ADDIS COLLEGE

SCHOOL OF GRADUATE STUDIES

ASSESSMENT ON REAL PROPERTY VALUATION PRACTICE FOR COLLATERAL IN SELECTED BANKS IN ADDIS ABABA

BY

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Addis Ababa, Ethiopia

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Declaration

I, **Yirga Tesfaye Mengistu,** hereby declare that the work which is being presented in this research work entitled "ASSESSMENT ON REAL PROPERTY VALUATION PRACTICE FOR COLLATERAL IN SELECTED BANKS IN ADDIS ABABA" is my original work and I or anyone else have not previously in its entirety or in part submitted it at any university or college for any other degree.

Name: **Yirga Tesfaye Mengistu**

Signature: _____

Date: _____

Statement of Certification

This is to certify that the work contained in the project work entitled "**ASSESSMENT ON REAL PROPERTY VALUATION PRACTICE FOR COLLATERAL IN SELECTED BANKS IN ADDIS ABABA**", submitted by **Yirga Tesfaye Mengistu in** partial fulfillment of the requirements for the Degree of Master of Science in Construction Technology and Management. Is carried out by him under my direct supervision and guidance. The contents embodied in the project work have not been submitted for the award of any other degree or diploma in this or any other university or college.

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List of Acronyms

BCF= Building Condition Factors

CBE= Commercial Bank of Ethiopia

CIS= Corrugated Iron Sheet

DBE= Development Bank of Ethiopia

DRC= Depreciated Replacement Cost

EELPA= Ethiopian Electric Light and Power Authority

GEA= Gross External Area

HCB=Hollow Concrete Block

IVS=International Valuation Standards

LHC= Land Holding Certificate

NBE = National Bank of Ethiopia

RICS= Royal Institute of Chartered Surveyors

RPVS=Real Property Valuation Standard

EBA=Ethiopian Banker Association

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Abstract

Real property valuation is one of the concerns for banks as well as the business world. In doing so, to know the ways & procedures of Valuation is the main thing that will be done by those banks or Business world. So, the main aim of this research was to assess existence of real property valuation method, policy (guidelines), manuals, current practice and study if the methods and procedures applied for valuation is consistent. In order to achieve this objective, the practice of real property valuation for collateral was viewed in case of two selected banks. A questioner, desk study, interview and sample case study (field survey) were used to collect data for the study and the collected data is carefully analyzed by descriptive Statistics using SPSS software. Accordingly, the study revealed that both Abyssinia and Dashen bank use real property valuation for the purpose of buying and security of loans and they use a guideline or Manuals which is particularly prepared by the organization itself. In addition, the finding of the research shows that both banks apply a combination of Cost and sales valuation methods in order to conduct real property valuation this is due to availability of relevant comparative cost data, the difficulty in updating rental rates of buildings, and lack of stability in the Ethiopian property market. Last but not list even if both banks use applies the same Valuation method there is inconsistency or difference on values of the same property this is because of the following factors, ways of valuation approach, inflation, economic growth of the country and experience of valuator.

Key word: *Real property, Valuation, Method of Valuation, Collateral*

Chapter 1

1. Introduction

1.1. Back ground of the study

Banks have a greater role to play in the development of a country. According to the information obtained from Ethiopian Bankers Association currently 29 commercial banks and one development bank are operating in Ethiopian. These Banks have different grades, capacities, organizational characters, and performances depending on many factors. The capacity, performance and competitiveness of these Banks have a major impact on their overall well-being, development and progress from smaller grades to upper ones. And the central practice of those banking industry consists of borrowing and lending. (EBA'S manual ,2015).

In addition, the lending divisions of Banks shall exercise a high degree of attention in the activity's economic and technological feasibility when reviewing, checking, and researching the title of the mortgagor (Wyatt, 2007). In general, the term property describes a legal concept; it refers to the rules that govern people's access to and control of physical things (tangible assets) like land, natural resources, and manufactured goods as well as of non-physical things (intangible assets) such as inventions or contractual rights and financial claims. While real property refers to land ownership and its human-made improvements attached to the land, e.g., buildings (Georgia, 2013).

In economic and other markets, valuations are commonly used and relied on whether for inclusion in financial statements, regulatory enforcement, or to promote protected lending and transactional activity (International Valuation Standards, 2011)Where as Collateral is a valuable asset that a borrower pledges as a security for loan. which reduces the risk for lender in the case of borrower defaults on the loan. So, in order to get the value of the given real property for collateral valuation must be done.

Property valuation is the process of obtaining an estimate for value of a property .so, property Valuation plays an important role in the determination of the value of properties for different purposes. However, collateral of real property is strongly challenged by absence of uniform guidelines. This is because no national regulatory institution responsible for valuation (Tirsit, 2018). There is also overall lack of research regarding how best to manage the valuation inconsistency among lending banks in Ethiopia (Habtamu Bishaw et al.,, 2020). As a result, there is a possibility that banks may manipulate valuation exercises to suit their institutional interest, for instance by under-valuing a property. The non-uniformity and inconsistency of practices leads to valuation debates (Adair Turner, 2003).

To make the appropriate real property value results, the estimation of property value should be supported by a recognized a Guideline of valuation. The valuation basis guides the valuation result (International Valuation Standards, 2011). Moreover, the valuation basis must be appropriate for the purpose of valuation since the basis of value may influence or dictate valuers' selection of valuation approaches, inputs and assumptions and the ultimate outcome of the valuation exercise (Standard, 2011). For mortgage valuation, market value is the appropriate basis although there are circumstances which may require other bases (Wyatt, 2007).

Therefore, this Research aim is to examine the overall real property valuation process for collateral, to assess the purpose and method of real property valuation, and the degree of differences between the assed value by commercial banks in Addis Ababa.

1.2. Statement of the problem

As the banking sector in Ethiopia is at its growing stage, it has been facing various challenges that prohibit their progress and performance. (Tirsit, 2018). One of the biggest challenges is absence of theoretical and empirical literature pertaining to collateral valuation (Habtamu Bishaw et al.,, 2020). Even though, there are many internationally accepted valuation provisions in Banks, there is no valuation framework stating the approaches.

Banks in Ethiopia adopt the working manual from Ethiopian bankers' association to use similar procedures of collateral valuation. But those member banks consider the cost approach as the only recognized approach. Through this approach the valuation parties have no evidence about the current detailed cost of construction (unavailability of up-to-date on construction cost) and the imperfect market characteristics of properties .and also this will result to the over valuation and under valuation of collateral. The predominant reasons for undervaluation and overvaluation are the valuation methods that the banks are currently practicing (Elizabeth, 2017).

The research observed that the existing valuation method and techniques undertaken by the banks is ultimately depended on their own valuation manual. Moreover, valuers working in those selected banks have no freedom to choose the appropriate valuation approach. Each bank uses the cost method that is best suited to the bank's risk reduction for any default related to the loan. Despite of the fact, the valuation is should consider both parties. Finally, the valuation problem becomes a big concern for the real property valuator, who is supposed to set a fair market value on the real property. The valuator has to provide a fair market value that reflects the current market situation, but must also make sure all factors related to the real property is taken into consideration.

According to (RICS professional standard, global,2019) one of the purposes of using comparable evidence in the valuation processes is to encourage consistency.

Therefore, this study is necessitating to discover and compare the valuation results of the selected banks in Addis Ababa and procedural consistency among the banks the international practice. To fill the gaps in the practice there are studies conducted by other researchers in Ethiopia related to bank collateral valuation but all of them are focused on the assessment of the existing practice. However, this study is focusing on the comparison of the valuation results between banks and trying to check their consistency and also to assess the practice of real property valuation for collateral that are adopted by banks and also hence calling for better valuation approaches that can counter all the claims condemning the weaknesses of the valuation techniques.

1.3. Research objectives

1.3.1 General Objective

The general objective of this research is to assess real property valuation practice for collateral in the case of selected commercial banks in Addis Ababa.

1.3.2 Specific Objective

- To assess the legal framework of selected commercial banks to determine the value of real property of collateral purpose.
- To assess the purpose and methods of valuation practiced for those selected banks to determine the value of real property for collateral purpose.
- To check the consistency of real property valuation methods.
- To assess the cause of variation for values given for the same collateral by the selected banks.

1.4. Research Question

The discussion above concerning the gaps of real property valuation basis and methods by banks results the following research questions:

- Is there a guide line or manual to valuate real property in those selected banks to carry out practically?
- What are the purpose and existing real property valuation methods practiced by commercial banks to determine the value of real property for collateral purpose?
- What are the factors of Inconsistency of real property valuation methods practiced by those selected banks to determine the value of real property for collateral purpose?
- Is there any variation on the value of same Real property which are evaluated by those selected banks?

1.5. Significance of the Research

This research is important for the study of the current real property valuation practices for collateral, hence calling for better valuation basis that can counter all the claims condemning the weaknesses of the valuation techniques currently practiced. The research findings will be another contribution to the existing stock of knowledge by filling the gap of information in the banks during real property valuation. It can serve as input for banks to analyze their gaps. Besides, it is hoped that the findings of this research may stimulate other academic researchers to conduct further study.

1.6. Scope of the Research

Geographically, the research is limited to the capital city of Ethiopia Addis Ababa. The head offices of all banks are located in the city. The engineering departments and most of experienced valuers are working at the head office and are largely practicing in the city. The city is organized by 11 sub cities (Addis Ketema, Akaki Kality, Arada, Bole, Gulelle, Kirkos, Kolfe Keraniyo, Lemi-Kura, Lideta, Nefas Silk, Yeka,). all banks are undertaking property valuation in all sub cities.

Thematic wise, this research is limited to the practice of property valuation and the techniques adopted by two banks; both are privet commercial banks (Dashen bank and

Bank of Abyssinia) at their headquarters found in Addis Ababa. The research also conducts property valuation by those banks by taking three selected buildings found in the capital city (one residential villa, one commercial and one warehouse) The research is as well intended to check the consistency of valuation value, factors that are the cause of variations basis and methods across these banks and compare value variance estimated by banks and compare banks' results. Therefore, study will take similar cases evaluated by banks on a defined range of date.

The research compared the assessed value of similar collateral by those selected banks. if there is differ value the research will identify the source of variation. The research also tries to find gaps under the valuation manual of both banks during collateral valuation to recommend the best suit frameworks.

1.7. Limitation of the Research

The research undertaken is not easy as it needs high level of information confidentiality. Particularly, it was difficult to get relevant data to be used as input to the study. Since the thematic area is new it was also difficult to find written literatures in related with the practices of valuation in Ethiopian context. Thus, the aim of the research is limited in assessing the particular methods and basis of the selected lending banks and investigating the existing manuals of the banks based on the generally accepted methods of property valuation and the consistency of procedures among the selected banks.

