“Shadow banking and micro-, small and medium scale enterprises: A municipal assessment in Nigeria”

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Abstract
Shadow banking is usually considered as offering financial and financial-related support outside of the mainstream conventional financial system. The biggest issue facing micro-, small, and medium-sized businesses (MSMEs) in Nigeria is the inconveniences and challenges associated with obtaining funds or credit from conventional banks, which encourages remote business operations and small-scale expansion. Thus, shadow banking activity is still widespread among MSMEs in Nigeria. This study used MSMEs operating in the Marian and Watt markets to analyze the impact of shadow bank interest income, savings products, and loans on the performance of MSMEs. A systematic Likert scale questionnaire was given to a group of 160 people, with 157 questionnaires duly returned. The survey research design was adopted, while the SPSS software was used to analyze the data acquired. As such, shadow banking interest income has a non-significant positive impact (0.022%) on the performance of MSMEs in Calabar metropolis; shadow banking savings products have a negative but significant impact (–0.160%) on MSME performance in Calabar metropolis, while shadow banking loans have a positive and significant effect (0.194%) on micro-, small, and medium-scale firm performance in Calabar metropolis. The study concluded that shadow bank operators should ensure that their service costs are standardized and supplied at affordable rates to attract MSMEs to patronize them for more successful business operations.

Keywords financial literacy, payment systems, capital structure, small businesses, investment banking, employment

INTRODUCTION
For years, in rural and semi-urban regions where there is little or no banking presence, informal thrift and credit societies have played a credit transformation role in Nigeria, as they do in most African countries. Even when banks exist, they supply MSMEs with non-collateralized loans at low interest rates, bridging the intermediation gap and meeting their working capital requirements. Although not as complex as hedge funds, the informal thrift society’s method of operation is similar to that of hedge funds, but without the reporting and operational constraints. The formal banking sector is typically the dominant player in the space, using exotic and frequently ambiguous special vehicles for extending profit-making opportunities beyond the conventional loan and loanable products. Shadow banking is usually considered as offering financial and financial-related support outside of the mainstream conventional financial system (Tule & Onipede, 2017). Although unregulated, shadow banks offer a variety of financial services to their customers, including loans, savings, and interest income, all of which help MSMEs develop and survive. Many SMEs lack the qualifications for traditional banking services, according to (Safiriyu & Njogo, 2012), due to their size, experience, and regulato-
ry lending criteria. Such SMEs, however, are not completely cut off from funds and banking products thanks to shadow banks. Surprisingly, experts have avoided this topic, as no one study has examined the contributions of shadow banks to MSMEs’ performance in Nigeria, or even globally, according to the reviewed literature and empirical investigations. As a result, the purpose of this study is to look at how shadow banking on Nigerian micro, small, and medium businesses.

Many individuals regard shadow banks as scams because the term “shadow” suggested that their activities are temporary, resulting in minimal patronage by micro-, small, and medium businesses for fear of losing their investment to the banks. As a result, MSMEs that would otherwise have raised cash for expansion and working capital needs are forced to either try internal finance of their operations or rely on traditional bank loans, which come with high collateral and other lending criteria and take a long time to process. The majority of small and medium scale enterprises face difficulties in obtaining the necessary funds to expand and develop their operations. The MSME Development Fund, with a share capital of N220 billion, was established by the CBN in 2013. The Fund was founded in acknowledgment of the Micro, Small, and Medium Enterprises (MSME) sub-substantial sector’s contributions to the economy and the massive financing shortfall that exists. The Fund’s broad goal is to use Participating Financial Institutions to transmit low-interest funds to the Nigerian economy’s MSME sub-sector (PFIs) (Mungiri & Njeru, 2015).

Unfortunately, experts in Nigeria and throughout the world do not appear to have given the relationship between shadow banking and MSMEs’ performance the attention it deserves. The few attempts to measure the impact of shadow banking on the economy have largely concentrated on economic development, ignoring the nucleus through which shadow banking operations transmit their impact to the economy. This study arose from a desire to determine whether shadow banking operations contributed significantly to the expansion of MSMEs in Cross River State, given that they are the primary customers of shadow banks and that many people believe shadow banks are ephemeral and fraudulent.

