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AN EXAMINATION OF THE FACTORS INFLUENCING COMMERCIAL BANKS' ACCEPTANCE OF REAL PROPERTY AS COLLATERAL FOR LOANS IN NORTH-CENTRAL NIGERIA

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Abstract

This study examined the factors that influence commercial banks' acceptance of real property as loan collateral, since despite attendant challenges, real property appears to remain financial institutions' preferred collateral type, and this has led to borrower self-exclusion from the credit market on account of lack of real property, a situation that is detrimental to economic growth. Based on descriptive research design, questionnaire was administered on 32 credit officers of commercial banks in North-Central Nigeria, and collated data analysed using Spearman's rank correlation coefficient, Relative Importance Index (RII) and Mean Item Score (MIS). The study revealed that the collateral types frequently used by commercial banks to secure loans include receivables, insurance policy, guarantee, cash deposit and real property, in proportions of 10%, 7.4%, 17.4%, 17.7% and 24.5%, respectively. Meanwhile, there is a weak negative correlation between the challenges that accompany the use of acceptable collateral types and the proportion of loans secured (r = -.036, p (.920) > 0.05); and the relationship between the frequency of collateral use and the proportion of loans secured is strong, positive and statistically significant (r = .881, p (<.001) < 0.05). Furthermore, with a RII of 0.90 and MIS of 4.52, value stability is the most dominant and highest ranked factor with very positive influence on commercial banks' acceptance of real property as loan collateral. Sensitization programmes and interventions in the secured lending space by *stakeholders will enable convenience, and increased loan volumes toward poverty alleviating productive activities within the Nigerian economy.*

Keywords: *Acceptable collateral types, Value stability, Loan proportions, Collateral for loans, North-Central Nigeria*

Introduction

It is generally believed and indeed several authors have documented that real property is traditionally the most preferred and widely used collateral for securing loans by financial institutions (Atogenzoya, Nyeadi and Atiga, 2014; Nwuba, Egwuatu and Salawu, 2013; Nagarajan and Meyer, 1995; Osuji, 2017; Feder, Onchan and Raparla, 1988; Domeher and Abdulai, 2012). In fact banks and bank examiners are said to prefer real property to other collateral types as security for loans (Fleisig, 1996). This may not be unconnected with the physical fixity of real property, its durability and dependability as a store of value in real terms, as well as issues in moveable property as loan collateral, among others (Nwuba, Egwuatu and Salawu, 2013; Atogenzoya *et al*., 2014; Fleisig, 1996).

However, it has been widely acknowledged that the use of real property as security for loan, especially in emerging or developing economies like Nigeria is riddled with issues, challenges and risks , all of which can be summed up as issues in the creation, perfection and enforcement of security interest in real property (Nwuba *et al*., 2013; Nwuba, Egwuatu and Salawu, 2015; Atogenzoya *et al*., 2014; Bruce-Twum and Adu- Darko, 2013; Domeher and Abdulai, 2012; Udo, 2001).

From the foregoing, a question that comes to mind is this: How is it possible that financial institutions would prefer real property to other types of collateral in securing the loans that they grant despite the inherent challenges? In other words despite the numerous issues and challenges, financial institutions still accept and use real property as collateral for loans. Meanwhile the belief that financial institutions, would always prefer or require real property as loan collateral has been a source of negative perception and discouragement to prospective borrowers, such as entrepreneurs, micro, small and medium scale enterprises (MSMEs), groups and individuals all of who on account of lack of real property or the inability to meet up with financial institutions' real property collateral requirement are unable to access loans to finance productive activities within a developing economy like Nigeria, because they are either credit rationed or they self-select themselves out of the credit market (Domeher and Abdulai, 2012; Nagarajan and Meyer, 1995; Osuji, 2017; Blazy and Weill (2007; Morsy, El-Shal and Woldemichael, 2019), and this constitutes a clog in the wheel of the country's economic growth and development in view of the importance of finance (Okpukpara, 2009).

Furthermore, a number of experts, economists and researchers have acknowledged the role of finance for economic development. They believe that financial intermediation provided by the banking system is critical for economic growth and development (Ajibola, 2015; Akujuobi and Nwezeaku, 2015; Imoughele and Ismaila, 2013; Ogar, Nkamare and Effiong, 2014). This was alluded to succinctly by Bello (2018), who stated that ''Lending by banks is the hub and lubricator of capitalism''. In fact, according to the Central Bank of Nigeria (CBN) report on Financial System Strategy 2020, commercial banks provide about 90% of the financial system credit by loan value in Nigeria. Consequently, the credit rationing of prospective borrowers or self-selection out of the credit market for lack of real property, which has been branded the most preferred collateral type, breeds financial and economic exclusion, which is detrimental to economic growth (Osuji, 2017). It is therefore imperative to examine the factors influencing commercial banks' acceptance of real property as loan collateral, so that all stakeholders in the financial intermediation industry will be well informed, guided and spurred toward taking steps to enhance easy, convenient and increased access to commercial banks' loans, in the interest of national economic development.

