

İŞLETME BİLİMİ DERGİSİ

THE JOURNAL OF
BUSINESS SCIENCE



JOBS

İşletme Bilimi Dergisi

2022

Cilt:10 Sayı:3



SAKARYA
ÜNİVERSİTESİ

JOBS

İşletme Bilimi Dergisi
The Journal of Business Science

Sakarya Üniversitesi / Sakarya University
İşletme Fakültesi / Sakarya Business School

i

Cilt/Volume : 10
Sayı/Issue : 3
Yıl/Year : 2022

ISSN: 2148-0737

DOI: 10.22139/jobs

İNDEKS BİLGİLERİ/ INDEXING INFORMATION



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DETERMINANTS OF BANK LENDING AND CREDIT ACCESSIBILITY OF MICRO, SMALL AND MEDIUM ENTERPRISES

Asst. Prof. Dr. Adeshola Olugbenga OLUNUGA

Department of Finance, Faculty of Management Sciences, University of Lagos, Lagos, Nigeria
uadeshola2001@yahoo.com
ORCID: 0000-0001-7390-3938

Determinants
of Bank
Lending and
Credit
Accessibility of
Micro, Small
and Medium
Enterprises
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ABSTRACT

Aim: The aim of the study is, besides other things, to establish the extent in which determinants of bank lending are implemented in association with the performance of micro, small and medium enterprises in Nigeria.

Method: The study applied the econometrics method of data analysis. Secondary data for the research were gathered from the Central Bank of Nigeria's Statistical Bulletin, which has a long history of providing accessible, adequate, accurate, and reliable data. Multiple regression analysis was used in conjunction with Stata software.

Findings: The study shows that bank size has a significant influence on bank lending to MSMEs, the regression coefficient further reveals that bank size is negatively associated with bank lending to MSMEs, this implies that an increase in bank size will not always bring about an increase in bank lending to MSMEs. The finding also shows that credit risk and bank liquidity have a significant influence on bank lending to MSMEs, the regression result further reveals that credit risk is negatively associated with bank lending to MSMEs, thus implying that an increase in credit risk will cause a decrease in lending to MSMEs in the same vein liquidity ratio was found to be positively related to bank lending to MSMEs, thus implying that higher liquidity ratio will propel higher bank lending to MSMEs. Finally, the finding shows that the volume of deposits and interest rates have a significant relationship with bank lending to MSMEs. The regression result further reveals that interest rate is negatively associated with bank lending to MSMEs, thus implying that an increase in interest rate will cause a decrease in bank lending to MSMEs. In the same vein volume of deposits was found to be positively related to bank lending to MSMEs, thus implying that an increase in the volume of deposits will cause an increase in bank lending to MSMEs

Makale Geliş Tarihi/Received for Publication : 25/03/2022
Birinci Revizyon Tarihi/ 1th Revision Received : 14/04/2022
Kabul Tarihi/Accepted : 09/12/2022

Atıfta Bulunmak İçin/ For Citation:

Olunuga, A. O. (2022). Determinants of bank lending and credit accessibility of micro, small and medium enterprises. *Journal Of Business Science*, 10(3), 299-313.

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Results: The study concluded that the determinants of bank lending have an effect on the access to capital and the development of MSMEs in Nigeria. The research suggested that banks should develop an alternative financing strategy that would alleviate lending constraints to MSMEs. This is because MSMEs are subjected to strict terms and conditions by banks, prompting them to seek other sources of funding that may be insufficient to finance their operations and ensure their survival.

Keywords: Determinants of Bank Lending, Credit Accessibility, MSMEs Growth, Commercial Banks, Economic Development

MİKRO, KÜÇÜK VE ORTA İŞLETMELERDE BANKA KREDİSİNİN VE KREDİ ERİŞİLEBİLİRLİĞİNİN BELİRLEYİCİLERİ

ÖZ

Amaç: Çalışmanın amacı Nijerya'daki mikro, küçük ve orta ölçekli işletmelerin performansı ile uygulanan banka kredileri belirleyicilerinin ne ölçüde ilişkili olduğunu tespit etmektir.

