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ASSESSING THE ROLE OF WOMEN ENTREPRENEURS IN THE ECONOMIC DEVELOPMENT OF SOUTHEASTERN NIGERIA

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Abstract

The role of entrepreneurship is important for the economic development of any nation, especially when practiced by women, as it provides employment opportunities for the citizens of the nation. Therefore, this study examines the contribution of women entrepreneurs in the economic development in Enugu and Anambra states, Nigeria. The study employed a non-experimental mixed method design which incorporates both quantitative and qualitative survey. Data were collected from women in various sectors through a structured questionnaire using a stratified random sampling techniques to ensure presentation. The findings from the study revealed most women entrepreneurs aged (26-45) demonstrate strong financial independence and business competency couple with high energy and assurance for monetary freedom, though with limited skills. The findings revealed that access to finance emerged as the strongest predictor ($e^{(\beta= 4.5)}$, $p< 0.001$) of business success while government support positively influenced market access ($e^{(\beta= 2.3)}$, $p< 0.001$). Manufacturing (($\beta = 12,850$, $p < 0.001$) and retail ($\beta = 9,340$, $p < 0.001$) sectors significantly contributed to job creation and revenue generation. The study was limited to only two states in Nigeria which restrict the generalizability of the findings to other regions. However, strengthening financial access, technical training and government incentives can enhance women entrepreneurial success which can lead to economic growth. The study indicates that empowering women entrepreneurs can foster their financial independence, reduce unemployment and promotes inclusive economic development. Finally, this study provides empirical evidence on the transformative role of women entrepreneurs given key drivers and policy recommendation for business growth.

Research Paper

Keywords: Women Entrepreneur, Economic growth, Regional development, Southern Nigeria

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Introduction

Female entrepreneurship has gained global recognition across developed countries like the U.S., Australia, Canada, and New Zealand (McAdam, 2013) and developing countries including sub-Saharan Africa (Aliyu, 2013; Ekpenyong, 2014). This huge breakthrough is evident in Nigeria to the point policymakers have the initiative as a catalyst for economic development, fostering growth through the development of individual enterprises (Imhonopi et al., 2013; Adepelumi, 2010; Adetiloye et al., 2020). The socio-economic contributions of female entrepreneurs are well-documented globally, benefiting various sectors through their enterprises (Cochran, 2019; Ramadani et al., 2017). International examples further underscore the impact of female entrepreneurs. In India, women-owned enterprises are among the largest employment providers (Kungwansupaphan and Leihaothabam, 2016), while in Kosovo and Latin America, female-led businesses sustain families and generate income (Ramadani et al., 2017; Terjesen & Amorós, 2010). Entrepreneurship serves as a vehicle for wealth creation, benefiting not just entrepreneurs but also broader networks of stakeholders (Brush & Cooper, 2012; Salamzadeh et al., 2023, 2024; Salamzadeh & Ramadani, 2021). Women all over the world play important roles in the social, economic, and political life of any nation. Women entrepreneurs in both developed and developing nations of the world stimulate the economy and create new jobs (Huggins et al., 2018).

Literature on entrepreneurs has increasingly acknowledged the desire of women to be economically independent (Brush and Cooper, 2012). Their roles and contributions as women entrepreneurs in shaping the labor market are continuously increasing (Adetiloye et. al., 2020; Motilewa et. al., 2015).

In Nigeria, women's entrepreneurial activities are pivotal for economic and social advancement, contributing to household welfare and reducing societal challenges like prostitution and child trafficking (Ogundana, 2020). As primary breadwinners, women in Sub-Saharan Africa play essential roles in economic life, adapting to change and demonstrating creativity in both formal and informal sectors (Brown, 2001; Chinonye, 2010). Research further suggests that female entrepreneurship improves child education (Chea, 2008; Otoo et al., 2012), enhances family nutrition (Ama et al., 2014), reduces crime rates (Iyiola and Azuh, 2014), and alleviates poverty and hunger (Misango and Ongiti, 2013). In developing economies like Nigeria, entrepreneurship is crucial for steering economic and socio-political landscapes. MSMEs account for 97% of businesses in Nigeria, contributing 87.9% of net jobs and 87.9% of industrial output (National Bureau of Statistics, 2017).

Women's entrepreneurship participation has recently increased worldwide and has gained increased establishment and management in the business sector. The recent report of the Global Entrepreneurship Monitor 2023/2024 women's entrepreneurship report indicates a steady upward trend in both startup and established business ownership by women over the past 25 years. The report suggests that the trend reflects the expanding role of women in economic activities particularly in a market or community where women entrepreneur is the driving force for poverty alleviation and economic inclusion (GEM, 2023). However, despite the increase in women's entrepreneurship participation, women entrepreneurs continue to face considerable challenges such as limited access to finance, restrictive cultural norms, lack of mentorship opportunities, and discriminatory regulatory environments. Most of the

time women entrepreneurs struggle to secure capital or bank loans with many relying on personal savings or informal lending work (World Bank, 2023). World Economic Forum reported six key global trends in women's entrepreneurship which include a rise in digital entrepreneurship, increasing government support through gender-focused Policies and the impact of social enterprises in promoting female-led businesses, but despite this progress, WEF reported that many women still operate in lower growth industries and remain under presented in high tech innovative industries (WEF, 2024). Furthermore ILO, (2023) reported that women entrepreneurs most of the time motivated by necessity entrepreneurship rather than the opportunity entrepreneurship brings especially in the developing economy which indicates that most women start businesses out of economic need rather than pursuing innovation-driven enterprises. The importance of female entrepreneurship in economic growth and job creation is further emphasized by the OECD (1997), which identifies women as key players in innovation and employment generation (Agu et al., 2024; Machado et al., 2025). The role of women in Nigeria's sustainable development has become increasingly an important issue in recent years and this has been due to the shift of emphasis away from equity concerns to the recognition of the productive roles women play and the contribution they can make. Despite the significant contribution of women entrepreneurs in the economic development of Nigeria, women entrepreneurship faces challenges which include limited access to finance, societal constraints, and infrastructural deficiencies. A study conducted by Ogundana et al.(2021) revealed that the Nigerian entrepreneurship ecosystem is often regarded as unreliable and weak because of institutional voids that negatively impact the

survival of businesses owned by women. Otunaiya and Idowu, (2019) identified financial constraints as a major impediment to the growth of women entrepreneurs in Nigeria. This study aligned with the institutional theory of the Resource-Based View(RBV) which indicates that access to financial, human and capital resources and good infrastructural policy can significantly shape entrepreneurial success(Brush etal.,2009; Scott, 2001). The empirical findings in this study aligned with these perspectives particularly as access to finance and supportive government policies emerged as a critical factor in business growth. Therefore, this study aims to assess the role of women entrepreneurs in the economic development of the Enugu and Anambra states of Nigeria.

Material and Methods

Description of the study area

Enugu and Anambra States were selected for this study due to their strategic economic significance in southern Nigeria., Enugu, historically a coal-mining hub, now thrives in commerce and services, while Anambra hosts major industrial and commercial centers like Onitsha and Nnewi. Both states exhibit high female entrepreneurial participation but lack gender-specific policy frameworks. The city's strong tradition of entrepreneurship has given rise to various business associations and networks, some of which are women-led. These groups facilitate mentorship, training, and financial access for women entrepreneurs. Researching these networks can provide insight into how they support women in scaling their businesses. Nnewi is home to many micro and small enterprises, and a significant proportion of these are

owned by women. Studying these businesses can offer a view of how female entrepreneurs navigate challenges such as limited access to capital and formal training while contributing to local economic development.

For instance, female business owners in the hospitality and tourism industry hire many local employees, contributing to household incomes and reducing unemployment. Women in both states participate in various sector of business such as Agriculture, Fashion and trade, hospitality and services, and Manufacturing have play critical roles in the development of micro, small and medium enterprises (MSMEs) and these states have high concentration of women entrepreneurs making them the ideal location for this study.

Research design

The study utilized a non-experimental and descriptive design that incorporated both quantitative and qualitative methods to ensure triangulation and establish the validity of the research findings. Qualitative methods were employed to examine social phenomena and understand their significance to the participants, while quantitative methods aimed to quantify and analyze variables using statistical methods. The descriptive phenomenon and characteristics associated with the subject population in this study are focused on women's entrepreneurship and economic development in Enugu and Anambra States of Nigeria**.**

Sampling procedure and sample size

The study covers women entrepreneurs of Enugu and Anambra State. The characteristics of the population are heterogeneous as they are made up

of literates, semi-literates, and illiterates as well as children from different parts of the States. The population comprised both sexes except for someone being disabled or physically challenged. The entire female population was studied because women's entrepreneurship tendency is pervasive as it covers the entire gamut of human endeavor.