Consequently, the study's research objectives are to:

- Identify the different types of collaterals used to secure commercial bank loans in North-Central Nigeria
- Evaluate the extent to which real property is used comparatively to other types of collaterals to secure commercial bank loans in the study area.
- Assess the challenges that accompany the use of the different collateral types acceptable to commercial banks for loan security in the study area
- Determine the association between the challenges that accompany the use of acceptable collaterals, the frequency of their use and the proportion of the loans that they secure.

- Assess the factors that influence commercial banks' acceptance of real property as collateral for loans in the study area.

North-Central Nigeria, also known as the Middle Belt region is the largest geopolitical zone in Nigeria, with a landmass of about 300,000 square km and an estimated population of about 45 million (Mailafia, 2020; Middle-Belt, n.d.); and made up of the following states: Plateau, Niger, Kogi, Benue, Nasarawa, Kwara, and the Federal Capital Territory, Abuja (Olawale, 2020). With abundant arable and fertile land, and agricultural production of numerous products, Benue and Niger states in North-Central Nigeria are considered the ‘food basket’ of the nation. Furthermore, with focus on agribusiness and solid minerals exploration, entrepreneurs and micro, small and medium scale enterprises (MSMEs) are embarking on farming and mining at levels beyond the subsistence and artisanal mining levels (Nigerian investment promotion commission, n.d.). This is expected to generate wealth and commercial banks in Nigeria are expected to contribute substantially to this effort by way of finance.

Review of Related Literature

The Concept of Secured Lending

Secured lending usually involve borrower default risk, therefore lenders make effort to reduce the risk and minimize losses that could be incurred due to a default, by taking collateral as security for loan (Feder, Onchan and Raparla, 1988; Domeher and Abdulai, 2012). It has been acknowledged that the rationale for secured lending is because of the inefficiencies in the credit market that present as problems of loan enforcement as well as information asymmetry about borrower quality, in terms of adverse selection and moral hazards which pervade the credit market, and for which collateral is used as a tool to resolve (Siebrasse, 1997; Hanedar, Broccardo and Bazzana, 2012; Chen, Guo and Huang, 2008; Boot, Thakor and Udell, 1991; Coco, 2000). Meanwhile, according to Kozolchz (2006), secured lending has proven to be effective in improving the gross domestic product (GDP) and reducing poverty of a country.

An Overview of Secured Lending Related Laws in Nigeria

Nigeria’s secured transactions law was said to be highly fragmented, lacked predictability and comprehensiveness and with several issues (Iheme, 2016).

However, In his book titled Personal property Law in Nigeria, Ozekhome (2019) is of the opinion that the Secured Transactions in Movable Assets Act, 2017 (herein after called STMA) has unified the pre-existing Nigerian security devices into a single statute, albeit personal property biased, that encourages borrowing and lending. While the STMA is the extant law with respect to secured transactions in movable property, the Land Use Act, *Chapter 202, LFN, 1990 (hereinafter called the LUA) is the extant law with respect to secured transactions in real property.*

The LUA, which vests all lands comprised in the territory of each state of the federation in the Governor of the state, was necessitated by the issues in the pre-LUA land laws. However, according to (Nelson, 2013), while the pre-LUA land laws were considered not suitable because of their challenges, the LUA though had some positive impacts on land administration, it has issues such as uncertainty of title, requirement of consent and its attendant challenges, revocation and the issue of compensation, as well as discrimination against a lender or mortgagee among others, that have hampered the effectiveness of the mortgage of land as security for loan transactions in Nigeria. Meanwhile, the Federal Government of Nigeria's drive to expand access to credit for businesses, particularly micro, small and medium enterprises (MSMEs), gave rise to the enactment of the STMA. This is because restricted access to finance, occasioned by lack of immovable properties for collateral, is a key limitation to the growth of MSMEs in Sub-Saharan Africa (Bruhn *et al*. (2017). The objects of the STMA are to enhance financial inclusion in Nigeria, stimulate responsible lending to MSMEs, facilitate access to credit secured with movable assets, facilitate perfection of security interest in movable assets, facilitate realization of security interest in movable assets, and establish a collateral registry and provide for its operations. While it may not be a perfect law, the STMA is already being used to facilitate the perfection of security interest in movable assets, and this is expected to improve in Nigeria with time (Osuji, 2017; CBN, 2019).

The Nature of Commercial Bank Loans in Nigeria

In Nigeria, commercial banks have numerous loan products designed to meet their customers' needs and convenience, and they ascribe various names and descriptions to such loan types. However, according to Akujuobi and Nwezeaku

(2015), commercial bank lending is often guided by each bank’s credit risk management and policy, which must be adhered to before loans are granted. From a study of commercial bank’ annual reports, coupled with the views of the CBN, loans are generally classified based on loan security (secured and unsecured); loan limit (open-end or closed-end); loan tenor (short term, about 1year; medium term, about 1 to 5 years; and long term, about 3 to 30 years); borrower type (Consumer or Retail, Commercial, Corporate and Public Sector); or based on purpose of the loan (auto finance for car purchase, import finance, education, and agric Loans among others).

