



A Statistical Survey on Small Scale Business Development in Nigeria

Kennedy I. Ekerikevwe¹, Edwin Isodje²

^{1,2}Department of Statistics, Delta State Polytechnic, Ofebe-Oghara, Delta State, Nigeria

Email: kennedyekerikevwe@gmail.com

Abstract:

In this paper, we examined the development of small-scale business in Nigeria. Primary data were obtained using structured questionnaires to elicit information from the study population. Data were analyzed using simple percentages and non parametric test statistic. The result showed that there is significant relationship between Entrepreneurship and development of small-scale business in Nigeria. It also shows that there is significant role of government in the development of entrepreneurship in Nigeria. The study recommends that there should be compulsory inclusion of entrepreneurship development modules in the academic programme of Nigeria institutions of learning so that entrepreneurial skills can be nurtured from the cradle. The study also recommends that government should provide technical facilities and services for Small and Medium Enterprises (SMEs) in Nigeria.

Keywords:

statistics; analysis; chi-square; hypothesis; entrepreneurs; development

I. Introduction

Entrepreneurs are the veritable backbone on which the world and modern ideas continue to develop. The magnitude and reach of their contributions, however, extend much beyond the world of business and economy, and to them goes irrefutable credit for the growth and evolution of societies at large. Developed nations across the world owe their current prosperity to the collective effort of intrepid entrepreneurs, on whose innovation also rests the future prosperity of much of the developing world. The larger rewards of risk taking, starting an enterprise and developing it into a successful business venture extend well past its immediate beneficiaries. The scope of financial freedom and flexibility that entrepreneurialism allows is a means to simultaneous individual and national prosperity. If this holds true for economies around the world, it has especially relevance for Nigeria, which is at the verge of a new era of progress.

II. Review of Literature

Akpan et al (2020) evaluated the implementation and use of state-of-the-art technologies by SMEs in EMDEs to improve operations performance and create sustainable competitive advantages. Further, their papers identified FinTech and analytical algorithms as some of the current technologies employed by SMEs in EMDEs to improve operations and processes in the manufacturing and service industries.

Effiom and Edet (2020) employed autoregressive distributed lag methodology on quarterly data of financial innovation measures. Their findings indicated that financial innovation has a positive and significant effect on SMEs' productivity in Nigeria. In particular,

of the seven financial innovation instruments used (Automated Teller Machine, Point of Sales, Web or Internet Banking, Cheques, Nigeria Inter-bank Settlement System Electronic Fund Transfer, Nigeria Inter-Bank Settlement System Instant Payment, and Mobile Money Operations), all but one turned out in both the short run and long run as significant predictors of SMEs' performance in Nigeria. Furthermore, the Toda-Yamamoto causality test reveals unidirectional causation running from financial innovation instruments to SMEs' performance. They noted that their results have implications for SMEs' growth and the current cashless policy of the Central Bank of Nigeria.

Tolstoy et al (2022) examined how effectual market creation affects the international performance of small and medium-sized enterprises (SMEs) engaged in cross-border e-commerce. Building upon effectuation theory, they suggested that firms can drive foreign market demand by creating new ways to interact and engage with customers in the digital space. Analysing a sample of 99 Swedish e-commerce SMEs, they found that effectual market creation has a positive effect on their international performance. they also found that this positive effect is enabled by insidership in international markets, illustrated by activities related to international marketing analytics and international networking. Through these findings, they contributed to theory development on the internationalisation of small digital firms.

III. Research Methods

The data obtained for this study will be presented in tabular form and analyzed by the use of simple percentages to enhance quick and easy understanding. In testing the hypothesis, as stated in chapter one of this study, Chi-Square statistic will be used for the analysis. In view of the need to utilize accurate data for this research, primary data were obtained through a structured questionnaire to elicit responses from respondents to meet the requirements of this research. The data for the foregoing study were obtained from primary source. Questionnaires were administered to 150 respondents and were retrieved for analysis. A sample is the proportion of items randomly selected from the population of study. It is usually denoted as n . This sample, when studied, is used to make inferences about the entire population. The sample size of this study consists of one hundred and fifty (150) respondents selected amongst entrepreneurs and small-scale business operators in southern Nigeria. The sample was selected or drawn using Convenience sampling technique. The result from the sample will be use to generalize the opinion of the entire entrepreneurs and small-scale business operators in Nigeria.

