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EFFECT OF FOREIGN FINANCE ON SME'S PRODUCTIVITYIN LAGOS, NIGERIA

EFEITO DO FINANCIAMENTO EXTERNO NA PRODUTIVIDADE DAS PMEs EM LAGOS, NIGÉRIA

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Abstract
This study explored the effect of foreign finance on the productivity of SMEs in Lagos State Nigeria. Adopting Pecking Order Theory and the Resource-Based Theory, the study hypothesised links between foreign finance and SMEs performance variable. The study employed a survey design using random sampling technique with 361 sample size out of a population of 5,344. Primary data were collected with the aid of a questionnaire on a five-point Likert scale distributed through hard and electronic means to SMEs in Lagos State. Both descriptive and inferential statistics with regression analysis were employed to examine the five hypotheses with the aid of Statistical Package for Social Sciences. The overall findings revealed that foreign finance elements of foreign direct investment (FDI), foreign venture capital (FVC), foreign loan (FL) and foreign grant (FG) had significant positive effect on the performance of SMEs in Lagos Statewith foreign grant leading the park. Size of the firm has no significant effect on SMEs performance. The study concluded that change foreign finance elements have significant effects on SMEs productivity in Lagos State. SMEs can draw insight from this study to engage in structuring their business to attract foreign investors. It is recommended that SMEs should make themselves attractive to foreign investors and grantors by structuring their companies and improve on their reporting process.

Resumo
Este estudo explorou o efeito do financiamento estrangeiro na produtividade de pequenas e médias empresas (PMEs) no estado de Lagos, Nigéria. Adotando a Teoria da Hierarquia de Financiamento e a Teoria Baseada em Recursos, o estudo formulou hipóteses sobre a relação entre o financiamento estrangeiro e o desempenho das PMEs. O estudo empregou um delineamento de pesquisa por levantamento, utilizando a técnica de amostragem aleatória, com uma amostra de 361 participantes de uma população de 5.344. Os dados primários foram coletados por meio de um questionário com escala Likert de cinco pontos, distribuído por via impressa e eletrônica para PMEs no estado de Lagos. Estatísticas descritivas e inferenciais, com análise de regressão, foram utilizadas para examinar as cinco hipóteses com o auxílio do Pacote Estatístico para Ciências Sociais (SPSS). Os resultados gerais revelaram que os elementos do financiamento estrangeiro, como investimento estrangeiro direto (IED), capital de risco estrangeiro (CRE), empréstimo estrangeiro (EE) e doação estrangeira (DE), tiveram um efeito positivo significativo no desempenho das PMEs no estado de Lagos, sendo a doação estrangeira o fator com maior impacto. O tamanho da empresa não apresentou efeito significativo no desempenho das PMEs. O estudo concluiu que a variação nos elementos do financiamento estrangeiro tem efeitos

Keywords: Small and Medium Enterprises (SMEs). Foreign Finance. SMEs Performance. Productivity.

significativos na produtividade das PMEs no estado de Lagos. As PMEs podem aproveitar as informações deste estudo para estruturar seus negócios de forma a atrair investidores estrangeiros. Recomenda-se que as PMEs se tornem mais atrativas para investidores e financiadores estrangeiros, estruturando suas empresas e aprimorando seus processos de prestação de contas.

Palavras-chave: *Pequenas e Médias Empresas (PMEs). Financiamento Externo. Desempenho das PMEs. Produtividade.*

1 INTRODUCTION

One of the key responsibilities of governments all over the world is improving the standard of living of their citizens. One way of achieving this is to continually improve the gross domestic product (GDP) of the country and create optimal employment among its citizens. Small and medium enterprises are a veritable channel of achieving this all-important government obligation through the generation of economic activities and job creation, stimulating growth and economic prosperity across most countries, especially in the African continent (Olaniyi, Muraina & Ngonadi, 2023; Awaad, 2022). However, this very important sector has been hampered by lack of access to finance (Fowowe, 2017). Though there are several sources of finance open to SMEs, including local and foreign, yet this problem persists.

Contributions of SMEs to countries' economy are well documented in literature. The 2021 Small and Medium Enterprise Development Agency of Nigeria (SMEDAN) survey report shows that MSMEs in Nigeria accounted for 96.7 percent of businesses, 87.9 percent of employment, 49.7 percent of national GDP and also accounted for 6.21 percent of gross exports in 2021 (SMEDAN, 2022). A report by World Economic Forum states that MSMEs represent around 90% of all firms globally, provide roughly 70% of all employment, and, by some estimates, contributes up to 70% of global GDP. This proves that small and medium-sized enterprises (SMEs) are the engine that pushes global economies.

According the United Nations, SMEs greatly promote and helps to achieve the 17 sustainability development goals (SDGs) in generating economic activity, in creating employment and incomes, particularly for the poor and marginalized groups. SMEs drive

the economy in the areas of increased employment and gross domestic products among others (UNDESA, 2020). According to Rao, Kumar, Chavan, & Lim (2023), "the prosperity of the world's economy is anchored on the emergence and growth of a thriving SME sector". Bartolacci, Caputo and Soverchia (2020) highlights that SMEs can provide substantial contributions to the United Nations Sustainable Development Goals through employment generation, sustainable industrialization, innovation nurturing, and income disparity reduction, and crucial to such aspirations and endeavours are the financial performance and sustainability of SMEs.

Despite these noble contributions by SMEs to world economies in general and Nigeria in particular, a lot of SMEs do not survive beyond 5 years, especially in Nigeria and Africa (Adetayo, Olorunfemi, Akinsehinwa, & Azrour, 2024; Adeniran & Olorunfemi, 2020; Gumel, 2017). According to Kippa (2022) in an SME survey report conducted in Nigeria in 2022, MSMEs in other emerging markets like India, Brazil, Mexico, Peru, and Indonesia outgrow their founders, employ more than one person, grow and record profits over time while majority of MSMEs in Africa do not even though they have that potential, as 80% of businesses in Africa fail within five years of starting up. Also, SMEDAN in its 2021 survey reported a reduction in the number of MSMEs in 2020 to 39.6 million as against 41.5 million in 2019, which accounts for a 3.7% reduction in less than a year. Though the COVID-19 pandemic may have contributed to this, the number is still worrisome. The pertinent question to ask is why the high rate of failure? What is impeding SMEs' performances?

SMEs sector is acknowledged for having huge potential and for making a significant contribution to sustainable economic growth but its performance in many developing nations still falls short of expectations (Okonkwo & Obidike, 2016). This suggests that despite the existence of many financial support programmes to SMEs, they continue to experience high failure rate (Kehinde, Abiodun & Adegbuyi, 2016). While some level of contribution of financial assistance is not in doubt, however, there is a little empirical evidence in Nigeria on the extent to which financial assistance improves performance of SMEs.

Expectedly, the growing importance of SMEs in an economy and the persistent problem of access to finance have attracted many research in this field. Researchers in the past have concentrated more on access to finance and its various forms available to SMEs but not much has been done on the impact of finance on SMEs performance (Piza

et al., 2016; Bradley *et al*., 2021). Majority of studies of SMEs finance and performance in Nigeria centred on domestic sources despite the inadequacy of these funding strategies (Saidi *et al*., 2019; Ugwuanyi & Agbo, 2013; Eze & Apiri, 2020; Adeyinka *et al*., 2019; Abdullahi *et al*., 2015). These studies failed to explicitly explore cross boarder financing of SMEs as alternative to solving this perennial problem of lack of access to finance.