Collaterals Used as Security for Commercial Bank Loans

The views of Brealey, Myers and Allen (1991), Note (1990), Pritchard (2008), and Ellis-Christensen (2012) about collaterals used to secure loans, is hereby consolidated with those of Okafor, Okafor and Okolie (2020) thus: Real property, Tangible movable property, Financial instruments such as Stocks, Shares and Bonds of quoted blue-chip companies, certificates of deposits, treasury certificates and other similar marketable securities, Claims and receivables, Cash deposits, Endorser, Intellectual property such as patents, copyright, trademarks, and designs, and Guarantee, all of which depends on the various commercial banks’ credit risk management and collateral polices.

The Use of Real Property as Collateral for Loans

A number of authors have written about the use of real property as collateral for securing loans granted by financial institutions. Authors whose work were reviewed, including Atogenzoya *et al*. (2014), Nagarajan and Meyer (1995), Feder *et al*. (1988), Bruce-Twum and Adu- Darko (2013) and Nwuba *et al*. (2013) believe that because of its unique characteristics, such as having a hedge against inflation and durability among others, real property is the most preferred type of collateral used by financial institutions for securing loans and reducing loan losses, though with impediments such as stringent land documentation processes, extra loan application costs, longer loan processing periods, difficulty in producing legally enforceable title, as well as difficulty and long procedure involved in realizing the security, among others, and all of which need to be mitigated as a precondition for the successful use of real property as collateral (Feder *et al*., 1988; Menkhoff *et al*., 2012); and that lack of real property restricts access to credit (Atogenzoya *et al*., 2014; Nagarajan and Meyer, 1995; Menkhoff *et al*., 2012; and Domeher and Abdulai, 2012). In fact, Nwuba *et al*. (2013) specifically stated that two third of loans granted by commercial banks in Nigeria are secured by real property. However, while a number of the authors agree with the preference for real property assertion and lack of real property collateral being the reason for access restriction to formal credit in developing countries, there are those with divergent views. Calomiris *et al*. (2016) stated that absence of effective and legal means of collateralizing movable assets can shape bank loan supply and that differences across countries in their legal systems' ability to support the use of movable assets as collateral for bank loans substantially affect the ability of borrowers to gain access to credit. This view was emphasized by Fleisig (1996), who believes that legal and regulatory barriers with respect to the creation, perfection and enforcement of security interest in movable property is what limits access to credit in developing countries. Even Nwuba *et al*. (2013) had stated in their study that the unreformed collateral system coupled with the poor documentation of titles to assets in the developing countries was a reason for the preference for real property.

Furthermore, while movable assets such as inventory and accounts receivable, investments instruments such as shares, cash, bonds, deposit accounts, household assets and motor vehicles are progressively being accepted as collateral (Bruce-Twum and Adu- Darko, 2013), collateral substitutes such as loan size reduction and interest rate hike; or guarantees and relationship lending make for easier access to finance when lending to poor households and entrepreneurs in emerging markets (Menkhoff *et al*., 2012). In fact, Domeher and Abdulai (2012) believe that collateral is not necessarily a compulsory and sufficient requirement for obtaining credit because there are more important factors that lenders consider when granting credit, such as financial position, cash flow, profitability and credit history, but that however, lenders would sometimes require collateral alternatives or substitutes rather than real property due to the impediments to the use of real property. Also, Nagarajan and Meyer (1995) believe that social, economic and legal environment within which the banks operate frequently influences the acceptability and value of assets used as collateral, and that there is a positive correlation between formal loans on one hand and security of land titles in Thailand and official granting of certificates of occupancy in Nigeria on the other, but that several collateral substitutes are being used in rural formal financial markets despite the continued reliance on conventional collateral to secure loans by formal lenders.

From the foregoing, while it has been documented that movable properties and a number of other collateral substitutes exists and that lack of reform and legal backing for which constitutes a hindrance to credit access, it would appear that lack of real property or inability to present real property as collateral is majorly responsible for credit access restriction in developing countries like Nigeria. These literature reviewed therefore highlights the need for research to examine the factors influencing commercial banks' acceptance of real property as collateral to secure loans in Nigeria. This is expected to provide information about real property as loan collateral that would guide stakeholders in the financial intermediation industry, especially prospective borrowers in making credit decisions that would to meet household needs and entrepreneurial productive activities, for the enhancement of the Nigeria's economic growth and development.

Methodology

Descriptive research design was employed for this study. The study population and sample frame include the Twenty-Two (22) Central Bank of Nigeria (CBN) licensed commercial banks in Nigeria. The purposive sampling technique was used to select Thirty-Two (32) credit officers who are involved in the process of loan administration in all the commercial banks with presence and operations in Makurdi and Minna, North-Central Nigeria. Data was gathered through the use of questionnaire developed for measurement of ordinal data with the aid of Likert scale, as well as nominal and interval data with the aid of contingency table. Thirty-one (31) out of the Thirty-two (32) questionnaires administered were correctly filled, retrieved and considered adequate for analysis.