Chi-Square Statistic

Chi-square denoted by χ^2 is a Greek letter. It is a theoretical sampling distribution that allows the testing of the assumptions that a sample was drawn from a population with a given distribution. In using the chi-square for formal hypothesis testing, the important thing is to be able to come up with an appropriate population model for the Null hypothesis. This means simply that the Chi-square enables the determination of whether there are aggregate discrepancies between the observed populations.

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$$\chi^2 = \sum_{i=1}^n \frac{(E_o - E_e)^2}{E_e} \quad \text{Where } \chi^2 = \text{Chi-square, } E_o = \text{Observed}$$

Frequency, E_e = expected Frequency, $\sum$ = Summation. The decision rule is to reject the Null hypothesis if χ^2 calculated is greater than or equal to χ^2 critical value; accept the Null hypothesis if χ^2 calculated is less than χ^2 critical value. Accept H_o if $\chi^2_{cal} < \chi^2_{tab}$, Reject H_o if $\chi^2_{cal} \geq \chi^2_{tab}$, Degree of freedom = (c—1) (R—1), Where R = number of rows, C = number of columns.

IV. Results and Discussion

4.1 Results

In this study, a total number of 150 questionnaires were distributed to respondent which represented 100% out of which 140 representing 93.3% were recovered while 10 representing 6.7% were not recovered. Therefore, the total number of the questionnaire presented and analyzed were 140.

Table 1. Sex Distrubution

Responses	Number of Response	Percentage
Male	80	57.1%
Female	60	42.9%
Total	140	100%

Source: Field survey 2021

From the above Table 1 above, 80 respondents representing 57.1% percentage were male while 60 respondents representing 42.9% were female.

Table 2. Age Distrubution

Responses	Number of Response	Percentage
20 – 30	34	24.3%
31 – 40	33	23.6%
41 – 50	44	31.4%
51 and above	29	20.7%
Total	120	100%

Source: Field survey 2021

From the Table 2 above, 34 respondents representing 24.3% were between 20–30years old, 33 respondents representing 23.6% were between 31–40years old, 44 respondents representing 31.4% were between 41 - 50years old while 29 respondents representing 20.7% percentage were between 51 years and above.

Table 3. Marital Status

Responses	Number of Response	Percentage
Married	90	64.3%
Single	50	35.7%
Total	140	100%

Source: Field survey 2021

From the Table 4. above, 90 respondents representing 64.3% percentage were married while 50 respondents representing 50% percentage were single.

Table 4. Educational Level

Responses	Number of Response	Percentage
SSCE	36	25%
OND/NCE	42	30%
HND/B.SC	38	27%
M.Sc	24	17%
Total	140	100%

Source: Field survey 2021

From the Table 4 above, 36 respondents representing 25% percentage had SSCE, 42 respondents representing 30% percentage had OND/NCE, and 38 respondents representing 27% percentage had HND/B.Sc, while 24 respondents representing 17% were M.Sc holder.

Table 5. Occupation

Responses	Number of Response	Percentage
Student	10	8.3%
Civil Servant	20	16.6%
Businessman/woman	40	33.3%
Unemployed	30	24.9%
Others	20	16.6%
Total	120	100%

Source: Field survey 2021

From the Table 5 above, 10 respondents representing 8.3% were students, 20 respondents representing 16.6% were civil servants, 40 respondents representing 33.3% were Businessman/woman, 30 respondents representing 24.9% were unemployed while 20 respondents representing 16.6% were others.

Table 6. Is there any Significant Relationship between Entrepreneurship and Small-scale Business?