Some researchers have indeed responded to the need to go beyond the important of access to finance by SMEs to studying the effect of finance on SMEs performance. For instance, while Wiik and Torvund (2022) and Muraközy and Telegdy (2023) studied on the effect of grants on SMEs performance, Walter, Offiong and Udoka (2018) carried out a study on impact of Joint venture Capitals on SMEs performance. Others authors that have researched on effect of specific financing types on SMEs performance include Adeyinka, Abdulkarim and Odi (2019), Eze and Apiri (2020), Wiik and Torvund (2022).

Nigerian SMEs, facing financial constraints, seek external funding sources, including foreign investment, loans, and grants, to boost their operations and expansion initiatives; however, the effectiveness and implications of this foreign financing for the SME sector remain a topic requiring in-depth investigation (Bradley *et al*., 2021).The impact of foreign financing on the performance and growth of Small and Medium Enterprises (SMEs) in Nigeria is a vital concern that demands a comprehensive examination. The primary problem stems from the uncertainty regarding how foreign financing influences SMEs in Nigeria. This study contributed to this existing research by concentrating on foreign sources of finance to SMEs in Nigeria and to see if foreign financing has any impact on the SMEs' productivity.

2 LITERATURE REVIEW

Small businesses are often defined based on the workforce, the amount of capital invested, and the management structure (OECD, 2004; Lucky & Olusegun, 2012). According to the United Nations (2020), SMEs can be considered as having, say, between five to two hundred employees and are found in the formal sector (i.e., they are formally registered as a business organization). For OECD (2015), SMEs employ fewer than 250 people. Nigeria is among the countries with many internal SMEs description. SMEs in Nigeria has been described differently by several government institutions. SMEDAN defined medium scale enterprises in Nigeria as enterprises with employees from 50 to

199, and capital ranging from 50 to 100 million Naira (US$100,000 to US$1,000,000) (Ogunyomi & Bruning, 2015; Juliana, 2013). This study considers the definition of small businesses by SMEDAN because it focuses on two fundamental aspects of this study, namely capital and employees, but adopted the definition of SMEs from the 2021 – 2025 revised national policy on MSMEs by the Nigerian government. This definition is summarized in the Table 1.

Table 1

SMEs definition by Nigerian National Policy on MSMEs

S/N	Size category	Employment	Turn over (N million)
1	Nano/ Homestead Enterprises	1-2	Less than 3
2	Micro Enterprises	3-9	3-25 million
3	Small Enterprises	10-49	25+ but less than 100
4	Medium	50-199	100+ but less than 1000

2.1 Review of sub-variables

The focus of this study is the effect of foreign finance on the performance of SMEs in Lagos state, Nigeria. Foreign finance can affect the performance of SMEs in Nigerian, either positively or negatively. In essence, the independent and dependent variables can influence each other. In this section, the variables utilized to complete the analysis and construct our models are highlighted.

Furthermore, the basis for the choices in the light of existing research, theory and data in the field is presented. The independent variables are forms of foreign finances, while dependent variables are the average performance metrics of revenue growth, employment creation, return on assets and productivity. We also control for firm-level data of size.

2.2 Independent variable and its components (proxies)

The independent variable is foreign finance sources. The components (proxies) of the independent variable which represent the forms foreign finance can flow to SMEs are:

1. Foreign Direct Investment (FDI)
2. Foreign Venture Capitals (FVC)
3. Foreign Private Loans (FPL)

4. Foreign Grants (FG)

Loans and equity include special funds from Development Financial Institutions (DFI)

1. Foreign direct investments (FDI)

FDI involves a long-lasting investment in a host country by a foreigner. An individual or firm from another nation may directly participate in production or business in another country through foreign direct investment (FDI), which might take the form of purchasing an existing company there or growing its operations; and is different from the portfolio investment which is a passive investment in the securities of another country such as stocks and bonds (Tülüce, & Doğan, 2014). FDI is also known as the growth enhancing factor in developing countries and has been considered as potential source of development for the novel and small domestic firms (Wang et al., 2018)

2. Foreign venture capital (FVC)

Venture capital (VC) is usually applied for fund startups and other companies that have the potential to expand significantly and quickly. It is a form of private equity finance which involves investing in unquoted companies with substantial growth. In nature, it is medium to long term and made in exchange for a stake in a company (Memba, 2011). Venture capitalists take an active role in the management of the firm they fund and work in close collaboration with the stock market to take the firm they fund public (Christian, 2018; Memba, 2011). The VC market in Africa is largely confined to South Africa, Nigeria and Kenya, accounting for over75% of the total VC investment in the Africa continent (VC4Africa, 2015).

3. Foreign loans (FL)

These are cross-border borrowings by SMEs from individuals and private companies. These foreign loans usually come in lower interest rate than domestic loans but are heavily affected by exchange rate movements. Sometime also, they come in longer tenors to the SMEs. Because foreign loans come in usually lower rate and longer tenure, its benefits to SMEs operations can be enormous. Harash, Al-Timimi and Alsaadi, (2014) in their studies found that companies that had some foreign debt financing performed better than their counterparts. However, it is noteworthy that foreign debt amplifies the negative effect of total leverage on company performance (Harash, Al-Timimi& Alsaadi, 2014).

4. Foreign grants (FG)

Grant is usually financial award given by an individual, company, foundation to a company to facilitate a goal or incentivize performance. Grants are essentially gifts that usually do not have to be paid back. A grant scheme for small businesses is designed to be offered at no rates of interest such that the beneficiary firms can leverage the advantages to be productive and grow their businesses thus participating in the mainstream of the economy (Aluko & Bayai, 2023). It becomes a foreign grant when the sources are beyond the shores of a country. Grants are not simply free money as they have conditions attached to them that need to be met. While some grant giving entities seek out qualified SMEs, many SMEs in turn look out for these donors to attract them by complying with certain conditions. Grants can come from various sources, including government agencies, nonprofit organizations, and private corporations. Each type of grant has its own set of eligibility criteria, application processes, and funding amounts.

2.3 Dependent variable and their indicators

1. Productivity (PRD)

Production is the conversion of inputs and durable resources into output in the form of product, service, or information. Productivity may be defined as simply the relationship between what goes into the system and what is produced, or more simply, the ratio of output to input (Misterek *et al*., 1992). According to Berhe *et al*., (2017), productivity has been practiced by every company as a performance measure and indicator and can be broadly defined as the ratio of output values to input values.

Rapidly expanding businesses may worry about rising costs or capital inputs, but as long as input growth is proportionately smaller than output growth, overall productivity growth will continue in that business. This is known as managed growth. Conversely, if a company can decrease inputs more quickly than it decreases outputs, it can be able to maintain productivity growth even in the face of diminishing sales (Adeniran & Obembe, 2020). One of the key limitations of productivity measures is its inability to account for changes in the quality of the inputs or outputs. (Misterek, D., Dooley & Anderson 1992). Researchers that have used productivity as a measure of SMEs performance include Radas *et al*., (2015); Tülüce and Doğan (2014); Saurav and Kuo (2020); Bruno and Cipollina (2018); Nyikos *et al*., (2020).

