do you engage in?		
Manufacturing	28	19.2
Services	67	45.9
Agriculture	33	22.6
I C T	10	6.8
Others	8	5.5
How long has your business been in operation?		
1 – 4 yrs.	83	56.8
5 – 10yrs.	35	24
11 – 15yrs.	20	13.7
More than 15yrs.	8	5.5
Do you belong to any association of SME business?		
Yes	32	21.9
No	114	78.1
What were you doing before you joined SME business?		
Schooling	58	39.7
Farming	16	11
Trading	21	14.4
Manual job	35	24
Paid employment	16	11

Source: Field survey, 2020

4.2 Small and Medium Scale Enterprises (SMEs) and Employment generation

This section analyzed the data on SMEs and employment generation.

H₀₁: Small and Medium Scale Enterprises (SMEs) have not significantly impacted on employment generation in Jos North LGA of Plateau State.

H₁₁: Small and Medium Scale Enterprises (SMEs) have significantly impacted on employment generation in Jos North LGA of Plateau State.

Table 3 shows the distribution of SMEs employment in two periods. The result contains response rate on the number of employees at the inception of SME business

and the number of employees at present in the business. The table revealed that 64.4% of the respondents opined that they had no employee(s) at the inception of the business, 28.1% respondents had less than 10 workers, and 6.8% respondents had less than 100 workers whereas 0.7% respondent had less than 300 workers at the business inception. It is clearly established that 92.5% of the SMEs started as Micro enterprises. None constituted the majority which shows that most of the business owners had no employees at business inception. This means that business owners were responsible for managing and regulating the business themselves. Furthermore, the number of employees as at present in SME business compared to the number of employees at

inception reveals that 24% respondents had no employees except the operators; this shows a great decrease of 40.4% meaning that more enterprises were able to employ more persons rather than operating by themselves due to expansion. Those with less than 10 employees (Micro Scale) accounted for 54.1% depicting

an increase of 40% in the number of employees as at present compared to the number of employees as at business inception, Small and Medium Scale Enterprises (SMEs) had 21.1% respondents denoting an increase of 13.3% as at business inception.

Table 3: Number of employees of SMEs at Business Inception and at Present Time

Number of employees	At inception		At present	
	Frequency	Percentage%	Frequency	Percentage%
None	94	64.4	35	24
< 10	41	28.1	79	54.1
< 100	10	6.8	26	17.8
< 300	1	0.7	6	4.1
Total	146	100	146	100

Source: Field survey, 2020

The research survey also tried to find out the remuneration/wage rate SME operators paid their employees. The outcome which is summarized in Table 4 revealed that 51.4% respondents paid less than N10, 000 to their employees, 17.1% respondents paid less than N20, 000, 4.8% paid less than N50, 000 while

26.7% respondents do not pay their employees in cash but rather in kind in form of an exchange labour. This is mostly among those in agric-SMEs. From the result, it can be deduced that, majority of the SMEs in Jos North LGA paid less than N10, 000 to their employees.

Table 4: Employees' Remuneration

Amount ₦	Frequency	Percentage %
< 10, 000	75	51.4
< 20, 000	25	17.1
< 50, 000	7	4.8
None	39	26.7
Total	146	100

Source: Field survey, 2020

From the survey, it was discovered that some of the respondents who are into SME business are not on the employer's payroll while others are. Table 5 summarized these result which shows that 56.2% respondents paid less than 10 workers, 15.8% respondents had less than 100 workers on their payroll, those with less than 300 workers accounted for 2.1% whereas those who do not have (none) had 26% respondents. Similarly, on the number of workers who are not on payroll, 31.5% and 4.1% respondents opined

that, they had less than 10 and 100 workers not on their payroll, those with less than 300 accounted for 1.4% while those who do not have (none) had 63% respondent. It is evident that, those without workers on their payroll constituted the majority (63%). The research observed that those respondents who are not on the employee's payroll are categorized into two: members of a cooperative society and those who received farm produce in exchange of cash.