Responses	Number of Response	Percentage
Yes	80	57.1%
No	45	32.1%
Undecided	15	10.8%
Total	140	100%

Source: Field survey 2021

In Table 6 above, 80 respondents representing 57.1% indicated YES while 45 respondents representing 32.1% indicated NO that there is no significant relationship between Entrepreneurship and small-scale business?

Table 7. Is there any Significant Role of Government in the Development of Entrepreneurship in Nigeria?

Responses	Number of Response	Percentage
Yes	91	65%
No	36	25.7%
Undecided	13	9.3%
Total	140	100%

Source: Field survey 2021

In Table 7 above, 91 respondents representing 65% indicated YES, 36 respondents representing 25.7% indicated NO while 13 respondents representing 9.3% indicated UNDECIDED that there is any significant role of government in the development of entrepreneurship in Nigeria.

Table 8. Are you into any Business?

Responses	Number of Response	Percentage
Yes	88	62.9%
No	40	22.8%
Undecided	12	8.6%
Total	140	100%

Source: Field survey 2021

In Table 8 above, 88 respondents representing 62.9% indicated YES while 40 respondents representing 22.8% indicated NO while 12 respondents representing 8.6% indicated UNDECIDED to the question that they are into business.

Table 9. Do you Believe that Entrepreneurship Contribute Immensely to the Development of Small-scale Business in Nigeria?

Responses	Number of Response	Percentage
Yes	94	67.1%
No	36	25.7%
Undecided	10	7.2%
Total	140	100%

Source: Field survey 2021

In Table 9 above, 94 respondents representing 67.1% indicated YES, 36 respondents representing 25.7% indicated NO while 10 respondents representing 7.2% indicated UNDECIDED to the question above.

Table 10. Has Government been able to Provide Fund to Interest Entrepreneurs?

Responses	Number of Response	Percentage
Yes	97	69.3%
No	30	21.4%
Undecided	13	9.3%
Total	140	100%

Source: Field survey 2021

In Table 10 above, 97 respondents representing 69.3% indicated YES, 30 respondents representing 21.4% indicated NO while 13 respondents representing 9.3% indicated UNDECIDED to the question “Has government been able to provide fund to interest entrepreneurs”

Table 11. Does the Provision of Fund Positively Increase the Number of Entrepreneurs?

Responses	Number of Response	Percentage
Yes	97	69.3%
No	30	21.4%
Undecided	13	9.3%
Total	140	100%

Source: Field survey 2021

In Table 11 above, 97 respondents representing 69.3% indicated YES, 30 respondents representing 21.4%% indicated NO while 13 respondents representing 9.3% indicated UNDECIDED to the question above.

Table 12. Do Entrepreneurs Give Advice or Guide Small Scale Operators in Nigeria?

Responses	Number of Response	Percentage
Yes	83	59.2%
No	37	26.4%
Undecided	20	14.4
Total	140	100%

Source: Field survey 2021

In Table 12 above, 83 respondents representing 59.2% indicated YES, 37 respondents representing 26.4% indicated NO while 10 respondents representing 7.2% indicated UNDECIDED to the question above “that entrepreneurs do not give advice or guide small scale operators in Nigeria”.

Table 13. Does Government Give Loans to Entrepreneurs without Considering Collateral Security?

Responses	Number of Response	Percentage
Yes	79	59.2%
No	41	29.3%
Undecided	20	14.5%
Total	140	100%

Source: Field survey 2021

In Table 13 above, 79 respondents representing 59.2% indicated YES, 41 respondents representing 29.3% indicated NO while 20 respondents representing 14.5% indicated UNDECIDED to the question above.

Table 14. Does the entrepreneur take the loans as their national cake?

Responses	Number of Response	Percentage
Yes	39	27.8%
No	90	62.3%
Undecided	11	7.9%
Total	140	100%

Source: Field survey 2021

In Table 14 above, 39 respondents representing 27.8% indicated YES, 90 respondents representing 62.3% indicated NO while 11 respondents representing 7.9% indicated UNDECIDED to the question above that entrepreneur do not take the loans as their national cake.