Sample size and sample techniques

The target population includes women entrepreneurs across various business sectors such as Manufacturing, retail, Agriculture, and services.

Using Yamane's formula, a sample size of 400 was derived from a population of 1 million women entrepreneurs (FATE Foundation, 2021). Stratified random sampling ensured proportional representation from urban, semi-urban, and rural areas. The model is expressed as

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

where n = required sample size

N = Total population of the study, e = Error margin

1= Constant

$$n = \frac{1{,}000{,}000}{1+ 1{,}000{,}000(0.05)2}$$

n = 399.84 ~ 400

Though the study employed stratified random sampling which ensure proper representation and avoid bias, potential bias may still exist because the study relied Soley on self-reported data. Social desirability bias may also lead

to participant overstating their business success or underreporting their challenges and moreover, focusing Soley on two states limits regional generalizability especially in the culturally distinct regions of Nigeria

Validity and reliability

The questionnaire underwent a process to ensure its validity and reliability. For validity, the instrument was developed considering both content and face validity protocols. Experts also provided feedback on the draft instrument, which was incorporated into the final questionnaire. Additionally, English and formatting were validated by individuals with knowledge and experience in the field. To ensure reliability, the instrument was pre-tested. Ten variables of the questionnaire were subjected to a Cronbach Alpha test using SPSS for reliability analysis. The results showed a reliability value of 0.76, indicating the consistency of the research instrument.

Data collection procedure and instrument

The instruments used for collecting primary data are standardized questionnaires, tests and interviews. Secondary data were obtained from research journals, textbooks, magazines, gazettes, newspapers and internet websites. Data for this study comes in two forms - qualitative and quantitative.

A well-structured questionnaire was developed and used to collect information on various things such as business performance, access to finance, contribution to community welfare etc.

Measurement of dependent variables such as economic development and contribution was measured through indicators like employment generation, revenue growth and social impact and the independent variables such as access to finance, business training, social support and government policies were measured based on the dependent variables. The control variables conclude business sector and years of experience.

To assess the economic contribution of women entrepreneurs to economic development, logistic and multiple regression models were used (Agresti,2013).

Logistic linear regression formula:

$$\text{logit}\big(\text{P}(\text{Y}-1)\big)\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_n x_n \qquad (1)$$

where:

β_0 is the intercept of the model

$\beta_1, \beta_2 \ldots . \beta_n$ are the coefficients of each predicator $x_1, x_2, \ldots\ldots x_n$

Multiple regression formula :

$$y = \beta_0 + \beta_1 xi_1 + \beta_2 xi_2 + \cdots \beta yi = \beta_p xi_p + \in \quad (2)$$

where, for $i=n$ observations:

y_i = dependent variable

xi = explanatory variables

β_0 = y-intercept (constant term)

β_p = slope coefficients for each explanatory variable

ϵ = the model's error term (also known as the residuals)

Data analysis

The survey data were entered into the SPSS 25 software for analysis. The analysis involved the use of descriptive and inferential statistics.

The logistic regression analysis for factors influencing business sectors was done using the standard equation:

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1(GS) + \beta_2(AF) + \beta_3(Bl) + \beta_4(BSM) + \beta_5(SBR) + \beta_6(SBS) + \beta_7(SBA) + \in \quad (3)$$

where:

P = the probability of business, GS = Government support, AF = Access to finance, BL = Business location, SBM = Business sector manufacturing, SBR = Business sector retail, SBS =Business sector services, SBA = Business sector Agriculture.

The logistic regression analysis for factors influencing business loan approval was done using equation (4):

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1(BS) + \beta_2(CA) + \beta_3(CH) + \in \quad (4)$$

Where:

BS = Business size, CA = Collateral availability, CH = Credit history.

The multiple linear regression analysis was done for factors influencing income generation equation (5):

$$\text{Income} = \beta_0 + \beta_1(S) + \beta_2(BS) + \beta_3(EE) + \beta_4(AF) + \in \quad (5)$$

Where:

S = Sectors, BS = Business size, EE = Entrepreneur experience and AF = Access to finance

The multiple regression analysis was also done for factors predicting business expansion using the standard equation (6):

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1(EE) + \beta_2(SBM) + \beta_3(SBR) + \beta_4(SBS) + \beta_5(ABL) + \beta_6(BS) + \in \quad (6)$$

where:

P = Expansion, EE = Entrepreneur experience, SBM = Business sector manufacturing, SBR = Business sector retail, SBS =Business sector services, SBA = Business sector Agriculture

Results

Socio-demographic characteristics and Experience of women entrepreneurs

The findings on the age distribution of respondents in the Enugu state revealed that most of the respondents (36.5%) were in the age group 26-35 followed by the age group (25.3%). Younger women who are entrepreneurs within the age group 18-25 years account for 19.5% of the population interviewed. The adults and old entrepreneurs between 46-55 years and 56 above account for 11.2% and 7.5% respectively. A similar trend was also observed in the Anambra state where most of the women (33.3%) interviewed were within the age group 26-35 years followed by the age group 35-45 years which accounts for 28.9% of the women interviewed. It was observed that younger entrepreneurs within age group 18-25 in Anambra state were low accounting for 16.3% of the women interviewed whereas the older entrepreneurs between age 46-55 years and 56 years above accounted for 13.1% and

8.4% respectively. The findings indicate the concentration of women entrepreneurs within the age group 26-45 in both Enugu and Anambra states could be attributed to the fact that young and middle-aged adults are more energetic and therefore are actively involved in the running of businesses. This indicates that entrepreneurs within this age group are motivated to invest in business ventures. The findings showed that the low percentage of older entrepreneurs in both states can be attributed to the fact older women entrepreneurs are less active in running businesses.

Results on the educational level of the respondents in Enugu state showed that half (50.5%) of the women/respondents interviewed had secondary education followed by those with tertiary education or vocational education which account for 25.5% of the women entrepreneurs interviewed, 17.0% of the respondents have primary education whilst 7.5% of the respondents have no formal education. Similarly in the Anambra state, slightly more than half of the respondents (54.5%) have secondary education 27.5 of the respondents have primary education, 12.2 % have no formal education and only 6.3% have tertiary/ vocational education. The higher portion of respondents with secondary education in both states suggests that the majority of the women entrepreneurs with literate and can take good records of stocks in their shops although they are not highly educated.

The findings revealed that in Enugu state, half of the respondents (52.0%) were married, 40.0% of them were single, 2.9% of them had been divorced and only 2.0% of them were widowed. Similar observation was done in Anambra state where the findings revealed more than half of the respondents as being married, 40.0% of them were single women entrepreneurs,3.2%

of them were divorced and 2.3% of them were widowed. The greater number of women entrepreneurs being married in both states indicates marriage is associated with entrepreneurial pursuits, which can be an increase in financial responsibilities and the need for additional income to support the family. The relatively high increase in the percentages of single women entrepreneurs in both states suggest that many young people will prefer to start up a business before settling down which can potentially serve as a pathway for financial stability.

The findings on the entrepreneur experience in both states showed that women entrepreneur was fairly distributed across different levels of experience. In Enugu state, it was revealed that most of the respondents/women (35.5%) had 1-3 years of experience, 30.0% of the respondents were having 4-6 years of experience, 19.5% of them had 7-10 years of experience whereas 15.0% of them have more than 10 years of entrepreneurial experience. The results obtained in Anambra follow a similar pattern where most of the respondents (38.5%) had 1-3 years, 28.9% of the respondents had 4-6 years of experience, 20.0% of them had 7-10 years of entrepreneur experience and only 12.6% of them were having entrepreneurial experience more than 10 years. The slight distribution of respondents based on entrepreneurial experience at different levels in both states indicates a slight balance between newer entrepreneurs and a well-established business entrepreneur. The slightly even distribution of respondents across the different experience levels in both states implies that dynamic and entrepreneurial landscape with a mix of start-ups, growth-stage businesses, and enterprises in these states.