1. LITERATURE REVIEW AND HYPOTHESES

The most difficult and inconvenient aspect of obtaining funds or credit from traditional banks in Nigeria is the difficulty and inconvenient nature of doing so, which encourages remote business operations and a limited scope of expansion. As a result, shadow banking operations have remained prevalent among Nigerian MSMEs. Shadow banking is a sort of arbitrage in regulation when maturity, credit, and liquidity conversions are carried out without using the credit opening of the central bank and transactions are generally carried out beyond the legal restrictions that govern the regular banking industry. Shadow banking is defined by Claessens and Ratovsky (2014) and Mehrling et al. (2012) as any financial activities that, with the exception of traditional banking, rely on backstops to operate. In the context of financial institutions, the term “shadow” can be misleading, as it appears to imply nefarious or ephemeral behavior when this is not the case. Shadow banking was actually directly proven to be the primary cause of the 2007–2009 global financial crisis (The Great Recession), emphasizing the systemic risk they might present to the financial economy in the years to come. This is because shadow banking is functionally undetectable to regulators in some sophisticated nations, or because there is a lack of thorough statutory regulation/supervision. However, by offering non-traditional intermediary services that are not offered by traditional banking and capital markets, shadow banks play a significant role in the economy, particularly in developing countries (Claessens et al., 2012).

Gangadhar et al. (2017) looked into the connection between financial literacy and SMEs’ use of financial services. According to the findings of the study, literate entrepreneurs are more likely to use financial services than illiterate ones. The study also found that teaching SMEs on a regular basis improved their financial literacy. As a result, more investment is made, resulting in enhanced economic growth. As Stiglitz and Weiss (1981)
pointed out, asymmetric information poses two fundamental challenges. On the other hand, the finance-led growth hypothesis can be used to characterize the supply leading theory. According to Patrick (1966), financial institutions and markets that provide financial assets, liabilities, and related financial services ahead of demand would efficiently allocate resources (credit) from surplus units to deficit units and enhance the process of economic growth. There are two functions to the supply-side phenomena. The terms “innovative financing” and “supply-leading financial intermediation” are interchangeable (Schumpeter, 1934).

One of the most significant advantages of the supply-leading approach is that while utilization of supply-lending capital grows, entrepreneurs’ expectancies increase and fresh opportunities in terms of possible options open up, inspiring them to “dream big.” Several studies have backed a finance-led growth paradigm (Cameron, 1961). The potential benefits to the economy in terms of promoting actual economic growth and development. While supply-leading finance is not required to put a country on the road to “self-sustained economic development,” it does provide a means of generating actual growth through financial means. Analysts feel that its application is more result-oriented early in a country’s development rather than later.

SMEs are universally recognized as major drivers of economic growth in any country, according to both practitioners and academics. SMEs, on the other hand, are confronted with a host of issues. One of the most significant difficulties confronting SMEs in Nigeria is a lack of financial resources to sustain their operations (Agbonifor, 1998). Finance contributes about 25% to the success of SMEs, according to empirical studies. According to a World Bank survey, 39 percent of small businesses and 37 percent of medium businesses in Nigeria are experiencing financial difficulties (Beck & Demirgüç-Kunt, 2004). Both the informal and formal finance sectors (IFS and FFS) are common sources of funding (FFS). Previous academics, academicians, and practitioners developed the two main funding models for SMEs: formal and informal forms of finance (Taiwo et al., 2012).

Commercial banks and development banks in the formal sector were determined to be the most popular sources of credit for businesses, according to the study. Small enterprises rely on the informal sector for financing, which includes borrowing from friends, relatives, and cooperatives. Another way to fund a business is to use personal funds. Moneylenders, relatives, credit and savings organizations are all part of the informal financial sector (Taiwo et al., 2012). Commercial banks, microfinance banks, international development organizations, and other financial institutions make up the formal finance sector.

Personal savings, among the methods outlined above, is the most realistic source of money for many people. In a study by Schumpeter (1934) on funding firms in Africa, the role of microfinance, 29 percent of respondents said saving for “a rainy day” or “in case we get sick” was the most important reason. People save for a variety of reasons, the most common of which is to start a business (almost 20 percent) (Isinta et al., 2019). Nearly half of those polled are utilizing funds for purposes for which credit was either intended or is billed, according to these figures. Other viable sources of funding for SMEs, such as bank loans, are virtually non-existent. According to Oni and Daniya (2012), the poor still have limited access to traditional financial services. Obi (2001) calculates the absolute gap between those in poverty and those with access to financial services in Nigeria and Congo, finding that the numbers are as high as 80 million and 48 million, respectively. While this is a rudimentary and imprecise means of measuring financial inclusion, it does highlight the fact that financial institutions continue to overlook the great majority of the poor. According to Safiriyu and Njogo (2012), money lenders in Western Africa have been successful in collecting high withdrawal fees on deposits.