1.8. Description of the Study Area

Addis Ababa, the capital of Ethiopia, was founded in 1886 by Emperor Menelik II. As the capital of Ethiopia and one of the largest cities on the African continent, Ethiopia is home to millions of people of diverse backgrounds and occupations. It is an important transportation, logistics and trade center. The city is home to numerous international companies and organizations. As such, it plays an important role in the international business world as the best place for investment, starting and developing private businesses, starting companies and ventures of all kinds. The population is expected to

grow rapidly in the near future. The estimated annual population growth rate in recent years is 3.8% (CSA, 2007). Job opportunities, clean drinking water, sanitation facilities and plenty of shops and stores ensure that the capital will continue to grow in the future. Most of Ethiopia's service companies are also established in the city. Most of Ethiopia's import and export trade passes through Addis Ababa. According to the Ethiopian Central Statistics Agency's Population Projection Report, Addis Ababa had an estimated population of 3,434,000 million in 2007, or about 18% of the country's urban population (CSA, 2013). The estimated area is 54,000 hectares. Job opportunities, clean drinking water and sanitation facilities, and numerous shops and shops ensure the capital will continue to grow well into the future.

In order to investigate the study, Addis Ababa city is selected purposely with the following reasons. This is because the engineering service of banks are located in head offices of the banks and located in Addis Ababa. Moreover, its geographic location, combined with its political and socio-economic status have made it a melting pot to hundreds of thousands of people coming from all corners of the country in search of employment opportunities and services. This increased demand of housing mortgage and project finance of property investment in the city. As a result, the financial lending institutions reinvent their services tremendously. First, there is high demand to access money from financial institutions. Secondly, data can be easily accessed and collected. Thirdly, the city is endowed with natural resources; so many investors are interested to engage into manufacturing and real estate investment sector. In support of this, banks play significantly to raise funds for the investors; lastly, the banks are not still aware of how they can to compute collateral valuation practices such as the mortgaged lending value. For this study the cases are bank of Abyssinia which was established in 1996 E.C. The bank has over 11,575 staff, over 10,275,940 customers and 909 branches (Bank of Abyssinia, 2023). And Dashen bank which was established in January 1996. The bank has a total number of over 800 branches over 3,900,000 customers and over 10,000 permanent employees (Dashen Bank, 2021).

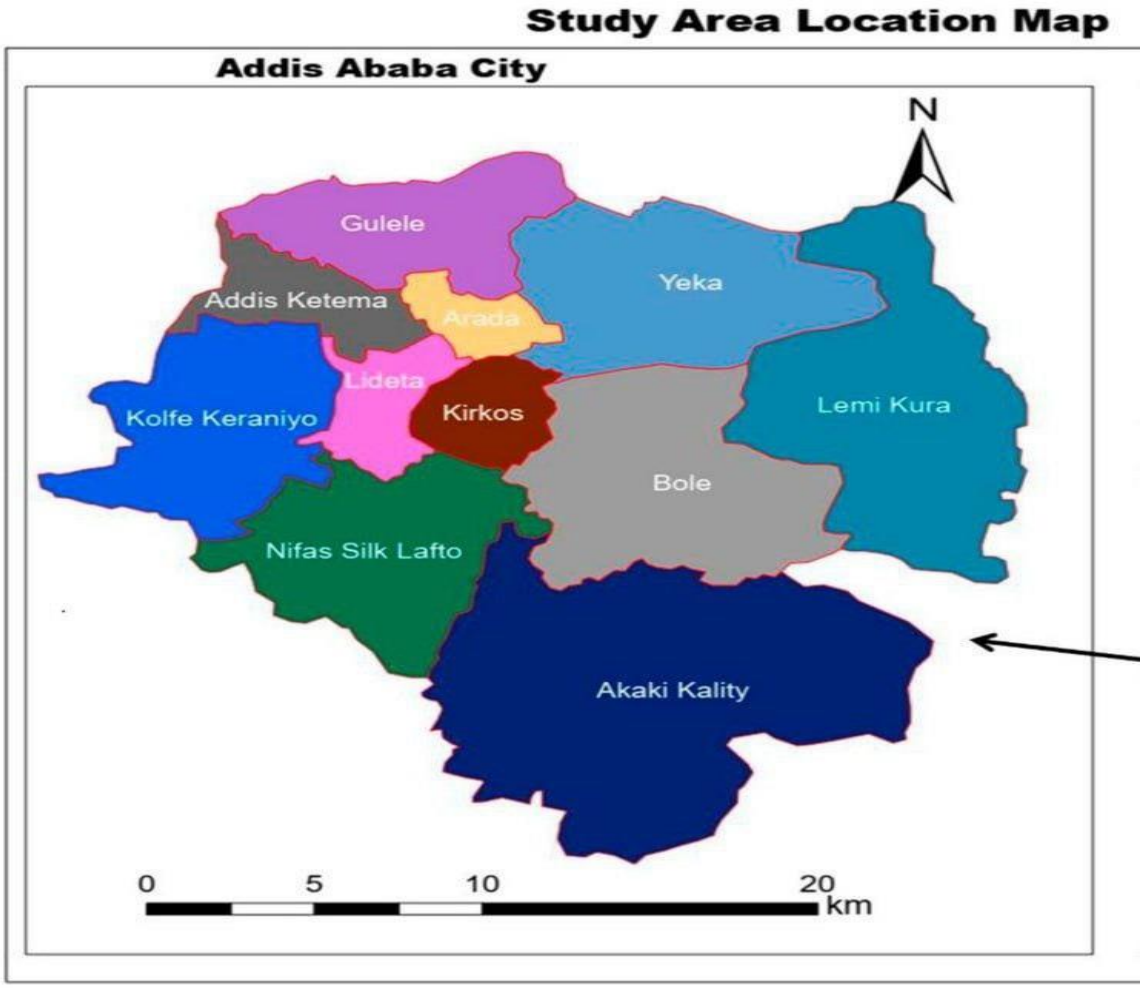

Figure1. 1: Location Map of the Study Area

1.9. Organization of the Research

This Research is organized to accomplish the following five chapters.

Chapter One- Introduction: it begins by describing the research's general background and intention. It also addresses the motivation of the study clearly, statement of the Problem, research Objective, and significance of the Research.

Chapter Two- Conceptual review of literatures: It discusses the conceptual definitions and crucial issues of the study.

Chapter Three- Research methodology: It includes research type and approach of the study, research design, study population and sampling, data collection and data analysis method.

Chapter Four- Results analysis and discussion: This chapter strongly deals with results and the discussion of collected data from Respondents.

Chapter Five- Conclusion and recommendation: It covers the research findings as conclusion for stated specific objectives. Recommendations are forwarded to improve real property valuation practice for collateral.

Chapter 2

2. Literature Review

2.1. Theoretical Framework

2.1.1. Introduction

Valuation refers to the broad concept that involves the professional judgement on the equivalent between the one being valued (property) and the amount of money based on certain conditions and within a particular period. Others define valuation as; The art, or science, of appraising the present value of a specific purpose of a particular interest in a property at a particular moment in time and respective conditions taking into accountable the features of the property and also considering all the underlying economic factors of the market including the scope and extents of alternative investments in the process ((Millington, 2000). Property valuation also defined as the art of estimating the far market monetary measure of the desirability of a particular ownership of properties for specific purpose (Marston ,1970; cited by Binyam, 2017). Property valuation can also be defined as "a procedure aimed at determining the value of a property". Therefore, valuation by itself is a process that goes a certain step to estimate the value of a property (Biniyam Zenebe, 2017).

In general, the term property describes a legal concept; it refers to the rules that govern people's access to and control of physical things (tangible assets) like land, natural resources, and manufactured goods as well as of non-physical things (intangible assets) such as inventions or contractual rights and financial claims.

Real property refers to the ownership of land and its man-made improvements attached to land e.g., buildings (Appraisal Institute, 2001).

Real property valuation is an art and a science of determining the most probable price of an interest or right in property encompassed in an ownership for a particular purpose at a particular point in time (French, 2003).

2.1.2. Importance of valuation

The concept of value and valuation influences everything we do as individuals or as groups of individuals in business or as community members. A sound working knowledge of valuation principles and procedures is essential in all kinds of decisions relating to the acquisition, sale, funding, growth, management, holding, leasing, trading of real estate, and in ever more relevant matters involving income tax considerations (Pornchokchai, 2006).

Property valuation is carried out for many different purposes, their relative importance varying from one country to another and from time to time. Valuations are required for many purposes relating to the development and subsequent occupation and ownership of property. The purpose for which the valuation is required and the type of property that is to be valued will determine the nature of the valuation instruction, including the techniques employed and the basis on which value is to be estimated (Wyatt, 2007). Purposes for which a valuation may be required include sale or purchase, rent to be paid or demanded, the amount of mortgage which could be advanced on a security, calculation of compensation payable or receivable, assessment of taxation or rating, for insurance, to borrow money using the property as 'security' and the advisability of investment.

2.1.3. Valuation profession and professional standards

2.1.3.1. The property valuation profession

The need for valuation service derives from two major aspects. These are: (1) heterogeneity of real property and (2) market imperfections. First, unlike shares and bonds, real estate as an investment object is heterogeneous in its nature. Due to its heterogeneity real property needs to be valued by professional appraisers, who collect

and interpret relevant market data of all possible characteristics describing the property and give their expert assessment about the market value of the asset. Secondly, in case of effective market value, fair value and present value are all equal with each other. Unfortunately, in most cases, real property markets are not effective and therefore, the need for a formal valuation theory arises (Brown et al., 2000).

As Property valuations are financial estimates of the future net benefit of purchasing an interest in property, suitably discounted over time to reflect opportunity cost and risk. The simultaneous business and economic changes occurred rapidly within and among nations, giving rise to expanded recognition of the market importance of professional asset valuations. Competent, objective, professionally developed valuations are required for a variety of business activities. Their importance in reflecting current values for financial reporting in particular has seen growing recognition. There is an increasing movement towards reporting the asset values for accounting and financial purposes on the basis of current valuation instead of historical cost.

Today, the International Valuation Standards Committee is dedicated to the principle that the valuation discipline is a profession that evidences a long-standing body of knowledge, identified and accepted scientific and other methodologies and procedures, an important public need for services, generally accepted ethical principles, and potential for harm to individuals and society at large where incompetence, misunderstanding, fraud or improper behavior occurs (Veronika and Kaia , 2005).

2.1.3.2. Property valuer roles

Property valuers are skilled professional persons who determines the value of immovable property for various purposes; they ensure, they are adequately addressing the changing market perception and reactions of the market regarding sustainability in the valuation process, the market will be better informed to understand the impact on the value of their assets, and furthermore this will create a foundation for future decisions relating to sustainability. As a consequence, sustainability as an increasingly important factor in the

decisions and actions of market stakeholders needs to have accurate and adequate consideration in the valuation process (Georgia, 2013).

The role of the valuer in their profession as valuers, is not about leading the market or creation of value for the market; rather it is about reflecting the market in an assessment of value for a particular asset at a particular point in time, given the dynamics of the market and all relevant factors that may influence the reactions and actions of market stakeholders or market conditions (Georgia, 2013).

In an ever-changing economy, property values are never static and therefore a valuer has to continuously research economic trends, because they often have to predict future trends to make a valuation. (South African Institute of Valuers).