Table 1. Demographic Profile of Women Entrepreneurs

Variables	Enugu State(%)	Anambra State(%)
Age		
18-25 years	19.5	16.3
26-35 Years	36.5	33.3
36-45 Years	25.3	28.9
46-55 years	11.2	13.1
56 and above	7.5	8.4
Educational Qualification		
No Formal education	7.5	12.2
Primary	17.0	27.5
Secondary	50.5	54.0
Tertiary/Vocational	25.5	6.3
Marital Status		
Single	43.1	40.0
Married	52.0	54.5
Divorced	2.9	3.2
Widowed	2.0	2.3
Years of entrepreneurial experience		
1-3 years	35.5	38.5
4-6 years	30.0	28.9
7-10 years	19.5	20.0
Over 10 years	15.0	12.6

Entrepreneurial characteristics

In Enugu state, the most operated business sector operated by women entrepreneurs is manufacturing which accounts for 30.0% of the respondents, followed by Retail businesses at 27.0%, services-based businesses account for 18.0% of the respondents, and 15.0% are involved in Agriculture. The dominance of Manufacturing as a business operated in Enugu state by many respondents indicates manufacturing business sector serves as the backbone for economic sustainability and expansion in Enugu state. The findings in Anambra state showed that the most prevalent business sector among women entrepreneurs is manufacturing which accounts for 35.5% of the respondents

followed by retail (28.5%), services which account for 24.0%, whilst the Agricultural sector accounts for 12.0%. The higher percentages of manufacturing and retail-operated businesses in Anambra state suggest that the economy is a diversified and consumer-oriented economy, which can be because of urbanization and greater market opportunities.

The number of employees and size of both business states revealed that in Enugu state, nearly half of the businesses (45.7%) are small scale with 1-5 people as employees, 30.0% of the businesses have employees between 6-10 people, businesses with 11-20 employees account for 14.3% whilst large businesses with more than 21 employees account for only 10.0%. Similarly in Anambra small scale businesses with 1-5 employees account for 40.0%, businesses with 6-10 employees account for 35.0% whilst moderately large businesses with 11-20 employees account for 16.0%, and large businesses with more than 21 employees account for 12.0%. The high portion of small-scale businesses in both states emphasized the prevalence and dominance of micro and small enterprises in the regional economies. The slightly higher percentages of businesses with 6-10 employees in Anambra opined the trend toward business growth which can be attributed to better access to resources such as market and financial services. The limited of larger businesses with more than 21 employees in both states suggests that there are challenges for scaling up businesses by women entrepreneurs such as limited access to capital and infrastructure which potentially hindered business scale-up in both states.

The results on the main source of financing/funding businesses by women entrepreneurs in both states revealed, in Enugu state more than half

of the women entrepreneurs (52.0%) depend on personal savings as their main source of funding their business, 20.0% of them rely on family support, 15.0% of them depend on microfinance as a major source of funding their businesses, 10.0% of them rely on bank loan whilst only 3.0% of them depend on government support for the establishment of their businesses. The Anambra states that nearly half of the respondents (46.0%) rely on their personal savings for the establishment of their businesses, microfinance accounts for 20.0% of the respondents, 15.0% of them depend on their family for financing their business whereas 4.0% rely only on government support. The reliance on personal savings and family support as a major source of funding businesses for entrepreneurs in both states indicated that there is limited access to formal and legal financial services or entrepreneurs are not willing to up debt. The higher use of microfinance as a source of funding for businesses in Anambra implies that there is better integration of microfinance institutions within the business ecosystem in the state. The low reliance on government support/grants in both states indicates there is either a scarcity of government grants/funding programs or that entrepreneurs are not aware of government grants or funding. The limited use of bank loans can be attributed to the fact that many entrepreneurs may find it difficult to get loans due to the challenging terms and conditions of the financial institutions such as high interest rates or strict collateral requirements.

In Enugu state, nearly half of the businesses (45.0%) are in urban areas, 40.0% of the businesses are in semi-urban areas and 15.0% of the businesses are in rural areas. This was consistent in Anambra where more than half of the businesses (60.0%) were in the urban settings, followed by semi-

urban settings (25.0%) and rural settings only account for 15.0% of the businesses in the state. The concentration of businesses in the urban area across both states suggests that urban centers are the primary hubs for many businesses possibly due to better access to markets, good infrastructure, and financial services. The higher concentration of Anambra state indicates that the state has a more urbanized economy compared to Enugu. This is because there are more larger cities and population densities in Anambra. The low proportion of businesses in the rural areas in both states reflects the challenges associated with rural entrepreneurship such as lack of good infrastructure, limited access to funding, and smaller markets.

Table 2. Comparison of the distribution of women entrepreneurs

Variables	Enugu State(%)	Anambra State(%)
Business Sector		
Manufacturing	30.0	35.5
Retail	27.0	28.5
Services	18.0	24.0
Agriculture	15.0	12.0
Business Size		
1-5 people	45.7	40.0
6-10 people	30.0	32.0
11-20 people	14.3	16.0
21 above people	10.0	12.0
Sources of Business Funding		
Personal savings	52.0	46.0
Bank loan	10.0	15.0
Microfinance	15.0	20.0
Family support	20.0	15.0
Government grant	3.0	4.0
Business Location		
Urban	45.0	60.0
Semi-urban	40.0	25.0
Rural	15.0	15.0

The results revealed that nearly half of the businesses in both Enugu (42.6%) and Anambra (42.0%) have been in operation between 4-7 years, businesses that have been in operation for 1-3 years which account for 30.5% and 33.0% in Enugu and Anambra respectively whilst businesses that have been in operation for more than 7 years account for 20.5% In Enugu and 21.2% in Anambra. The high portion of businesses that have been in operation for 4-7 years indicate that Enugu and Anambra states have relatively established businesses, and they have even moved beyond the challenging and critical early phase which is characterized by a higher failure rate because of limited capital, limited market knowledge or operational inefficiencies. Since a greater number of businesses have reached the level of stability points to a favorable condition that supports business growth reflects entrepreneurial culture that prioritizes continuity and adaptability in business operation.

The findings for the reason of starting a business by women entrepreneurs in both Enugu and Anambra revealed that more than half of the respondents in Enugu(58.1%) and Anambra(61.2%) start business because they want to gain finance independence, Unemployment was the second motivation and common reason for starting a business by 31.9% of respondent in Enugu and 33.0% in Anambra, whereas 5.2% and 3.0% in of respondent Enugu and Anambra respectively starts business because they have passion for it, while family tradition was mentioned by 4.8% respondents in Enugu and 2.5% in Anambra. The higher portion of respondents who see financial independence as their primary reason for starting a business in both states suggests that entrepreneurship is hugely driven by the desire for economic empowerment and self-sufficiency among women. This study also indicates

that entrepreneurship can be an alternative to conventional employment in both states since there are limited jobs.

Greater percent of the respondents in both Enugu(44.9%) and Anambra(45.3%) cited that the most frequent challenge their business faces is difficulty in accessing finance even when they want to expand their businesses, Market competition was the second most important challenge cited by 20.4% in Enugu and 23.0% in Anambra, Regulatory barriers was another common challenge cited by 12.0% in Enugu and 8.0% in Anambra, 5.0% and 4.6% of respondents in both Enugu and Anambra state respectively sees family obligation as a challenge affecting their businesses, Lack of support was the third most frequent challenge by 14.2% of respondents in Enugu and 14.8% in Anambra. However, only 4.3% of the women in Enugu and 3.5 in Anambra opined that Gender bias was a major challenge facing the expansion of their businesses. The findings indicate that women entrepreneurs in both states shared common motivations and challenges are slight variations between women in Enugu and Anambra. The important role of financial independence and challenges in accessing finance to start or expand businesses are clearly shown in this study. Therefore, addressing these challenges could foster a more supportive business environment for women entrepreneurs hence greater business sustainability and economic growth (Table 3)

Table 3. Business Operation Duration, Motivations, and Challenges among Women Entrepreneurs in Enugu and Anambra States

Characteristic	Enugu (%)	Anambra (%)
Business operation duration		
Less than 1 year	6.9	3.8
1-3 years	30.5	33.0
4-7 years	42.6	42.0
More than 7 years	20.0	21.2
Reasons for starting a business		
Financial independence	58.1	61.2
Passion for entrepreneurship	5.2	3.0
Unemployment	31.9	33.0
Family tradition	4.8	2.5
Challenges Faced in Business		
Difficulty in accessing finance	44.9	45.3
Market competition	20.4	23.0
Regulatory barriers	12.0	8.0
Family obligations	5.0	4.6
Lack of support	14.2	14.8
Gender bias	3.5	4.3

Economic Contributions of Women Entrepreneurs in Enugu and Anambra

It was observed from the study that most of the businesses in Enugu and Anambra employ between 1-10 people. With Enugu having 46.1% of businesses that employ 1-5 people, 38.4% employ 6-10 people, while Anambra has 42.6% employing 1-5 people and 40.0% employing 6-10 people. A portion of businesses in Enugu (11.0%) and Anambra (13.2%) employ 11-20 people, only 4.5% and 5.3% of businesses in Enugu and Anambra respectively employ people above 21.

