Credit Risk Mitigation with Real Estate Collaterals in Nigeria's Commercial Banks

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Abstract
The practice of posting collaterals to mitigate credit risk is commonplace in bank lending. Real estate is an important collateral instrument especially in developing countries. This study investigated credit risk mitigation with real estate collaterals by commercial banks in Nigeria to establish if real estate is a reliable collateral instrument, the role of real estate valuation and the key issues the banks consider in the process. Response was elicited from a sample of commercial banks in a cross-sectional survey with a structured questionnaire. Data analysis employed descriptive statistics. Findings indicate that real estate is a very reliable collateral instrument and that its valuation is a significant aspect of the risk mitigation process. The reliability of valuation opinion is the most important expectation of the banks from the valuers and the banks are satisfied with valuation advice provided by valuation firms. The banks consider the reputation of the borrower the most important factor to mitigate credit risk with real estate collateral and the quality of borrower's title to the real estate the most important aspect of the collateral instrument for risk mitigation. Overall, the findings suggest negligence and inadequate due diligence on the part of the banks in the process of credit risk mitigation with real estate collaterals. There is need for adequate documentation of real estate titles and transactions for more efficient risk mitigation practice.

Key words: Bank lending, Credit risk mitigation, Collateral, Nigeria; Real estate, Secured lending

1. Background

The use of credit is commonplace in contemporary commercial activities. However, repayment of loans is important to lenders. Therefore, lenders assess the risk profile of prospective borrowers before deciding whether to extend credit to them. There is a probability that a borrower will default on their obligations on a loan contract. This is referred to as credit risk. Credit risk is the risk to the lender which results from a counter-party's failure to meet the terms of a lending contract. It arises any time a lender extends its funds as loans or related contractual agreements. Credit risk is one of the most important risks for commercial banks because credit exposures from their lending activities account for the major proportion of their assets and sources of revenue.

In the assessment of the risk profile of prospective borrowers, lenders try to ensure that the potential borrower is credit-worthy and person of integrity who will keep to the terms of the loan contract. Nonetheless, while the process reduces the probability of default by the borrower, it does not eliminate it. There is no assurance that borrowers who are assessed credit worthy at the commencement of a loan transaction will remain so throughout the duration of the transaction. Circumstances may change and they often do and even a most prudent borrower may fail to meet loan repayment obligation. Lenders need to be assured of the safety of their funds in the event of such unexpected circumstances which make it difficult or impossible for the borrower to repay from normal operational cash flow. Consequently, they take measures to mitigate this risk of default by taking collaterals to cover their credit exposures. This process is an essential aspect of credit risk management. In credit transactions, there is widespread practice of borrowers pledging assets as security for their obligation to repay loans. Such assets are generally referred to as collateral. Collateral is widely used in debt contract and it is a powerful instrument for dealing with moral hazard (Boot, et al., 1991). It is a feature of loans that help to channel resources to their best use (Leitner, 2006). The purpose of collateralisation is to hedge the risk of default by a borrower. Studies have indicated that 60 to 70% of bank loans in the developed markets are collateralised, with a large proportion of the loan volume secured on physical assets (Menkhoff, et al., 2006).

The banking sector in Nigeria has undergone two major reforms in a little over a decade - in 2004/5 and in 2009. The reforms were aimed at removing inefficiencies to stabilise the financial sector, and reposition the banks to play their roles effectively in economic growth (Sanusi, 2010a, 2010b, Soludo, 2004, 2006). Several studies have investigated these reforms (Akpansung & Gidigbi, 2014; Anyanwu, 2010; Eriemo, 2014; Fadare, 2010; Iganiga, 2010; Ofanson, et al, 2010; Somoye, 2008). These studies indicate that the reforms have generally been beneficial to the country's economy.

However, a significant fallout of the reforms was the exposure of high volume of non-performing loans and toxic assets amid poor corporate governance and gross insider abuse in the banks (Soludo, 2004, 2006). These revelations have brought the need for due diligence to the front burner of bank lending debates. In particular, effective collateralisation through the provision of adequate security for bank credit has become a most essential element in credit risk management.