Yöntem: Çalışmada veri analizi için ekonometri yöntemi uygulandı. Araştırma için ikincil veriler, erişilebilir, yeterli, doğru ve güvenilir veriler sağlama konusunda uzun bir geçmişe sahip olan Nijerya Merkez Bankası İstatistik Bülteni'nden toplanmıştır. Stata yazılımı ile birlikte çoklu regresyon analizi kullanıldı.

Bulgular: Çalışma, banka büyüklüğünün KOBİ'lere verilen banka kredileri üzerinde önemli bir etkiye sahip olduğunu göstermektedir. Regresyon katsayısı banka büyüklüğünün KOBİ'lere verilen banka kredileri ile negatif ilişkili olduğunu ortaya koymaktadır, bu da banka büyüklüğündeki bir artışın her zaman bankaların kredilerinde bir artışa neden olmayacağı anlamına gelmektedir. Bulgular ayrıca kredi riskinin ve banka likiditesinin bankaların KOBİ'lere kredi vermeleri üzerinde önemli bir etkiye sahip olduğunu göstermektedir. Regresyon sonucu kredi riskinin bankaların KOBİ'lere kredi vermeleriyle negatif ilişkili olduğunu ortaya koymakta, dolayısıyla kredi riskindeki bir artışın kredi vermede azalmaya neden olacağını ima etmektedir. Benzer şekilde likidite oranının KOBİ'lere banka kredisi vermeyle pozitif ilişkili olduğu bulunmuştur. Bu da daha yüksek likidite oranının KOBİ'lere daha yüksek banka kredisi verilmesini teşvik edeceğini göstermektedir. Son olarak, bulgular mevduat hacminin ve faiz oranının bankaların KOBİ'lere verdiği kredilerle önemli bir ilişkisinin olduğunu göstermektedir. Regresyon sonucu ayrıca, faiz oranının KOBİ'lere verilen banka kredileri ile negatif ilişkili olduğunu ortaya koymaktadır, bu nedenle faiz oranındaki bir artışın KOBİ'lere verilen banka kredilerinde bir azalmaya neden olacağını göstermektedir. Benzer şekilde mevduat hacminin banka kredileri ile pozitif ilişkili

olduğu bulunmuştur. Bu, mevduat hacmindeki bir artışın, KOBİ'lere verilen banka kredilerinde bir artışa neden olacağı anlamına gelmektedir.

Sonuçlar: Çalışmada banka kredilerinin belirleyicilerinin Nijerya'daki KOBİ'lerin sermayeye erişimi ve gelişimi üzerinde bir etkisi olduğu sonucuna ulaşılmıştır. Çalışma bankaların KOBİ'lere yönelik kredi kısıtlamalarını hafifletecek alternatif bir finansman stratejisi geliştirilmesi gerektiğini öne sürmektedir. Bunun nedeni, KOBİ'lerin bankalar tarafından katı hüküm ve koşullara tabi tutulmaları ve bu nedenle KOBİ'lerin faaliyetlerini finanse etmek ve hayatta kalmalarını sağlamak için yetersiz olabilecek başka finansman kaynakları aramaya sevk etmesidir.

Anahtar Kelimeler: Banka Kredisinin Belirleyicileri, Kredi Erişilebilirliği, KOBİ'lerin Büyümesi, Ticari Bankalar, Ekonomik Kalkınma

I. INTRODUCTION

MSMEs are frequently cited as the driving force behind economic growth and equitable development in both developed and developing countries. Development strategists have argued for a greater reliance on micro, small, and medium-sized businesses to spur economic growth, particularly in the developing world's emerging nations (Sawar, 2013). MSMEs are labor intensive, capital intensive, and account for the lion's share of the one million new jobs necessary by the end of the century. Micro, small, and medium-sized enterprises account for more than 10% of all businesses registered in Nigeria. For various reasons, they are deemed vital to the country's economic prosperity. MSMEs in the country have received scant attention, despite the fact that they employ nearly three times as many people as large manufacturing firms and also play vital roles in the economy (Ashamu, 2014).