A greater percentage of the women-owned businesses in both Anambra (65.50%) and Enugu (60.0%) experience growth and conversely 40.0%

of business in Enugu and 35.0% of businesses in Anambra do not have growth since their establishment. The high portion of the growth in women-owned businesses in both states indicates that there are more favorable businesses and better access to growth. The findings further revealed that women-owned businesses in both Enugu and Anambra contribute to various economic outcomes and the most important contribution is through job creation as it was cited by 40.0% of respondents in Enugu and 45.0% in Anambra, 30.0% of respondents in Enugu and 35.0% in Anambra reported that increased in income is another major contribution of the businesses they have established, business partnership and community development were less mentioned contributions with business partnership accounting for 5.0% of respondents in Enugu and 3.0% in Anambra while community developments account for 5.0% in Enugu and 2.0% in Anambra. In both states, the majority of respondents indicated that their standard of living had either significantly improved or moderately improved due to their business activities. Anambra had a higher percentage reporting significant improvement (35.0%) compared to Enugu (30.0%), suggesting that women entrepreneurs in Anambra may be experiencing more substantial economic benefits from their businesses. A larger proportion of respondents in Enugu (50.0%) reported moderate improvement compared to Anambra (45.0%), indicating that while businesses do contribute positively to the quality of life, the impact may be less dramatic for many in Enugu. Slight improvements were reported by 15.0% in Enugu and 17.0% in Anambra, while those who saw no improvement accounted for 5.0% in Enugu and 3.0% in Anambra. This suggests that for a minority of entrepreneurs, business ownership may not yield significant changes in living standards,

possibly due to economic challenges or business constraints. The data suggests that women-owned businesses in Enugu and Anambra are predominantly small-scale, with a strong emphasis on job creation and income generation. While both states exhibit positive trends in business growth and economic contributions, Anambra shows slightly higher growth rates and greater economic impact. However, there are still challenges to scaling up businesses and achieving substantial improvements in living standards across both regions. Addressing these barriers could help women entrepreneurs further enhance their economic contributions and improve their quality of life.

Table 4. Contributions of Women Entrepreneurs to Economic Development

Contributions	**Enugu(%)**	**Anambra(%)**
Business growth		
Yes	60.0	65.0
No	40.0	35.0
Economic contribution		
Job creation	40.0	45.0
Increased family income	30.0	35.0
Contribution to local markets	20.0	15.0
Business Partnership	5.0	3.0
Community development	5.0	2.0
Impact on standard of living		
Significantly improved	30.0	35.0
Moderately improved	50.0	45.0
Slightly improved	15.0	17.0
No improvement	5.0	3.0

Societal and policy influence of women entrepreneurs

The results showed a significant insight into the dynamic of business loan applications and women entrepreneurs funding preferences in both states. The findings revealed that less than half (40.0%) of respondents in

Enugu and Anambra (45.0%) applied for loans, while more than half of respondents in both Enugu (60.0%) and Anambra (55.0%) do not apply for loans. From the finding, it can be seen more business women applied for loans in Anambra state compared to their counterparts in Enugu (figure 1).

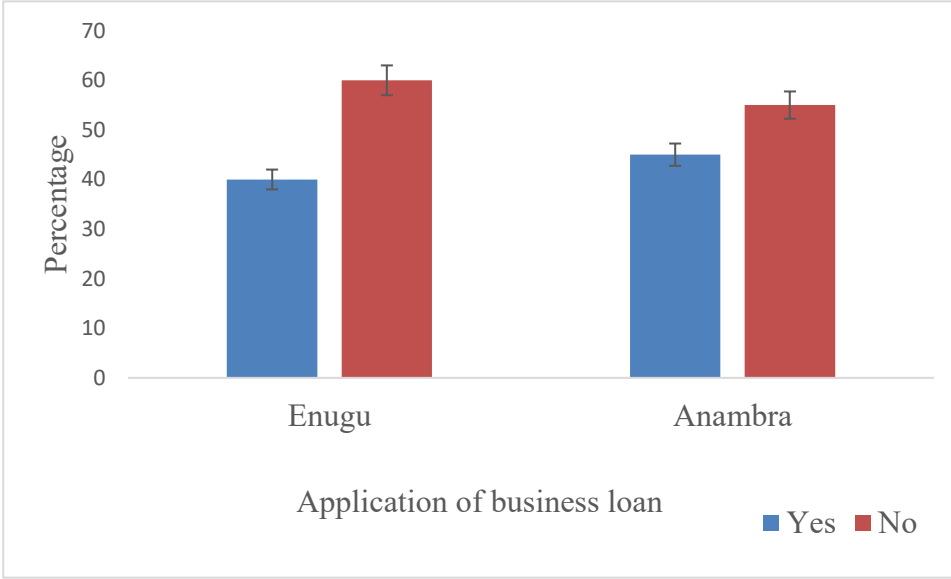

Figure 1. Distribution of women entrepreneurs based on business loan application

The loan approval rate in both states was relatively low, only 20.0% of loan applications were approved in Enugu and 25.0% in Anambra. Both states' low loan approval rates may be associated with challenges in meeting the loan or lending requirements. The reasons for loan rejection reveal barriers to accessing finance (Figure 2). Findings showed that greater percent of the women entrepreneurs in Enugu (50.0%) and Anambra (55.0%) cited that lack of collateral is the most common barrier or reason for their loan rejection

which indicates the need for collateral-free loan product or an alternative credit assessment method that increase the access of women entrepreneurs to finance, 20.0% of women entrepreneurs in Enugu and 25.0% in Anambra cited that high interest rate was a major challenges for loan approval (Figure 3). Complex loan application process as a major challenge or barrier for rejection of loan approval accounts for 15.0% of women in Enugu and 18.0% in Anambra while Insufficient business track record as a reason for loan rejection account for 10.0% in Enugu and 7.0% in Anambra. The low portion of women entrepreneurs reporting loan application complexity process and insufficient business record as a reason for loan rejection indicate that they are not as critical as other financial constraints.

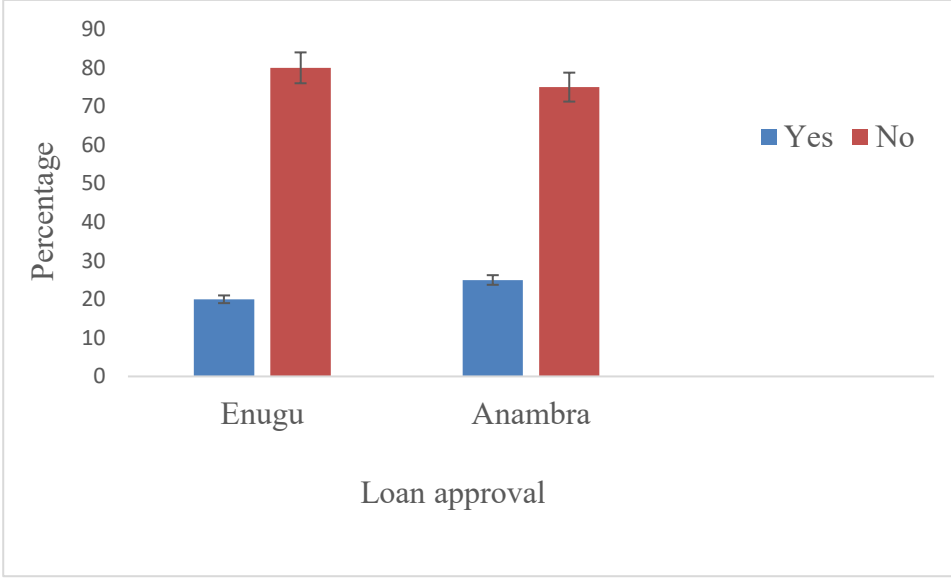

Figure 2. Women entrepreneur's access to loan approval

The findings on funding preference which further reflect the challenges that are associated with accessing financial institutions revealed that most of the women entrepreneurs in Enugu (30.0% and Anambra(35.0%) preferred bank loans as a major source of funding their businesses, similarly 30.0% in Enugu and 25.0% in Anambra preferred personal saving as a major source of funding, 25.0% in Enugu and 30.0% in Anambra preferred government support as a major source of funding while low portion of women in Enugu(10.0%) and Anambra(8.0%) preferred family loan as their major source of income (Figure 4). The findings indicate while there is interest in formal financial assistance, collateral requirements high interest rates limited loan access are also significant barriers for women entrepreneurs. Enhancing financial literacy, offering alternative financing models, and advocating for policy changes that address these barriers could improve access to credit for women-owned businesses. Furthermore, the role of government in facilitating access to affordable credit, particularly for marginalized groups, could be pivotal in addressing the financing gaps observed in these states.