2.1.3.3. Qualification of the valuator (Royal Institution of Chartered Surveyors 2012)

The professional and ethical code of valuer's task is to advise on what will be the best figure to obtain for a given property on the open market at a particular date. To do so, the valuer must know how its various and varied features of real property can influence valuation and how developments in social, economic, and political, environmental, geological conditions are likely to affect it in the local, national and foreign contexts. The legislation will significantly impact the assessment of value. The valuer must have an excellent working knowledge of the relevant law to undertake the required valuations correctly. ((RICS), 2012)

According to ((RICS), 2012) RICS Red book valuation global standards (2012); whether an individual is appropriately qualified to accept responsibility for, or supervise the inputs into, a valuation involves satisfying the following criteria: Appropriate academic/professional qualifications , Membership of a professional body & demonstrating a commitment to ethical standards, Sufficient current national and international (as appropriate) knowledge of the asset type and its particular market, and the skills and understanding necessary, to undertake the valuation competently

,Compliance with any country or state legal regulations governing the right to practice valuation , Practical experience as a valuer;

2.1.3.4. Responsibility for the valuation and the Level of Accuracy

As the purpose of property valuation is to estimate a market value for a subject property; appraisers, as well as end-users, often want a clear and precise opinion of the value as possible. As valuations do play a major role and has a high impact of different financial decisions around the world, they have to contain all required information (Pagourtzi, et al, 2003).

Banks, shareholders, house-buyers, pensions-funds, investors, property owners and whole banking system, are all very depended on reliable valuations to work. Therefore, to be considered accurate, it is required that the valuation can reflect all the important fundamentals in the real market ((Elli Pagourtzi, 2012) ;Pagourtzi, et al, 2003)) . and since the valuation is supposed to serve as a reliable indicator of the property´s transaction price (Samuel Bowles, 2001) ;Bowles et al, 2001)) market participants must be able to rely on it. and also, it is important to keep in mind that the appraiser has no possibility to find an exactly point estimate of the value; valuation does not lead to true value because “all valuations are biased because of factors attributed to the property being valued; property specific and external of the property.

Because of both internal and external factors of the process all the use of mathematical formulae and calculations, valuers also exercise subjective opinions based on their knowledge of the market and their interpretation of facts. Two valuers, given the same property to value and the same facts to work from, will often arrive at different final values of valuer as they have each formed somewhat diverse opinions on the current state of the market and how the information concerning the property should be interpreted. Therefore, all valuations are considered to include some degree of uncertainty.

It is therefore the responsibility of valuer to incorporate the financial benefit of sustainable features of real property when estimating the worth of the property.

Socially responsible property valuation requires valuers to take into account social, environmental and ethical considerations when carrying out valuation exercise. Responsible property valuation is about determining the value of property and in forming judgement as to the extent to which sustainability factors will impact on valuation, the attitudes of those likely to be in the market for the subject property are worthy of consideration.

2.1.3.5. Basis of Value

Valuation basis is the fundamental measurement assumptions of value on which the reported value of an asset is established (Standard, 2011). It describes the basic assumptions, on which the reported value will be based; indicates the probable price of the property in the open market e.g., the nature of the hypothetical transaction, the parties' relationships and motivations, and the extent to which the asset is exposed to the market (Standard, 2011) .

2.1.3.6. Property valuation approaches

The valuation approach is the way to reach specific values depending on the chosen valuation basis by considering the available evidence; Sometimes it is assumed that valuation approaches are similar to valuation basis. But valuation bases are the fundamental premises on which the reported values are based (Babawale, 2012). It refers to generally accepted analytical methodologies that are in common use (Standard, 2011). But the valuation approach may well be inappropriate for different interests, different property types with different purposes over time (Babawale, 2012).There are three internationally recognized methods of property valuation and they are all based on the principle of market comparison which is an anticipation of benefits or substitution, which are the economic principles of price equilibrium. These valuation approaches may be suitable to mortgage valuation, if based on appropriately analyzed market-derived data (Standards, 2012) ;International Valuation Standards Council, 2017)).

The three internationally recognized methods of property valuation are the following: Sales comparison; Income capitalization; and Replacement cost.

The market (Sales), income and cost approaches are based on the economic principles of price equilibrium, anticipation of benefits and substitution respectively. Using the sales comparison method, the valuer examines the recent sales of comparable properties and uses this market intelligence to help estimate a value. The market (Sales) approach assumes the value of the real property is based on the views of the typical buyer and seller of the property (Miller & Geltner, 2004).

The income approach assumes the value of property is based on the typical investor ‘s yield requirements, current financing possibilities, and the property risks (Miller & Geltner, 2004) Market approach, on the other hand, is based on comparing the subject property with other identical or similar assets for which price information is available (Parker, 2016). Under the income approach, the value of an asset is determined by reference to the value of income, cash flow or cost savings generated by the asset. Income capitalization considers the net income that a property might generate, typically in the form of rent, and this income is capitalized using an appropriate yield or by discounting the projected cash flow at a suitable target rate of return. (Appraisal Institute, 2001).

Conversely, the cost approach assumes the value of the property is inherent in the cost to create the property based on land acquisition and building cost less wear and tear and depreciation (Miller & Geltner, 2004). Therefore, the value of the property in this approach is determined by considering the market value of the site and the improvements separately, and then adding them (K.Adetiloye and P.Ekw, 2014) .

The replacement cost method considers the possibility that, as a substitute for the purchase of a given property, one could construct another property that is either a replica of the original or could offer comparable utility. In practice, the approach also involves an estimate of depreciation for older or less functional properties where the estimated

cost of a new replacement is likely to exceed the price that would (hypothetically) be paid for the subject property (International Valuation Standards, 2011). Building costs, depreciation rates and land values are all estimated by referring to comparable evidence.

According to (Elizabeth, 2017)cost approach is the process of estimating the value of a property by adding the appraiser's estimate of the reproduction (the Birr amount required to construct an exact duplicate of improvements to the subject property) or replacement cost (the Birr amount required to construct improvements of equal utility using current construction methods and materials) of property improvements (can be termed also as Replacement Cost New), less accrued depreciation, to the estimated land value.

However, valuation approaches are not mutually exclusive and one can use more than one approach for cross-verification which is strongly encouraged, particularly where valuation inputs are limited (parker, 2016) . Theoretically, all market (Sales), income and cost approaches may be used for developing and supporting an indication of value for mortgage purposes. However, the replacement cost approach is largely considered to be unsuitable for mortgage since mortgage is an investment in the market and it lacks the capacity to reflect the fundamentals of investment uncertainty for mortgages (Aluko, 2007).

However, it can be used when there is no comparable property transaction in the market or when it is difficult to get definite income for the subject property. Thus, the cost approach is mostly used as a check on the reasonableness of the value determined using another valuation approach (Appraisal Institute, 2001).This is because the cost approach is based on the perception that the value of the property is inherent in the cost of creating the property (Miller & Geltner, 2004).It is however, suitable for the valuation of specialized properties that have insufficient evidence to use the two approaches (Habtamu Bishaw et.al., 2020). Such a specialized property where the cost approach might be used occurs when there is no transaction evidence or evidence of recent sales transactions (Adair Turner, 2003) . In using the cost approach, the valuer should have a

good knowledge of construction costs or unit rates of construction (Onyejiaka et.al., 2015).

- **The Cost Method (Replacement cost)**

The replacement cost method takes into account the possibility that instead of buying the property, another property will be built that is a replica of the original or can offer a comparable benefit. In practice, this approach also includes estimating the depreciation of older or less viable assets when the estimated replacement cost is likely to exceed the (hypothetical) price that will be paid for the subject property (IVS, 2011). Construction costs, depreciation rates and property values are estimated using comparable elements. According to the (International Valuation Standard 2005), the cost approach takes into account the possibility that instead of buying a specific property, another property can be built that replicates the original or another that can provide the same benefit. In the real estate context, unless it involves undue time, inconvenience and risk, it would not normally be justified to pay more for a particular property than the cost of buying an equivalent piece of land and building an alternative property. Additionally, according to (Millington, 2000), the historical cost method is used to value specialty properties that are rarely sold due to a lack of clear market demand or if there is little or no comparable evidence. According to (vos, 1996) its economic rationale is that no reasonable person will pay more for an existing property (real estate) than it would cost to buy the land and construct a new building on it. This approach is intended for use when an estimate using the capitalization method or the sales comparison method is not possible due to an almost total lack of information. For comparable market transactions, the method is intended to estimate the replacement cost and not the price change. In cost approach, quantifying Depreciation to reach at Depreciated Replacement Cost or Depreciated Reproduction Cost is the most paramount and important step.

$$(RCN - D) + LV = INDICATED\ VALUE\ OF\ SUBJECT\ PROPERTY$$

Where: RCN = Replacement/Reproduction Cost New of the Improvements; LV=Land value, as if vacant; and PV=Present value of the property. According to Marston (1970),

estimating a property's value using the cost approach requires that the appraiser must have a good knowledge of property design and construction. Moreover, property valuer needs to know administrative laws such as the City Planning Act and the Rent Restriction Act, market prices, economic analysis skills and local taxes.

Depreciation

The depreciation is the measure of the cost or revalued amount of the economic benefits of the tangible fixed asset that have been consumed during the period; includes the wearing out using up or other reduction in the useful economic life of the tangible fixed asset whether arising from use, effluxion of time or obsolescence through either change in technology or demand for the goods and services produced by the asset. It is a lose in value of a property from any cause. Once the replacement cost of the modern equivalent asset is determined it is then necessary to adjust or depreciate all costs incurred to provide the modern equivalent asset to reflect differences between this modern equivalent and the actual asset being valued (RICS, 2018) The underlying principle is that the hypothetical buyer has the option of procuring either the modern equivalent or the actual asset. Therefore, the primary purpose of applying depreciation is to indicate how the market would view the asset. According to (Binyam, 2017) the loss in value (depreciation allowance) of a property may be caused by three principal causes: physical deterioration, functional obsolescence and economic obsolescence.

Physical Deterioration: Physical deterioration is the result of years of wear and tear that can accompany a lack of maintenance. The appraiser compares the depreciation of goods of the same age with the value of new properties in the same market. The appraiser should examine the various features of the subject property such as the roof, walls, doors, windows, floors, etc. to identify physical defects in the structure. Physical degradation is often measured by the expected physical lifetime of the asset, taking into account the different rates of wear of its components. The Depreciated Update Value (DRC) can be calculated as follows:

$DV = P$ (100−rd 100) n; DV=depreciated value; rd=depreciation rate, 3.33% for 30 years; n= building age

Functional obsolescence: Functional obsolescence occurs when an asset's layout or specification no longer fulfills the function for which it was originally designed ((RICS, 2018); (Binyam, 2017)). In some cases, the functional obsolescence is absolute, i.e., the asset is no longer usable. This is due to a shortage or an oversupply. It can be treatable or incurable. Terminal functional aging occurs when the defect would cost more to repair than the market is willing to pay to fix it. Functional loss can arise from;

Design fault: such as ceilings too high or too low; improper location of kitchen, bathrooms, wasted spaces; old fashioned facilities, etc.

Dysfunctional structural facilities: such as external walls not water resistant; ceilings and walls not insulated; inadequate electrical wiring, plumbing, etc.

Changes in the use of neighboring property: may also contribute to the obsolescence of a building.

Legislative Change: In the industrial sector an existing plant may be incapable of meeting current environmental regulations, or in some cases the product it was built to produce is now illegal. In the service sector, the need for occupiers to comply with current regulations on health and safety or disabled access may also give rise to differing degrees of functional obsolescence.