Table 5: Number of SME Workers on Pay Roll and Those Who Are Not On Payroll

Income level In naira ₦	Workers on payroll		Workers not on payroll	
	Frequency	Percentage	Frequency	Percentage
None	82	56.2	46	31.5
< 10	23	15.8	62	4.1
< 100	3	2.1	2	1.4
< 300	38	26	92	63
Total	146	100	146	100

Source: Field survey, 2020

Table 6 shows the initial or start-up capital of the respondents and the amount of money invested at present. The table revealed that 88.4% respondents started their business with less than N1.5 million, 8.9% started with less than N50 million while 2.7% respondents started with less than N200 million. However, at the time of this survey, the number of SME

operators with capital below N1.5 million decreases to 69.2% depicting decrease in the invested amount into the business, likewise those with invested amount below N50 million and N200 million had 29.7% and 4.1% respondents. The set of SMEs operators were able to expand their business as the number of businesses increased substantially.

Table 6: Capital Invested in SME Business at Business Inception and Present

Income level ₦	At inception		At Present	
	Frequency	Percentage	Frequency	Frequency
< ₦ 1.5 million	129	88.4	101	69.2
< ₦ 50 million	13	8.9	39	26.7
< ₦ 200 million	4	2.7	6	4.1
Total	146	100	146	100

Source: Field survey, 2020

Distribution on the basis of sources of initial capital of the respondents is seen in Table 7 which shows that 87.7% respondents started their business with their personal savings, 7.5% started with informal funds, 3.4% of the respondents started with a loan from the bank, while 1.4% started with ploughed back profit. This confirms the fact that funding for most SMEs is mainly from individual resources, with a little help from informal source and bank loans. The study revealed that, 87.7% is purely owners' equity that is, the entrepreneur relied mainly on their personally

generated funds to finance their businesses. The implication of this is that their growth and expansion is limited in size. Survey on the company/organizations annual sales/turnover at the time of this study as revealed in Table 7 shows that 80.1% respondents had less than ₦5 million as their annual turnover, SME operators whose net worth is between ₦5 & ₦10 million are 15.8% of the respondents while those with annual turnover of ₦11 & ₦40 million as well as ₦40 million and above are 3% of the respondents each.

Table 7: Source of Business Fund and Organizations Sales/Turnover

Questions	Frequency	Percentage %
What was the source of your start- up capital?		
Informal loan	11	7.5
Personal funds	128	87.7
Ploughed back profit	2	1.4
Bank loan	5	3.4
What is your organizations annual turnover/sales?		
< ₦5 million	117	80.1
Between ₦5 & ₦10 million	23	15.8
Between ₦11 & ₦40 million	3	2.1
₦40 million & above	3	2.1

Source: Field survey, 2020

The research strived to determine whether SME operators have access to loan/financial aids and Table 8 summarized the findings. It shows that 43.2% respondents had access to loan facility while 56.8% respondents had no access to loan facility. Similarly, 4.8% respondents obtained their loan from the commercial bank, 13.7% obtained theirs from micro finance bank, 5.5% from friends, 17.8% from their family, 6.2% from Esusu while those who could not access loan facility from either of the above accounted for 52.1%. The distribution of beneficiaries from government financial aid among SMEs revealed that 11.6% respondents benefit from government financial

aids whereas 88.4% respondents did not benefit from government financial aids. On the basis of whether loan/financial aid has helped expand SME business, 26.7% respondents believed they have expanded their business through the loan/aids while majority of the respondents constituting about 73.3% could not expand their business. In an attempt to investigate whether inadequate finance is the major constraint of SMEs, 94.5% respondents who constituted the majority agreed that finance is the major constraint of SMEs which conforms with the work of Akanbi, Akin and Sodiq (2016). However, 5.5% respondents opined that finance is not the major constraint of SMEs.