Control variables

As suggested by existing literature, there are many factors that might impact firm performance beyond finance. To account for other variables that might influence the results, and to ensure correct conclusion, this study will account for factors such as firm characteristics which have demonstrated possible impact on firm performance. At firm-level, the researcher will include firm size as a control variable.

Theoretical Framework

This study essentially anchors on the pecking order theory because of its relevance to the research.

Pecking order theory and SMEs

Many works have concluded that SMEs possess greater limitations to access to external financing more than large companies mainly due to asymmetric information problems between borrowers and lenders (Beck *et al*., 2005; Bebczuk & Haimovich, 2007; Bebczuk, 2010). In the SMEs hierarchy, the smallest ones imply high risk related to their activities and are associated with different problems of information asymmetry. Access to outside funding may be significantly impacted by asymmetric knowledge issues like moral risk and adverse selection.

Asymmetric information, which includes information prices, frequently causes issues for SMEs. Consequently, they seem to be affected by the problems typically contemplated in the pecking order theory. Compared to large firms, SMEs are not usually listed on a capital market. As a result, they incur significant transaction costs when seeking financing. Recall that SMEs are usually owned and managed by only one director/owner (or very few) who is not interested in retaining firm control. Due to the financial constraints imposed by creditors, SMEs typically have lower levels of leverage. As a result, they rely more on short-term debt and internal resources. Finally, they are more prone to bankruptcy since they are more volatile.

Pecking order theory and SMEs Productivity

By contending that firms would avoid external financing if they have internal financing available and avoid new equity financing whenever they can engage in new debt financing, POT challenges other theories including the Trade-off Theory. According to Myers and Majluf, 1984) and Daskalakis *et al*. (2017, this will ensure profitability. The authors contend that because highly successful businesses have the ability to generate profits and are prepared to finance their investment opportunities and other activities using retained earnings first, debt financing second, and new equity issues last, POT will

have a negative relationship with leverage which has the highest information cost. Burgstaller and Wagner (2015) supports this position. Psillaki& Daskalakis (2009) affirm that firms that can generate more profits and accumulate enough of it will borrow less, all things remaining the same, signifying a negative relationship between profitability and debt.

Empirical Review

The researcher observed from empirical reviews of literature that the findings from the subject matter still remain inconclusive. There were conflicting findings in the various studies carried out by different researchers. For instance, Adegboye and Iweriebor (2018)) indicated a positive relationship between access to finance and innovation, the authors also concluded that increased finance may lead to productivity decline. Also, there were mixed results in the study carried out by Charoenrat and Harvie (2014) in Thailand with positive and significant impact of FDI on medium SMEs but negative impact on small SMEs.

There were also mixed results across regions indicating need for further research. Alraja, Hammami and Al Samman, (2016) in their study found that FDI does not have effect on the ICT goods exports and imports. On other hand the study finds a positive and significant effect of FDI on ICT service thus necessitating further studies. While Ekienabor, Aguwamba and Liman, (2016) from their study revealed positive and significant relationship between foreign direct investment (FDI) and manufacturing output in Nigeria, Subair and Salihu (2011) in their study concluded that FDI on its own has contributed negatively to the development of small and medium scale enterprises in Nigeria through the MNCs.

The main objective of this study is to investigate the causality between foreign finance and SMEs productivity in Nigeria. Many reviewed literatures concentrated only on foreign direct investment. Such researchers included Chodisetty and Babu (2022); Akinwale *et al*., (2018); Rawoof *et al*. (2023); Belloumi and Touati (2022); Edeh *et al*. (2020). The researcher has added other forms of foreign finance including grants, foreign loans, funds from foreign development finance institutions and venture capitals. In Nigeria there are few studies on venture capitals as the concept is still evolving. This position was reinforced by Kato (2021) and Walter *et al.* (2018) who suggested further work on venture capitals. This reinforced the empirical gap the researcher intends to fill.

Srhoj, Lapinski and Walde (2021) investigated the new micro econometric evidence on the impact of business development grant schemes on output and input additionality of SMEs in Croatia. The authors employed ex post facto research design making use of data set from Ministry of Entrepreneurship and Crafts of the Republic of Croatia and Annual Financial Statements Registry of the Republic of Croatia database. Data was analysed using a two-way fixed effects regression. The results from the study show on average strong positive effects of business development grants on capital stock, bank loans, intermediate inputs, value added as well as employment for firms with over 20 employees, but no empirical evidence of any significant and positive effect on productivity, sales, average wage and inventories. However, the significant positive findings are more prevalent on of firms of smaller size.

Dvoulety, Srhoj and Pantea (2021) employing a systematic review of empirical evidence as their research design carried out a study on public SME grants and firm performance in European Union. The study focused only on European Union 28 member countries (EU 28) and grants supporting small and medium-sized enterprises (SMEs). The result of the study shows mostly the positive outcomes of the grants on firm-survival, employment, tangible/fixed assets, sales/ turnover, with varied findings for labour productivity and total factor productivity (TFP).

Nyikos *et al*. (2020) examined micro-level effects of grants, and financial instruments (FIs) on SMEs access to finance in Hungary. A panel data with firm-years as the units of analysis sourced from European Union (EU) subsidies and yearly aggregated information on credits received by the firms were used. The analyses are done using propensity score matching. Findings show that the use of subsidies has a positive impact on employment, sales and in certain settings on productivity. The result also shows that grants seem to be used effectively while FI holds more direct relevance to advanced productivity.

Takahashi and Hashimoto (2023) examined the effects of a small grants subsidy on small- and medium-sized enterprises' (SMEs) productivity in Japan. The study utilized secondary data (from 2009 - 2016) and employed regression to analyse the data using propensity score matching and difference-in-differences (DID) design This study showed that receiving a small subsidy does not have significant outcomes, but applying for one can increase SMEs' sales and productivity. These positive results are heterogeneous on

firm age and industry and are most pronounced in firms operating for 6-10 years in the service industry.

Saurav and Kuo (2020) surveyed literatures and explored the heterogeneous effect of FDI on three types of domestic firms: foreign-owned local firms that are affiliates of multinational corporations (MNCs), local firms that are suppliers to or customers of MNC affiliates, and local firms that compete with MNC affiliates. The authors employed a review and meta-analyses of existing literature on developing countries. Findings of the study revealed consistent evidence that foreign ownership increases the productivity of MNC affiliates in developing countries. For firms engaged in supplies to MNCs, evidence suggests significant productivity benefits, whereas the evidence is mixed for buyers and distributors of MNCs products.

Šelebaj and Bule (2021) studied the effects of grants from EU funds on business performance of non-financial corporations in Croatia. The methods adopted are secondary date extracted from three data bases including Croatia Ministry of Finance with some econometric analysis. The research showed that the use of EU funds has a strong and positive effect on employment, operating income, labour productivity or total factor productivity and capital intensity. At the same time, the level of impact significantly depends on the relative size of grant received from EU funds.

Aluko, Bayai and Enwereji (2023) focused on government programmes providing financial and non-financial resources to support small, micro and medium-sized enterprises (SMMEs) through grants and subsidies. Employing literature review during period 2010 to 2022 on publications that focused on the terms “effectiveness of grant support for SMME,” “government intervention programme for SMME,” and “subsidies programme for small business” results indicated that government intervention programmes have had an overall favourable impact on business employment creation, sales/turnover and productivity, while there are conflicting results for business labour productivity and business survival.