The Nigerian government, on the other hand, has taken a variety of steps to promote entrepreneurship in the country in order to combat unemployment and increase the country’s growth and development (Leegwater & Show, 2008). Despite the fact that microfinance institutions (MFIs) were established in Nigeria with the objective of assisting SMEs in obtaining funding for expansion, most SMEs are unable to obtain money due to a lack of assets and bank demands for collateral (Oni & Daniya, 2012). Part of the blame has been placed
on the collapse of credit markets. The argument is that lending to the poor is unnecessarily risky and expensive, since they have so little collateral and borrow such small amounts (Okwu et al., 2013). However, if this could be checked, one of the most serious problems that SMEs face would be solved. The inability of MSMEs’ entrepreneurs to secure funding is a stumbling block to their expansion (Ahiawodzi & Adade, 2012).

Financial regulatory authorities are in charge of ensuring that clients are treated fairly and openly throughout the financial firm. In the event of a crisis, such committees’ purpose is to ensure that appropriate ethical standards are followed in order to protect customers’ interests and investments in the institution (Woldehanna, 2017). Consumer protection can be viewed in terms of direct action or non-intervention, with regulatory bodies mandated to maintain a balance of interests between customers and credit intermediaries (shadow banks) on the one hand and regulatory bodies mandated to maintain a balance of interests between customers and credit intermediaries (shadow banks) on the other (Onyiego et al., 2017). Consumers are assumed to have sufficient knowledge of their options and the ability to process that knowledge in order to make the optimal decision (Akhtar & Liu, 2018; Asenge et al., 2018; Gichuki et al., 2014). The main issue with this method is that humans do not always make logical decisions due to a variety of circumstances such as incomplete or insufficient knowledge, unlimited cognitive powers, and so on (Haider et al., 2017).

Banks and Fintechs (financial technology businesses) have also been filling the void in the market by offering MSMEs in Nigeria with short-term financial loans. In comparison to Fintechs, which use data and technology to provide seamless and quick access to funding, banks often need a huge quantity of paperwork, including a business plan, as part of the application process. The Nigerian government has launched various schemes and programs expressly targeted towards MSMEs in the past and recent years, such as SMEDAN, YouWin, TraderMoni, N-Power, and others. All of these activities, taken together, represent a significant step toward bridging the gap for Nigerian MSMEs (Mungiri & Njeru, 2015).

Another reason advanced by proponents of the interventionist approach to consumer protection is the lack of information. As the old adage goes, “knowledge is power,” consumers must have a proper understanding of the goods or services being supplied. This is not always the case, because one of the parties to a transaction may try to deceive or mislead the other on purpose (Kakar et al., 2010). Furthermore, the fact that consumers may not be financially literate enough to determine the authenticity of financial services supplied by such organizations (in the case of shadow banks) presents a compelling rationale for regulation (Atandi et al., 2017). Proper administration or regulation of shadow banks will decide the type of social security supplied to customers’ investments in the event of adverse or unfavorable situations.

In Kiambu County, Kenya, Allen et al. (2019) investigated the impact of informal finance on the performance of MSEs. Many respondents picked credit from self-help groups, friends and family, and trade credit, according to their findings, because these sources aided their company performance. Essien and Arene (2014) looked into the impact of microfinance on MSE expansion in Nigeria. Microfinance did not help to the expansion of MSEs in Nigeria, according to the research. Other factors affecting a firm’s performance included its location, the entrepreneur’s knowledge, the firm’s age, the rate of interest, and the loan length (Itonga et al., 2016; Kadiri, 2012).

An empirical study on the influence of microfinance institutions on SMEs in Nigeria was carried out by Li et al. (2014). The role of informal financial banking services in rural women’s economic empowerment through self-help groups was investigated by (Chepsang et al., 2018). Women are afraid to borrow money from banks, according to their research, because of high interest rates and lengthy documentation. Furthermore, just a small fraction of women was aware of the government’s microfinance loans and credit facilities, according to the data. The overwhelming majority of women admitted to using credit to fund their pursuits (Moe, 2012).