Economic Obsolescence: This is due to the impact of changing economic conditions on the demand for the goods or services produced by the activities (RICS, 2018)Economic obsolescence arises from the impact of changing external macro and microeconomic conditions on assets, and internal factors affecting the profitability of the accommodating company should not be considered (onyejiaka et al,, 2015) . According to (onyejiaka et al,, 2015), causes of economic depreciation include: Threats and harassment in the neighborhood; high traffic volume; burn; Dust; Noise; unpleasant smells; Etc. Route

realignment or indexing, which can reduce area and reduce demand. A decrease in demand; population shifts; depression or other adverse economic factors such as financial collapse or lack of liquidity.

Depreciated replacement cost (DRC)

The DRC method is a form of cost approach defined as the current cost of replacing an asset with a modern equivalent less deduction for physical deterioration and associated form of obsolescence and optimization. This method estimates the market value of real estate by adding the market value of buildable land to the cost of constructing and/or modifying the building, less depreciation ((Binyam, 2017); (Fattinnanzi et al, 2020); (RICS, 2018)).

According to (Binyam, 2017)in the absence of a market for land value, it is the construction cost that gives the value of a new building. When estimating the cost of reproducing the property the subject property (or refurbishing a new similar or equivalent property), the gross floor area of the property must be calculated and multiplied by the construction cost per square meter ((onyejiaka et al,, 2015)), as in Binyam's citation (2017).

According to (Fattinnanzi et al, 2020) where market comparable examples or income-based parameters specifically concerning buildings with special features are lacking, the Depreciated Page | 24 Replacement cost new views the building as if reconstructed with modern methods, design and materials that would most closely replace the use of the appraised building but provide the same utility. For example, old brick warehouses are now built with concrete block or tilted cast panel structures. Like other forms of valuation, this method is based on comparative economic theory by comparing the asset being valued to another asset ((RICS, 2018)That is, unless undue time, inconvenience, risk, or other factors are involved, comparisons are made with hypothetical substitutes, also known as modern equivalents, for which potential buyers will not pay for subject property more than the acquisition cost of equivalent new property (RICS, 2018);

(Binyam, 2017) However, due to the lack of comparative and income parameters specific to buildings with special characteristics, the depreciated replacement cost (DRC) method remains the only possible method of estimating the market value of such properties (Fattinnanzi et al, 2020) Therefore, this method attempts to estimate replacement costs, not market prices. It does not produce a market valuation (value-in-exchange) as such because cost relates to production rather than exchange (Wyatt, 2007)as cited in Binyam (2017).

According to (Binyam, 2017) beside of rarely sold properties (special use properties) it is undertaken in case of new commercial properties, but as buildings and other improvements grow older, depreciation in value becomes increasingly difficult to quantify accurately. In this regard when the age of the improvement of commercial properties increases it is better use income method of valuation than replacement cost method. However, as his thesis was the use of income approach for cost methods of valuation, he disregarded the applicability of market comparison method of valuation during collateral for commercial properties. According to (Fischer, 2002) the process of DRC method is carried out to estimate the value of a property in cost approach:

1. Collection of relevant documents and carrying out property survey.

2. Estimate the replacement cost new (RCN) of all improvements to the land.

3. Estimate the accrued depreciation for each improvement.

4. Calculate replacement cost new less depreciation (RCNLD) by deducting all accrued depreciation from replacement cost new for each improvement. (Subtract step 3 from step 2).

5. Estimate the value of the land rights, using highest and best use.

6. Add all replacement cost new less accrued depreciation to the calculated land value.

7. This step will derive a value which is indicative of the Cost Approach to market value.

- **Income Method**

The income methods are usually applied to properties that are capable of generating rental income and are most likely to be purchased by investors. The Income Approach consists of methods, techniques and mathematical procedures used by assessors to analyze an asset's ability to generate income ((Appraisal Institute, 2001); (Millington, 2000) According to (Maria, et al., 2010,2002,2018) cited in (Degualem, 2018) it is based on the assumption that potential buyers will pay no more for the subject property than an equally desirable substitute investment that offers the same return and risk as the subject property. Therefore, the income approach is primarily used to calculate the market value of properties that generate or have the potential to generate income. It considers the subject property as an investment and its value is on the rent it will produce for the owner with the anticipation of future benefits. This approach provides a measure of value by converting future cash flows into a single current net present value (RICS, 2012). The price paid by the buyer is determined by the income the property may generate from its investment. In this case, a property valuer assumes that the investor ultimately seeks a total return greater than or equal to the amount invested (Hungria-Garcia, 2004). According to (Maria,2010; Fischer,2002; Degualem,2018) the procedure in carrying out the valuation of commercial property using income valuation method is stated as follows:

Estimating Potential Gross Property Income (PGI): This is the highest potential income from all sources. This is the expected future earnings. In many cases direct or current income can be an indicator of future income. However, it is a mistake to rely solely on past earnings. Income includes both rental and non-rental income (if there is any). The non-rental profits consist of for example, profits from hoardings located on the buildings, mobile communications gadgets positioned at the roofs, or different transmitting gadgets, parking area costs etc. While calculating the capacity profits, the valuer makes an assumption that the complete location of a assets generates maximal profits over a year.

Estimating vacancies and collection losses: It is the expected reduction caused by vacancy and collection loss. In economy, the income received by the owner (so called

effective gross income) is rarely equal to potential gross income. The amount of lost profit (income) may vary and depends on the vacancy rate and collection losses (rent arrears or lack of payment), the overall economic situation, condition of local market, property type, and opportunity cost.

Estimating effective gross income (EGI): It is the difference between potential gross income and losses due to vacancy rate and tenants' negligence.

Effective gross income (EGI) = Potential gross income (PGI)- Vacancies/bad debts (Vac)

Estimating the operating expense rate (OE): the operating expenses (all expenditures necessary to produce income) are to be deducted from the effective gross income to find the net operating income expected from the property. They are generally classified as: fixed expenses and Variable expenses.

Estimating net operating income (NOI): This is a company's effective gross income (EGI) less operating expenses (OE).

The technique of calculating net operating return withinside the investment technique includes the steps depicted on the diagram below: Net operating income (NOI)= effective gross income (EGI)- operating expenses (OE). Then, determine capitalization rate (cap rate) = Net Operating Income / Purchase Price

Sales Comparison Method

The economic rationale of the sales comparison method is that a knowledgeable and prudent person would not pay more for a property than other persons have recently paid for comparable properties given that the general market conditions are the same. The property to be valued is compared to others on the market now or that have recently been sold or let on the market (Degualem, 2018) According to (Millington, 2000) adjustments are then made to allow for the advantages and disadvantages of the subject property in relation to each similar to arrive at a figure that can be considered the recent market price

of the subject. The three main requirements of property comparable are: 1) similar property type to the subject; 2) similar location to the subject; and 3) evidence obtained is recent and reflects current market conditions. Each property is unique, and allowances must be made for the differences between the property being valued and the ones used for comparison, to take into account the various advantages and disadvantages of each. Typically, a mixture of qualitative and quantitative strategies might be employed.

According to (Appraisal Institute, 2001 ; Wyatt, 2007) procedurally the comparison method involves the following steps: Collect evidence of transactions and eliminate those not conducted at arm's length (for example, between parent and subsidiary companies); Determine which transactions are suitable for adjustment having regard to their comparability with the subject property; The geographic extent from which a comparable can be selected depends on the type of property and the state of the market; Comparable yet to transact or beyond a suitable time-frame should be used with caution; Select the elements of comparison; Compare the transactions based on these elements, and make adjustments where necessary; reconcile comparison elements to provide an indication of value for the trouble property (taking care to make sure that any modifications made to the same evidence mirror the in all likelihood reactions of market (Wyatt, 2007) formulated the equation below as the general procedure employed on sale comparison method:

$SALES\ PRICE\ OF\ COMPARABLE\ PROPERTY \pm ADJUSTMENTS$ = INDICATED VALUE OF SUBJECT PROPERTY

However, the more specialized the type of property, the less likely it is that an appraiser will be able to find a comparable property, and it is not uncommon for evidence of sales of comparable properties to be inadequate ((Appraisal Institute, 2001) ; (Millington, 2000) another weakness of the sales comparison is that the purchaser of the comparable property may have special reasons and specific personal situations which each precipitated and enabled the acquisition to be made, such motives and situations being absolutely inappropriate to others withinside the marketplace place. The other problem

with the sales comparison approach lies in the fact that income properties are not frequently traded, so the available sample becomes so small that it is very difficult to apply that method. The economic rationale for the income approach to subject property is that no investor will pay more for real estate than he or she can earn by owning it. In addition, it is not easy to compare the income variables (rent, rental space, tax inside and outside, etc.) of each property with the comparable properties

2.1.3.7. Real property valuation basis and practice in Ethiopia

In Ethiopia due to the rapid economic expansion, the banking industry necessitates the property investors to borrow money. Property developers are engaged in borrowing money through collateral of properties. The lending banks therefore have to value the mortgaged real properties as a security for loans.

In developing countries like Ethiopia where the economy is in boom, the borrowers have a great expectation to get more benefit from the loan with an equivalent amount of the property's price at the open market based on the market value of their investment. The lenders are also initiated to increase their lending capacity in order to increase their market share to have an easy-going lending policy.

In Ethiopia there is no valuation framework, regulatory institutions and professional valuation firms. This challenge results the commercial banks undertake property valuation without valuation basis although market value is appropriate for the purpose. But the proper valuation method frequently employed in the determination of value of property ultimately depends on the purpose of the assignment, the type of value request, the type of property under consideration and the type of reliability of available market evidence. The banks in the country adheres to the cost approach for all types of loan securities. In using the method, the way of estimating the value of properties is not scientific. The mortgage valuation in Ethiopia contradicts the valuation practice of international standards and professional practice (Babawale, 2012).

The valuation methodologies are usually employed without consideration of the type of property to be valued. Although the methodologies in all banks are similar, the figurative elements and internal procedures are different. The cost approach procedure though not strictly in the right manner prescribed by the generally accepted valuation procedure (Zenebe, 2017).the property market evidence are observed as not up to date due to the lack of empirical study of property market, professionals or other capacity related factors. In countries such as Ethiopia where property market is undeveloped the reliable and empirical transactional market evidence are almost unavailable, application of more than one valuation method is clearly very difficult; however, value estimation should be based on selection of one or more of methodologies that will best suit the type of subject property (Elizabeth, 2017). The valuation methods in banks stated the combined use of market and cost methods of valuation are used but in actual practice banks prepare value report in order to ascertain the bank that it may not lend a loan more than the present value of the property under the collateral. Also, to keep a sufficient margin between the market value of the property and the loan so as to cover the loss of value due to depreciation and interest charges on the loan. Therefore, banks engaged to minimize the level of risk that they are taking. So banks wish to value the property by a method that doesn't increase the market value. As a result, the cost method of valuation is to lower the value figure than the income and direct comparison methods. Therefore, the cost approach of valuation is to the advantage of the banks, that is why they rely using this method (Biniyam Zenebe, 2017).