Edeh, Eze and Ugwuanyi (2020) conducted a study on the impact of foreign direct investment on the agricultural sector in Nigeria. The research adopts the ex-post facto research design using quarterly time series data for the period 1981–2017 obtained from the Central Bank of Nigeria Statistical Bulletin. The Authors used the Autoregressive Distributed Lagged (ARDL) model, Fully Modified Least Squares (FMOLS) and Dynamic Ordinary Least Squares (DOLS) to estimate the parameter estimates of the

regression model. The framework for the study was based on the eclectic model of FDI by Dunning (1992).

Results indicate that foreign direct investment has a positive and significant impact on agricultural sector output especially in the short run. In order to improve long run gains, the authors recommend that urgent efforts should be put in place by stakeholders in government and the agriculture sector to attract more FDI in order to improve and increase output. Such efforts include an increase in tax holidays (from the present 3 years to at least 6 years) to prospective foreign direct investors. The study relied only on the CBN statistical bulletin. Direct impact on the companies engaged in agriculture was not explored.

Akinwale, Adekunle and Obagunwa (2018) investigated the impact of foreign direct investment on agricultural productivity in Nigeria. The study employed Augmented Dickey – Fuller (ADF), Johansen test and Error Correction Mode on secondary data to examine the effect of foreign direct investment and agricultural development. The result of the study indicated that both foreign direct investment and bank credit to agricultural sector had significant effect on agricultural productivity. The authors concluded that, for the Nigerian economy to benefit from the huge potentials of agricultural sector, the sector must be willing to explore more benefits offered by foreign investors. They however recommended that; government should put in place adequate infrastructures through massive rural-urban in infrastructure investment scheme in order to attract foreign investment to the agricultural sector.

Pasali and Chaudhary (2020) assessed the impact of foreign ownership on firm performance by size in developed and developing countries using sales growth, employment and labour productivity as performance indicators. Data was sourced from the Enterprise Surveys collected by the World Bank across the developed and developing world between 2010 and 2019 with a sample of about 80,000 formal enterprises in 144 countries including 47 African countries. While the preliminary results show foreign ownership overall does give firms an edge on performance, there is no consistent evidence that this is so by firm size. However, across all developing regions, the study consistently finds that foreign ownership has a positive impact on the sales and productivity growth of micro-size firms.

3 METHODOLGY

3.1 Research design

The study adopted a survey research design. The type of survey design is research adopted is a cross-sectional design to evaluate relationship among variables in the study and data was collected from various organizations at a single point in time and analysed according to set hypotheses (Olorunfemi & Adeniran, 2024; Adetayo, Olorunfemi, & Njoku, 2022). A substantial sample of business owners or a senior staff member from these companies participated in surveys and questionnaires, which included Likert scale questions to assess foreign finance and performance variables. The data was sourced from one member of the top management preferably CEO or the staff in charge of finance or strategy who were considered knowledgeable about the issue under investigation. Their choice is consistent with similar studies conducted by Olaniyi, Olorunfemi and Akanmu (2025), Adeniran and Tayo-Ladega (2024), Adeniran, Stephens and Akinsehinwa (2020), Shabarati, Jawad and Bontis (2010) and Cabrita and Bontis (2008) who claim top managers are well-informed about organizational features.

This research adopted a quantitative method to investigate the effect of foreign finance on the revenue generation of Nigerian SMEs with focus on Lagos State. Descriptive statistics was computed to represent general information and firm characteristics. Both descriptive and inferential statistics were utilized to analyse the data. Additionally, a series of regression analyses was conducted to assess the relationship between the independent and dependent variables to determine whether the results are significant or not

3.2 Population of the study

The population of the study is 3,744 SMEs in Lagos that are registered with Corporate Affairs Commission as private limited liability companies (SMEDAN, 2021). According to SMEDAN' 2021 survey report and as shown in the tables below, about 1.2m Micro, Small and Medium Enterprises (MSMEs) are formally registered. Out of this number 670,447 are small and medium enterprises which are the study focus. The state distribution shows Lagos state having 42,067. The SMEDAN reports also revealed that

private limited companies constitute 8.9% of the registered 1.2m as shown in Table 2. Thus, the study population becomes 3,744 (8.9% of 42,067) SMEs.

Table 2

Ownership Structure of formally registered enterprises in Nigeria in 2022

Ownership Structure		
Form of Ownership	**Number**	**Percent**
Sole Proprietorship	981,269	79.1
Partnership	77,635	6.3
Joint Venture	20,013	1.6
Private Limited Liability Company	110,979	8.9
Cooperative	9,557	0.8
Faith Base Organization	25,226	2.0
Others	16,287	1.3

Source: SMEDAN (2022)

3.3 Sampling techniques

The Researcher employed the probabilistic sampling techniques of random sampling. From the sampling frame/population of 3,744 SMEs, each SME will stand a chance of being selected into the sample from whence the questionnaires will be administered. The random sampling to select the required samples was executed using the = random ( ) function in excel.

3.4 Sample size determination

This researcher used a total of 361 participants determined using Taro Yamane (1967) sample size determination represented as follows: 3,744/ (1+3,744(0.05)2 = 361

3.5 Reliability of research instrument

Cronbach's Alpha was employed for evaluating reliability and assessing the internal consistency of items within a scale. The coefficients of Cronbach alpha reliability test ranges from 0.00 to 1.00 with any value above 0.7 indicating that the research instrument is reliable (Adeniran, 2025; Adeniran and Fakunle, 2025; Adeniran, 2019). The pilot survey instrument was administered to 50 identified SMEs. The result of the

test is above the threshold of 0.70 indicating the reliability of the instrument as shown in Table 3.

Table 3

Overall reliability statistics

Cronbach's Alpha	N of Items
.987	9

Source: Research Survey (2024)

3.6 Methods for data analysis and statistical treatment

Both descriptive and inferential were applied in the analysis of the data. To ensure completeness and suitability of data sets, the questionnaires with many gaps for data analysis were eliminated. Descriptive analysis was the first step for data analysis used for this study. The Regression Analysis served as the statistic tool (Adeniran, Asifat, Familusi & Folorunso (2024). Regression analysis was employed to examine the research hypotheses utilizing the Statistical Package for Social Sciences (SPSS) version 27.0. The regression model statistically measures the relationship between foreign financing and SMEs' productivity. Firm size is employed as a control variable

The perceived functional forms shall be specified as follows:

PRD=f(FDI, FVC, FL, FG, FS)…….(1)

Where:

PRD = Productivity
FDI =Foreign Direct Investments
FPE= Foreign Venture Capitals
FL= Foreign Loans
FG =Foreign Grants
FS = Firms Size (Control Variable)

The econometric model is functionally specified and re-stated as:

$$PRD_i = \beta_0 + \beta_1 FDIR_i + \beta_2 FVCR_i + \beta_3 FLR_i + \beta_4 FGA_i + \beta_5 FSA_i + \mu_i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Where:

β_0, α_0, Θ_0 = Constant parameter/Intercep

β_1 - β_2 = Coefficients of independent variables

μ_i, μ_i, μ_i, μ_i, = Error terms

3.7 Model selection

A step in creating a statistical model is model specification. The specification process involves deciding on the model's functional form and the variables to be used.