The relationship between financial intermediation and Nigerian economic growth was explored by Asseto (2014). From 1970 to 2010, secondary da-
ta was used to conduct a full time series study. In contrast, the author’s research only covered a few explanatory factors. As a result, nothing was known about the function of intermediation in the economy’s development. Gangadhar et al. (2017) looked into the link between financial literacy and small business use of financial services. Literate entrepreneurs are more likely to use financial services than illiterate entrepreneurs, according to the study’s findings. At two points in time, the researchers compared borrowers to control groups who had not received microcredit (Awoyemi & Jabar, 2014). According to the data, there are significant differences in revenue, productivity, fixed assets, and other people’s employment generation between the borrowers and the control group (Okello et al., 2017; Onakoya et al., 2013).

There are currently very few studies available that examine the various components of shadow banking and the performance of micro, small, and medium-sized businesses in the Calabar municipal area. The major purpose of this study is to assess the shadow banking effect on the financial survival of micro-, small and medium scale enterprises in Cross River State, Nigeria. Shadow banks, although, not regulated, provide range of financial services such as loans, savings and interest income to their customers which assist MSMEs’ growth and survival (Singh, 2013; Petria, 2012). The hypotheses developed to accomplish the study’s goals are listed below:

\[ H_1: \] Shadow bank interest income has no significant impact on the performance of MSMEs in Cross River State, Nigeria.

\[ H_2: \] Shadow bank savings products do not significantly affect the performance of MSMEs in Cross River State, Nigeria.

\[ H_3: \] Shadow bank loans have no significant impact on the performance of MSMEs in Cross River State, Nigeria.

2. METHOD

Calabar, the capital of Nigeria’s Cross River State, was the site of this study. Calabar South and Calabar Municipal make up the Calabar Metropolis. This study used one market from each of the Calabar South (Watt) and Calabar Municipality (Marian) areas. The participants in this study were all traders from the Watt and Marian marketplaces. The choice of these marketplaces was prompted by a desire to learn whether shadow banking operations in the Calabar city have an impact on MSME performance. The stratified random sampling technique was used in this study to pick sampled respondents in the Watt and Marian markets, respectively. The respondents were separated into two groups for this purpose, the Watt market and the Marian market. The study then used a convenience sample technique to choose the 80 respondents in each market. This resulted in a total of 160 respondents who were given the research instruments, however, three of the respondents returned inappropriately and were therefore excluded from the study.

A questionnaire was used to gather information. A total of 160 questionnaires were created and distributed to the participants but only 157 questionnaires were properly and appropriately filled and used in this study. The questionnaire was designed to capture all of the factors of interest and was closed ended and qualitative in nature. The questionnaire was divided into two sections: A and B. The demographic characteristics were collected in Section A, which included sex, age, marital status, and experience. Shadow banking activities such as loan, deposits, interest income, and MSME performance are covered in Section B. Respondents were also required to specify the frequency of their responses in Section B. The responses would be scored as highly agreed, agreed, disagreed, and strongly disagreed on a 5-point Likert scale. The instrument was administered to a sample of 60 respondents who were not part of the original sample but had similar characteristics to the population of this study to determine its internal consistency. The 60 respondents’ responses were then coded and entered into SPSS software, and the coefficient alpha (or Cronbach’s alpha) coefficient for each of the series was calculated. The coefficient alpha for shadow bank interest income was 87.3 percent, for shadow bank savings products it was 85.5 percent, for shadow bank lending operations it was 93.7 percent, and for MSME performance it was 91.9 percent. Table 1 is an extract of the Cronbach’s alpha reliability test results from SPSS:
Table 1. Cronbach’s alpha reliability test of the instrument

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Mean</th>
<th>SD</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shadow Banks Interest Income</td>
<td>5</td>
<td>19.550</td>
<td>4.872</td>
<td>0.873</td>
</tr>
<tr>
<td>Shadow Banks Savings Product</td>
<td>5</td>
<td>19.483</td>
<td>5.173</td>
<td>0.855</td>
</tr>
<tr>
<td>Shadow Banks’ Lending Activities</td>
<td>5</td>
<td>19.033</td>
<td>4.909</td>
<td>0.937</td>
</tr>
<tr>
<td>MSMEs Performance</td>
<td>5</td>
<td>18.983</td>
<td>5.121</td>
<td>0.919</td>
</tr>
</tbody>
</table>

Source: Authors’ elaboration based on SPSS 22.0.