Table 15. Is it true that some people pretend to be entrepreneurs and invest their money in other areas outside entrepreneurship development?

Responses	Number of Response	Percentage
Yes	86	61.4%
No	44	31.4%
Undecided	10	7.2%
Total	140	100%

Source: Field survey 2021

In Table 15 above, 86 respondents representing 61.4% indicated YES, 44 respondents representing 31.4% indicated NO while 10 respondents representing 7.2% indicated UNDECIDED to the question above.

Table 16. Does small scale business scheme do well in Nigeria?

Responses	Number of Response	Percentage
Yes	95	67.8%
No	33	23.8%
Undecided	12	8.6%
Total	140	100%

Source: Field survey 2021

In Table 16 above, 95 respondents representing 67.8% indicated YES, 33 respondents representing 23.8% indicated NO while 12 respondents representing 8.6% indicated UNDECIDED to the question above that small scale business scheme do well in Nigeria.

Table 17. Does the small-scale business have a positive impact in the development of the Nigeria economy?

Responses	Number of Response	Percentage
Yes	45	32.1%
No	75	53.6%
Undecided	20	14.3%
Total	140	100%

Source: Field survey 2021

In Table 18 above, 45 respondents representing 32.1% indicated YES, 75 respondents representing 53.6% indicated NO while 20 respondents representing 14.3% indicated UNDECIDED to the question above.

Table 18. Are the adequate measures and policies of the government enough to boost entrepreneurial system in Nigeria?

Responses	Number of Response	Percentage
Yes	55	39.3%
No	75	53.6%
Undecided	10	7.2%
Total	140	100%

Source: Field survey 2021

In table 18 above, 55 respondents representing 39.3% indicated YES, 75 respondents representing 53.6% indicated NO while 10 respondents representing 7.2% indicated UNDECIDED to the question above.

Table 19. Do Rural Entrepreneurs see Small Scale Business Scheme as a Welcome Development in Nigeria?

Responses	Number of Response	Percentage
Yes	107	76.4%
No	20	14.3%
Undecided	13	9.3%
Total	140	100%

Source: Field survey 2021

In Table 19 above, 107 respondents representing 76.4% indicated YES, 20 respondents representing 14.3% indicated NO while 13 respondents representing 9.3% indicated UNDECIDED to the question above.

Table 20. Do you Think that the Neglect of Entrepreneurship Business has Adverse Effect on the Nigeria Economy?

Responses	Number of Response	Percentage
Yes	119	85%
No	17	12.2%
Undecided	4	2.7%
Total	140	100%

Source: Field survey 2021

In Table 20 above, 119 respondents representing 85% indicated YES, 17 respondents representing 12.2% indicated NO while 4 respondents representing 2.7% indicated UNDECIDED to the question above that the neglect of entrepreneurship business have adverse effect on the Nigeria economy.

Table 21. Can you Quit your well-Paid Job and Become an Entrepreneur?

Responses	Number of Response	Percentage
Yes	23	16.4%
No	102	72.9%
Undecided	15	10.7%
Total	140	100%

Source: Field survey 2021

In Table 21 above, 23 respondents representing 16.4% indicated YES, 102 respondents' representing 72.9% indicated NO while 15 respondents representing 10.7% indicated UNDECIDED to the question above if they can quit their well-paid job and become an entrepreneur.

Table 22. Is there any significant relationship between Entrepreneurship and development of small-scale business in Nigeria?