Table 8: Distribution of SMEs in Terms of Loan Facility/Financial Aids

Questions	Frequency	Percentage %
Do you have access to loan facility?		
Yes	63	43.2
No	83	56.8
If yes what is your source of loan/aids?		
Commercial bank	7	4.8
Micro finance	20	13.7
Friends	8	5.5
Family	26	17.8
Esusu	9	6.2
None	76	52.1
Have you benefited from any government financial aids in your business?		
Yes	17	11.6
No	129	88.4
Has this aid/loan help you expand your business?		

Yes	39	26.7
No	107	73.3
Inadequate finance is a major constraint to SMEs?		
Yes	138	94.5
No	8	5.5

Source: Field survey, 2020

4.3 Challenges Affecting Small and Medium Scale Enterprises

An attempt was also made to investigate some of the challenges affecting employment generation potentials of SMEs. Findings revealed that the major problem faced by SME operators is electricity as shown by 30.8% respondents who constituted the majority followed by water which accounted for 8.2%, lack of good road with 11% respondents. 23.3% respondents opined that all the aforementioned problem are the challenges, electricity/water had 4.1% respondents, electricity/bad road accounted for 11.6%, water/bad road accounted for 7.5% while 3.4% respondents attested other factors. This implies that aside from

finance, one of the amenities affecting SMEs is electricity followed by water and bad road. Other challenges as mentioned by respondents and observed phenomenon on the field are poor market structure among SMEs, industrial action by tertiary institutions which result into decrease in demand, multiple taxation which affect their efficiency, unfavorable government policies in terms of lending rate and the stringent measures put in place for accessing loan, inadequate farm land or small holdings for those who want to expand productivity in the agricultural SMEs as well as seasonality of a product which affects the performance of the product in the market. These findings are summarized in Table 9.

Table 9: Major Challenges Affecting SME Business

Variables	Frequency	Percentage %
Electricity	45	30.8
Water	12	8.2
Good road	16	11
All of the above	34	23.3
Electricity/Water	6	4.1
Electricity/bad road	17	11.6
Water/bad road	11	7.5
Others	5	3.4
Total	164	100

Source: Field survey, 2020

4.4 Quantitative Analysis of the Impact of Small and Medium Scale Enterprises in Employment Generation

Table 10 shows the Generalized Linear Model result on Small and Medium Scale Enterprises as a means of employment generation. Employment being the dependent variable is regressed against Age of the Business (AOB), Invested Amount at Present (IAP), Number of Employees at Inception of the business

(NEI), Number of Employees not on Payroll (NEnP), Start -Up Capital (SUC) and Wage Rate. The result indicated that, four of the explanatory variables are positively related to employment whereas two are negatively or inversely related.

Employment in terms age of the business (AOB) is inversely related. This shows that 1% increase in age of the SME would lead to 5.1% decrease in employment. This negates the a priori expectation because; an

increase in business age without an improvement in capital invested affects business expansion. On the contrary, employment and the invested amount at present (IAP) is positively related. This means 1% increase in the invested amount at present of SME business would lead to 24.25 % increases in employment generation; this conforms to the a priori expectation. The number of employees at business inception (NEI) is also positively related to employment. This shows that 1% increase in the number of employees at business inception would result in 59.43 % increase in employment; this is in conformity with the a priori expectation. Furthermore, employment and the number of employees not on payroll (NEnP) of SMEs are positively related. Statistically, a 1% increase in the number of employees not on payroll would lead to 8.47 % increase in employment. This negates a priori expectation. Findings for employment in terms of start- up capital (SUC) revealed that 1% change in the start –up capital would lead to 4.99% increase in employment generation which is in line with the model's a priori

expectation. Similarly, Monthly wages paid to SMEs' employees (WAG) is inversely related to employment and thus 1% increase in employees wage rate would decrease employment by 29.40 % in conformity with a priori expectation.

The analysis revealed that IAP, NEI, NEnP and WAG are statistically significant since they are below the conventional p-value of 0.05 (0.0033, 0.0000, 0.0108 and 0.0000 < 0.05 respectively). However, AOB and SUC are statistically insignificant with the probability value of 0.2987 and 0.6367 which is above the 0.05 confidence level. The joint effect of the explanatory variables on employment is statistically significant at 5% level. This is revealed by the probability value of the Chi-square test (0.000000) which is less than 5% confidence level. The fitness of the model as determined by the Deviance statistic had a value of 0.217 which is relatively small. Thus, we conclude that predictions are reliable and close to the observed phenomenon.