The questionnaire items and data collected were tested for reliability in terms of internal consistency, in order to determine if the questionnaire items could reliably measure the latent variables consistently. Consequently, Cronbach's Alfa was determined for the items in the research questionnaire, using SPSS and Two Factor ANOVA without replication (Rai and Thapa, n.d.; Kothari, 2004; Hussain, 2019). The Cronbach's Alfa obtained for each of the questionnaire item include 0.794 (Acceptable collateral types and usage frequency), 0.905 (Proportion of loans secured by acceptable collateral types), 0.781 (Challenges that accompany the use of acceptable collateral types by commercial banks) and 0.753 (Factors influencing commercial banks' acceptance of real property as collateral), all of which are at acceptable levels, which indicate good internal consistency of data collated for the study.

Data collected were analyzed and presented with the aid of SPSS software version 28, Microsoft Excel and tables, as well as descriptive statistics such as Percentage, Mean Item Score (MIS), Relative Importance Index (RII) and Spearman's rank correlation coefficient.

The equations used for the calculation of the MIS and the RII are presented below.

$$MIS = (\sum W) \div N = (5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1) \div N$$

$$RII = (\sum W) \div (A * N) = (5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1) \div 5N$$

Where in both cases ΣW represents the sum of the weighted responses as applied to each point option based on the Likert scale category; N represents total number of sampling units that responded; and A represents the highest weight or number of response category of Likert scale used, which is 5 points in this case. Consequently, the Likert point or weighting value attached to each of the number of responses range from point 1 to point 5. Therefore, n_1 represents the number of responses assigned to point 1, n_2 represents the number of responses assigned to point 2, n_3 is represents the number of responses assigned to point 3, n_4 represents the number of responses assigned to point 4, n_5 represents the number of responses assigned to point 5 (Umeh, 2018; Ankeli, Nuhu, Saheed, Akinremi, and Tinufa, 2021).

The cut-off points for the interpretation of the MIS with respect to the types of acceptable collaterals and the frequency of their usage by commercial banks include: Always (4.50 – 5.00); Very frequently (3.50 – 4.49); Frequently (2.50 – 3.49); Sometimes (1.50 – 2.49); and Rarely (1.00 – 1.49). Also, the cut-off points for the interpretation of the MIS for the factors that influence commercial banks acceptance of real property as loan collateral are: Very positive influence (4.50 – 5.00); Positive influence (3.50 – 4.49); Neutral influence (2.50 – 3.49); Negative influence (1.50 – 2.49); and Very negative influence (1.00 – 1.49). Meanwhile, the interpretation of the RII with respect to the factors that influence commercial banks acceptance of real property as loan collateral is based on a range of 0 to 1, and described as being the least influential factor to the most influential factor (Pornel, Balinas, and Saldaña, 2011; Pornel and Saldaña, 2013; Udoekanem, Olatunji, and Oko, 2015; and Morse, 2018). Furthermore, correlation coefficient interpretation rule enunciated by Schober, Boer, and Schwarte (2018), and adopted in this study include: 0.00 to 0.10 or 0.00 to −0.10 (negligible positive or negative correlation), 0.10 to 0.39 or −0.10 to −0.39 (Weak positive or negative correlation), 0.40 to 0.69 or −0.40 to −0.69 (Moderate positive or negative correlation), 0.70 to 0.89 or −0.70 to −0.89 (Strong positive or negative correlation), 0.90 to 1.00 or −0.90 to −1.00 (Very strong positive or negative correlation).

Results and Discussions

Types of acceptable collaterals used by commercial banks to secure loans, the frequency of their usage and ranking are presented in Tables 4.1 and 4.2:

Table 4.1: Acceptable collateral types and usage frequency based on Likert scale

Acceptable Collateral Types	Rarely		Sometimes		Frequently		Very Frequently		Always	
	N	%	N	%	N	%	N	%	N	%
Real property	-	-	-	-	22	(71.0)	7	(22.6)	2	(6.4)
Moveable property	4	(12.9)	10	(32.3)	17	(54.8)	-	-	-	-
Intellectual property	26	(83.9)	5	(16.1)	-	-	-	-	-	-
Shares	4	(12.9)	22	(71.0)	5	(16.1)	-	-	-	-
Bond	4	(12.9)	16	(51.6)	11	(35.5)	-	-	-	-
Treasury bill	4	(12.9)	14	(45.2)	13	(41.9)	-	-	-	-
Insurance policy	2	(6.5)	9	(29.0)	20	(64.5)	-	-	-	-
Receivables	-	-	4	(12.9)	20	(64.5)	7	(22.6)	-	-
Cash deposit	-	-	5	(16.1)	22	(71.0)	3	(9.7)	1	(3.2)
Guarantee	-	-	4	(12.9)	23	(74.2)	3	(9.7)	1	(3.2)