The dependent variable of this study is the SMEs'Productivity (PRD), while the independent variables consist of Foreign Direct Investments (FDI), Foreign Venture Capital (FVC), Foreign Loans (FL) and Foreign Grants (FG). The Table 4 presents the description of model specification of the variables concerned.

Table 4

Description of model specification

Variable	Sub-Variables	Definition of Specification	Functions
Performance (PM)	Productivity (PRD)	Foreign Finance (FF) model Productivity (PRD)	PRD= f(FF)

4 DATA ANALYSIS

4.1 Questionnaires administered

A total of 400 (four hundred) questionnaires were distributed out of which 361 were returned amounting to 90.25% success rate. The questionnaires as summarized in Table 5 were analysed with Statistical Packages for Social Sciences (SPSS) package version 27. The questionnaires include section A, B and section C and analysis were made based on the response in the section B and C of the questionnaire.

Table 5

Questionnaires

Questionnaire	Copies	Response rate %
Administered	400	100%
Irrecoverable	28	7%
Unusable	11	2.75%
Used	361	90.25

Source: Research survey (2024)

4.2 Presentation of demographic data

The Table 6 presents the distribution of respondents based on the sector their companies operate in. A total of 361 respondents participated in the survey and their responses are categorized into different businesses. The largest proportion of respondents (23.8%) is from the "Others" category, which includes Media, Engineering, Renewable Energy, etc. This is followed by Information and Communication (15.2%) and Professional and Scientific (15.2%), indicating strong participation from knowledge-based industries. The agriculture sector accounts for 13.6%, showing a significant presence of businesses in this industry.

Table 6

Type of Sector of Company (Respondents)

S/N	Sector	Frequency	Percentage (%)	Cumulative Percentage (%)
1	Manufacturing	37	10.2	10.2
2	Agriculture	49	13.6	23.8
3	Wholesale / Retail Trade	29	8.0	31.8
4	Transport and Storage	23	6.4	38.2
5	Information and Communication	55	15.2	53.4
6	Professional and Scientific	55	15.2	68.7
7	Real Estate	22	6.1	74.8
8	Accommodation and Food Services	5	1.4	76.2
9	Others (Media, Engineering, Renewable Energy etc.	86	23.8	100.0
	Total	**361**	**100**	

Source: Authors' survey (2024)

The Manufacturing sector contributes 10.2% of the respondents. The Wholesale/Retail Trade sector makes up 8.0% of the sample; Real Estate (6.1%), Transport and Storage (6.4%), and Accommodation and Food Services (1.4%) have the lowest representation. These are areas that if well invested into, will catalyze the economic growth of the nation; most especially transportation which Adetayo, Ilugbami,

Olorunfemi and Ojo (2024) described as a means to an end and not an end in itself. The Accommodation and Food Services sector (1.4%) has the fewest respondents, suggesting either a lower response rate from this industry or a smaller presence of such firms in the study population.

4.3 Test of normality

This segment investigated normality assessments applied to both the dependent and independent variables, gauged through the evaluation of skewness and kurtosis. Tests of normality are statistical procedures designed to assess whether a given dataset follows a normal distribution. Skewness and kurtosis values within the range of -2 to +2 are often considered acceptable for assuming normality (See Table 7).

Table 7

Dependent and Independent Variables Normality Test

Indices	**Number**	**Skewness**		**Kurtosis**	
		Statistic	Standard Error	Statistic	Standard Error
PRD	50	0.359	0.122	0.359	0.122
FDI	50	0.237	0.122	0.237	0.122
FVC	50	0.359	0.122	0.359	0.122
FL	50	0.374	0.122	0.374	0.122
FG	50	0.376	0.122	0.376	0.122
FS	50	0.359	0.122	0.359	0.122
Valid	50				

Source: Research Survey (2024)

While skewness measures the probability distribution or position of the data series, kurtosis measures the peakiness or flatness of the distribution of the series. Skewness measures the extent of asymmetry or symmetry of the data series. The data series is skewed if one tail is longer than the other. When a tail perfectly reflects the other, it indicates symmetric distribution, otherwise it is asymmetry.Kurtosis determines whether the data series is heavy-tailed or light-tailed. The results obtained from the pilot study revealed that all the variables of the study were normally distributed because the skewness index and the kurtosis index obtained for each of the variables was less than 1.0.

4.4 Descriptive statistics

This section preceded regression analyses and hypothesis testing and delved into a thorough descriptive analysis of respondents' opinions on the dependent variables of the study (SMEs' productivity) and the independent variables of the study (Foreign Direct Investment, Foreign Venture Capital, Foreign Grant and Foreign loan). Through rigorous descriptive statistical techniques, this study presented a comprehensive overview of respondents' opinions on each element. In this analysis, respondents' opinions are distilled using a structured Likert scale, encompassing a spectrum from strongly agree (SA) to strongly disagree (SD).

4.5 Descriptive analysis of responses to questions on effect of foreign finance on productivity

The analysis of the descriptive statistics of responses regarding the impact of various sources of foreign finance: Foreign Direct Investment (FDI), Foreign Venture Capital (FVC), Foreign Loans (FL), and Foreign Grants (FG) on productivity. The responses are categorized into five levels: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD) is presented in Table 8. The results are presented in terms of frequency and percentage for each response category.

Table 8

Descriptive Statistics of responses effect of foreign finance on Productivity

S/N	**Foreign Direct Investment and Productivity**	**SA 5**	**A 4**	**U 3**	**D 2**	**SD 1**	**Mean**	**Standard Deviation**
1	Foreign Direct Investment has enabled our enterprise to adopt new technologies, leading to enhanced productivity.	72 (19.9%)	151 (41.8%)	101 (28.0%)	25 (6.1%)	12 (3.3%)	3.68	0.978
2	The involvement of foreign investors has provided access to better equipment, which has improved productivity.	70 (19.4%)	189 (52.4%)	59 (16.3%)	26 (7.2%)	17 (4.7%)	3.75	1.004
3	Foreign Direct Investment has facilitated the optimization of our production processes, resulting in higher productivity.	59 (16.3%)	152 (42.1%)	78 (21.6%)	57 (15.8%)	15 (4.2%)	3.51	1.079
4	Overall, Foreign Direct Investment has positively	81 (22.4%)	157 (43.5%0	66 (18.3%0	37 (10.2%)	20 (5.5%)	3.67	1.100