Finance has been described as a vital component in the establishment, growth, and success of micro, small, and medium-sized enterprises (MSMEs). According to Afolbi and Oni (2016), MSMEs use a variety of financing methods, ranging from initial internal sources such as the owner-personal manager's savings and retained profits to informal external sources such as financial assistance from family and friends, trade credit, venture capital, and angel financiers, to formal external sources represented by financial intermediaries such as banks. According to Ana (2008), banks are a vital source of financing for businesses, particularly micro, small, and medium-sized firms (MSMEs) that lack access to capital markets. Commercial banks are designed to bridge the

funding gap created by informal or internal sources of funding. On the other hand, banks are hesitant to lend to the subsector.

There is a dearth of financial institutions capable of meeting the economy's medium- and long-term lending requirements. Micro, small, and medium-sized firms are no exception, and they bear a disproportionate burden as a result of the country's lack of resources for development and progress. According to Aremu and Adeyemi (2011), credit issues for MSMEs may not always be the result of information gaps regarding the range of funding institutions and the scope of services offered by these institutions, but rather of insufficient preparation on the part of micro, small and medium entrepreneurs submitting credit assistance requests. The subsector continues to suffer a capital gap for new micro, small, and medium-sized firms, as well as the expansion of existing ones. While some MSMEs are creditworthy and hence qualify for loans, the MSMEs subsector's high risk is frequently an impediment. Collateral for loans is a big concern. Ariyo (2008) proceeded by adding that the majority of entrepreneurs in MSMEs live in their own homes in rural areas or in rented housing in urban areas. Rural residences and estates may be ineligible for collateral security. Recovery of claims and collateral realization are frequently quite limited. Credit protection is harmed further by the extremely slow issuance of titles due to a lack of acceptable property registration processes and insufficient resources at property registration offices.

Inefficient and time-consuming legal and judicial processes jeopardize credit recovery. Additionally, due to the low account turnover, servicing MSMEs corporate accounts is risky and difficult to manage. Other elements, according to Ayozie and Latinwo (2010), may influence commercial banks' lending decisions. These considerations include a firm's performance and projected future cash flows adjusted for risks and transaction costs, as well as owner characteristics that may impact a bank's willingness to offer credit to or not to MSMEs. Additionally, Eze and Okoye (2014) highlighted that additional owner characteristics include the size of the business, the owner/age, manager's gender, educational background, and whether the business has financial or audited financial statements. While some of these characteristics help a commercial bank decide whether or not to give credit, others work against it.

Currently, MSMEs rely largely on commercial banks for expansion financing. MSMEs' financial requirements are increasing, which has attracted

the attention of the Nigerian government. Recognizing the importance of addressing MSMEs' financing issues, the government has adopted a plethora of legislation targeted at providing adequate finance for Nigeria's micro, small, and medium-sized firms. Nigeria's successive governments have continued to articulate policy measures and programs in recognition of these potential subsectors in order to achieve industrial growth and development. These measures and programs include direct participation alone or in collaboration with the private sector, interest groups, external assistance, industrial incentives, and adequate financing (CBN, 2011).

II. LITERATURE REVIEW

The MSMEs subsector's importance cannot be overemphasized. The subsectors make a significant contribution to a variety of socioeconomic goals, including job creation, national production and exports, fostering new entrepreneurship, and establishing the industrial backbone of the economy. Obasan and Adediran (2010). It is vital to emphasize the importance of entrepreneurship development; the role entrepreneurs play in economic growth, and the funding mechanisms used by entrepreneurs, both formal and informal. Alhassan and Sakara (2014) believe that numerous nations' development experiences suggest that micro, small, and medium-sized firms can contribute significantly to the achievement of numerous development goals. These include output growth, employment creation, and even industry relocation within nations' borders, income redistribution, the promotion of local entrepreneurship and technology, as well as intermediate product manufacture to plug inter- and intra-industry leakages. Azende (2011) states that MSMEs encompass a range of businesses kinds that engage in a variety of economic activities throughout the country. MSMEs, according to Ladime, Sarpong, and Osei (2013) include artisans who produce local agricultural implements, vegetable shop owners, tailors, iron fabricators, roadside mechanics, small transport firms, internet cafés, small engineering or software firms, and medium-sized automotive parts manufacturers, grocery stores, hair salons, supermarkets, textile retail businesses, footwear, and bakeries. Certain MSMEs manufacture goods for domestic or worldwide markets (Calice et al., 2012).