There are different circumstances in which the pledging of collateral will be required in bank lending. Research findings indicate that smaller borrower size is associated with greater borrower risk (Berger & Udell, 1995b; Strahan, 1999). Other findings demonstrate that larger loans attract lower collateral requirements though collaterals may be posted by either safer or riskier borrowers (Boot, et al., 1991). Therefore, higher risk loans attract higher collaterals (Menkhoff, et al., 2006). In other words, the smaller borrowers are associated with smaller loans and are riskier than larger ones. They therefore attract higher requirement for collaterals. Research results also demonstrate that the credit quality of the borrower is a determinant of the requirement to post collateral (Jiméneza, et al., 2006). The findings show that borrowers with lower credit quality are more likely to pledge collateral to secure a loan than are other borrowers. These findings imply that loan and borrower characteristics determine collateral protection.

Findings from other studies however suggest that borrower and relationship characteristics are more important determinants of collateral protection than lender and loan characteristic (Voordeckers & Steijvers, 2006). The longer the relationship between the bank and the borrower, the lower will be the likelihood that the bank will require collateral (Berger & Udell, 1995a; Boot & Thakor, 1994; Voordeckers & Steijvers, 2006). Researchers have however found that although relationship lending reduces the likelihood of collateral for long-term loans, duration of relationship does not have significant effect on short-term loans (Jiméneza, et al., 2006). These results imply that lenders consider borrowers less risky as the relationship with them gets longer. The key issue however, is that lenders take collaterals they consider good and reliable enough to mitigate credit risk.

There are quite a number of assets that banks use as collateral. However, different assets have different risk characterises and protection capacity. Therefore, banks usually select assets that they consider most efficient for protection considering the structure of the loans and the bank's collateral and risk mitigation framework. Assets that will be ideal for collateral should possess certain properties including legal certainty, credit quality, ease of pricing, and marketability. The legal status of a collateral asset must be clear and certain. It should be possible to determine the credit quality of the asset. The asset should be easy to price and be marketable such that its value could be determined and if necessary, it could be disposed to liquidate any outstanding debt.

Real estate is commonly used as collateral in secured lending. It is considered important collateral in bank lending (Gan, 2007). In particular, in the developing countries, real estate occupies a unique place as collateral instrument in the formal credit market (Fleisig, 1996). Fleisig states that regulated banks in developing countries grant only loans secured on real estate or make unsecured loans to borrowers that provide evidence of ownership of real estate on which the bank could file a lien in the event of the borrower's default. Other studies indicate that in most low and middle-income countries including Nigeria, real estate is preferred to movable assets as collateral instruments (International Trade Centre, 2010; Safavian, et al, 2006). Findings from Nwuba, Egwuatu, and Salawu (2013) demonstrate that real estate is the most widely used collateral instrument in Nigeria's banking sector.

Furthermore, as part of the process of credit risk mitigation, lenders take some important steps with respect to the collateral instrument, such as valuation and title investigation to ensure the suitability of any asset being pledged as collateral. In addition, the value of the collateral asset in relation to the loan amount is important for risk mitigation. Accordingly, banks usually have a margin between the collateral value and the loan amount, referred to as collateral haircuts. The higher the risk of the loan, the higher the haircut required and the higher the haircut, the greater the loan security.

The significant role of real estate in risk mitigation for secured lending underscores its economic importance in a developing country like Nigeria. Consequently, determining the value of real estate collateral assets is an important process in secured lending and essential element in credit risk mitigation. Indeed, real estate valuations are essential aspect of risk management in the banking sector (Crosby, et al, 2004). However, real estate is a unique, illiquid, and irregularly traded asset and so, determining its value involves technicalities. Accordingly, it cannot be used as collateral for its market value. A haircut has to be deducted which means that the market value has to be adjusted to account for its relative illiquidity and the fact that any possible sale on default will be outside normal market conditions. Lenders therefore usually rely on experts for the determination of the value of real estate collaterals. The ability of a bank to sustain credit risk in secured lending depends on the quality of such valuations prepared by valuers (Aluko, 2007). Thus, real estate valuers play essential role in the secured lending process and error on their part could endanger prudent lending decision by banks (Gallimore & Wolverton, 2000). Accordingly, the reliability of their valuation advice to lenders is critical for lending decisions and in particular, for credit risk mitigation with real estate collaterals.