According to the (EBA, 2015) the aim of the manual is in minimizing variations observed on valuation procedures employed by member banks and avoid differences in the estimated value of properties given as collateral. Moreover, be a step forwards encouraging consistency in banks' valuation methods in line with the generally accepted valuation techniques (Elizabeth, 2017). However, in the case of development bank of Ethiopia most of projects that finances are specialized in nature; they are to produce specific product and cannot easily be exchanged in the market in case they fail, it entails to the overestimation and under estimation issue which needs careful and proper

estimation and the bank particularly has its own valuation manual. Whereas in accordance with the international valuation standards (International Valuation Standards, 2011) and EBA's real property valuation manual, property valuation for loan security is better to be based on market value. But the constraint on availability of reliable transaction market data in Addis Ababa, infancy of property market as a country, difficulty of consistency in EBA's manual and each bank; only the cost approach and sometimes income approach are likely employed during the appraisal of major classes of properties. The income method is based on the income which the property is generating at the time of valuation, while cost method is based on the detailed total cost of the estimation of a property (EBA, 2015).

It is thus in the absence of any guiding framework, there is no consistency in the procedure and methods in which collateral valuation is practiced by banks in Ethiopia. Therefore, developing a legal framework and guideline provides reliable and accurate valuations according to the purpose and type of property being valued; finally has a significant economic benefit for various parties and is central to a efficient property market; therefore it is un doubly necessary to understand various valuation practices particularly the methods adopted in loan security (Habtamu Bishaw et al.,, 2020).

2.1.3.8. Basis of Valuation Implemented in Banks

It has been some time since property valuation is practiced in Ethiopia. Properties are valued mainly for compensation during expropriation, during forced sell by court order and for collateral purpose. In most cases different stakeholders have complaint on the value of the properties which are valued by the institutions. In carrying out any valuation assignment for collateral purposes, the valuer is faced with a task of selecting the appropriate method to adopt. The value of a property which is calculated by the bank for the purpose of collateral is debatable. The borrowers have different outlook regarding the value of their property appraised by the bank. They do believe the appraisal made by the bank is much less and/or more than the market value of their property. The major causes

for undervaluation and overvaluation is the method of valuation that the banks are used (Biniyam Zenebe, 2017).

In all commercial banks in general and commercial bank of Ethiopia in particular, the valuation method which is used for collateral purpose is depreciated replacement cost (DRC) method. Depreciated replacement cost method is the current cost of replacing an asset with its modern equivalent asset less deductions for physical deterioration and all relevant forms of obsolescence and optimization.3 Therefore, the DRC method will only show the cost of a property and it will not show the market value of a property (Biniyam Zenebe, 2017).

In the emerging country like Ethiopia, when the economy is in boom, the borrowers will have full of expectation to get more benefits from the loan and they will initiate to get a loan. The lenders also wish to increase their lending in order to increase their market share of the banking industry. Those things will force the lenders to have an easy-going lending policy. This will open a door for the lenders to give a loan for customers who are far from credit worthy.

Appropriate valuation method plays an important role in minimizing the existence of under and over valuations. In commercial bank of Ethiopia properties to be held as collateral by the bank, is valued using cost replacement method based on the property valuation manual.

Modern banking in Ethiopia started in the beginning of the 20th century since the establishment of the bank of Abyssinia in 1906 (Mintesnot & Semeneh , 2018 ;Bassie, 2018). The provision of mortgage loans has been one of the main functions of commercial banks in Ethiopia. But there is no well-known empirical study on how mortgage valuation in Ethiopia is practiced. Presently, there is no mortgage valuation framework or regulatory institution to oversee mortgage valuation. The national bank of Ethiopia (NBE); which has the power to license, supervise and regulate the operations of commercial banks, does not have a clear policy concerning mortgage valuation. It simply

forces banks to undertake valuations without any guideline or framework (National Bank of Ethiopia, 2010). Moreover, the responsible ministry for urban land administration and management in Ethiopia, the Ministry of Urban Development and Construction, does not have any power and duty in mortgage valuation (FDRE, 2018). The Ethiopian bankers' association has prepared and distributed a real property valuation manual to banks to apply similar procedures of mortgage valuation to all banks in 2014. However, the actual mortgage valuation practice still lacks uniformity and consistency.

Commercial banks in Ethiopia recognize the cost approach as the suitable mortgage valuation approach to the Ethiopian real estate market. For instance, the valuation manual of the Commercial Bank of Ethiopia (CBE) states that it adopts the cost approach due to its suitability for the property market in terms of availability of relevant comparative databases in Ethiopia (Commercial Bank of Ethiopia, 2016). However, as highlighted by the literature above this approach of valuation is largely seen as unsuitable for mortgage valuations. The credit policy of the bank on the other hand, stipulates that the bank may use either of the three approaches as they see appropriate (Commercial Bank of Ethiopia , 2013). The valuation manual of Dashen Bank also states that the bank adopts a combination of the cost approach and income approach. This combination is said to help them cope with varying market values (Dashen Bank , 2014).

It is thus clear that in the absence of any guiding framework, there is no consistency in the way in which mortgage valuation is carried out by banks in Ethiopia. Developing a guiding framework is necessary to providing reliable and accurate valuations. This has significant economic benefits for various parties and is central to a functioning and efficient real estate market. Such a framework should seek to align international standards with the established skills and practices of valuation practitioners in Ethiopia. Therefore, to help define a framework for mortgage valuation it is necessary to understand the various valuation practices, particularly the bases and approaches of valuation adopted by banks in Ethiopia. This is the main focus of this study. The methodological approach is outlined below (Habtamu Bishaw et al.,, 2020).

2.1.3.9. Collateral valuation practice of Ethiopian banks

Valuation methodologies employed by almost all Banks is similar, except the figurative elements and some minor differences inherent in each. Many of the procedures employ the cost approach one way or the other, though not strictly in the manner prescribed by the Generally Accepted Valuation Procedures. To come up with the methods used by banks it is stated that rent return and cost method of valuation are used. In actual practice banks prepare valuation in order to ascertain the firm that it may not advance money more than the value of the property. Also, to keep a sufficient margin between the value of the property and the loan so as to cover the loss of value due to depreciation and interest charges on the loan. Hence, banks tend to minimize the level of risk that they are taking. So, they want to value a property by a method that doesn't increase the valuation result. Rent return and cost method of valuation is likely to result lower figure than a profit method. Therefore, rent return and cost methods are to the advantage of the banks, so that they rely using these methods (Biniyam Zenebe, 2017).

The expectation of operational units to perform valuation in values of properties secured to loan as collateral, value foreclosed properties of defaulted borrowers, revaluation of its building assets and expansion works of buildings financed by the bank.

Property valuation practice in Ethiopian banks, most of the banks developed their manuals which is to be up dated every year and some of the banks used nationally developed EBA's Manual. The manuals deal with valuation of buildings and other associated civil works including consideration of consultancy fee and the amount paid in advance and interim payment/s for the plot of land held on lease.

In case of Development Bank of Ethiopia (DBE) most of the projects that finances are specialized in nature, they are to produce specific product and cannot easily be exchanged in the market in case they fail, hence, it entails both over estimation and under estimation issue which needs careful and proper estimation and particular Development Bank has its own valuation manual.

According to (EBA Manual, 2015). The aims of EBA's Manual to endeavor of minimizing variations observed on valuation procedures employed by member banks and thereby avoid and or curtail differences in estimated values of properties pledged as collateral. It will also be a step forward towards aligning the Banks' valuation methods in line with generally accepted valuation techniques (Elizabeth, 2017).

In the valuation methods used by many of the Banks, the depreciated (or un-depreciated) replacement cost of development on the premises to be held as collateral are calculated and multiplied with some kind of appreciation factor/s or some sort of location value is added to determine the estimated value of the property. For developments under construction requesting project finance, most of the Banks employ an engineering cost estimation using the specification and bill of quantities method (Elizabeth, 2017)..

Such methodologies are grossly employed without consideration of the type of property to be valued. Moreover, the property market data used in the valuations are observed to have not been kept up-to-date due to lack of required personnel or other capacity related problems. In undeveloped markets, one such us our country's, where reliable and compiled transactional market data are almost unavailable, application of three valuation methodologies (Cost, Income and Direct Comparison) is understandably very difficult. However, value estimation should be based on selection of one or more of the three valuation methodologies that will best suit the type of property under consideration (Elizabeth, 2017).

The valuation reports produced by such procedures also lack the basic analysis and disclosure of risks associated with the property. Except in very rare cases, reports do not address such issues as: town planning considerations, permitted use of plots, legal issues associated with title, obsolesce and marketability and stability in the estimated value, which are very essential in the assessments of risks associated with properties to be attached as collateral (Elizabeth, 2017).

The proper method to be employed in the determination of the value of a property will depend mainly on the purpose of the assignment, the type of value sought, the type of property under consideration, and the type and reliability of available comparable market data (Elizabeth, 2017)..

In accordance with EBA's Real Property Valuation Standard and The International Valuation Standards 2007, Valuations for loan security shall be based on market value. Due to the constraint on availability of reliable transactional market data in the City, infancy of property market in the Country and difficulty of consistency in EBA's appraisal applications, only the Cost Approach and Income Approach will be employed in the valuation of major class of properties. An income approach is based on the income which the property is generating at the time of valuation, while a cost approach is based on the total cost of the construction of a property (EBA's Manual ,2015)

In Ethiopia there is no valuation framework, regulatory institutions and professional valuation firms. As a result, commercial banks undertake mortgage valuation without basis although MV is appropriate. Commercial banks adhere to the cost approach for all types of mortgage securities. In using the cost approach, the way of estimating depreciation and land value is not scientific. This may be due to the fact that valuers in banks are engineers without valuation degrees. The mortgage valuation system in Ethiopia contradicts the valuation practice in many countries where reliable valuation results can be produced only by a valuation professional that adheres to international standards and professional practice (Babawale, 2012).

2.13.9.1. Property class and method for valuation purpose

For the valuation purpose, Properties are generally classified into three major classes, namely: Commercial /Investment Property, Residential Property, and Specialized Property.

Commercial /Investment Properties

These classes of properties are developed and owned to lease to a third party, for possible future occupation by the owner, or for future development to earn rental income or profit upon resale. A prospective Investor on commercial property will mainly be interested in the income-producing capacity of the property. The assignment of weight in the final reconciliation of market value indicative resulting from, the application of the Cost and Income Approaches will be as follows:

Table 2.1:Commercial/Investment Property Valuation Approach ((EBA, 2016))

No.	CORRELATION FACTOR	Factor weight (100%)	ASSIGNED WEIGHT	
			Cost approach	Income approach
1	Strength of approach to value	40	35	65
2	The relevance of approaches to the subject	30	40	60
3	Amount and reliability of data for each approach	30	45	55
	Total	100	40%	60%
	Value indicative using Cost approach		X	
	Value indicative using the Income approach			Y
	Final Reconciled Market Value of the property		0.4(X) + 0.6(Y)	

Residential Properties

Are those which are mainly developed for residential purposes, whether they are owner-occupied or rented out. A prospective buyer will mainly consider the suitability of the premises for satisfying the required needs rather than contemplating the expected yield from investing on the property. Accordingly, one has to assign more weight on the cost approach value indicative than the income approach indicative, the detail specifics of which are depicted in the table below:

Table 2.2:Residential Property Valuation Approach (EBA, 2016)

No.	CORRELATION FACTOR	Factor weight (100%)	ASSIGNED WEIGHT	
			Cost approach	Income approach
1	Strength of approach to value	40	85	15
2	The relevance of approaches to the subject	30	80	20
3	Amount and reliability of data for each approach	30	74	26
	Total	100	80%	20%
	Value indicative using Cost approach		X	
	Value indicative using the Income approach			Y
	Final Reconciled Market Value of the property		0.8(X) + 0.4(Y)	

Specialized Properties

These classes of property are those that are rarely if ever sold on the open market, except by way of a sale of the business of which they are part of, due to their uniqueness, which may arise from the specialized nature and design of the buildings, their configuration, size or location or other factors. Key characteristics of the specialized property are that they:

- Are useful to a limited number of uses or users;
- Are rarely, if ever, sold on the open market, except as part of the business entity;
- Have generally specialized structures; and
- Earn revenue that has not been derived from an open market and for which market-based evidence does not exist.