Source: Field survey (2021)

Table 4.2: **Ranking of acceptable collateral types based on usage frequency's MIS**

Acceptable Collateral Types	1	2	3	4	5	N	Σw	MIS	Usage	Ranking
Real property	0	0	22	7	2	31	104	3.35	Frequently	1st
Receivables	0	4	20	7	0	31	96	3.10	Frequently	2nd
Guarantee	0	4	23	3	1	31	94	3.03	Frequently	3rd
Cash deposit	0	5	22	3	1	31	93	3.00	Frequently	4th
Insurance policy	2	9	20	0	0	31	80	2.58	Frequently	5th

Moveable property	4	10	17	0	0	31	75	2.42	Sometimes	6th
Treasury bill	4	14	13	0	0	31	71	2.29	Sometimes	7th
Bond	4	16	11	0	0	31	69	2.23	Sometimes	8th
Shares	4	22	5	0	0	31	63	2.03	Sometimes	9th
Intellectual property	26	5	0	0	0	31	36	1.16	Rarely	10th

Source: Field survey (2021)

Tables 4.1 and 4.2 shows that acceptable collateral types that are frequently used to secure commercial bank loans in the study area include guarantee, real property, cash deposit, receivables and insurance policy as indicated by 23 (74.2%), 22 (71.0%), 22 (71.0%), 20 (64.5%) and 20 (64.5%) of the commercial banks' credit officers respectively, and as evidenced by the Mean Item Scores (MISs) of 3.03, 3.35, 3.00, 3.10, and 2.58 respectively. While real property, with a MIS of 3.35 is the highest ranked collateral type that is frequently used to secure commercial bank loans, there are other collateral types, such as receivables, guarantee, cash deposit and insurance policy that are also frequently used by commercial banks. While this is congruous with the views of Domeher and Abdulai (2012), who argued that real property is not necessarily a compulsory and sufficient requirement for obtaining credit where the borrower has a steady periodic credit inflow or cash flow, which could pass for alternative collateral with comparatively less challenges than real property, this study has provided scarce empirical data on the same.
Proportion of loans secured by acceptable collateral types and the ranking of acceptable collateral types based on the loan proportions' Mean Item Score (MIS) are presented in Tables 4.3 and 4.4:

Table 4.3: Proportion of loans secured by acceptable collateral types

Acceptable Collateral Types	Proportion of loans										
	0%	**10%**	**20%**	**30%**	**40%**	**50 %**	**60%**	**70%**	**80 %**	**90 %**	**100 %**
Real property	-	9(29.0)	7(22.6)	9(29.0)	5(16.2)	-	1(3.2)	-	-	-	-
Moveable property	7(22.6)	22(71.0)	1(3.2)	1(3.2)	-	-	-	-	-	-	-

Intellectual property	28(90.3)	3(9.7)	-	-	-	-	-	-	-	-	-
Shares	23(74.2)	8(25.8)	-	-	-	-	-	-	-	-	-
Bonds	9(29.0)	19(61.3)	3(9.7)	-	-	-	-	-	-	-	-
Treasury bill	23(74.2)	8(25.8)	-	-	-	-	-	-	-	-	-
Insurance policy	9(29.0)	21(67.8)	1(3.2)	-	-	-	-	-	-	-	-
Receivables	4(12.9)	24(77.4)	2(6.5)	1(3.2)	-	-	-	-	-	-	-
Cash deposit	2(6.5)	9(29.0)	14(45.2)	6(19.3)	-	-	-	-	-	-	-
Guarantee	-	16(51.6)	12(38.8)	1(3.2)	1(3.2)	-	-	1(3.2)	-	-	-

Source: Field survey (2021)

Table 4.4: Ranking of acceptable collateral types based on loan proportions' MIS

Acceptable Collateral Types	0	10	20	30	40	50	60	70	80	90	100	N	Σw	MIS	Ranking
Real property	-	9	7	9	5	-	1	-	-	-	-	31	760	24.5%	1st
Cash deposit	2	9	14	6	-	-	-	-	-	-	-	31	550	17.7%	2nd
Guarantee	-	16	12	1	1	-	-	1	-	-	-	31	540	17.4%	3rd
Receivables	4	24	2	1	-	-	-	-	-	-	-	31	310	10.0%	4th
Moveable property	7	22	1	1	-	-	-	-	-	-	-	31	270	8.7%	5th
Bonds	9	19	3	-	-	-	-	-	-	-	-	31	250	8.1%	6th
Insurance policy	9	21	1	-	-	-	-	-	-	-	-	31	230	7.4%	7th
Treasury bill	23	8	-	-	-	-	-	-	-	-	-	31	80	2.6%	8th
Shares	23	8	-	-	-	-	-	-	-	-	-	31	80	2.6%	9th
Intellectual property	28	3	-	-	-	-	-	-	-	-	-	31	30	1.0%	10th

Source: Field survey (2021)