The ordinary least square multiple regression model was used to test the effect of shadow bank interest income, shadow bank savings products, and shadow bank lending activities against MSMEs’ performance. The functional relationship expressed in this study could be stated as follows:

\[ MSMEP = f(SBII, SBSP, SBLD) \] (1)

The ordinary least square multiple regression model was given as:

\[ MSMEP = \beta_0 + \beta_1 SBII + \beta_2 SBSP + \beta_3 SBLD + e_i, \] (2)

where \(\beta_0\) = Regression constant; \(\beta_1\), \(\beta_2\), & \(\beta_3\) are Regression Parameters; \(MSMEP\) = MSMEs performance; \(SBII\) = shadow banks interest income; \(SBSP\) = shadow banks savings products; \(SBLD\) = shadow banks lending activities against; \(e_i\) = Stochastic error term.

3. RESULTS

Table 2 represents the cross-tabulation of the work experience and gender of the respondents. From the Table, it could be seen that 4 males, representing 2.55 per cent, had less than 11-15 years of working experience, while 20 females, representing 12.74 per cent, had 11-15 years of work experience. 16 female respondents, representing 10.19 per cent of the entire sample, had about 16 years of work experience, while no male had over 16 years of work experience. 21 male respondents, representing 13.38 per cent of the entire respondents, had 6-10 years of work experience, while 47 females, representing 29.94 per cent of the entire sampled respondents, had between 6-10 years of work experience.

Table 3 represents the cross-tabulation of the qualifications and gender of the respondents. From the Table, it could be seen that 5 females, representing 3.18 per cent, had primary school education, while 1 male respondent, representing 0.64 per cent of the entire sample, had primary school education. 20 males, representing 12.74 per cent of the entire respondents, had secondary school qualifications, while 29 female respondents, representing 18.47 per cent of the entire sampled respondents, had secondary school qualifications. While 25 male respondents, representing 15.92 per cent of the entire sampled respondents, had tertiary education qualifications, 77 sampled female respondents, representing 49.04 per cent of the entire sampled respondents, had tertiary education qualifications.
Table 4. Respondents by work experience and age cross-tabulation

Source: Authors’ elaboration based on the field survey.

<table>
<thead>
<tr>
<th>Work experience</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20-29 years</td>
</tr>
<tr>
<td>16 years and above</td>
<td>16 (10.19%)</td>
</tr>
<tr>
<td>6-10 years</td>
<td>12 (7.64%)</td>
</tr>
<tr>
<td>11-15 years</td>
<td>12 (7.64%)</td>
</tr>
<tr>
<td>0-5 years</td>
<td>–</td>
</tr>
</tbody>
</table>

Table 4 represents the cross-tabulation of the work experience and age of the respondents. It could be seen that within the age bracket 20-29 years, 16 respondents, representing 10.19 per cent, 12 respondents, representing 7.64 per cent and 12 respondents, representing 7.64 per cent had 16 years and above, 11-15 years and 6-10 years’ working experiences respectively. Within the age bracket 30-39 years, 8 respondents, representing 5.10 per cent, 22 respondents, representing 12.51 per cent and 20 respondents, representing 12.74 per cent had 11-15 years and above, 6-10 years and less than 5 years’ working experiences respectively. Within the age bracket 40-49 years, 4 respondents, representing 2.55 per cent, 9 respondents, representing 5.73 per cent and 29 respondents, representing 18.47 per cent had 11-15 years and above, 6-10 years and less than 5 years’ working experiences respectively. Lastly, within the age bracket 50 years and above, 26 respondents, representing 16.56 per cent of the entire sampled respondents had over 6-10 years trading experiences, and 11-15 years of experience and above, 6-10 years, and less than 5 years of experience, respectively.

Table 5. Respondents by qualification-age cross-tabulation

Source: Authors’ elaboration based on the field survey.