In general, specialized properties are those that, due to some specialized physical or geographical factor, offers very little utility for any purpose other than that for which they were originally designed. These classes of properties are so specialized by nature that no comparable market data could be employed to apply the Income approach, as tabulated below. Hence, the final market value conclusion will fully rely on the results of the Cost approach.

Table 2.3:Specialized Property Valuation Approach

No.	CORRELATION FACTOR	Factor weight (100%)	ASSIGNED WEIGHT	
			Cost approach	Income approach
1	Strength of approach to value	40	100	0
2	The relevance of approaches to the subject	30	100	0
3	Amount and reliability of data for each approach	30	100	0
	Total	100	100%	0%
	Value indicative using Cost approach		X	
	Value indicative using the Income approach			Y
	Final Reconciled Market Value of the property		X	

Source: EBA manual, (2016)

Specialized property: the type of property that would be referred to as a specialized are those properties where there is insufficient market data to value them by some form of comparison.

Non-specialized property: the type of property that would be referred to as nonspecialized are the dominant property types of residential, offices, shops, industrial units, and warehousing.

2.1.3.10. Practice of property valuation in international

As it has been reviewed the general practice form IVS and RICS here practice of Ghana & Nigeria from Africa and Romani from Europe has been selected for review as it has been difficult to view other country practices from different source:

A. Nigeria

In Nigeria, the real estate valuation profession is regulated by two complementary bodies, the Estate Surveyors and Valuers Registration Board of Nigeria and the Nigerian Institution of Estate Surveyors and Valuers. (Babawale, 2005) observed that the evolution of the Nigeria property market has been held back by a number of structural problems, among which are the risks associated with unsecured titles, high interest rates resulting from high inflation, lack of reliable transaction information, discriminatory government intervention and lack of transparency in the market. Others include obsolete training curriculum, weak regulatory framework, lack of national valuation standards, predominance of small size firms, and lack of specialization. Valuators are mostly aware of the traditional methods and the wide spread method of valuation in use is that "sales comparison method" in practice. Due to lack of national valuation standard each valuator uses their own method (Babawale, 2012).

B. Ghana

According to (Mantebea, 2006) Property valuation is carried out in Ghana for various purpose such as for insurance, payment of compensation for state acquired lands, taxation, rent/lease, sale and mortgages. In all these though different methods of valuation are applied, until now real property appraisers have assessed real property based on their intuition or experiences. The basis of valuation that is widely adopted is the open market value basis using comparative sale method. Property valuations are therefore usually distorted and not a true reflection of what would be an open market value. These constraints include high inflation and interest rates, difficulty in determining interest in the property being valued due to the land tenure systems, social behaviors, dearth of knowledge of the property market, an informal property market and lack of adequate data.

C. Romania

According to (EMF-ECBC, 2017) the Romanian National Association of Chartered Valuers, is the professional competent authority that organizes and coordinates valuation activity in Romania. Valuation activities can only be undertaken by authorized valuers which are members of the Romanian National Association of Chartered Valuers. There is no specific legal framework for the valuation of property. the value used for mortgage lending purposes is generally the market value. Three main valuation methods are used: comparison, income approach and cost approach.

For Residential properties: Comparison method**,** Income method **&** Depreciated replacement cost: for new properties or special properties (some banks do not accept this method any more)

For Commercial Properties: Income method or discount cash flow approach**,** Comparison method & Depreciated replacement cost method (some banks do not accept this method any more)

According to (Deaca, 2014) in Romania, the main challenge concerning valuation is the lack of access to information about traded properties and missing of a general data base concerning the information about the similar and recent real properties transactions. This information is not for public access, and it is impossible to find out who, what and how has been valuated another property, so that you can compare a valuation made in the past with one made in the present (Fischer, 2002). Because of this impediment, each valuer is forced to apply another method.

2.2. Empirical Review

Many researchers have studied the valuation process for the collateral purpose from different perspective. The following are some of the studies which are related and useful for my research are discussed as below.

Bioye Tajudeen Aluko (2007) Implications of the current trend in mortgage valuation practice in Nigeria, the Research Asses the mortgage valuation process including sources

of valuation instruction, bases and methods being adopted and their implication on lending decisions and valuation profession in the study area. To accomplish the study, questionnaires were randomly administered on samples of estate surveying and valuation firms and lending institutions respectively in Lagos metropolis. The data emanating there from were analyzed using frequency distributions, ranking mean and relative important index ranking. The study, prima facie established that mortgage valuation has been an important input in lending decision. It further showed the implications of the blind adoption of the cost approach, inconsistency among valuers and non-inclusion of insurance valuation in the mortgagee valuation process.

(Rotimi, et al., 2021) Factors influencing property valuation accuracy in Australia, the research investigates the factors that contributes to property valuation inaccuracy and examines different strategies to achieve greater accuracy in practice. The research finds three factors those are Inexperience valuers, the selection, interpretation use of comparable evidence in property valuation exercise and the complexity of the subject property in terms of design, age, and material specification as the most significant factors currently affecting valuation in accuracy. also, the research identifies that a highly ranked strategies for reducing the level of in accuracy are: developing a global mindset, use of advanced methodology and training valuers on market forecasting skills.

European Mortgage Federation (2009) carried out an investigation on the Valuation of Property for Lending Purposes in Europe. The study revealed that accurate and transparent property valuation is essential to the mortgage lending business as it promotes confidence in the collateral system. In this respect, property valuation represents one of the major building blocks of the mortgage system. The lender requires certainty that the asset being taken as a guarantee for a housing loan is of a certain value and will cover losses should the loan default. This confidence in the property value is one of the elements, which make mortgage debt a low risk, inexpensive way of providing housing finance and which in turn makes homeownership a reality for many throughout Europe. The need for transparency is therefore ever growing as the frontiers of the single market push further outwards and as cross-border activity increases. The result shows that

transparency in valuation techniques and methodologies across borders would significantly further reduce the risks associated with mortgage lending. These reductions in risk will lead to greater confidence in European property markets on the part of homeowners, mortgage lenders and investors.

Tebele 2.4: Summery of Empirical Review

Author	Country	Method Used	Finding
Bioye Tajudeen Aluko	Nigeria	Survey Method	⇨ mortgage valuation has been an important input in lending decisions ⇨ blind adoption of the cost approach, inconsistency amongst valuers and non – inclusion of insurance valuation in the mortgage valuation process.
Rotimi, et al., 2021	Australia	An online Questioner	The three factors influencing property valuation accuracy are: 1. inexperience valuers 2. the selection, interpretation use of comparable evidence in property valuation exercise 3. the complexity of the subject property in terms of design, age, and material specification

2.3. Literature summary & Research Gap

This literature review identified gaps in understanding of the real property valuation practice in national and international level. The review shows that while the theoretical benefits of practicing of real property valuation in Ethiopian banking industry is well documented, the actual experience and application of real property valuation in banking industry is largely undocumented.

According to IVSC (2017), the accelerated pace of investment globalization has underscored the need to adopt international standards for reporting real property values. Therefore, without international valuation standards, there is a significant risk of confusion. Disagreements between national assessment bodies can lead to unintentional misunderstandings.

In developing countries like Ethiopia, where the economy is booming, borrowers expect to get the most out of lending at the market price of the asset as collateral. However, the practice is not based on the price of real estate on the open market. In fact, Ethiopia lacks professional valuation frameworks, regulatory institutions and valuation firms to collect real property market data. While the aim of the Ethiopian Bankers Association Manual is to minimize observed discrepancies in the valuation methods used by member banks and to avoid discrepancies, it is a step towards promoting the consistency of banks' valuation methods in accordance with generally accepted valuation techniques.

However, member banks estimate real property values using this method is not yet Consistent. Therefore, the valuation of a mortgage and/or collateral in Ethiopia is contrary to standard international valuation and professional practice. To fill this gap, different authors conducted research in the practices. However, the studies conducted are mainly focused on the existing practices of banks. The studies are deficient in comparing the consistency of the practice between the banks. Moreover, the variations of collateral

value in the banks and the cause of Variation are not study. Therefore, the study intended to fill the gaps in the practice.

2.4. Conceptual Framework

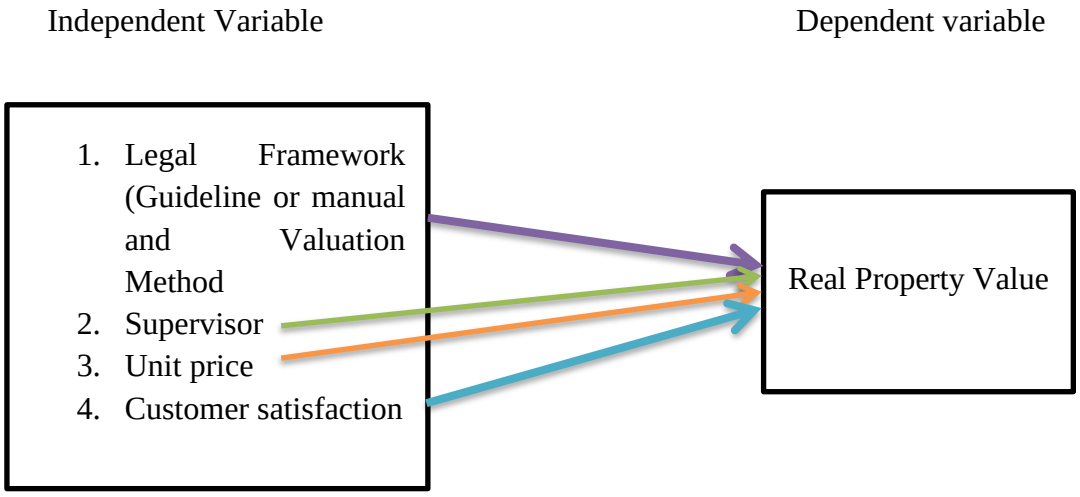

Fig: 2.1 Conceptual Frameworks

Chapter 3

3. Research Methodology

3.1. Introduction

The methodology informs the strategy and procedure to be employed in carrying out the research agenda and how the data collected is interpreted. It provides research type, methods selected and the information about the research design from research instruments.

Instrument One, This part will provide information on questionnaire design, population, sample size, various approaches to data collection and data analysis technique and also Instrument Two, includes document analysis from selected banks.

3.1.1 Description of the study area

Currently In Addis Ababa, there are more than 25 actively working both private and government owned banks which are accountable for the national bank of Ethiopia. All banks are predominantly involved in real property valuation which provide mortgage credits and loans for households and firms. Among these only private commercial banks are selected. This is because Private banks are more competitive than government owned banks. For the same purpose of valuation, banks practice valuation differently. Moreover, most of the banks developed their manuals, and some of the banks used nationally developed EBA's Manual. Under a similar property and purpose of valuation the existing practices in the bank’s focus on cost method; and others employ both cost and rarely income method. Moreover, the practices are not based on the generally accepted practices of international standards. The study also gets a touch with the comparison of banks valuation result.