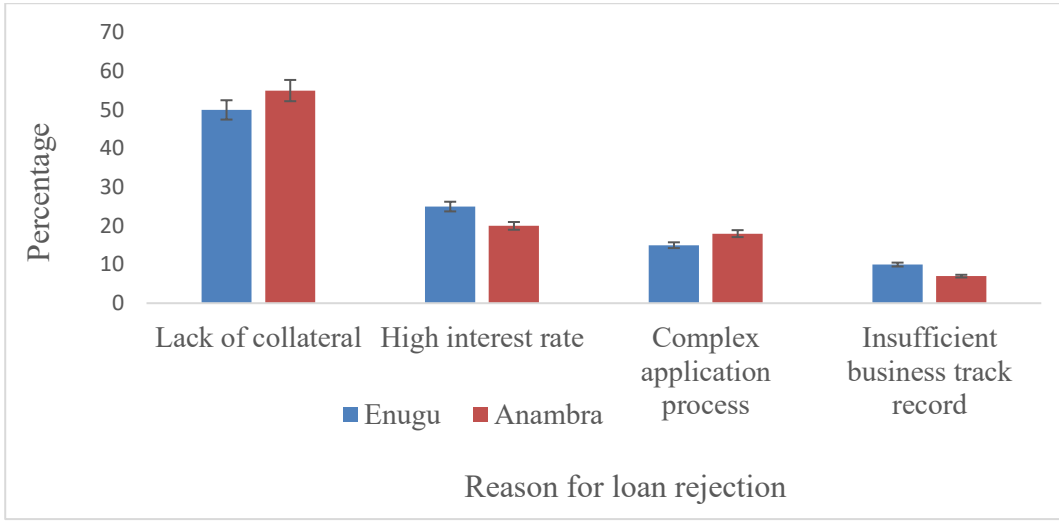

Figure 3. Reasons for the rejection of business loan application

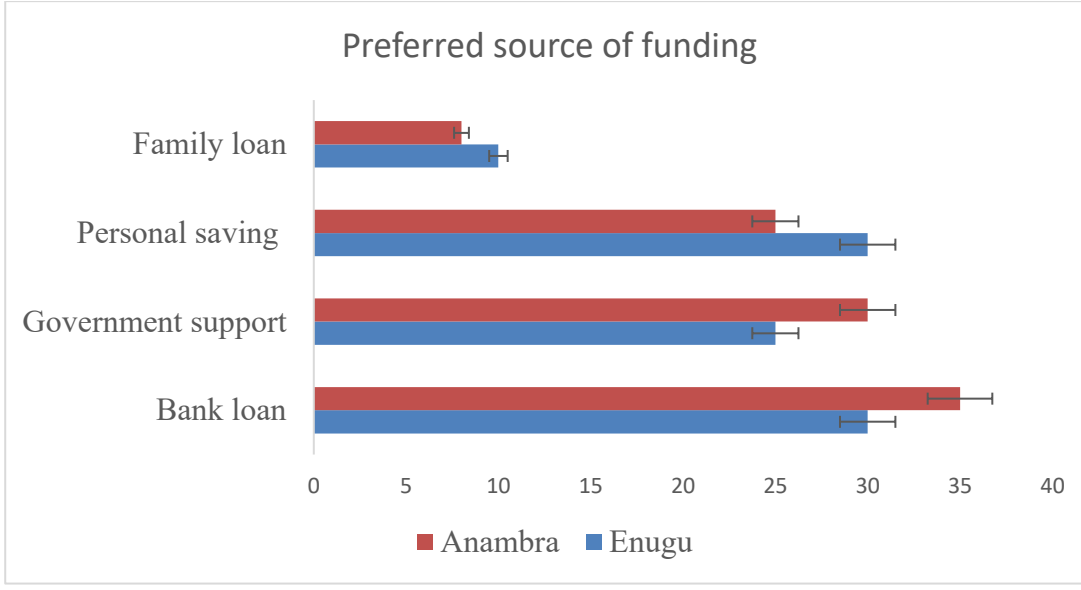

Figure 4. Women entrepreneurs preferred sources of funding

The government policy supportiveness level varies among women entrepreneurs in both states, the findings low portion of women entrepreneurs

in Enugu (10.0%) and Anambra found government policies to be supportive, the relative portion of the women in both Enugu (30.0%) and Anambra (35.0%) found government policies to be moderately supportive, while nearly half (40.0%) in Enugu and Anambra (38.0%) of women entrepreneurs reported neutral feelings towards government policies to be supportive and relatively low portion of women entrepreneurs in Enugu(20.0%) and Anambra (19.0%) found government policies to be unsupportive

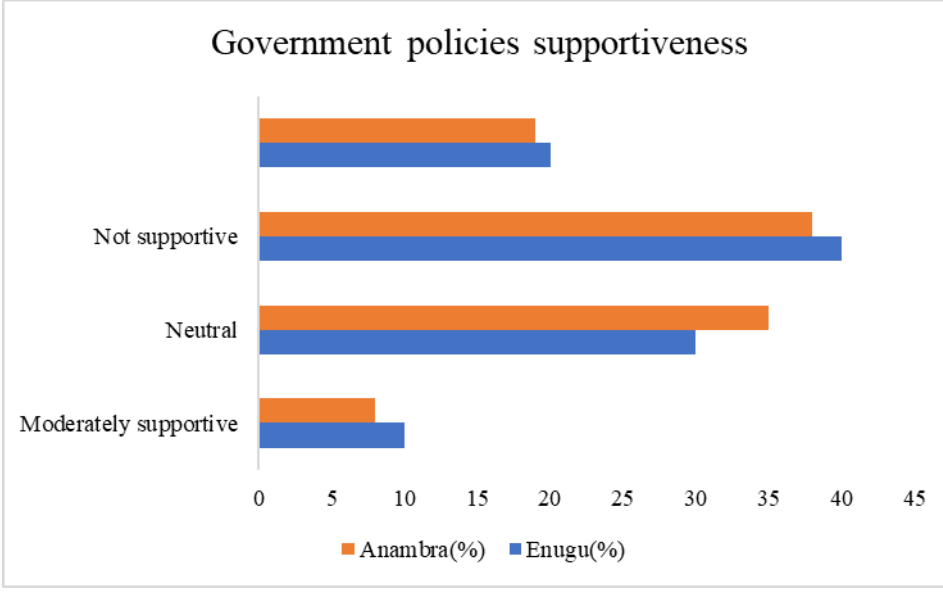

Figure 5. Existing Government policies for supporting women entrepreneurs

The findings on suggested government policy improvement reflect priorities identified by women entrepreneurs which can foster a more conducive business environment. The findings revealed nearly half of the women entrepreneurs in Enugu (45.0%) and half of them in Anambra (50.0%) suggested that policy on access to finance should be improved, 25.0% of women

entrepreneurs in Enugu and 20.0% in Anambra suggested infrastructural improvement, similarly, 20.0% of women in Enugu and 20.0% highlight capacity building improvement and a lower portion of the women entrepreneurs in both Enugu (10.0%) and Anambra (5.0%) mentioned reduced regulatory barriers improvement. The findings indicate though there is some degree of support from the government for women entrepreneurs, the perfection of that is insufficient. The high portion of women entrepreneurs both Enugu and Anambra who perceived the policies as neutral or moderately supportive might indicate that there are existing initiatives that are not tailored specifically to address the unique challenge faced by women entrepreneurs. This could be because of the general nature of policies or their biased implementation which can lead to gaps in the actual benefits received by women-owned businesses. The high portion of women entrepreneurs advocating training on business in both states suggests that they recognized the value and need for skill development for effective running and growth of business.