In view of the significance of real estate as a collateral instrument in developing countries, and the important place collateral occupies in credit risk mitigation, it is essential to ascertain how banks in a developing country use the instrument to mitigate credit risk. In addition, researchers have questioned the reliability of valuation outcomes prepared by valuers in Nigeria (Aluko, 2007; Ogunba & Ajayi, 1998; Ogunba & Ojo, 2007). It is therefore important to establish how reliable banks find these valuations which form part of the key variables on which they base their lending decisions. Accordingly, this study explored the use of real estate collaterals to mitigate credit risks by commercial banks in Nigeria with a view to ascertaining if real estate collaterals are a reliable instrument for credit risk mitigation and the role of real estate valuation in the process. The specific objectives were to:

1. determine if real estate collaterals are a reliable credit risk mitigation instrument to Nigeria's commercial banks;
2. ascertain the key issues commercial banks in Nigeria consider when using real estate collateral to mitigate risk; and
3. establish the role of real estate valuation in the credit risk mitigation process

2. Research Methodology

The study was a cross-sectional survey with structured questionnaire administered by email. The population consisted of the 24 commercial banks in Nigeria out of which a sample of 19 was drawn by simple random process. Nine banks, representing 47.4% responded to the questionnaire and all the responses were used in the analysis. It is easier to reach respondents and the survey process is shorter with questionnaire survey than with qualitative methods such as interviews. Moreover, busy respondents like bank officials may not be readily available or disposed to interviews. In addition, questionnaire is a good instrument for minimising respondents' bias.

In designing the questionnaire, a preliminary survey of five commercial banks was conducted to establish the relevant response variables. An economist and a banker reviewed the questionnaire. Thereafter, it was piloted on three commercial banks. Necessary adjustments were made to obtain the final instrument used for the survey.

The survey was conducted in January 2011. The relevant units of the sampled banks completed the questionnaire willingly. The data analysis utilised descriptive statistics which included weighted mean, ranking and percentage distribution. The reliability of real estate collateral as an instrument for credit risk mitigation was assessed based on the respondents' rating on a 4-point Likert-type scale ranging from 1 (very reliable) to 4 (very unreliable). The key issues the banks consider in credit risk mitigation with real estate collateral were determined in two ways. One was by the ranking of five factors that they take into consideration to mitigate credit risk with real estate collateral on a scale of 1 (strongest) to 5 (weakest). The other was the ranking of the aspect of the collateral instrument that they consider as a measure to mitigate risk. Similarly, the reliability of valuation advice from valuation firms was determined from the respondents' rating of their level of satisfaction with the valuation advices on a 3-point scale ranging from 1 (very satisfactory) to 2 (satisfactory) and 3 (not satisfactory).

3.0 Results

This section presents the results of the study thematically according to the research objectives.

3.1 Reliability of Real Estate Collaterals as Risk Mitigation Instrument

The respondents were asked to rate the reliability of real estate collaterals as credit risk mitigation instrument on a 4-point scale. The results showed that banks find real estate collaterals very reliable for credit risk mitigation. The weighted mean response for the item was 3.67 on a 4-point scale, which signified that the collateral is a very reliable instrument. About 67% of the respondents actually said that they find real estate a very reliable instrument while about 33% said that they find it reliable. No respondents said they find it unreliable.

Table 1: Ranking of Ideal Loan Collateral by Commercial Banks in Nigeria

Collateral Instrument	Rank
Bank deposit certificate	1
Real estate	2
Treasury bills	3
Capital market instruments[1]	4
Personal property[2]	5
Stock inventory	6
Third party guarantee[3]	7

Source: Field survey, 2011

The respondents also ranked real estate high as an ideal collateral instrument. However, they ranked it second behind bank deposit certificate as a preferred collateral instrument (Table 1).

The study further investigated the extent to which the use of real estate collaterals enables the recovery of outstanding debt in case of default, which is the essence of collateralisation. Surprisingly, the results indicated a low recovery when the banks carry out foreclosure. As much as about 56% of the respondents said that they recover less than 50% of the outstanding loans while about 33% of them said that they recover between 50 and 75%. Only 11% recover above 75% of outstanding debt. Two major factors are responsible for the low recovery, namely, negative equity, which was identified by all the responding banks, and inability to sell some of the collateral properties, which was identified by about 78% of them. Other factors, including short time to sell and cost of foreclosure are not important as they were identified by only about 22% of the respondents.