Tables 4.3 and 4.4 shows that real property and guarantee secured loans in proportions that range of between 10% to 70%, while other acceptable collaterals types secured loans that are concentrated and spread around 0% to 40%, indicating that the total volume of loans granted by commercial banks within the study area are secured by and spread among the different acceptable collateral types in varying proportions. Furthermore, on the average, 24.5% of the loans granted by commercial banks are secured by real property, while 17.7%, 17.4%, 10.0% and 7.4% of the loans are secured by cash deposit, guarantee, receivables, and insurance policy respectively. Intellectual property secures the least proportion of loans at 1%. It should be noted that with a loan proportion MIS of 24.5%, real property is the highest ranked acceptable collateral type, and this is a pointer to the assertion by a number of authors that real property is the most widely used and preferred collateral type (Atogenzoya *et al*., 2014; Nwuba *et al*., 2013; Nagarajan & Meyer, 1995; Osuji, 2017; Feder *et al*., 1988; Domeher & Abdulai, 2012; Fleisig, 1996), though their studies differ either with respect to the study area, the methodology, or the details provided.

The challenges that accompany the use of collateral types acceptable to commercial banks for securing loans are presented in Table 4.5:

Table 4.5: Challenges that accompany the use of collateral types acceptable to commercial banks

Collateral usage Challenges	Acceptable types of collaterals										
	Real Property	**Moveable Property**	**Intellectual Property**	**Shares**	**Bonds**	**Treasury Bill**	**Insurance Policy**	**Receivables**	**Cash Deposit**	**Guarantee**	**Total**
	N (%)	**N (%)**	**N (%)**	**N (%)**	**N (%)**	**N (%)**	**N (%)**	**N (%)**	**N (%)**	**N (%)**	**N (%)**
Title and ownership issues	10(8.5)	9(17.0)	4(10.3)	1(2.5)	1(7.7)	1(6.7)	1(4.2)	0(0.0)	0(0.0)	1(4.5)	28(7.9)
Tedious documentation process	17(14.6)	1(1.9)	0(0.0)	1(2.5)	1(7.7)	0(0.0)	0(0.0)	1(4.8)	0(0.0)	1(4.5)	22(6.2)
High processin	9(7.7)	1(1.9)	0(0.0)	0(0.0)	0(0.0)	1(6.7)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	11(3.1)

g cost											
Long processing duration	18(15.4)	1(1.9)	0(0.0)	1(2.5)	0(0.0)	1(6.7)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	21(5.9)
Encumbrances	9(7.7)	1(1.9)	9(23.1)	5(12.5)	1(7.7)	3(20.0)	1(4.2)	6(28.6)	4(33.3)	6(27.3)	45(12.6)
Legal issues	9(7.7)	1(1.9)	12(30.8)	0(0.0)	3(23.1)	1(6.7)	8(33.2)	7(33.3)	3(25.0)	3(13.6)	47(13.2)
Governor's consent	13(11.1)	1(1.9)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	14(3.9)
Illiquidity	26(22.2)	10(18.8)	7(17.9)	5(12.5)	0(0.0)	0(0.0)	7(29.2)	4(19.0)	3(25.0)	2(9.1)	64(18.0)
Value instability	6(5.1)	28(52.8)	7(17.9)	27(67.5)	7(53.8)	8(53.2)	7(29.2)	3(14.3)	2(16.7)	9(41.0)	104(29.2)
Total	117(32.9)	53(14.9)	39(11.0)	40(11.2)	13(3.7)	15(4.2)	24(6.7)	21(5.9)	12(3.4)	22(6.2)	356(100)

Source: Field survey (2021)

Table 4.5 shows that value instability is the most dominant challenge that was raised across all the collateral types, as indicated by the respondents 104 times (29.2%), and the impact of which is greatest on moveable property, shares, bonds and treasury bill at 52.8%, 67.5%, 53.8% and 53.2% respectively. Furthermore, Real property has the highest number of challenges comparative to the other collateral types, as issues were pointed out 117 times, which represents 32.9% of all the issues indicated by the respondents, and this can be attributed mainly to the challenges of tedious documentation process (14.6%), high processing cost (7.7%), long processing duration (15.4%), illiquidity (22.2%) and Governor's consent (11.1%). While this is consistent with numerous existing literature that the use of real property as security for loan, especially in emerging or developing economies like Nigeria is riddled with issues and challenges (Nwuba *et al*., 2013; Nwuba *et al*, 2015; Atogenzoya *et al*., 2014; Bruce-Twum & Adu- Darko, 2013; Domeher & Abdulai, 2012; Udo, 2001), this study has provided empirical data on the same together with a comparative analysis.