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20-29 years</td>
</tr>
<tr>
<td>Primary</td>
<td>4 (2.55%)</td>
</tr>
<tr>
<td>Secondary</td>
<td>24 (15.29%)</td>
</tr>
<tr>
<td>Tertiary</td>
<td>12 (7.64%)</td>
</tr>
</tbody>
</table>

Table 5 represents the cross-tabulation of the qualifications and age of the respondents. From the Table, it could be seen that within the age bracket 20-29 years, 4 respondents, representing 2.55 per cent, 24 respondents, representing 15.29 per cent, and 12 respondents, representing 7.64 per cent, had primary education, secondary education, and tertiary education, respectively. Within the age bracket 30-39 years, 1 respondent, representing 0.64 per cent, 7 respondents, representing 4.46 per cent, and 41 respondents, representing 26.11 per cent, had primary education, secondary education, and tertiary education, respectively. Within the age bracket of 40-49 years, 1 respondent, representing 0.64 per cent, 10 respondents, representing 6.37 per cent, and 31 respondents, representing 19.75 per cent, had primary, secondary, and tertiary education qualifications, respectively. Lastly, within the age bracket of 50 years and above, 8 respondents, representing 5.10 per cent, and 18 respondents, representing 11.46 per cent, had secondary and tertiary education qualifications, respectively.

Table 6 represents the cross-tabulation of the work experience and marital status of the respondents. From the Table, it can be seen that from the single group, 4 respondents, representing 2.55 per cent of the entire sample of respondents, had over 16 years of work experience; 14 respondents, representing 8.92 per cent of the entire sample of respondents, had between 11 and 15 years of work experience; and 32 respondents, representing 20.38 per cent of the entire sample of respondents, had between 6 and 10 years of work experience; and 23 respondents, representing 14.65 per cent of the entire sample of respondents, had between 0-5 years of work experience. Within the married group, it could be seen that 12 respondents, representing 7.64 per cent of the entire sample of respondents, had over 16 years of work experience, 9 respondents, representing 5.73 per cent of the entire sample of respondents, had between 11 and 15 years of work experience, and 36 respondents, representing 22.93 per cent of the entire sample of respondents, had between 6-10 years of work experience, and 24 respondents, representing 15.29 per cent of the entire sample of respondents, had less than 5 years of work experience. Lastly, within the divorced group, it could be seen that 1 respondent, representing 0.64 per cent of the entire sample of respondents, had 0.5
years of work experience, while 2 respondents, representing 1.27 per cent of the entire sample of respondents, had between 11 and 15 years of work experience.

Table 6. Respondents by work experience-marital status cross-tabulation

<table>
<thead>
<tr>
<th>Work experience</th>
<th>Single</th>
<th>Married</th>
<th>Divorced</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 years</td>
<td>23</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(14.65%)</td>
<td>(15.29%)</td>
<td>(0.64%)</td>
</tr>
<tr>
<td>6-10 years</td>
<td>32</td>
<td>36</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>(20.38%)</td>
<td>(22.93%)</td>
<td>–</td>
</tr>
<tr>
<td>11-15 years</td>
<td>14</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(8.92%)</td>
<td>(5.73%)</td>
<td>(1.27%)</td>
</tr>
<tr>
<td>16 years and above</td>
<td>4</td>
<td>12</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>(2.55%)</td>
<td>(7.64%)</td>
<td>–</td>
</tr>
</tbody>
</table>

From the results of Table 7, it could be seen that the mean values for MSMEs performance (MSMEP), shadow bank interest income (SBII), shadow bank savings products (SBSP), and shadow bank lending activities against (SBLD) were, respectively, 15.9254, 10.8769, 35.6846, and 16.4808. From the descriptive statistics results, the dataset ranged (minimum to maximum), respectively, from 11.75 to 121.90, 11.49 to 117.00, 17.32 to 108.65, and 12.78 to 120.07 for MSMEs performance (MSMEP), shadow bank interest income (SBII), shadow bank savings products (SBSP), and shadow bank lending activities against (SBLD). From the summary, the standard deviation values were 86.2416, 64.0054, 89.0717, and 72.1242, respectively, for MSMEs performance (MSMEP), shadow bank interest income (SBII), shadow bank savings products (SBSP), and shadow bank lending activities against (SBLD).

From the results, the skewness values of –3.853 and –4.241 for MSMEs performance (MSMEP) and shadow bank interest income (SBII) respectively mirrored a negatively skewed distribution, implying that the distribution had a long-left tail with lower values than the sampled mean. On the other hand, the skewness values of 2.179 and 1.446 for shadow bank savings products (SBSP) and shadow bank lending activities against (SBLD) respectively mirrored a positively skewed distribution, implying that the distribution for these variables set had a long right tail with higher values than the sampled mean.