Table 10: Generalized Linear Model Results on SMEs as a means of Employment Generation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.144345	0.197160	5.804131	0.0000
AOB	-0.050959	0.048854	-1.043080	0.2969
IAP	0.242469	0.082452	2.940727	0.0033
NEI	0.594328	0.073653	8.069264	0.0000
NEnP	0.084677	0.033201	2.550483	0.0108
SUC	0.049907	0.105420	0.473416	0.6359
WAG	-0.293980	0.031652	-9.288013	0.0000
Chi-square	30.13462			
Deviance	0.216796			
Prob.(Chi-square)	0.000000			

Source: Authors computation using E-views 10

4.5 Discussion of Findings

The result of the analysis revealed that SMEs have positive impact on employment generation in the study area as at the period of the survey. Employment in terms age of the business (AOB) is inversely related and statistically insignificant. This implies that age of the SMEs have weak relationship with employment generation and the longer the SMEs, the less likely the

enterprise will generate employment. This conforms to OECD (1996) study on small businesses, job creation and growth: facts, obstacles and best practice where findings revealed that young businesses created more employment opportunities than the older ones. Findings further revealed that employment and invested amount at present (IAP) is positively related and statistically significant. This means that an increase in the invested

capital at present by SMEs leads to an increase in employment generation. This was confirmed by some entrepreneurs who disclosed that the amount they started their business with and their capital at present induce their decision to employ more people. The number of employees at business inception (NEI) was positive and had significant relationship with employment (EMP) which implies that SMEs as at the time of establishment create more employment opportunities to persons who otherwise would have been jobless. This conforms to the work of Adelino, Manuel, Song Ma and Robinson (2014) on the mechanisms behind the entrepreneurship growth nexus by examining how young and old firms take advantage of new investment opportunities. Finding from the work revealed that new businesses generates more employment than those existed for longer time.

Also, employment and the number of employees not on payroll (NEnP) of SMEs operators are positively related and statistically significant. This reveals that an increase in the number of employees not on payroll would lead to an increase in employment opportunities. An increase in the number of persons not directly on the SMEs payroll rather increases the rate at which people are engaged in employment opportunities. Findings from the result also revealed that employment in terms of start-up capital (SUC) is positively related but statistically insignificant which implies that an increase in the start-up capital would bring about a weak increase in employment generation. However, if such capital is properly channeled to boost and expand SME business, it could generate significant employment. Monthly wages paid to employees (WAG) is inversely related to employment but statistically significant. This means that the lower the monthly wages paid to employees, the more likely the capacity of the SMEs to significantly generate more employment.

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5. Conclusion and Recommendations

The significance of this study is that it provides optimal understanding to existing, new or potential entrepreneurs of SMEs in Nigeria and the role of SMEs in employment generation as well as factors affecting its employment generation potential. This study implies that invested capital at present, number of employees at SMEs' inception, number of employees not on payroll and the monthly wages paid to employees are some of the major SMEs features that have significant potentials to raise employment. Conversely, age of the business and startup capital are insignificant factors of small and medium scale enterprises that are weak in generating employment for the SMEs. Particularly, new businesses with high invested capital tend to generate more employment. Also, the higher the number of employees not on the enterprise payroll and the lower the monthly wages, the more employment SMEs are able to generate.

Therefore, the government should encourage financial institutions to lend to SMEs at single digit interest rates and these institutions should be encouraged to accept the business as collaterals since most SMEs relied heavily on personal savings and family for funds. Also, government should improve the accessibility of SME operators to amenities most especially electricity, roads and water and as well review its program and policies on agriculture and manufacturing for them to attain their full potential in employment generation. Similarly, more programs and policies geared towards training the youths on skill acquisition should be intensified by civil society, private individuals and the government to help them expand their business and create more job opportunities for the unemployed youth.

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