Accordingly, a purposive sampling technique was used to select two banks(Dashen bank and Bank of Abyssinia) from more than 25 banks. The reason why the study selected

these banks is because they are the first private banks financing households and firms by practicing estimation of collateral properties after the beginning of free market economy. These banks become the leading private institutions with high financial mobilization and number of branches they expanded in the country and also based on the number of customers they have. The valuation request of the customers is through the branch banks. Hence a bank with large number of branches will be offered by a relatively large number of properties for loan access. And banks which value large number of properties for loan security is better to undertake the case study.

The banks have a total of 29 valuers actively practicing valuation for collateral. The professional expertise of the valuers is diverse in their work experience, positions and educational background. Therefore, the appropriate technique of sampling is purposive sampling.

3.2. Research Types

The approach focused on more qualitative than quantitative approach but mixed of the two approaches. The qualitative approach is where answers are not given in quantitative forms for questions asked. The study used explanatory approach to explain qualitative data the existing appraisal basis and methods of real property valuation in banks. In this approach numbers are not of primary interest but should be of a qualitative kind. The answers are stated by words rather than numbers. Because the intention is not to get broad and general picture with related to numbers or equivalent. The study also used descriptive approach to analyze numerical data just to explain the significance of value variation in the consistency of valuation reports between the banks. It is the researcher's intentions to gain a deeper understanding of the phenomenon of existing real property appraisal. Therefore, the qualitatively aimed research approach best fits the intention of the research. It is the author's beliefs that the choice of method is consistent with the purpose of the study.

3.3. Population and Sampling

3.3.1. Target Population

The research data collection process was focused on Bank of Abyssinia and Dashen Bank are operating in Addis Ababa. The research's targeted populations were selected from those banks. The reason for the selection of those banks is based on the establishment time (Year of service), number of customers and number of Branches i.e. Bank of Abyssinia which was established in 1996 E.C. The bank has over 11,575 staff, over 10,275,940 customers and 909 branches (Bank of Abyssinia, 2023). And Dashen bank which was established in January 1996. The bank has a total number of over 800 branches over 3,900,000 customers and over 10,000 permanent employees (Dashen Bank, 2021). The total populations of the research are 29.

3.3.2. Sample size Determinations

The sample size was also chosen purposively due to the scope of the work considering, the knowledge of the population and the purpose of the study. In order to ensure that the margin of error is within acceptable limits, it is essential to estimate the likely response rate and increase the sample size accordingly. According to real property valuation practice for selected banks data, Bank of Abyssinia sixteen (16) and Dashen Bank thirteen (13). For the questionnaire designed the number of total populations of the research is 29. The questionnaire was distributed to all the population.

Table 3.1. Dashen bank number of Valuators, profession (Title) and Positions in Addis Ababa

No	Position (Title)	Numbers of employee
1	Director	1
2	Manager	1
3	Senior Collateral Valuator specialist	1
4	Senior Collateral Valuator	10
Total Number of Valuator (Employee)		**13**

Table 3.2. Bank of Abyssinia number of Valuators, profession (Title) and Positions in Addis Ababa

No	Position (Title)	Numbers of employee
1	Associate collateral valuator	1
2	Team leader	1
3	Senior Collateral Valuator	7
4	Junior Collateral Valuator	7
Total Number of Valuator (Employee)		**16**

3.4. Data Source and Data collection mechanism

The research used primary data collected through questionnaire, interviews, and desk study, field observation or physical inspection and valuation of sample properties. The secondary data are gathered from documented and published sources including books, journals, central statistics reports and relevant offices. The number of samples for interview data collection through convenience sampling technique is 6. In addition, through desk review both bank of Abyssinia and Dashen bank manuals are reviewed.

3.5. Questionnaire Design

A questionnaire survey is designed to obtain research study objectives and it is also designed based on identified variables, the questionnaire was designed to gather data

from professionals that were involved in real property valuation works in Addis Ababa selected banks.

In this study, the research questionnaire is designed using the background from literature review stated in previous Chapter 2 and interviews with senior professionals to obtain different thoughts, which can be useful for creating questions. The questionnaire had Three sections. The first section consisted of questions about the general profile of the respondent. The second section (5 Multiple questionnaire) was compromised of questions to test the level of awareness of the Respondents about their valuation manuals. In the third section (11 questionnaire) that was believed to test the level of agreement of respondents about real property valuation based on the selected independent variables.
A questionnaire of 11 was carefully designed from literatures and they are organized based on Likert's scale of five ordinal measures i.e (1 = Strongly disagree, 2 = Dis agree, 3 = Neither Agree nor Disagree, 4 = Agree, and 5 = Strongly agree). This approach to scaling responses in the questionnaire was adopted for two primary reasons;

1) Suitability of Likert-type scales to the measurement of latent variables, and ease of data analysis.
2) The ongoing use of Likert scales in prior studies of engineering management (Chang-Richards, Wilkinson, Seville, & Potangaroa, 2011).

3.6. Methods of Data Analysis

Data analysis is a means of checking, cleaning, transforming, and modeling data with the goal of discovering useful data, suggesting conclusion and supporting decision making. The quantitative data will be analyzed using descriptive statistics including mean, frequency and standard deviation.

The numbers assigned to the important (1, 2, 3, 4, 5) do not indicate that the interval between scales is equal, nor do they indicate absolute quantities. They are merely numerical labels based on Likert Scale. After collecting the data from questionnaire which distributed to valuators of selected banks, the data were analyzed

using SPSS package and Microsoft Excel. The mean score for each variable was calculated using the following formula (Pritha Bhandari,2020).

$$MS = \frac{\sum(FxS)}{N}$$

Where; S = score given to each variable by the respondents;

F = frequency of responses to each score for each variable; N = total number of respondents.

And also, in order to find the reasons how and why the same property can have different value in different banks. the research trays to estimating different types of sample real properties type which are estimated for collateral purpose. the estimation then conducted by site visit and by manual review of the selected banks. then based on estimated amount the reasons for variation are identified.

3.6.1. Correlation Analysis

Correlation Analysis Investigate the linear relationship between variable. The correlation coefficient which range from -1 to +1. determines the strength of the correlation. the correlation direction can be either positive or negative. when higher values of one variables are accomplished by higher values of another variables, there is a positive correlation (0 and 1) . Negative correlation occurs when higher values of one variables are accomplished by lower values of another (-1 and 0) .

SPSS analysis output shows that coefficient spearman correlation for different variables in Bank of Abyssinia are (0.357,0.553,0.602 & 0.636) and also for Dashen bank (0.597,0.743,0.597 & 0.450) it indicates that it is positive range which is moderate agreement between Real Property value (Dependent Variable) and Legal Framework Supervisor ,Unit price and Customer satisfaction which are independent variables .

Table 3. 3. Bank of Abyssinia sample out puts of SPSS for Spearman correlation among independent and dependent variable.

Correlations

			Real Property Value	Unit Price
Spearman's rho	Real Property Value	Correlation Coefficient	1.000	.602*
		Sig. (2-tailed)	.	.064
		N	16	16
	Unit price	Correlation Coefficient	.602*	1.000
		Sig. (2-tailed)	.064	.
		N	16	16

*. Correlation is significant at the 0.05 level (2-tailed).

Table 3. 4. Dashen Bank sample out puts of SPSS for Spearman correlation among independent and dependent variable

Correlations

			Real Property Value	Supervisor or Superintendent
Spearman's rho	Real Property Value	Correlation Coefficient	1.000	.743**
		Sig. (2-tailed)	.	.004
		N	13	13
	Supervisor or superintendent	Correlation Coefficient	.743**	1.000
		Sig. (2-tailed)	.004	.
		N	13	13

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

3.6.2. Checking Validity of Questionnaires

A according to (Walker, H. W,2006) Validity is a measure of the degree of validity or the validity of a research instrument .an instrument is said to be valid if it is able to measure what is to be measured or desired .in instrument said to be valid if can be reveal the data of the variable studied.

Test the validity of the questioner was conducted using person product moment correlations using SPSS. the validity test product moment person correlations done by correlating each item questionnaire that significantly correlated with total score indicates that the items are valid.

Basic Making Decision in validity test are the following.

A. Seeing The value of significance:

1.If the significance value < 0.05, then the instrument is declared valid.

2. If the significance value > 0.05, then the instrument is declared invalid.

B. Compare analyzed obtained results of correlation coefficient against the critical value (Pearson's product moment correlation coefficient or r value) in the table at 95% confidence interval.

1. If the value of degree of freedom at two tailed N-2 > r table product moment, then the instrument is declared valid.
2. If the value of degree of freedom at two tailed N-2 < r table product moment, then the instrument is declared invalid.

So in this research, based on the significant value obtained by the sig. (2-tailed) of all questioner less than or < 0.05, so it shows that all item or questioner was valid .and also based on the count value of all item or questioner obtained degree of freedom at two tailed N-2 greater than or > r table product moment, so in this way also all item or questioner was valid.

3.6.3. Checking Reliability of Collected Data

According to (Saunders et al, 2003) Reliability refers to the extent to which your data collection techniques or analysis procedures will yield consistent findings. It is a measure of the degree to which a research instrument yields consistent results or data after repeated trials.

Reliability is influenced by random error. The most common way to measure internal consistency of data used by researchers is Cronbach's alpha α (The Greek letter alpha)

which measures internal consistency or average correlation of items in a survey instrument to gauge its reliability.

The Cronbach's Alpha formula is used since reduces the time required to compute a reliability coefficient in other methods. Cronbach's alpha reliability coefficient normally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale.

High Cronbach's alpha values indicate that response values for each participant across a set of questions are consistent. For example, when participants give a high response for one of the items, they are also likely to provide high responses for the other items. This consistency indicates the measurements are reliable and the items might measure the same characteristic. Below is the formula for Cronbach's alpha (lee Cronbach,1951).

$$\alpha = \frac{N * \overline{c}}{\overline{v} + (N-1) * \overline{c}}$$

Where:

N =Number of items

$\overline{c}$ =Mean Covariance Between Items

$\overline{v}$ =Mean item Variance

Table: 3.5. Reliability value range

No	Coefficient of Cronbach's Alpha	Reliability Level
1	More than 0.90	Excellent
2	0.80-0.89	Good
3	0.7-0.79	Acceptable
4	0.6-0.69	Questionable
5	0.5-0.59	Poor
6	Less Than 0.59	Unacceptable

So, The Cronbach's Alpha (α) coefficients obtained in my researches are as shown below on table 3.2. Values are 0.74 & 0.77 for Bank of Abyssinia and Bashen bank

Respectively this indicates an acceptable level of internal consistency for our scale within the questionnaire .and finally these result leads to the next step that is analysis of Data.