	impacted the efficiency and productivity of our enterprise							
	Summary of results						***3.65***	***1.040***
	Foreign Venture Capital (FVC) and Productivity							
1	Collaboration with foreign investors has led to improved employee training and development, boosting productivity.	58 (16.1%)	157 (43.5%)	83 (23.0%)	50 (13.9%)	13 (3.6%)	3.55	1.032
2	Foreign Venture Capital has enabled us to expand our operations and scale up production, increasing our productivity levels.	53 (14.7%)	194 (53.7%)	66 (18.3%)	38 (10.5%)	10 (2.8%)	3.67	0.945
(3	Foreign Venture Capital investment has increased our firm's innovation capacity enabling us to expand our firm's product lines	66 (18.3%)	174 (48.2%)	83 (230%)	28 (7.8%)	10 (2.8%)	3.71	0.945
4	Foreign Venture Capital has contributed to an increase in the overall productivity of our enterprise	69 (19.1%)	170 (47.1%)	77 (21.3%)	32 (8.9%)	13 (3.6%)	3.69	0.996
	Summary of results						***3.66***	***0.980***
	Foreign Loans (FL) and Productivity							
1	Foreign Loans have enabled our enterprise to acquire new technology, leading to increased productivity.	63 (17.5%)	163 (45.2%)	75 (20.8%)	38 (10.5%)	22 (6.1%)	3.57	1.083
2	The use of Foreign Loans has allowed us to maintain a steady supply of raw materials, reducing downtime and increasing productivity	64 (17.7%)	137 (38.0%)	92 (25.5%)	47 (13.0%)	21 (5.8%)	3.48	1.103
3	Access to Foreign Loans has helped us improve the quality of our products/services, which has enhanced our productivity.	61 (16.9%)	150 (41.6%)	93 (25.8%)	41 (11.4%)	16 (4.4%)	3.55	1.040
4	Compared to our prior productivity levels, the application of the foreign loans improved the firm's productivity over time.	55 (15.2%)	171 (47.4%)	85 (23.5%)	29 (8.0%)	21 (5.8%)	3.58	1.030
	Summary of results						***3.55***	***1.064***
	Foreign Grants (FG) and Productivity							
1	The Foreign Grants have increased our research & development capacity thereby ultimately improving our productivity.	44 (12.2%)	182 (50.4%)	93 (25.8%)	35 (9.7%)	7 (1.9%)	3.61	0.891
2	Access to Foreign Grants has facilitated improvements in our production processes,	33 (9.1%)	152 (42.1%)	104 (28.8%)	62 (17.2%)	10 (2.8%)	3.38	0.964

	resulting in higher productivity.							
3	Foreign Grants have supported employee training and development programs, boosting productivity.	50 (13.9%)	167 (46.3%)	104 (28.8%)	30 (8.3%)	10 (2.8%)	3.60	0.923
4	Foreign Grants have significantly improved the overall productivity of our enterprise.	33 (9.1%)	205 (56.8%)	86 (23.8%)	27 (7.5%)	10 (2.8%)	3.62	0.858
	Summary of results						***3.55***	***0.909***

Across the questions, respondents generally perceived Foreign Direct Investment (FDI) as significantly improve productivity (PRD) of SMEs in Lagos. Most agreed that FDI enabled enterprise to adopt new technologies, leading to enhanced productivity with 58(16.1%) strongly agreeing, 157(43.5%) agreed, 83(23.0%) were undecided, 50(13.9%) disagreed while 13(3.6%) strongly disagreed. On the involvement of foreign investors providing access to better equipment, 53(14.7%) strongly agreed, 194(53.7%) agreed, 66(18.3%) were undecided, 38(10.5%) disagreed and 10 (2.8%) strongly disagreed. Specifically on optimization of production processes, resulting in higher productivity 59(16.3%) strongly agreed, 152(42.1%) agreed, 78(21.6%) remained undecided, 57(15.8%) disagreed and 15(4.2%) strongly disagreed. On the part of foreign finance impacting the efficiency and productivity of enterprises, 81(22.4%) strongly agreed, 157(43.5%) agreed, 66 (18.3%) were undecided, 37(10.2%) disagreed while 20(5.5%) strongly disagreed

Foreign Venture Capital (FVC) was viewed favorably in improving productivity. Respondents acknowledged its role in providing capitals for effective production activities and better capital management through strategic partnerships. On training of employees to boost productivity 58(16.1%) strongly agreed, 157 (43.5%) agreed, 83(23.0%) were not decided, 50(13.9%) disagreed while 13(3.6%) strongly disagreed. Regarding enabling expansion of operations and scale up production, 53(14.7%) strongly agreed, 194(53.7%) agreed, 66(18.3%) remained undecided, 38(10.5%) disagreed while 10(2.8%) strongly disagreed. On expansion of product lines 66(18.3%) strongly agreed that this can be achieved through innovation, 174(48.2%) agreed, 83(230%) were undecided, 28(7.8%) disagreed and 10(2.8%) strongly disagreed. On overall contribution to productivity 69(19.1%) strongly agreed, 170(47.1%) agreed, 77(21.3%) could not decide, 32(8.9%) disagreed and 13(3.6%)53 strongly disagreed.

The perception of foreign loans on productivity is also positive. A greater number of respondents recognized that foreign loan can enable the acquisition of machineries and raw materials which can ultimately improve productivity. On acquisition of new technology 63(17.5%) strongly agreed, 163(45.2%) agreed, 75(20.8%) were undecided, 38(10.5%) disagreed while 22(6.1%) strongly disagreed. Over 65% of respondent were in agreement indicating that foreign loans enhance technology acquisition which ultimately increases productivity. On maintenance of steady raw materials reducing downtime while larger number are in agreement, a significant number of respondents were either undecided or disagreed; 64(17.7%) strongly agreed, 137(38.0%) agreed, 92(25.5%) were undecided, 47(13.0%) disagreed and 21(5.8%) strongly disagreed. The question on access to foreign loans helping to improve the quality of products/services, a significant 25% (93) were not sure and remained undecided. 61(16.9%) strongly agreed, 150(41.6%) agreed, 41(11.4%) disagreed while 16(4.4%) strongly disagreed.

Foreign grants were generally perceived positively regarding productivity, though a good number of respondents representing about 26% remained undecided. On increased research and development capacity 44(12.2%) strongly agreed, 182(50.4%) agreed, 93(25.8%) were undecided, 35(9.7%) disagreed and 7(1.9%) strongly disagreed. The question on improvements in production processes, resulting in higher productivity saw 33(9.1%) strongly agreeing, 152(42.1%) agreed, 104(28.8%) remained undecided, 62(17.2%) disagreed while 10(2.8%) strongly disagreed. For Foreign Grants have supported employee training and development programs, boosting productivity, 50(13.9%) strongly agreed, 167(46.3%) agreed, 104(28.8%) were undecided, 30(8.3%) disagreed and 10(2.8%) strongly disagreed.

4.6 Inferential analysis

Evaluate the effect of foreign finance on productivity of small and medium enterprises in Nigeria.

Hypothesis (Ho): Foreign finance does not have a significant effect on productivity of small and medium enterprises.