Furthermore, in certain cases, the banks are unable to carry out foreclosure when it becomes necessary due to a number of factors, the most significant of which is the legal processes involved, which was identified by about 78% of the respondents. Next is anticipated difficulty in getting buyers for the property which was identified by about 67% of the respondents. Other factors identified by about 56% each were, time constraints which arise because of the need to complete the process within a limited time frame, inability to locate some of the properties, fake title documents on the collateral assets, and interference from highly placed persons. The least important hindering factors were personal and business relationships with the defaulting customer, which recorded about 22% and 33% respectively.

3.2 Key Issues in Credit Risk Mitigation with Real Estate Collaterals

The respondents were also asked to rank a set of factors in order of importance as the key issues they take into consideration to mitigate credit risk for loans secured on real estate. The borrower's reputation ranked first, followed by the borrower's credit rating and the collateral asset which jointly ranked second. The loan-to-value ratio followed while the prevailing economic climate ranked last.

The findings suggest that the borrower is a more critical factor than the collateral instrument in secured lending. This should be expected because in reality the borrower is the primary security for loan while the collateral is secondary, and lenders generally prefer not to resort to the collateral wherever possible. In fact, lenders would rather extend credit to a good borrower with bad collateral than to a bad borrower with good collateral.

The results also demonstrate that in carrying out collateral integrity test on real estate collaterals, the legal/asset security test, which deals with the nature of the property title and the ease of possession, is the most important factor that the banks take into consideration. The other factors they consider are the collateral financial quality test and the integrity of the borrower, which they rated equal in importance.

[1] In this type of collateral the banks focus on government bonds

[2] The use of personal properties is qualified. In most cases it is limited to properties purchased with bank loans such as cars. Such properties are prima facie collaterals for the loan.

[3] This is another case in which the use of the instrument is qualified. Here, the banks focus on government guarantee in form of irrevocable standing payment order (ISPO)

Table 2: Ranking of Aspects of Real Estate Collateral Considered as Credit Risk Mitigation Measures

Aspect of Collateral Instrument	Rank
Quality of borrower's title	1
Town/city the property is	2
Quality of location of property	3
Value of the real estate asset	4
Reputation of the valuer	5

Source: Field survey, 2011

In addition, the respondents ranked the aspects of real estate collateral that they consider as measures to mitigate credit risk. As shown in Table 2, they ranked the quality of the borrower's title to the property as the most important. The others in order of importance are the town/city the property is, the quality of location where the property situates in the town/city, and the value of the asset. The reputation of the valuer that prepared the valuation of the property ranked lowest.

To establish the quality of the title, the banks carry out title investigations and the findings indicate that the incidence of fake title documents is rare. About 89% said they seldom or never encountered fake title documents.

These results demonstrate that in secured credit transactions where real estate asset is the collateral, the borrower's title to the property is fundamental to risk mitigation. This should be expected as legal certainty regarding real estate collateral instrument is essential for secured lending and in view of the importance of title in establishing ownership in the formal urban real estate market in Nigeria. The finding lends support to Hermanda de Soto's assertion of the importance of representation of assets with titles in raising capital through asset collateralisation. It should also be expected that the city in which the property situates will be an important factor as the city defines the property market which generally influences property values and the ease with which the assets could be disposed in the event of foreclosure.

3.3 The Place of Real Estate Valuation

The findings show that valuation occupies important place in loan collateralisation with real estate. All the respondents said that they require the professional valuation of a real estate asset before they accept the asset as collateral. However, while valuation is a pre-condition for approving a loan application, the findings suggest that it is not important when a borrower defaults and foreclosure becomes necessary. Only about 22% of the respondents revalue the collateral assets before carrying out foreclosure. This scenario is similar to the experience in the US where most mortgage servicers do not usually obtain updated valuations of collateral assets before embarking on foreclosures (Appraisal Institute, 2011).