MSMEs, on the other hand, have two financing options: internal and external sources, with internal sources accounting for the bulk of micro and small-scale businesses (Kwaning & Kyereh, 2015). Bank financing and other

forms of institutional credit, as well as public equity and debt obtained through the stock market, are all examples of external sources of finance (Nkuah et al., 2013). MSMEs must rely on informal financial institutions such as savings and loan associations, traditional moneylenders, friends and family due to a lack of external finance. According to Obamuyi (2007), the government has taken a number of efforts to boost the credit availability to the MSMEs sub-sector in order to ensure that they have access to external sources of funding. Additionally, the government sought collaboration with bilateral and international organizations, as well as non-governmental organizations (NGOs), to aid Nigeria's MSMEs. According to Okpara and Pamela (2007), the government established institutions such as the Small Scale Credit Scheme, the Microfinance Banks (MFBs) scheme, the Bank of Industry (BOI), the Bank of Agriculture (BOA), the Nigerian Export and Import Bank (NEXIM), the National Economic Reconstruction Fund (NERFUND), and the Agricultural Credit Guarantee Scheme (ACGS) in an attempt to reposition the MSMEs sub-sector through access to financing. As a result, financing for this crucial sector of the economy is expected to increase (Safiriyu & Njogo, 2012).

III. THEORETICAL AND EMPIRICAL ISSUE

Both theoretical and empirical studies have been conducted with considerable effort.

The classical theory argues that loan availability reduces the gap between a company's available and required capital. Due to the gap between existing and needed assets, companies need loans. Aryeetel et al. (1994) categorized loan demand. Perceived, potential, and revealed credit demand. A corporation with a perceived need for cash has a financial restriction. Potential demand is cash demand that cannot be met owing to institutional obstacles and market faults. Revealed demand is cash application at a certain interest rate. Moneylenders and borrowers must state their need for cash, but loan applications may not always reflect actual needs. Gale (1991) defined effective demand as the financial sector's total investor credit. High interest rates hinder credit demand, according to Boon (1989). According to Steel and Webster (1992) and Nissanke and Aryeetey (1995), credit sector liberalization has not enhanced SME loan availability (SMEs). Steel and Webster (1989) found that SMEs' inability to expand operating capital and fund new investments hindered their growth.

Credit rationing is an idea that was first introduced in a seminal paper by economists Joseph Stiglitz and Paul Weiss (1981). Higher interest rates may create an additional incentive for adverse selection and risk taking. Thus lenders try to establish quantitative limitations on the amount of debt the borrower can receive (a practice sometimes known as "equilibrium quantity rationing of credit"). Based on the assumption that information asymmetry characterizes imperfect loan markets, the strategy assumes that it would be too costly for banks to collect accurate information about borrowers and monitor their actions. To protect themselves and the credit market from the adverse selection problem of rising prices and ever-increasing demand, banks in this model are assumed to maximize profits through their choice of interest and collateral (thereby reducing the probability of default on their loans), while potential borrowers are assumed to maximize profits through the choice of projects (Mutoko & Mutoko, 2015; Helsen & Chmelar, 2014). Therefore, without the aid of price, demand will exceed supply, and the market will collapse (Helsen & Chmelar, 2014).