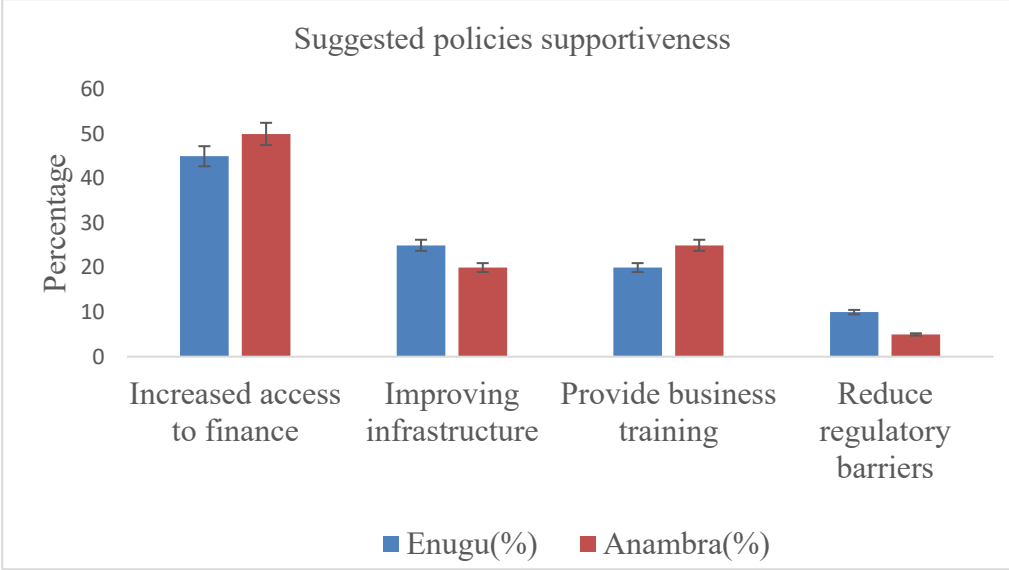

Figure 6. Potential policies for supporting women entrepreneurs

Factors affecting entrepreneurial growth among women entrepreneurs in Enugu and Anambra Staes

The finding revealed a significant positive relationship between the perceived government support and the business successes in both states among women entrepreneurs ($e^{\beta = 2.3}$, $p < 0.001$). The results obtained indicate when respondents/women entrepreneurs perceived government policies as supportive, they were two times as likely to experience business growth compared to those women entrepreneurs who did not perceive government policies as supportive. The results clearly showed the important role of favorable government policies as a catalyst for the development of an enabling environment fit for entrepreneurship which facilitates business establishment and expansion (Table 5).

In predicting business success, the most influential factor was access to finance ($e^{\beta = 4.5}$, p< 0.001). The high odds ratio suggests that women entrepreneurs who have access to financial resources are nearly five times more likely to achieve business growth compared with those women entrepreneurs without access to finance. This clearly showed the importance of financial support in boosting women entrepreneurs to scale up their businesses, get new opportunities, and effectively manage their businesses and the associated challenges.

Variations were shown in the impact of business location on business growth in both states. The model predicts that businesses in semi-urban areas demonstrate a modest increase in the likelihood of growth ($e^{\beta = 1.8}$, p< 0.06) although this evidence was not statistically significant(P>0.05). However, rural locations did not show a significant effect on business success ($e^{\beta = 1.4}$(p < 0.4) indicates that a semi-urban environment may offer and guarantee better conditions for business growth because of easy market access and improved infrastructures not lacking in rural areas (Table 5).

The findings revealed a strong positive relationship between business growth and business sectors like Retail and Manufacturing. The manufacturing sector has a significant impact on business growth ($e^{\beta = 2.6}$, p< 0.01), thus suggesting that manufacturing-based businesses are twice as likely to experience business growth compared to Agriculture-based businesses. Consistently, the manufacturing business sector showed a strong positive impact on the growth of businesses in both states($e^{\beta = 2.5}$, p< 0.01), which implies that these sectors have more opportunities for business expansion and success than the services sector. Overall, this model accounts for 66. 4% of the variation

in business growth suggests that it is a strong fit and significant influence as an independent variable on the dependent variable. These findings indicate the relevance of financial access, government policy support, and sectoral engagement in driving business success among female entrepreneurs.

The correlation matrix further revealed the influences of various factors such as government support (PGS), access to finance(AF), business location(LSU,LR), and various business sectors(SBR, SBA, SBS, SBM) on the growth of business in both states. From findings it revealed that there is a moderate positive relationship($r = 0.41, p < 0.01$) between PGS and LSU, which indicates as perceived government support(PGS) increases, there is a moderate likelihood of business being located in the semi urban areas(LSU), similarly the correlation ($r = 0.48$, $p < 0.01$) between AF and LSU was significantly strong and positive which suggest that access to finance is positively related to business in semi urban area which indicate that businesses in these areas have more access to funding and opportunities. There was a strong positive correlation ($r = 0.50$, $p < 0.01$) between SBR and AF which indicate that women entrepreneurs that are involved in Retail business sector are likely to get better access to finance(Table 6). Further analysis revealed that the correlation between SBM and SBR clearly indicates that the manufacturing business sector tends to perform better than the retail business sector (SBR) and is more likely to experience growth, though the retail business sector has the potential for expansion. A similar observation was revealed by the logistic regression in which the correlation ($r = 0.55$, $p < 0.001$) showed a positive relationship between SBR and SBA suggesting that retail and Agricultural business sectors have the potential for growth

Table 5. Logistic regression analysis of factors influencing business growth among female entrepreneurs

Variables	**(β) (coefficient)**	**Std. Error**	**Wald**	**Df**	**P-value**	**Exp(β) (odd Ratio)**
Intercept	-2.4	0.4	24.8	1	<0.001***	0.07
PGS	0.6	0.2	10.2	1	<0.001***	2.3
AF	1.5	0.2	26.4	1	<0.001***	4.5
LSU	1.5	0.4	3.2	1	0.06	1.8
LR	0.3	0.3	0.7	1	0.4	1.4
SBR	1.5	0.5	10.0	1	<0.001***	2.6
SBM	1.7	0.3	5.6	1	0.019**	2.5
SBS	0.7	0.5	2.6	1	0.4	1.3
SBA	0.9	0.2	2.1	1	0.4	3.1

Table 6. Person correlation matrix of the factors influencing on business growth among women entrepreneurs

Variable	PGS	AF	LSU	LR	SBR	SBA	SBS	SBM
PGS	-	0.57***	0.32*	0.28	0.45**	0.30	0.21	0.38*
AF	0.58***	-	0.47**	0.38*	0.49**	0.42**	0.31	0.41**
LSU	0.41**	0.48**	-	0.26	0.32	0.38*	0.28	0.30
LR	0.28	0.38*	0.26	-	0.25	0.31	0.19	0.28
SBR	0.41**	0.50**	0.32*	0.25	-	0.57**	0.43**	0.48**
SBA	0.30	0.42**	0.38*	0.31	0.55***	-	0.31	0.37*
SBS	0.21	0.31	0.28	0.19	0.44**	0.32*	-	0.29
SBM	0.36*	0.58	0.30	0.28	0.55***	0.37*	0.29	-

*** P< 0.001, ** P< 0.01, * P< 0.05

The likelihood of the business receiving a loan was predicted by a logistic regression model, The model predicts that larger businesses, especially with 6-10 employees($e^{\beta = 2.3}$, p< 0.01) and 11-20 employees ($e^{\beta = 3.5}$, p< 0.001), have a high likelihood of receiving loan approval from financial institutions, however, the model further explained that businesses with more than 21 employees ($e^{\beta = 6.7}$, p< 0.001) also showed a significantly higher likelihood of securing a loan from financial institutions and businesses with 1-5 employees. It can be observed from the findings that lenders may see larger businesses with more employees as less risky due to the high potential they have in generating higher revenue and maintaining operational stability. Collateral availability plays a significant role in obtaining by businesses, the model further predicts that businesses that offer collateral ($e^{\beta = 4.5}$, p< 0.001)

have a greater likelihood of receiving loans from financial institutions. These findings showed the significant role of collateral in reducing the lender's risk and hence increasing the chances of loan approval (Table 7).

The Pearson correlation analysis on factors influencing loan approval likelihood for businesses revealed that factors such as number of employees or business size(BS), collateral availability(CA), credit history(CH) and various business sectors(SBR, SBA, SBS and SBM) are closely related or linked to one another and they significantly contribute to the likelihood of loan approval. These relationships suggest that businesses with better financial profiles, larger employee bases, and strong management practices are more likely to secure loans (Table 8). The analysis showed a linear relationship between variables at different significant levels as indicated by ($p < 0.001$, $p < 0.01$, and $p < 0.05$) which clearly indicates the strength of these associations.

Table 7. Logistic regression analysis predicting the likelihood of loan approval for businesses based on key factors.