Furthermore, the banks apply some measure of quality control in valuation exercises as signified in their process of obtaining valuations. As a consideration for accepting valuations, all the respondents require that the valuation be carried out by a valuation firm registered by the Estate Surveyors and Valuers Registration Board of Nigeria. The Board is the statutory body established under the law - Decree No 24 of 1975 (now Cap E13, Laws of the Federal Republic of Nigeria 2007) to register and issue stamp and seal for practice to valuers and regulate the valuation profession in the country. About 89% of the respondents have additional requirement that the valuation firm should be on the bank's valuer panel. In effect, about 89% of the banks obtain their valuations through instructions to firms on their valuer panel while only about 11% obtain their valuations from the borrowers' valuers that should of course be duly registered valuation firms. The widespread practice of engaging only valuers in the banks' valuer panel is a demonstration of quality control measure by the banks.

In addition, the valuation opinion of the valuer is essential to risk mitigation with real estate collaterals. The results show that reliable valuation opinion is the most important expectation of the banks from valuation firms. On the other hand, the quality of packaging of valuation report is of relatively little importance. All the respondents identified reliable valuation opinion as one of the expectations while only about 33% identified quality of packaging of report. The second most important expectation is prompt delivery of report, named by about 78%. This result suggests that time is of the essence in the valuation of real estate asset for secured lending.

The third most important expectation of banks from valuation firms is ease of understanding of report which was identified by about 44% of the respondents. The relatively low importance of this variable suggests that the banks do not make detailed study of valuation reports. If they do, the ease of its understanding would be more important to them than the finding showed. Failure to study valuation reports in greater details could be an issue of negligence or an indication of inadequate understanding of fundamentals of real estate valuation reports on the part of banking professionals. It may result in overlooking important issues relating to the valuation or the collateral asset which might aid the bank to make lending decisions that are more prudent. Detailed study of valuation reports is necessary for prudent and objective assessment of valuation advice.

As a measure of the reliability of valuation advice offered by the valuation firms on collateral assets, the respondents were asked to rate their satisfaction with the valuation advice on a three-point scale ranging from 'very satisfactory' to 'not satisfactory'. The results indicate that banks find valuation advice satisfactory. They rated the item 2.11 on a 3-point scale. About 89% of the respondents said that they find the advice satisfactory while 11% said that they find it very satisfactory. No respondents said that they find it not satisfactory. Actually, it would be surprising if the banks did not find the valuers' advice satisfactory. In most cases, the banks control which valuers they do business with through the valuer panels. To maintain the quality of service, they can revise the benchmark for admitting valuers into the panel from time to time, and at any time, they can delist any firms that are performing below their expectation from their valuer panels.

Interestingly, on the areas of valuation service delivery that the banks would want the valuers to improve the quality of their service, the respondents identified the reliability of valuation opinion as the most important. They ranked the variable first among six areas in the valuation of real estate collaterals. All the respondents identified this variable as the most important area for improvement. The next ranked variable was the standard of reporting (Table 3). These two top-ranked areas are some of the most important issues in real estate valuation service delivery.

Table 3: Ranking of Areas of Valuation that Banks would want Improvement in Quality of Service Delivery

Service Area	Rank
Reliability of valuation opinion	1
Standard of reporting	2
Application of modern technology	3
Use of explicit valuation method	4
Prompt service delivery	5

Source: Field survey, 2011

4.0 Discussion

The findings raise some fundamental questions regarding the banks' evaluation of the reliability of real estate collaterals as instrument for credit risk mitigation. It is not surprising that Nigerian banks find real estate a very reliable collateral instrument. Urban real estate, which the banks mostly use for collateral, is good investment in Nigeria. There is generally strong value appreciation which has been persistent over the years. It is surprising however that despite this value appreciation, the banks do not recover substantial proportions of outstanding loans through foreclosure. Interestingly, they find real estate a very reliable collateral instrument notwithstanding the low level of recovery of outstanding loans in foreclosure.

The essence of collateralisation is to enable the lender recover any outstanding loan through foreclosure in the event that the borrower defaults. Therefore, a reliable collateral instrument should be one that enables the lender recover substantial proportion if not whole of outstanding loan. It is an irony that the banks still find a collateral instrument very reliable when it largely fails to fulfil its role of enabling the lender recover outstanding loan when there is default. The findings therefore suggest the existence of important reasons other than the recovery of outstanding debt in cases of default by the borrower, why banks use real estate as collateral instrument. Further investigation is required on this issue.