From Table 7, the kurtosis values of parameters respectively were –2.216 and –1.195 for shadow bank savings products (SBSP) and shadow bank lending activities against (SBLD) were less than 3.0000 required for a normal distribution. Hence, the data for these variables had flatted curve and produced lower values than the sample mean. On the other hand, the coefficient of the kurtosis values for MSMEs performance (MSMEP) and shadow bank interest income (SBII) were 4.544 and 3.881, respectively, and were found to be greater than 3.0000 required for a normal distribution. It therefore, means that these datasets were leptokurtic as they produced higher value than the normal.

From Table 8, it could be seen that by holding shadow banking activities constant, micro, small and medium-scale enterprises were reduced by about 21.033 per cent. In Cross River State, a 1% increase in shadow bank interest income resulted in a 2.2 percent increase in micro, small, and medium enterprise profit. Also, it could be seen that a one percent increase in shadow bank savings packages led to a 16 percent decrease in micro, small and medium enterprise performance in Calabar municipality. This implies that there is a negative effect of the shadow bank savings package on small and medi-

Table 7. Descriptive statistics analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSMEP</td>
<td>157</td>
<td>11.75</td>
<td>121.90</td>
<td>15.9254</td>
<td>86.2416</td>
<td>36.290</td>
<td>–3.853</td>
<td>4.544</td>
</tr>
<tr>
<td>SBII</td>
<td>157</td>
<td>11.49</td>
<td>117.00</td>
<td>10.8769</td>
<td>64.0054</td>
<td>4.1688</td>
<td>–4.241</td>
<td>3.881</td>
</tr>
<tr>
<td>SBSP</td>
<td>157</td>
<td>17.32</td>
<td>108.65</td>
<td>35.6846</td>
<td>89.0717</td>
<td>36.938</td>
<td>2.179</td>
<td>–2.216</td>
</tr>
<tr>
<td>SBLD</td>
<td>157</td>
<td>12.78</td>
<td>120.07</td>
<td>16.4808</td>
<td>72.1242</td>
<td>4.522</td>
<td>1.446</td>
<td>–1.195</td>
</tr>
</tbody>
</table>

Note: Valid N (listwise) = 157.
um-scale enterprises in Calabar municipality. Also, from the result, a one per cent increase in shadow bank loans led to a 19.4 per cent increase in small and medium enterprise profit in Calabar municipality. In other words, increased access to shadow bank loans by micro, small, and medium-sized enterprises resulted in improved SMEs performance in Calabar Municipality.

A review of the t-statistics and the respective p-values showed that shadow bank savings products and shadow bank loans were highly significant in influencing micro, small and medium-scale enterprises’ profitability in Calabar Municipality. This was evidenced by their respective t-statistics values of –2.479 and 3.632 and corresponding p-values of less than 5 per cent. Shadow bank interest income had a T-statistics value of 0.324 and a p-value of 74.6 percent, indicating that it had no influence on micro, small, and medium-sized enterprises in the Calabar Municipality of Cross River State. The result also showed an R-squared adjusted value of 0.886. This implies that about 88.6 percent of the observed changes in micro, small and medium enterprise performance have been jointly accounted for by shadow banks’ activities in Calabar Metropolis.

The outcomes of this study demonstrated that shadow bank interest income had a positive but negligible impact on micro, small, and medium firm performance in the Calabar metropolis. This study shows that increased interest income from shadow banks improved the performance of MSMEs in the Calabar city. In other words, SMEs’ interest earnings from shadow banking transactions have a negligible impact on their earnings potential. This finding was in line with the study by Kurgat et al. (2018), which looked into the role of

4. DISCUSSION

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>T-stats</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>–21.033</td>
<td>2.536</td>
<td>–8.294</td>
<td>0.000</td>
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<tr>
<td>SBII</td>
<td>0.022</td>
<td>0.067</td>
<td>0.324</td>
<td>0.746</td>
</tr>
<tr>
<td>SBSP</td>
<td>–0.160</td>
<td>0.065</td>
<td>–2.479</td>
<td>0.014</td>
</tr>
<tr>
<td>SBLD</td>
<td>0.194</td>
<td>0.054</td>
<td>3.632</td>
<td>0.000</td>
</tr>
<tr>
<td>R2</td>
<td>0.913</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>R2-Adjusted</td>
<td>0.886</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>SER</td>
<td>1.878</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>F-Stats</td>
<td>5.867</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>P-value</td>
<td>0.001</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Note: P ≤ 0.05; df = 153; Critical t = 1.960; critical t = 1.960; df = 153.
informal financial banking services in rural women's economic empowerment through self-help groups and came to the same conclusion. Women are afraid to borrow money from banks, according to their research, because of high interest rates and lengthy documentation. Furthermore, just a small fraction of women was aware of the government's microfinance loans and credit facilities, according to the data. The vast majority of women said they used credit to fund their projects and believed credit was responsible for their businesses' expansion.