Credit rationing can take many forms, deviating from temporary to permanent and dependent on the duration of the surplus demand and, most importantly, the conditions under which the lending rate is reduced. Small and medium-sized enterprise (SME) investment will be constrained to what is available from liquid assets and internal cash flows if interest rates are raised, credit is rationed quantitatively, or collateral is not provided (Campello et al., 2010). Furthermore, banks are more likely to ration credit rather than change lending rates in response to a rise in interest rates by the central bank due to the imperfect structure of financial markets and the presence of adverse selection (Ladime et al., 2013). Small and medium-sized firms (SMEs) rely heavily on credit in order to accrue significant savings, and this is true for economies as a whole. Small and medium-sized businesses (SMEs) have unique challenges when trying to secure financing because they are often unable to provide adequate collateral. Collateral reduces the lender's risk of default and the borrower's loss in the event of default, making it an attractive incentive (Ghosh et al., 2000). However, because of the economy's volatility, banks are being extremely careful with their lending policies. Banks' loan rationing exacerbates SMEs' financial crises, which can have a negative impact on their performance because the SME sector is seen as risky.

The theoretical debate over the impact of bank lending on companies' credit accessibility has resulted in empirical expositions aiming at demonstrating an economic connection and causal factors influencing both bank lending determinants and credit accessibility of MSMEs. Numerous studies have examined the effect of various aspects of bank lending on the performance and development of small and medium-sized businesses. Nwosa & Oseni (2013), for example, investigated the effect of bank loans to SMEs on industrial production in Nigeria from 1992 to 2010. The research concluded, using an error correction model, that bank loans to the SME sector had a substantial effect on manufacturing production in both the long and short term.

Dada (2014) evaluated the effect of commercial banks' loans on SMEs development by constructing multiple regression models using the ordinary least squares (OLS) technique. A positive and significant effect of commercial bank lending to SMEs, as measured by wholesale and retail trade output as a component of GDP, is found. Still, a negative effect of exchange rate and interest rate is found.

Akingunola (2011) investigated the funding alternatives accessible to SMEs in Nigeria and their impact on economic development. The Spearman's Rho correlation coefficient was used to evaluate the connection between the funding of SMEs and the amount of investment. The Rho value of 0.643 showed a substantial and positive connection between SMEs funding and economic development in Nigeria at the 10% level of significance.

Duru and Lawal (2012) studied the impact of Nigeria's banking reforms on SME growth. The study used a model to predict SME production performance based on company characteristics, ownership, and financial sector financing. The findings suggest that each of these elements has a significant positive impact on SMEs in Nigeria. It is therefore recommended that the government create an enabling environment for SMEs by providing sufficient infrastructure and security to minimize the cost of doing business in the economy.

Funding SMEs in Nigeria has been studied by Afolabi (2013). The study estimated a multivariate regression model using OLS. According to the findings, SMEs' output, as defined by GDP wholesale and retail trade output, commercial bank loans to SMEs, and the naira's exchange rate relative to the USD have positive effects on economic growth, whereas lending rates have negative

effects. However, SMEs output and commercial banks' lending to SMEs were key contributors to improving Nigeria's economic development.

There are many empirical studies on the issue of MSMEs funding; nevertheless, based on the reviewed literature, the available data indicates that this study topic warrants additional examination. The effect of bank lending determinants on loan accessibility for MSMEs seems to be inadequate, which explains why banks have a lackadaisical attitude about lending to MSMEs.

IV. METHODOLOGY

The study's objective is to ascertain the degree to which bank lending determinants are applied in order to offer credit to MSMEs. To do this, an econometrics method of data analysis was used. Secondary data for the research were gathered from the Central Bank of Nigeria's Statistical Bulletin and Nigeria Bureau of Statistics report on MSMEs from 1990-2020, which has a long history of providing accessible, adequate, accurate, and reliable data. Ethics committee approval was not obtained because secondary data were used in the study. Multiple regression analysis was used in conjunction with Stata software.

Based on the literature reviewed, the following model is specified which is expressed as:

$$NLA_t = f(BSZ_t, CRK_t, LQY_t, VDE_t, IRT_t) \dots \dots \dots \text{equ 1}$$

To ascertain the effect of these factors on net loans and advances, the following multiple regression equation is specified explicitly in functional form:

$$NLA_t = \beta_0 + \beta_1 BSZ_t + \beta_2 CRK_t + \beta_3 LQY_t + \beta_4 VDE_t + \beta_5 IRT_t + \mu_1 \dots \dots \dots \text{equ 2}$$

Where;