Tables 9(a)

Linear Regression between foreign finance and Productivity of SMEs in Lagos State

Model Summary					
Model	**R**	**R-squared**	**Adjusted R**	**Standard Error Estimates**	**Durbin-Watson**
1	0.955	0.913	0.911	0.242	1.733

a: Dependent Variables: Productivity

b: Predictors (Constant): Foreign Direct Investment, Foreign Venture Capital, Foreign loans, Foreign grants and Firm Size

Table 9(b)

Anova

ANOVA						
		Sum of Squares	**Df**	**Mean Square**	**F**	**Sig**
Model	**Regression**	217.822	5	43.564	741.020	0.000
1	Residuals	20.870		355	0.059	
	Total	238.693		360		

a: Dependent Variables: Productivity

b: Predictors (Constant): Foreign Direct Investment, Foreign Venture Capital, Foreign loans, Foreign grants and Firm Size

Table 9 (c)

Coefficients

Coefficients						
		Unstandardized Coefficients		Standardized Coefficients	T-statistics	Probability
Model		B	Std. Error	B		
1	Constant	0.009	0.067		0.139	0.890
	Foreign Direct Investment	0.243	0.019	0.285	12.689	0.000
	Foreign Venture Capital	0.282	0.022	0.324	12.627	0.000
	Foreign Loans	0.246	0.018	0.308	13.855	0.000
	Foreign Grants	0.283	0.020	0.289	14.368	0.000
	Firm Size	-0.024	0.017	-0.029	-1.353	0.177

a. Dependent Variable: Productivity

b. Predictors (Constant): Foreign Direct Investment, Foreign Venture Capital, Foreign loans, Foreign grants and Firm Size

Correlation and Regression results were presented in Tables 9a, 9b and 9c. The overall correlation value was found to be 0.955, which indicate a very strong positive correlation between foreign finance (FDI, Foreign Venture Capital, Foreign Loans, Foreign Grants) and SME productivity. The Regression value (R^2) is 0.913 which explains 91.3% of the variation in SME productivity, suggesting that foreign finance is a key driver of productivity. The Adjusted R^2 value of (0.911) is close to R^2, confirming that the model is robust and not over-fitted. Standard Error of Estimate (0.242) indicates that the model's predictions have a relatively small error margin. The Durbin-Watson value of (1.733) falls within the acceptable range (1.5 - 2.5), indicating no serious autocorrelation in the residuals. F-statistic (741.020) and Sig (0.000) showed that the model is highly significant ($p < 0.05$), meaning that at least one independent variable significantly impacts productivity.

The Constant (intercept) value of ($B = 0.009$, $p = 0.890$) is not significant, implying that when all independent variables are absent, productivity is not meaningfully predicted. Foreign Direct Investment ($B = 0.243$, $p = 0.000$) indicates a 1-unit increase in FDI leads to a 0.243-unit increase in productivity, and this effect is statistically significant. Foreign Venture Capital ($B = 0.282$, $p = 0.000$) suggests a 1-unit increase in FVC leads to a 0.282-unit increase in productivity, and this effect is statistically significant. Foreign Loans ($B = 0.246$, $p = 0.000$) reveal that a 1-unit increase in foreign loans leads to a 0.246-unit increase in productivity, and this effect is statistically significant. Foreign Grants ($B = 0.283$, $p = 0.000$) show that a 1-unit increase in foreign grants leads to a 0.283-unit increase in productivity, and this effect is statistically significant. Firm Size ($B = -0.024$, $p = 0.177$): Firm size does not significantly impact productivity, as its p-value is above 0.05.

Conclusively, Foreign Direct Investment, Foreign Venture Capital, Foreign Loans, and Foreign Grants all have positive and statistically significant effects on productivity, Foreign Grants have the highest impact ($B = 0.283$), followed by Foreign Venture Capital ($B = 0.282$), Foreign Loans ($B = 0.246$), and Foreign Direct Investment ($B = 0.243$). Firm size does not significantly influence productivity. The model is highly explanatory ($R^2 = 91.3\%$) and statistically significant ($F = 741.020$, $p < 0.05$), confirming that foreign finance plays a critical role in enhancing SME productivity in Lagos State.

Pearson correlation coefficient (r) measures the strength and direction of the linear relationship between variables. The significance level (Sig. 2-tailed) determines whether

the correlation is statistically meaningful. Significance at 0.01 level ($p < 0.01$) indicates strong statistical significance. The correlation matrix in Table 18 examines the relationship between various sources of foreign finance and key measures of corporate performance (Productivity) for SMEs in Lagos State. Foreign Direct Investment (FDI) has a strong and positive correlation with all corporate performance indicators: (Productivity ($r = 0.752$, $p < 0.01$).

Table 10

Correlation matrix of the relationship between Foreign Finance and Corporate performance of SMEs in Lagos State

		Productivity
Foreign Direct Investment	Pearson Correlation	0.752**
	Sig. (2-tailed)	0.000
	N	361
Foreign Venture Capital	Pearson Correlation	0.852**
	Sig. (2-tailed)	0.000
	N	361
Foreign Loans	Pearson Correlation	0.769**
	Sig. (2-tailed)	0.000
	N	361
Foreign Grants	Pearson Correlation	0.698**
	Sig. (2-tailed)	0.000
	N	361
Firms Size	Pearson Correlation	-0.234
	Sig. (2-tailed)	0.177
	N	361

Note: **. Correlation is significant at the 0.01 level (2-tailed).

This suggests that an increase in FDI is associated with improved performance across all indicators. Foreign Venture Capital (FVC) has the highest correlation coefficients across the performance metrics: (Productivity ($r = 0.852$, $p < 0.01$). This indicates that foreign venture capital has the strongest positive impact on SMEs' productivity. Foreign Loans have a strong positive correlation with the corporate performance indicator: (Productivity ($r = 0.769$, $p < 0.01$). This implies that access to foreign loans significantly contributes to business growth and financial success. Foreign Grants exhibit the lowest but still significant positive correlations with(Productivity ($r = 0.698$, $p < 0.01$). While grants positively influence corporate performance, their impact is slightly weaker compared to other forms of foreign finance.Firm Size shows weak and insignificant correlations with the performance indicator: (Productivity ($r = -0.234$, $p >$

0.05). These results suggest that firm size does not play a significant role in determining SMEs productivity.

5 DISCUSSION

The study specifically looked at the effect of foreign finance on the productivity of SMEs in Lagos state of Nigeria. Productivity was used as endogenous variable to proxy for performance in this study. To determine the effect of foreign finance on the studies of nature, firm size was also used as a control variable to evaluate its effect on the relationship between foreign finance and performance of SMEs in Lagos.

The findings from research hypothesis provide strong empirical evidence that foreign finance plays a crucial role in enhancing SME productivity in Lagos State, Nigeria. The high correlation coefficient ($R = 0.955$) and coefficient of determination ($R^2 = 0.913$) indicate that 91.3% of the variation in SME productivity is explained by foreign finance. This result aligns with previous studies that emphasize the role of foreign financing in driving firm efficiency, innovation, and overall productivity. The Adjusted R^2 (0.911) being close to R^2 confirms that the model is robust and not overfitted, reinforcing its reliability (Gujarati & Porter, 2009). The Durbin-Watson statistic (1.733) suggests that there is no serious autocorrelation, ensuring the credibility of the regression results. The high F-statistic (741.020, $p = 0.000$) confirms that the model is highly significant, indicating that at least one independent variable meaningfully impacts SME productivity. These findings align with research by Ayyagari, Demirgüç-Kunt, and Maksimovic (2011), who found that financial access is a major determinant of SME efficiency and output growth.

The statistically significant effect of FDI on SME productivity supports the argument that FDI improves firm efficiency through technology transfer, better management practices, and enhanced production techniques. This is consistent with the findings of Bentivogli and Mirenda (2017), who assert that FDI enhances firm productivity by introducing new technologies and global best practices. This assertion is further supported by Edeh, Eze and Ugwuanyi (2020) who postulated that FDI has a positive and significant impact on agricultural sector output. Other authors who supported the significant impact of FDI on SMEs' output include Bacovic (2021), Bruno and Cipollina (2018) and Saurav and Kuo (2020). The significant positive impact of foreign

venture capital (FVC) suggests that venture-backed SMEs are more productive, likely due to improved strategic management, innovation, and resource allocation. This finding is in line with Bradley *et al*. (2021), who found that venture capital-backed firms are more efficient and experience higher growth rates due to the mentorship and strategic guidance provided by investors.