The findings of this study showed that shadow bank savings products had a significant negative influence on the performance of micro, small, and medium-sized businesses in Calabar municipality. This suggests that the more shadow bank products MSMEs employ, the poorer their profitability and performance will be. This is the case due to the unregulated activities of shadow banks. Most shadow banks charge high interest rates on their loans and other things. This has a negative impact on their clients' earning potential, causing them to perform poorly overall was in line with the study by Mungiru and Njeru (2014), which examined the impact of informal finance on MSE performance in Kenya's Kiambu County and came to the same conclusion. According to their findings, many respondents chose credit from self-help groups, friends and family, and trade credit since these sources enhanced their business success. Shylock finance, on the other hand, proved to have a negative impact on MSE performance, according to the research.

According to the study, shadow bank loans had a positive and significant influence on micro, small, and medium businesses in the Calabar Metropolis. This implies that the more MSMEs in Calabar who have access to shadow bank loans, the better. Because shadow bank loans are utilized to fund corporate expansion and growth, this is the case with the study by Olowe et al. (2013) which did an empirical study on the influence of microfinance banks on SMEs in Nigeria. The researchers chose SME respondents using deliberate sampling and microfinance bank customers using random sampling. According to their findings, the payback period has a positive impact on MSE growth. As a result, the expansion of MSEs is unaffected by short-term loans.

Given that the objectives of this study were deduced into testable forms (hypotheses), objective one revealed that, since the calculated $t$-statistics value of 0.324 is less than the table $T$-statistics value of 1.960 at a 5 per cent level of significance, the study accepted the null hypothesis and rejected the alternative hypothesis. It therefore, meant that shadow bank interest income does not have any significant effect on small and medium scale enterprise performance in Calabar metropolis. The second objective further showed that, since the calculated $T$-statistics value of 2.479 is greater than the table $T$-statistics value of 1.960 at a 5 per cent level of significance, the study accepted the alternative hypothesis and rejected the null hypothesis. This, therefore, means that Shadow bank savings product had a significant effect on small and medium scale enterprise performance in Calabar metropolis. Lastly, since the calculated $T$-statistics value of 3.632 is greater than the table $T$-statistics value of 1.960 at a 5 per cent level of significance, the study accepted the alternative hypothesis and rejected the null hypothesis. This, therefore, means that Shadow bank loans had a significant effect on Small and Medium Scale Enterprise performance in Calabar metropolis.

**CONCLUSION**

Sequel to the findings from this study, the conclusions made are that the volume of loans and advances granted to MSMEs greatly enhanced micro, small and medium scale enterprise performance and Calabar metropolis. Finally, other shadow banking measures were substantial in facilitating a positive and significant impact on micro, small and medium scale enterprise performance and Calabar metropolis. This means that within the value chain of MSME performance in Cross River State, effective and efficient operations of shadow banking are clearly a critical factor.
AUTHOR CONTRIBUTIONS

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Formal analysis: Joseph Anyadighibe, Aniebiet Etuk.
Funding acquisition: Anthony Ogar, Joseph Anyadighibe, Jeremiah Abanbeshie, Aniebiet Etuk, Basil Eja.
Investigation: Jeremiah Abanbeshie.
Methodology: Anthony Ogar, Joseph Anyadighibe.
Project administration: Anthony Ogar, Jeremiah Abanbeshie.
Resources: Joseph Anyadighibe, Jeremiah Abanbeshie, Aniebiet Etuk, Basil Eja.
Software: Anthony Ogar, Jeremiah Abanbeshie, Aniebiet Etuk, Basil Eja.
Supervision: Anthony Ogar, Joseph Anyadighibe.
Validation: Joseph Anyadighibe, Aniebiet Etuk.
Writing – original draft: Jeremiah Abanbeshie.
Writing – reviewing & editing: Anthony Ogar, Joseph Anyadighibe, Jeremiah Abanbeshie, Aniebiet Etuk, Basil Eja.

REFERENCES