NLA= Net loan and advances to MSMEs, BSZ = Bank size, CRK = Credit risk, LQY = Commercial bank liquidity, VDE = Volume of deposit, IRT = Interest rate, β_0 = Constant, β_1 - β_5 = Regression coefficient, ϵ = Error term

4.1. Data Presentation and Analysis

Table 1. Multiples Regression

NLA	Coef.	St.Err.	t-value	p-value	[95% Conf Interval]	Sig
BSZ	6.033	1.914	3.15	0.012	-2.045 1.979	**
CRK	-10.241	2.302	-2.42	0.022	-63.730 43.247	**
LQY	-0.107	0.009	-11.88	0.000	-0.011 0.026	***
VDE	0.650	0.091	-7.14	0.003	-2.667 1.367	***
IRT	-0.247	0.050	-4.94	0.011	-0.063 0.156	***
Constant	14.327	2.246	6.38	0.000	9.385 19.270	***
Mean dependent var	10.082		SD dependent var		0.738	
R-squared	0.914		Number of obs		17.000	
F-test	23.395		Prob > F		0.000	
Akaike crit. (AIC)	7.189		Bayesian crit. (BIC)		12.188	

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: STATA 13 Output

4.2. Findings and Discussion

From the regression results obtained, it is observed that the constant parameter (β_0) has a positive coefficient, bank size (BSZ) and volume of deposit (VDE) have a positive effect on the dependent variable net loan and advances (NLA) thus, implying that a unit change in bank size (BSZ) and volume of deposit (VDE) will propel an increase of 6.033 and 0.650 in net loan and advances (NLA respectively).

The coefficient of credit risk (CRK), liquidity ratio (LQY) and interest rate (IRT) is negative implying that a unit increase in credit risk (CRK), liquidity ratio (LQY) and interest rate (IRT) will cause a decrease of -10.241, -0.107, -0.247 in net loan and advances (NLA) respectively. These findings supports the findings of Oyebowale and Karley (2018) and Matousek and Solomon (2018).

The coefficient of determination adjusted (R^2) value of 0.914. This implies that (bank size (BSZ) volume of deposit (VDE), credit risk (CRK), liquidity ratio (LQY), and interest rate (IRT)) account for 58.5% of the variation in share price volatility. The remaining balance of 8.6% variation in the dependent net loan and advances (NLA) can be explained by other factors outside the variables studied.

V. CONCLUSION AND RECOMMENDATIONS

The research discovered that bank lending determinants had a substantial impact on the credit availability of micro, small, and medium-sized businesses in Nigeria. Additionally, the research showed that commercial banks' lending to MSMEs had a substantial impact on bank size. Credit risk and commercial bank liquidity have a significant impact on lending to MSMEs; deposit volume and interest rate also have a sizable impact on lending to MSMEs. The study's findings suggest that banks' credit strategies should prioritize the provision of credit to micro, small, and medium-sized enterprises. This is because the MSME sector is essential and vital to economic growth and employment generation. Effective lending regulations for MSMEs will significantly alleviate the financial restrictions that the majority of MSMEs in Nigeria experience. Banks could thus develop an alternate financing strategy that would alleviate lending constraints to MSMEs. This is because MSMEs are forced to seek other means of funding due to the banking sector's strict terms and conditions, which may be insufficient to support their operations. Banks should pay particular attention to interest rates when lending to micro, small, and medium-sized businesses in order to encourage them to seek financing. This will expand banks' loan portfolios, thus increasing profitability while also boosting MSMEs' growth. Finally, banks should develop risk mitigation strategies to guarantee that MSMEs meet their loan payback requirements.

ARTICLE INFORMATION FORM

Author Contributions:

Idea / Concept: Adeshola Olugbenga OLUNUGA

Research Design: Adeshola Olugbenga OLUNUGA

Article Writing: Adeshola Olugbenga OLUNUGA

Data Collection: Adeshola Olugbenga OLUNUGA

Analysis: Adeshola Olugbenga OLUNUGA

Critical Reading: Adeshola Olugbenga OLUNUGA

Conflict of Interest Statement

No grants were received from any public, private or non-profit sectors for this research.

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