It is also striking that the failure to recover full or substantial proportion of outstanding loan amount through foreclosure is due to negative equity and inability to sell some of the collateral assets. It is illogical that negative equity should pose such a challenge in markets that have persistently experienced real estate value appreciation over the years. It will be expected that with value appreciation the security margin (the gap between the credit exposure and the collateral value) will widen as the loan matures, more so, if part of the principal is repaid with the interest during the tenure of the loan.

Accumulated interest is one way negative equity could operate in this circumstance. Commercial lending rates are generally high in Nigeria's credit market. If the interest charges are not settled as and when due, the compounding could operate to the extent that the accumulated interest may become so large that the value of the property, especially on forced sale, may no longer be sufficient to offset the loan balance. However, these issues should usually be duly considered in the credit risk management process. If this is done, and the loan package is properly managed, such unhealthy situation is likely to be minimised.

Furthermore, the widespread practice of not revaluing collateral assets before foreclosure sale could be a contributory factor. The implication of not revaluing assets before foreclosure is that most banks sell collateral assets when there is default without having the current values of the assets. Such a situation may result to underselling, further limiting the recovery of outstanding debt and putting the borrower at a disadvantage.

In addition, if the banks are diligent to establish the marketability of the real estate and the validity of the title before accepting the asset as loan collateral, it will be ironical that failure to sell some of properties should be a major hindrance to recovery of whole or substantial proportion the outstanding debt at foreclosure. In the same vein, it is surprising to find that incidence of fake title documents and anticipated difficulty in selling some of the assets are some of the important factors preventing foreclosure. Any difficulty to sell should be anticipated at the beginning of the transaction. A prudent investigation should reveal any such possibility and the officers responsible for processing the securities should adequately consider it before entering into the credit contract. If that possibility is high, then such an asset should not be accepted as a collateral instrument.

Likewise, if there is due diligence in title investigation, fake title documents should be discovered and such properties rejected as collaterals. Adequate title investigations should be conducted before the asset is considered as possible collateral and the asset valued for the purpose. Lending transactions should not be predicated on any assumption about title. Issues regarding title should be clear and conclusive. On the other hand, there is need for adequate documentation of real estate titles and transactions by the relevant public authorities to ease title investigations in transactions involving real estate. This will aid improvement in the efficiency of credit risk mitigation.

Even more disturbing is the inability to locate properties pledged as collateral when there is need for foreclosure. It is unthinkable that this is a factor preventing foreclosure. Real estate assets offered as collateral are normally identified and valued before loans are approved. Valuation reports usually give adequate description of the location of the assets. It is ridiculous that when foreclosure becomes necessary, a collateral asset with fixed location cannot be located. This is a demonstration of gross negligence on the part the bank officers responsible for processing mortgage securities.

The foregoing issues suggest negligence on the part of the banks in the processing and management of mortgage securities. They raise doubts as to whether the banks carry out due diligence as they should in handling credit risk mitigation through collateralisation with real estate. The findings suggest that the inability to fulfil the purpose of collateralisation with real estate assets is due to systemic failures rather than weaknesses with this type of collateral instrument. In fact, by saying that they find real estate collaterals very reliable instrument for credit risk mitigation despite the failure to recover substantial part of outstanding loan when there is foreclosure, the banks are admitting responsibility for the failure. Overall, the findings suggest inadequate due diligence and serious negligence on the part of the banks which tends to negate the essence of credit risk mitigation through collateralisation. The findings are strong indications of the existence of serious shortcomings in the processing and managing of mortgage securities by Nigerian banking professionals.

Furthermore, it seems contradictory that the respondents find advice from the valuation firms satisfactory and at the same time saying that reliable valuation opinion is the most important area that they want improvement in service delivery by the valuers. If they find the valuation advice satisfactory, it means that the valuation opinions are generally reliable. Why then should reliable valuation opinion be the most important area to them for improvement in service delivery? A plausible explanation is that the result is a demonstration of the importance of valuation opinion in the valuers' service delivery to banks rather than a contradiction of the reliability of valuation advice. It complements the findings which showed that reliable valuation opinion is the most important expectation of the banks from valuation firms. Although the advice that valuers offer is currently satisfactory, there is need for continuous improvement.