Variables	**β (coefficient)**	**Std. Error**	**Wald**	**Df**	**P-value**	**Exp(β) (odds Ration)**
Intercept	-1.875	0.432	18.73	1	<0.001	0.153
BS (6-10 employees)	0.8	0.2	6.1	1	<0.001	2.3
BS(11-20 employees)	1.2	0.3	13.6	1	<0.001***	3.5
BS(21+ employees)	1.9	0.4	16.5	1	<0.001***	6.7
CA	1.5	0.3	29.1	1	<0.001***	4.5
CH(good)	0.9	0.4	5.3	1	0.01**	2.7
CH(Excellent)	1.5	0.4	13.2	1	0.2	1.6
SBR	0.5	0.4	1.5	1	0.2	2.0
SBA	0.6	0.5	1.5	1	0.2	2.4
SBS	0.6	0.3	2.8	1	0.09	1.6
SBM	0.9	0.5	4.5	1	0.03*	1.4

Table 8. Person correlation matrix of factors influencing the likelihood of loan approval among women entrepreneurs in Enugu and Anambra States

Variable	1	2	3	4	5	6	7	8	9	10
1.BS(6-10)	-	0.48**	0.39*	0.44**	0.38*	0.31	0.28	0.25	0.31	0.34*
2. BS(11-20)	0.47**	-	0.58***	0.49**	0.44**	0.37*	0.33*	0.29	0.38*	0.44**
3. BS(21+)	0.39*	0.58**	-	0.56***	0.44**	0.38*	0.31	0.33*	0.42**	0.55***
4. CA	0.42**	0.49**	0.56***	-	0.48**	0.39*	0.37*	0.35*	0.38*	0.46**
5. CH(good)	0.36*	0.42**	0.43**	0.48**	-	0.55***	0.33*	0.28	0.43**	0.37*
6.CH(Excellent)	0.31	0.37*	0.38*	0.39*	0.56***	-	0.28	0.25	0.37*	0.38*
7. SBR	0.28	0.33*	0.30	0.37*	0.33*	0.28	-	0.57***	0.49**	0.47**
8. SBA	0.25	0.29	0.33*	0.35*	0.28	0.25	0.58***	-	0.38*	0.34*
9. SBS	0.31	0.39*	0.44**	0.38*	0.45**	0.37*	0.56***	0.58***	-	0.48**
10. SBM	0.55***	0.58***	0.45**	0.46**	0.57***	0.43**	0.58***	0.56***	0.49**	-

*** P< 0.001, ** P< 0.01

The analysis reveals critical insights into income generation across various business sectors, emphasizing the influence of sector-specific factors, business size, entrepreneurial experience, and access to funding. Businesses in the manufacturing and retail sectors emerge as the top income generators. Manufacturing businesses demonstrate the highest profitability ($\beta = 389{,}000$, $p < 0.001$), followed closely by retail businesses ($\beta = 300{,}760$, $p < 0.001$). These sectors benefit from their essential role in satisfying fundamental consumer needs and leveraging extensive customer bases. In contrast, services ($\beta = 156{,}340$, $p < 0.001$) and Agriculture ($\beta = 290{,}000$, $p < 0.001$) generate comparatively lower incomes. This may stem from challenges like market saturation, limited scalability, and higher operational costs. Beyond sector-specific

dynamics, business size significantly predicts income generation. For every additional employee, income rises by an average of 8,359 Naira ($\beta = 200{,}000$, $p < 0.001$), illustrating economies of scale and the operational advantages of larger enterprises. Entrepreneurial experience also plays a pivotal role; each additional year of experience corresponds to a 4,200 Naira increase in income ($\beta = 167{,}000$, $p < 0.001$). This underscores the importance of accumulated expertise, strategic acumen, and strong networks in driving business success. The impact of access to funding further highlights the importance of financial resources. Businesses with secured funding experience an average income increase of 6,782 Naira ($\beta = 1{,}890$, $p < 0.001$), demonstrating that financial support enables growth through investment in technology, operational expansion, and enhanced product or service delivery. The regression model explains 65.4% of the variance in income generation, confirming its robustness in identifying the primary drivers while acknowledging potential external influences (table 9).

The correlation matrix of factors influencing income generation among business sectors revealed that all factors have a significant positive correlation which indicates that these factors(SBA, SBR, SBM, SBS, AF, and EE) are interconnected and significantly influence business performance(Table 10). The highest correlations are observed between SBR and SBM($r = 0.68$), AF and SBM($r = 0.67$), and SBR and AF($r = 0.66$) which suggest a strong relationship between business sector retail(SBR), business sector manufacturing(SBM) and access to finance(AF). The finding clearly indicates that the business sector's performance and income generation are significantly influenced by support systems and financial access.

Table 9. Multiple Regression Analysis of Income Generation Across Business Sectors and Key Predictors

Variable	β	St. Error	T	P-value
Intercept	800,200	3,350	25.3	<0.001***
SBR	300,760	2,870	16.5	<0.001***
SBM	389000.00	2,900	17.6	<0.001***
SBS	156,340	1,040	10.7	<0.001***
SBA	290,000.00	2,678	15.1	<0.001***
BS	200,000.00	1,890	12.5	<0.001***
EE	167,000.00	1,530	10.1	<0.001***
AF	1,890.00	1,150	10.0	<0.001***

**** $p < 0.001$(highly significant)

Table 10. Pearson correlation matrix of factors influencing income generation among business sectors

Variable	SBR	SBA	SBS	SBM	BS	EE	AF
SBR	-	0.60***	0.57***	0.68**	0.41**	0.54***	0.66***
SBA	0.60***	-	0.68***	0.54***	0.45**	0.60***	0.65***
SBS	0.56***	0.60***	-	0.58***	0.50**	0.61***	0.59***
SBM	0.50**	0.54***	0.59***	-	0.54***	0.59***	0.61***
BS	0.40**	0.44**	0.50**	0.54***	-	0.57***	0.60***
EE	0.55***	0.60***	0.61***	0.59***	0.58***	-	0.64***
AF	0.58***	0.60***	0.65***	0.67***	0.60***	0.64***	-

*** P< 0.001, ** P< 0.01

The influence of entrepreneurs' experience on the expansion of businesses in each state was significant ($\beta = 0.256$, $p < 0.001$) as predicted by the model. It is observed from the findings that for every additional year of experience, there is a 25.6% increase likelihood of business expansion which implies that businesses with more experienced entrepreneurs have a high likelihood of growth because experienced entrepreneurs can overcome challenges which can lead to business growth (Table 11). The model further explained that women entrepreneurs in the manufacturing business sector have the highest likelihood of experiencing business expansion($\beta = 0.511$, $p < 0.001$) which

indicates that the manufacturing business sector has greater growth potential because of industrial demand, production scalability, and value-added opportunities. Retail business sectors(B = 0.473, P= 0.002) and services business sectors ($\beta = 0.321$, $p < 0.041$) also show significant expansion potential. These findings underscore the potential for growth in the retail and services business sector. It was observed from the findings that bank loan access and market opportunities influence business expansion as predicted by the model ($\beta = 0.279$, $p = 0.06$) which indicates that business that have access to bank loans have a high tendency of expansion. These findings showed that financial support either through loans or other sources can facilitate business growth. The size of the business, which is measured by the number of employees, influences the expansion of a business significantly as predicted by the model ($\beta = 0.435$, $p < 0.001$). The model explains that for each addition of employees, there is a likelihood of 44.23% business expansion which suggests that lagers businesses have more resources which enable them to invest and expand. The model also explained 62.4% of the variance in business expansion which suggests a strong relation between the predictors and the outcome variables.

The correlation matrix of factors influencing business expansion revealed that strong and positive correlation exists between years of experience and business size (YE and BS) which suggest that an increase in YE is strongly associated with an increase in BS. Similarly, there was a moderate but significant correlation between YE and SBR, and YE and SBM which suggest that an increase in years of entrepreneur experience(YE) can lead to

an increase in growth of business in Retail and Manufacturing business sector(Table 12). The correlation matrix revealed that SBR, BS,SBS, and YE are interconnected which implies that they may share underlying factors influencing them(Table). Business size, which is a dependent variable, is positively correlated with all other variables, which suggest that it has a strong association with the predictors.