Pasali and Chaudhary (2020) also concluded in their study that foreign ownership has a positive impact on the sales and productivity growth of micro-size firms. The significant effect of foreign loans on productivity aligns with the work of Moscalu, Girardone, and Calabrese (2020), who found that credit access allows SMEs to invest in new technologies, hire skilled workers, and expand production capacity.

Nigeria. Foreign Grants have the highest impact, followed by Foreign Venture Capital, Foreign Loans, and Foreign Direct Investment. Firm size does not play a significant role in productivity improvement. These findings reinforce the importance of foreign financing in driving SME efficiency and competitiveness.

6 CONCLUSION AND RECOMMENDATIONS

This research embarked on an exploration into the nexus between foreign finance elements and the productivity of SMEs in Lagos, Nigeria. It underscored the crucial role of foreign finance components in shaping overall performance within SMEs entities, expounding the intricate dynamics of foreign finance demonstrated through foreign direct investments, foreign venture capitals, foreign loans and foreign grants. The investigation delineated that the proxies of foreign finance, exerted significant effect on the performance of SMEs in Lagos, Nigeria represented by productivity.

The study concludes that foreign financing is a crucial determinant of SMEs' productivity in Nigeria. Specifically, foreign direct investment, foreign loans, and foreign grants significantly contribute to firms' productivity.The research underscores the need for improved access to foreign financing sources to foster SME growth and sustainability emphasizing that foreign finance is a window that should be explored by SMEs in Nigeria in general.

7 RECOMMENDATIONS

7.1 Recommendations to government and policy makers

The following are recommended to the government and policy makers who are responsible for creating an enabling environment for businesses to strive. It is recommended that this group should do the following:

i. Foreign investors are naturally attracted to favorable business climate and would willingly invest in Nigeria if the environment is good. Government should therefore implement policies to attract more foreign direct investments and grants for SMEs. Such policies may include easing some conditions for foreign investment in SMEs compared to other forms of corporation.
ii. Establish regulatory frameworks that ease access to foreign loans while ensuring financial stability. The study provides the basis for government to create further enabling environment to make it easier for SMEs to satisfy any conditions or requirements for accessing foreign finance.

7.2 Recommendations to foreign investors

The recommendations below are for both potential and existing foreign investors who want to take advantage of the Nigerian business environment.

i. In order to increase the opportunities of significant returns, foreign investors are encouraged to explore targeted investment in SMEs by providing tailored funding options that will suit the particular SME and the sector.
ii. Investments in foreign countries are usually made easier working with local partners. Foreign investors can align with domestic partners like Nigerian venture capitals and banks for crucial support relating to the domestic economy and business environment.

7.3 Recommendations to SMEs

SMEs are the major beneficiaries of foreign investors alongside the Nigerian economy. The following recommendations are put forward for SMEs in Nigeria:

i. It is imperative for SMEs in Nigeria to start making themselves 'beautiful brides' for foreign investors by enhancing those features and characteristics that attract investors generally. This will include registering the business with the Corporate Affairs Commission and developing structures and management systems. Setting up a good system of financial reporting is a sine qua non. Overall, SMEs can develop strategic plans to align business objectives with foreign investments.
ii. SMEs can also expand or diversify their business into those sectors that are most attracted to foreign investors. Beyond the SMEs in the core Technology sector, opportunities abound where SMEs in any sector can implement technology to drive their business and this is an attraction point to foreign investors especially venture capitals. Other sectors attracting foreign investment in Nigeria include transport, trading and agriculture.

7.4 Contributions to knowledge

The study has demonstrated in the empirical review that globally, researchers and many scholars have carried out studies around the SMEs sector in many countries including Nigeria. Nonetheless, the present study addresses some gaps in literature thus contributing to knowledge.This study made a substantial contribution to the existing body of knowledge across multiple dimensions, including conceptual, theoretical, and empirical domains.

Specifically, the study contributes to knowledge in this area:

1. The study expands the literature on SME financing by highlighting the role of foreign financing sources in Nigeria's SME sector.Conceptually, by investigating the various dimensions of foreign finance and their impact on performance within the context of SMEs sector in Nigeria, this study enriched our understanding of the intricate relationships between foreign finance forms and performance.
2. Theoretically, this study has extended existing theories such as Pecking order theory and resource-based theory used as the theoretical framework for this study.
3. No previous research in Nigeria to the best of author's knowledge and through search in peer-reviewed literature has empirically explored the effect of foreign finance on SMEs performance applying firm's size as a control variable with the

outcomes in academic setting. However, research has shown that the size of a firm is a factor in access to funds and ultimately to performance.

7.5 Limitations of the study

The study, faces several limitations that must be acknowledged. The followings are some of the limitations of the study:

1. **Data Limitations:**Data on SMEs operations are usually not readily available in Nigeria. The laws of the country do not make it mandatory for SMEs to publish financials. This becomes one of the reason the study adopted primary data which also exposed the study to limitations of primary data namely the potential for response bias in surveys and interviews, where participants may provide socially desirable or overly optimistic responses rather than accurate depictions of their organizational practices and performance. The lack of secondary data to support survey responses and the respondents possible bias may affect the comprehensiveness of the study. However, the researcher ensured that questionnaires are completed by business owners who possess the overall knowledge of their businesses.
2. **Other influencing factors:**Lastly, while the study attempts to establish causal relationships between foreign finance and SMEs productivity, external factors such as macroeconomic instability, infrastructure challenges and internal factors such as owners' management style may also influence productivity, complicating the attribution of outcomes solely to foreign finance strategies. These limitations underscore the need for cautious interpretation of the results and highlight opportunities for future research to address these challenges through broader samples, longitudinal designs, and mixed-method approaches.

7.6 Suggested area for further research

This study examined the effect of foreign finance on productivity of SMEs in Lagos State, Nigeria. In the light of this primary emphasis of the study, considerable insights have been accrued and numerous enquiries have been addressed. Nevertheless, several potential avenues for future research persist including:

1. Future studies could examine the moderating role of firm characteristics such as management practices and industry type in determining the impact of foreign financing on SME performance. Additional soft factors like culture, organic structures and systems to enrich the literature and understanding of the study may be incorporated
2. Replicating this study in different geographical locations, states, or countries instead of Lagos State would enhance the generalisability of findings and contribute to the broader body of literature, considering the unique contextual factors at play in diverse settings.
3. Future research could explore the long-term effects of foreign financing in driving sustainability initiatives and environmental, social, and governance (ESG) considerations in Nigerian on SME sector

AUTHOR CONTRIBUTIONS

HOE: Conceptualization, Writing - original draft, Introduction, Method, Editing; **EOO**: Conceptualization, Editing, Visualization. **JOA**: Conceptualization, Editing. The authors read and approved the final manuscript.

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Authors' Contribution

All authors contributed equally to the development of this article.

Data availability

All datasets relevant to this study's findings are fully available within the article.

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