LEVEL OF RESPONSE	MALE	FEMALE	ROW TOTAL
YES	45	35	80
NO	25	20	45

UNDECIDED	10	5	15
COLUMN TOTAL	80	60	140

Source: Field survey 2021

Cells	F _o	F _e	F _o – F _e	(F _o – F _e)	$\frac{(F_o - F_e)^2}{F_e}$
C ₁₁	45	45.71	-0.71	0.5041	0.01103
C ₁₂	35	34.29	0.71	0.5041	0.01470
C ₂₁	25	25.71	-0.71	0.5041	0.01951
C ₂₂	20	19.29	0.71	0.5041	0.02613
C ₃₁	10	8.57	1.43	2.0449	0.23861
C ₃₂	5	6.43	-1.43	2.0449	0.31802
Total					0.628

$$\chi^2_{cal} = 0.628$$

$$\chi^2_{tab} = \chi^2_{(r-1)(c-1), 0.05} \rightarrow \chi^2_{2, 0.05} = 0.103$$

Decision Rule: Reject H₀ if $\chi^2_{cal} > \chi^2_{tab}$, otherwise, do not reject, **Decision:**

Since $\chi^2_{cal} = 0.628 > \chi^2_{tab} = 0.103$, we reject the null hypothesis (H₀).

Conclusion: Base on our decision above, we therefore conclude that there is significant relationship between Entrepreneurship and development of small-scale business in Nigeria.

Table 23. Is there any significant role of government in the development of entrepreneurship in Nigeria?

LEVEL OF RESPONSE	MALE	FEMALE	ROW TOTAL
YES	50	41	91
NO	22	14	36
UNDECIDED	8	5	13
COLUMN TOTAL	80	60	140

Source: Field survey 2021

Cells	F _o	F _e	F _o – F _e	(F _o – F _e)	$\frac{(F_o - F_e)^2}{F_e}$
C ₁₁	50	52	2	4	0.0769
C ₁₂	41	54.6	-13.6	184.96	3.3875
C ₂₁	22	28.8	-6.8	46.24	1.6055
C ₂₂	14	15.4	-1.4	1.96	0.1273
C ₃₁	8	7.4	0.6	0.36	0.0486
C ₃₂	5	5.6	-0.6	0.36	0.0643
Total					5.3101

$$\chi^2_{cal} = 5.3101$$

$$\chi^2_{tab} = \chi^2_{(r-1)(c-1), 0.05} \rightarrow \chi^2_{2, 0.05} = 0.103$$

Decision Rule: Reject H₀ if $\chi^2_{cal} > \chi^2_{tab}$, otherwise, do not reject

Decision: Since $\chi^2_{cal} = 5.3101 > \chi^2_{tab} = 0.103$, we reject the null hypothesis (H₀).

Conclusion: Base on our decision above, we therefore conclude that there is significant role of government in the development of entrepreneurship in Nigeria.

4.2 Discussion

According to the questionnaires, oral interview, research and calculation made. The result showed that there is significant relationship between Entrepreneurship and development of small-scale business in Nigeria.

It also shows that there is significant role of government in the development of entrepreneurship in Nigeria.

V. Conclusion

The main purpose of this research was to explore the role of entrepreneurs in the development of small-scale business in Nigeria. The analysis of the data collected through structured questionnaire, revealed that there is significant relationship between Entrepreneurship and Development of Small-Scale Business in Nigeria. Further analysis also showed that government has a major role to play in the development of small-scale business in Nigeria.

This study is concluded on the note that small scale business has a positive impact in the development of the Nigeria Economy. Government role in the development of small scale enterprises is very crucial to resuscitating the country's economy which is currently undergoing recession. Entrepreneurs, are the central figure of economic activity and propeller of progress. Therefore, Entrepreneurship plays a crucial role in determining the level of development in any economy. The difference in the nature and magnitude of investment between the developed and the underdeveloped and between different stages in the progress of any single country is to be found in the size, energy, initiative and scope of operation of the entrepreneurial class.

From the above summary and conclusion, the following recommendations are made:

1. Compulsory inclusion of entrepreneurship development modules in the academic programme of secondary institution so that entrepreneurial skills can be nurtured from the cradle.
2. There should be access to credit for Small and Medium Enterprise (SMEs).
3. Government should provide technical facilities and services for Small and Medium Enterprises (SMEs) in Nigeria.

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