The results have strong implications for the banking sector, the valuation profession and the economy at large. The apparent systemic failures demonstrated in the deficiencies in the processing and managing of mortgage securities could result in wider failures in the banking system, especially as real estate is a widely used collateral instrument among Nigerian banks. This could have collateral damage on the economy as failures in the banking system often spread to other sectors of the economy. Nigerian bankers therefore need to be more prudent and demonstrate greater diligence in credit risk management with real estate collaterals.

Secondly, to continue to play their role effectively in credit risk mitigation, Nigerian valuation professionals need to be continually up-to-date in real estate valuation methodologies taking cognisance of valuation accuracy, standard of reporting and forced sales in foreclosure situations, to ensure that there is continuous improvement and that they meet international best practices.

The resulting challenge to the valuation professionals is the need for continuous development in valuation technology, ensuring appropriate adaptations to meet local needs. On the other hand, banking professionals, especially those responsible for the processing and management of mortgage securities need to be well acquainted with valuation methodologies and procedures to enable them adequately assess valuation advice and make their valuation-aided lending decisions more rational. These are necessary for valuation of investment assets and would warrant continued professional development and re-professionalisation of both valuation and banking professionals. Research and training should be directed towards this area of professional competence with collaboration between the Nigerian Institution of Estate Surveyors and Valuers (NIESV) and the Chartered Institute of Bankers of Nigeria (CIBN). This will demand increased supervision by the regulatory agencies in the valuation and banking professions. All these are essential to ensure that reforms in Nigeria's financial sector result in upgrade of professional competences of relevant staff and advisers which is important to the achievement of reform objectives.

5.0 Conclusion

The study has explored credit risk mitigation with real estate collaterals by commercial banks in Nigeria. It found that real estate is a very reliable collateral instrument to the banks, even though banks do not usually recover substantial proportion of outstanding loan through foreclosure when borrowers default. Negative equity and inability to sell some of the collateral assets are responsible for this inability to make adequate recovery of outstanding loans. In preference as an ideal collateral instrument, the banks ranked real estate next to bank deposit certificate.

In addition, real estate valuation plays a significant role in loan collateralisation as banks always carry out valuation of real estate before accepting the real estate as collateral. The banks also control the quality of valuations through the practice of engaging only valuers in the banks' valuer panels. However, they rarely carry out valuations before foreclosure sales. Further, the reliability of valuation opinion is the most important expectation of the banks from their valuers and the banks are satisfied with valuation advice offered by the valuation firms.

The reputation of the borrower is the factor the banks consider most important to mitigate credit risk involving real estate collateral while the quality of the borrower's title to the collateral asset is the aspect of the collateral they consider most important as risk mitigation measure. Thus, the banks carry out title investigations before accepting real estate as collateral instrument

We can conclude that real estate is an important instrument for credit risk mitigation by commercial banks in Nigeria. This conclusion supports Gan (2007). Further, that real estate valuation is an essential element in credit risk management. This agrees with Crosby, et al (2004). Accordingly, valuers play vital role in the credit underwriting process, as Gallimore and Wolverton (2000) asserted. It can also be deduced that with commercial bank loans secured on real estate, the borrower's title to the collateral is fundamental to risk mitigation.

However, greater level of due diligence is required on the part of the banks to enable a more effective use of real estate collaterals in credit risk mitigation. A much higher level of prudence is required of them in the processing and management of mortgage securities. It is imperative therefore, that Nigeria's banking professionals need to be conversant with valuers' methodologies and procedures for valuing real estate collaterals for more prudent valuation-aided lending decisions.

Furthermore, to play their role effectively in credit risk mitigation with real estate collaterals, Nigerian valuers should not only be up-to-date with global developments in valuation technology but also continuously adapt valuation methodologies to Nigeria's markets. Moreover, government should ensure the efficiency of land titling and registration system as it is essential to effective use of real estate collaterals for credit risk mitigation. Finally, it is necessary to ensure that financial reforms in Nigeria result in upgrade of professional competences of relevant staff and professional advisers as well as banking practices so that credit risk mitigation with real estate collaterals meets best practices.

It is suggested that further studies be carried out to ascertain the reasons why Nigerian commercial banks use real estate as collateral instrument and particularly why they find it very reliable, as well as into measures to improve the performance of real estate as an instrument for credit risk mitigation.

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