Table 11. Multiple Regression Analysis of Factors Influencing Business Expansion

Variable	B	St. Error	T	P-value
Intercept	-0.879	0.321	-2.737	0.006**
YE	0.256	0.05	4.11	<0.001***
SBM	0.511	0.126	3.75	<0.001***
SBR	0.473	0.15	3.17	0.002**
SBS	0.321	0.16	2.04	0.041*
SBA	0.303	0.150	2.00	0.047*
BL	0.279	0.14	1.88	0.060
BS	0.435	0.09	4.44	<0.001

Table 12. Pearson correlation matrix of factors influencing business expansion

Variable	YE	SBR	SBS	SBL	BS
YE	-	0.34**	0.29*	0.27*	0.41***
SBR	0.34**	-	0.40***	0.24*	0.37***
SBS	0.29*	0.40***		0.31**	0.35***
SBL	0.28*	0.24*	0.32**	1.00	0.40**
BS	0.41***	0.37***	0.35***	0.40***	1.00

*** P< 0.001, ** P< 0.01, * P< 0.05

The F-statistics revealed a significant difference ($p < 0.05$) in employment level across various business sectors. The study found out that there are uneven average numbers of employees across the various sectors which indicates that certain sectors might have more employment opportunities than

others. The average number of employees in the manufacturing sector was significantly higher (20.5 people) and higher than those in agriculture (16.0) and retail(12.0) in both states. The findings opined the significant differences in employment levels across different business sectors among female entrepreneurs in both states with the Manufacturing sector emerging as the highest employment potential sector which outlay the agriculture and retail sectors.

Table 13. Breakdown of Employment Levels Across Business Sectors Among Female Entrepreneurs

Sector	**Mean ± Standard Deviation**
Agriculture	5.2±3.1
Retail	8.6±4.5
Services	12.4±5.2
Manufacturing	15.8±6.8
F-statics	25.47
P-value	< 0.001

Discussions

The age distribution of women business owners in both Enugu and Anambra states falls within the age bracket 26–35, followed by 36–45, which is described with high energy and assurance for monetary freedom. Kelly et al. (2020) reported that the youthful and adult age range of entrepreneurship aligns with the peak of productivity and determination to overcome challenges faced during the investment. Akpan et al. (2022) likewise detailed that these energetic and grown-ups are circulated across sub-Saharan Africa, where young individuals manage small and medium enterprises due to the need for employment. In the two states, older entrepreneurs were fewer,

which can be because of either retirement or the high physical vigor that entrepreneurship demands, which older entrepreneurs cannot provide. There was business proficiency among women entrepreneurs, as more than 50.0% of them have secondary school education. However, limited advanced technical skills were observed during the study in both states. Maina and Gathenya (2020) revealed that high-level training can improve business vital abilities and development, which are important for business growth and better access to finance. Marriage acts as an inspiration for the foundation of business, and single women entrepreneurs ordinarily take part in business because they need to get monetary freedom and self-reliance (Lawal et al., 2021; Eze and Okeke, 2018), which was clear in this study. Experience levels are varied, with a slightly greater proportion having 1–3 years, reflecting a mix of startups and established enterprises that foster peer learning and innovation (Udo et al., 2020). Business sectors differ prominently, with agriculture and retail leading in Enugu and service-oriented businesses prevalent in Anambra due to local financial structure differences (Okoro et al., 2019). Low manufacturing engagement points to barriers such as limited infrastructure and investment. Most female entrepreneurs depend on private reserves and family support, with limited access to formal finance, reflecting 1broader developing economy trends. The slight expansion in microfinance use in Anambra suggests a stronger sector presence; however, the low government support take-up signals a gap in policy reach (Hansen et al., 2021). Predominant urban business locations indicate urban centers provide better market access and support, while rural entrepreneurship faces infrastructure and market limitations (Emefiena et al., 2020). Akinola et al. (2023) reported that addressing

infrastructural and market challenges can promote entrepreneurial activities. The findings showed a strong positive association between government support and business success ($e^{\beta = 2.3}$, p< 0.001), confirming the role of strategic policies in overcoming market entry barriers and supporting sustainable development (Herrington & Coduras, 2019; Minniti, 2010). Access to finance ($e^{\beta = 4.5}$, p< 0.001) is the strongest predictor of success, allowing growth through resource acquisition and resilience to market shifts (World Bank, 2020). Location also impacts growth, with semi-urban businesses showing an advantage, likely due to market proximity and improved networks (Ghani et al., 2016). Retail ($e^{\beta = 2.3}$, p< 0.019) and manufacturing ($e^{\beta = 3.2}$, p< 0.001) sectors show strong growth due to consumer demand and economic relevance (FAO, 2020). Large businesses ($e^{\beta = 6.7}$, p< 0.001) and collateral provision ($e^{\beta = 4.1}$, p< 0.001) improve loan access, reflecting lender preference for stable, income-generating enterprises (Beck et al., 2015). Income generation is notably higher in manufacturing (β = 12,850, p < 0.001) and retail (β = 9,340, p < 0.001), with each employee contributing to revenue, supporting studies on larger enterprises' revenue potential (De Kok et al., 2011). The recent report from Kwode, (2022) from study conducted in Southwestern and Northern Nigeria(Garba et al.2022) have highlighted similar constraints faced by women entrepreneurs particularly in access to credit and market linkage. Similarly, comparative research in Ghana and Cameroon indicate parallel institutional and cultural barriers(Derera,2023). These regional parallels strengthen the argument that the challenges observed in Enugu and Anambra are part of broader structural issues in West Africa. Entrepreneurial experience positively influences income (β = 3,180, p < 0.001) and expansion likelihood (β

= 0.226, $p < 0.001$), as experience improves adaptability and market network strength (Minniti & Bygrave, 2001; Bosma et al., 2004). Bank loan access and market opportunities further drive expansion, indicating the critical role of financial resources for SME growth (Ayyagari et al., 2008).Government support and access to finance seen as critical tools for entrepreneur development and participation reinforces institutional theory which predict that formal structures can either constrain or enable entrepreneurship. Similarly, the dominance of manufacturing and retail sectors suggest how resource mobilization, which is the core tenet of RBV can influence women's participation and success. It can be seen from the study further that the strong performance of manufacturing and retail sectors may be due to their low entry barriers and which is agreement with traditional gender roles that encourage women's participation in trade and production of consumer goods. In the Southern Nigeria especially cites like Nnewi and Onitsha are commercial hubs where women have historically dominated the informal manufacturing and retail sectors creating favorable ecosystems for female owned enterprise.

Conclusion

Women entrepreneurs account for 76.1% of the entrepreneurs and more than (52.7 %) of them have attained secondary education. Their level of literacy, equipped with basic entrepreneur skills for a good and better business operation, has been the driving force for their business success.

The study further sheds light on experience level and business sectoral variations with most of the women (38.4%) having 1-3 years of business while the manufacturing and retail business sectors are the dominant business

sectors. The finding concluded that access to finance is the strongest predicting factor for business success ($e^{\beta = 4.5}$, $p < 0.001$) which enables them to acquire resources and be resilient to market fluctuations. The growth of business can be significantly influenced by business location as business growth was observed in the semi-urban center and urban centers which was due to the market proximity and improved network as indicated by the findings. Similarly, it was concluded that larger businesses with more employees have six times ($e^{\beta = 6.7}$, $p < 0.001$) more potential to grow and four times ($e^{\beta = 4.1}$, $p < 0.001$) more likely to receive loans than smaller businesses. Manufacturing and retail business sectors demonstrate strong growth and high-income generation potential, providing more employment, and thus indicating their role in satisfying consumers compared to other business sectors, and entrepreneurs experience significant and positive influence on income generation. The study clearly underscores the importance of financial access, which emerged as the strongest significant predictor for business and therefore policies should prioritize expanding microcredit and lowering further collateral requirements. Furthermore, the significant role of manufacturing and retail sectors indicate that government incentives should target value chains in textiles, agro-processing, and trading which in agreement with capabilities and interest of women entrepreneurs in these states. Inadequate infrastructure limited rural market opportunities, and restricted access to credit were the most limiting factors for the expansion of business, creation of employment, and generation of income thereby reducing the economic contribution to both states. The findings recommended that to enhance women's entrepreneurship, context-specific policy reforms such as expanding the Bank of industry's Gender

Business Loans to semi-urban Enugu and Anambra. For instance, the YouWin connect Nigeria initiative has demonstrated success in empowering female entrepreneurs through mentorship and funding which could be replicated across other southeastern states. It is also important that the state-levvel governments should also consider developing entrepreneurship hubs modeled after Lagos LSETF women in Business fund, tailored to the regional dynamics of the southeastern Nigeria. Therefore, this study recommended targeted interventions, including financial support with reduced collateral requirements, skill development programs, and infrastructure improvement, to address these challenges.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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