In a bid to determine relationship and statistical dependence, if any among the study variables, a number of the outputs of the data analyses, including the MISs with respect to the frequency of use of acceptable collateral types and proportion of loans that they secure, as well as the number of challenges that accompany the use of the various acceptable collateral types were analysed using the Spearman's rank correlation coefficient, in view of the **monotonic and non-linear** nature of the variables, and the result presented in Table 4.6:

Table 4.6: Spearman's rank correlation coefficient report

		Challenges that accompany the use of acceptable collaterals	Frequency of use of acceptable collaterals	Proportion of loans secured by acceptable collateral types
Challenges that accompany the use of acceptable collaterals	Correlation Coefficient	1	0.030	-0.036
	Sig. (2-tailed)	.	0.934	0.920
	N	10	10	10
Frequency of use of acceptable collaterals	Correlation Coefficient	0.03	1	.881**
	Sig. (2-tailed)	0.934	.	<.001
	N	10	10	10
Proportion of loans secured by acceptable collateral types	Correlation Coefficient	-0.036	.881**	1
	Sig. (2-tailed)	0.920	<.001	.
	N	10	10	10

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

Source: Field survey (2021)

Table 4.6 shows that the challenges that accompany the use of acceptable collateral types have a weak negative correlation with the proportion of loans secured by acceptable collateral types (r = -0.036, p (0.920) > 0.05). What this means is that when the challenges that accompany the use of acceptable collateral types reduces, the proportion of loans secured by the said collateral types increases, and vice versa. Also, the frequency of use of acceptable collateral types have a statistically significant, strong positive correlation with the proportion of loans secured by acceptable collateral types ($r = 0.881$, p (<0.001) < 0.05). The implication of this result is that when the frequency of use of an acceptable collateral type is increased, there will be a corresponding increase in the proportion of loans that will be granted. Therefore, a prospective borrowers who do not have real property to present as collateral can have access to higher loan proportions, if or when they present alternative frequently used collateral types, and the frequency of use of the said alternative collateral types are increased by the commercial banks.

The factors that influence commercial banks' acceptance of real property as collateral to secure the loans that they grant, and the ranking of the said factors in terms of the extent of the influence and dominance are presented in Tables 4.7 and 4.8:

Table 4.7: Factors that influence commercial banks' acceptance of real property as collateral for loans based on Likert scale

Factor	Very Negative Influence		Negative Influence		Neutral Influence		Positive Influence		Very Positive Influence	
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Bank collateral policy	-	-	-	-	4	(12.9)	14	(45.2)	13	(41.9)
Value stability of property	-	-	-	-	-	-	15	(48.4)	16	(51.6)
Durability of property	-	-	-	-	2	(6.5)	14	(45.2)	15	(48.3)
Urban location of property	-	-	-	-	2	(6.5)	18	(58.1)	11	(35.4)
Rural location of property	11	(35.5)	16	(51.6)	3	(9.7)	1	(3.2)	-	-
Statutory title of property	-	-	-	-	1	(3.2)	23	(74.2)	7	(22.6)
Customary title of property	4	(12.9)	18	(58.1)	8	(25.8)	1	(3.2)	-	-
Marketability of	1	(3.2)	11	(35.5)	15	(48.4)	4	(12.9)	-	-

property										
Documentation process of loan	-	-	18	(58.1)	12	(38.7)	1	(3.2)	-	-
Processing cost of loan	1	(3.2)	9	(29.0)	19	(61.3)	2	(6.5)	-	-
Processing duration of loan	1	(3.2)	8	(25.8)	18	(58.1)	4	(12.9)	-	-
Foreclosure process of loan	13	(41.9)	7	(22.6)	11	(35.5)	-	-	-	-
Retail loan type	1	(3.2)	2	(6.5)	28	(90.3)	-	-	-	-
Commercial loan type	-	-	-	-	13	(41.9)	18	(58.1)	-	-
Corporate loan type	-	-	-	-	6	(19.4)	21	(67.7)	4	(12.9)
Public sector loan type	1	(3.2)	10	(32.3)	19	(61.3)	1	(3.2)	-	-
Small loan amount	1	(3.2)	7	(22.6)	22	(71.0)	1	(3.2)	-	-
Moderate loan amount	1	(3.2)	10	(32.3)	18	(58.1)	2	(6.4)	-	-
Large loan amount	-	-	-	-	7	(22.6)	18	(58.1)	6	(19.3)
Short term loan tenor	-	-	1	(3.2)	26	(83.9)	4	(12.9)	-	-
Medium term loan tenor	1	(3.2)	6	(19.4)	23	(74.2)	1	(3.2)	-	-
Long term loan tenor	-	-	-	-	6	(19.4)	9	(29.0)	16	(51.6)
Maximum Interest rate	-	-	-	-	29	(93.5)	2	(6.5)	-	-
Minimum Interest rate	-	-	-	-	20	(64.5)	11	(35.5)	-	-
Borrower capacity	-	-	-	-	28	(90.3)	3	(9.7)	-	-
Borrower credit history	-	-	-	-	19	(61.3)	11	(35.5)	1	(3.2)
Alternative collateral	-	-	8	(25.8)	21	(67.7)	1	(3.2)	1	(3.2)
Socio economic environment	-	-	-	-	28	(90.3)	3	(9.7)	-	-
Legal environment	-	-	2	6.5	22	(71.0)	7	(22.5)	-	-

Security of the environment	1	(3.2)	7	(22.6)	19	(61.3)	4	(12.9)	-	-

Source: Field survey (2021)

Table 4.8: **Ranking of factors that influence commercial banks' acceptance of real property as collateral for loans based on MIS and RII**

Factor	1	2	3	4	5	N	Σw	MIS	RII	Ranking
Value stability of property	-	-	-	15	16	31	140	4.52	0.90	1st
Durability of property	-	-	2	14	15	31	137	4.42	0.88	2nd
Long term loan tenor	-	-	6	9	16	31	134	4.32	0.86	3rd
Bank collateral policy	-	-	4	14	13	31	133	4.29	0.86	4th
Urban location of property	-	-	2	18	11	31	133	4.29	0.86	5th
Statutory title of property	-	-	1	23	7	31	130	4.19	0.84	6th
Large loan amount	-	-	7	18	6	31	123	3.97	0.79	7th
Corporate loan type	-	-	6	21	4	31	122	3.94	0.79	8th
Commercial loan type	-	-	13	18	-	31	111	3.58	0.72	9th
Borrower credit history	-	-	19	11	1	31	106	3.42	0.68	10th
Minimum Interest rate	-	-	20	11	-	31	104	3.35	0.67	11th
Legal environment	-	2	22	7	-	31	98	3.16	0.63	12th
Short term loan tenor	-	1	26	4	-	31	96	3.10	0.62	13th
Borrower capacity	-	-	28	3	-	31	96	3.10	0.62	14th
Socio economic environment	-	-	28	3	-	31	96	3.10	0.62	15th
Maximum Interest rate	-	-	29	2	-	31	95	3.06	0.61	16th
Retail loan type	1	2	28	-	-	31	89	2.87	0.57	17th
Alternative collateral	-	8	21	1	1	31	88	2.84	0.57	18th

Security of the environment	1	7	19	4	-	31	88	2.84	0.57	19th
Processing duration of loan	1	8	18	4	-	31	87	2.81	0.56	20th
Small loan amount	1	7	22	1	-	31	85	2.74	0.55	21st
Medium term loan tenor	1	6	23	1	-	31	86	2.77	0.55	22nd
Marketability of property	1	11	15	4	-	31	84	2.71	0.54	23rd
Processing cost of loan	1	9	19	2	-	31	84	2.71	0.54	24th
Moderate loan amount	1	10	18	2	-	31	83	2.68	0.54	25th
Public sector loan type	1	10	19	1	-	31	82	2.65	0.53	26th
Documentation process of loan	-	18	12	1	-	31	76	2.45	0.49	27th
Customary title of property	4	18	8	1	-	31	68	2.19	0.44	28th
Foreclosure process of loan	13	7	11	-	-	31	60	1.94	0.39	29th
Rural location of property	11	16	3	1	-	31	56	1.81	0.36	30th

Source: Field survey (2021)

Value stability, with a RII of 0.90 and a MIS of 4.52 is the highest ranked and most dominant factor with 'very positive influence' on commercial banks' acceptance of real property as loan collateral in the study area. This is followed closely by other factors with 'positive influence' as revealed thus: durability of property, long term loan tenor, bank collateral policy, urban location of property, statutory title of property, large loan amount, as well as corporate and commercial loan types. This result is somewhat consistent with existing literature, such as Atogenzoya *et al*. (2014) who believe that value stability and durability are the main reasons why financial institutions prefer real property to other collateral types in securing the loans that they grant; and Bruce-Twum and Adu- Darko (2013), who opined that banks' securitization policies determine the collateral type that they consider acceptable.

Conclusion and Recommendations

In conclusion, while the use of real property as loan collateral, in spite of the numerous impediments attendant, enhances greater access to commercial bank loans in North-Central Nigeria, an equivalent amount of access to commercial bank loans can be enhanced by alternative collateral types such as receivables, guarantee, insurance policy and cash deposit, all of which are frequently used at levels equivalent to real property, and which are expected to exhibit equivalent levels of value stability, which is the most positively influential real property collateral acceptance factor. Consequently, prospective borrowers are called upon not to self-select themselves out of the credit market, but rather take advantage of other commercial banks' frequently used collateral types, in order to access loans to meet various needs, including poverty alleviating productive activities within the Nigerian economy.

It is recommended that commercial banks engage in sensitization programmes that will better equip prospective borrowers on collateral options and acceptance factors, towards making them willing to effectively access loans; Estate surveyors and valuers should be innovative and show leadership with respect the movable properties market, so that inefficiencies that lead to value disparity and instability can be resolved to favour higher uptake of movable properties as collaterals, since the STMA is already helping in the same direction; and the government and other stakeholders in the financial intermediation industry should make interventions in the secured lending space, with the aim of substantially reducing the numerous challenges that bedevil the utilization of the various collateral types. This will enable convenience, and increased loan proportions and volumes toward productive activities within the economy of Nigeria.

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