Table 3.6. Reliability Statistics

Reliability Statistics		
	Average Cronbach's Alpha (α) Value	N of Items
Bank of Abyssinia	0.74	11
Dashen Bank	0.77	11

Source: (SPSS)

Chapter 4

4. Results, Analysis and Discussion

4.1. Introduction

The previous chapter presented the methodology used to understand the research and generate the data for the thesis. Primarily the purpose of this study is to find out assessment on real property valuation practice for collateral in selected banks in Addis Ababa. This chapter of the research deals with the analysis and discussion of the collected data. The research utilized questionnaire surveys and case study to collect primary data. Utilizing a combination of quantitative and qualitative methods is to make the research reliable and more useful. The use of questionnaires facilitated the collection of large amounts of data from a sizeable population in a highly economical way. The collected data were analyzed by using SPSS software and Microsoft excel 2021.

Questionnaire Data Discussion and Analysis

4.2. Response Rate

In order to ensure a study, a sample well represented to the targeted population was Bank of Abyssinia and Dashen Bank in Addis Ababa. The main respondents were Managers, Directors, Principals, and Team leaders were included, to reveal their perspective of on real property valuation. Questionnaires were distributed to twenty-nine (29) respondents with hand. Out of the targeted 29 respondents, twenty-nine of (29) were returned; the total response rate is 100%.

4.2.1. Respondents' profession and general information

Respondents were requested to provide their background information on the provided space that was given in the questionnaire. Concerning the main sector in Addis Ababa Bank of Abyssinia and Dashen Bank real property valuation, each professional can be classified in one field of work on the property valuation.

1. **Respondent's position**

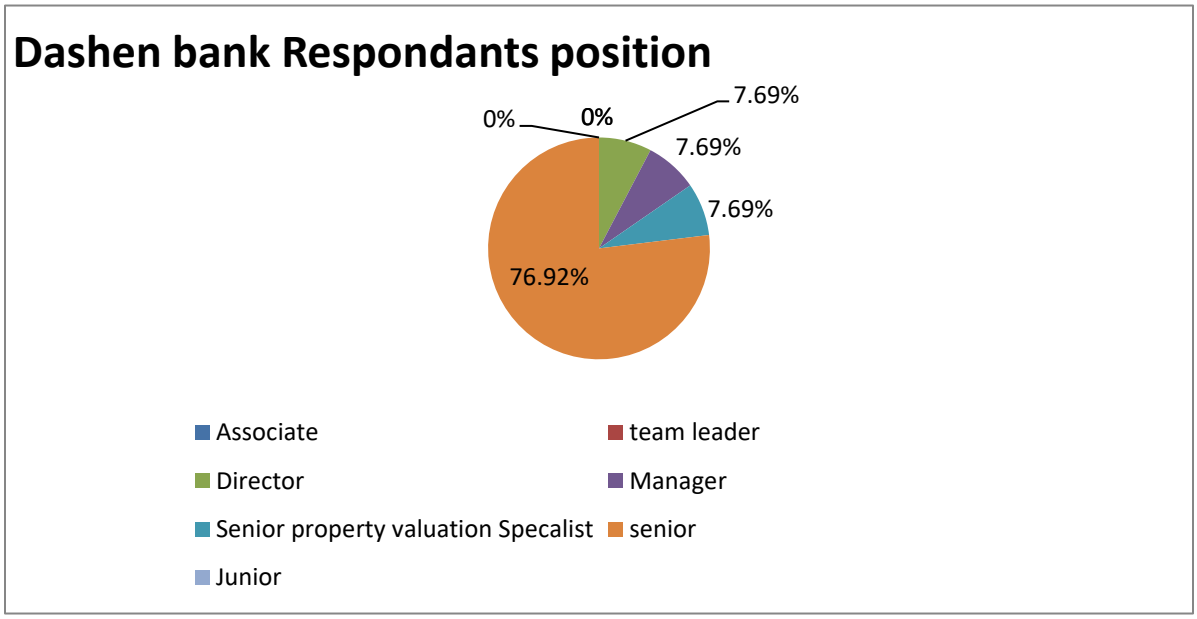

Fig 4.1: Dashen bank respondents position

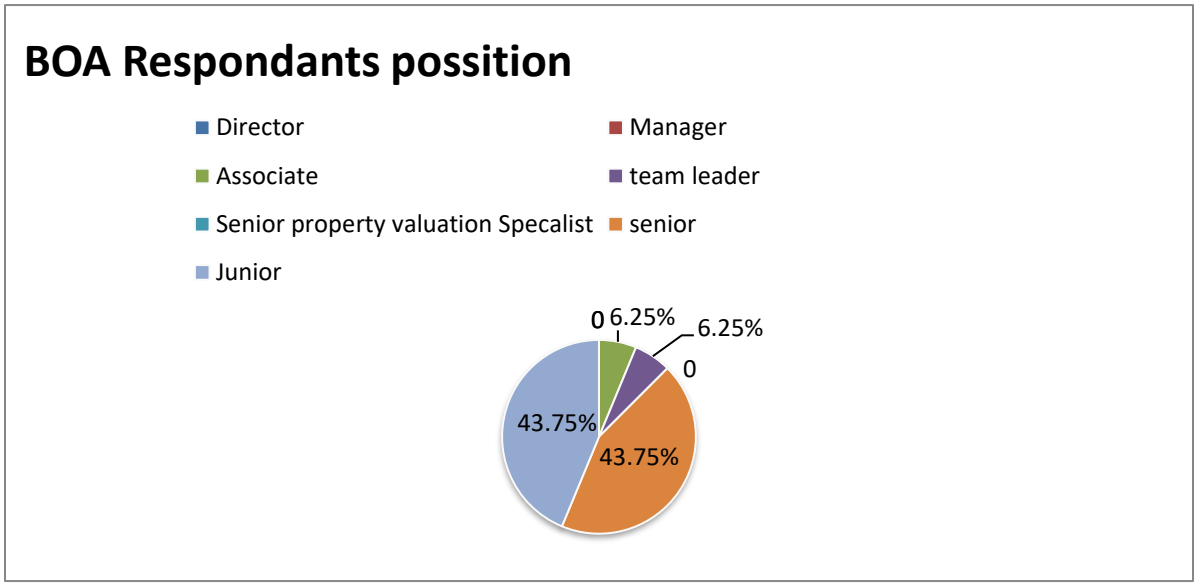

Fig 4.2: Bank of Abyssinia respondent's position

From the above Figs.4.1 & 4.2. shown that, the distribution of the respondents' position were of that in Bank of Abyssinia, one (6.25%) were associate and team leader for each. seven (43.75%) were seniors and junior for each from the total sixteen (16) Respondents.

In Dashen Bank, one (7.69%) were manager, director and senior property valuation specialist for each. Ten (76.92%) were senior from the total thirteen (13) distributed questionnaires, all were returned. This varied representation underscores the comprehensive nature of the study, capturing insights from professionals across different organizational hierarchies and responsibilities. The detailed breakdown of positions enriches the understanding of the respondent profile, facilitating nuanced interpretations of the study findings in relation to distinct job roles within the industry.

2. **Experience of respondents in both banks.**

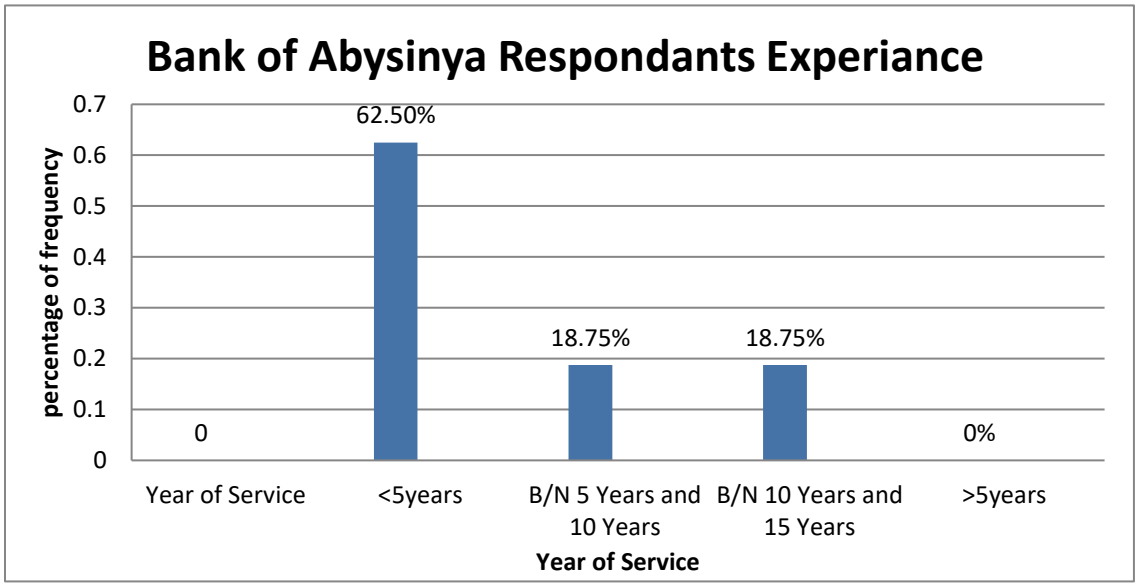

Fig 4.3 : Bank of Abyssinia experience of respondents.

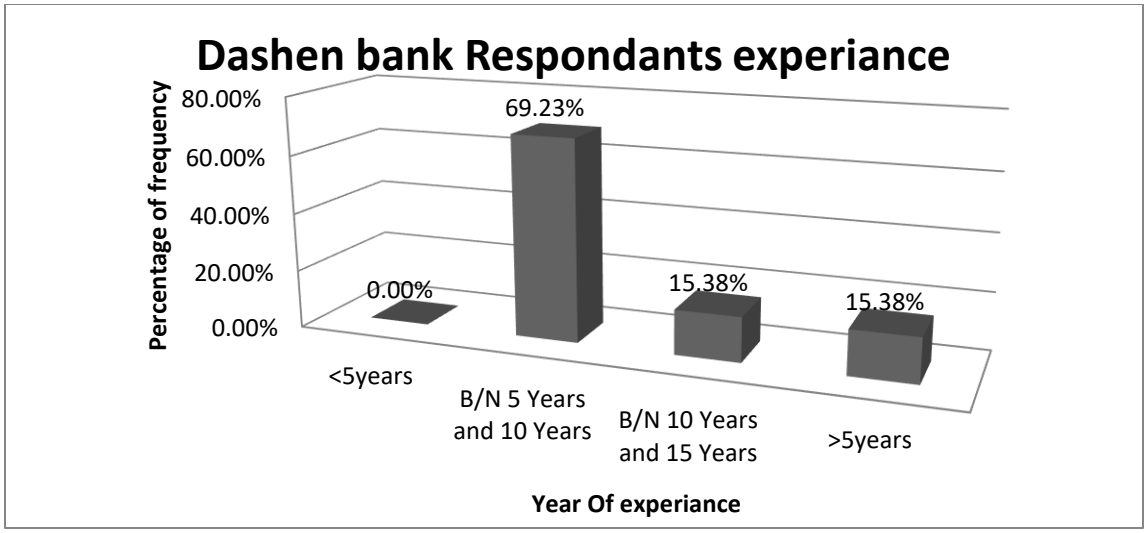

Fig 4.4: Dashen Bank experience of respondents

Fig. 4.3 & Fig.4.4. indicated that, among the 16 respondents, ten (62.50%) of the respondents' experience were have between less than five (< 5) years of experience. Three (18.75%) of the respondents' experience have between five to ten (5-10) years of experience. Three (18.75%) of the respondents' experience have between ten to fifteen (10 -15) years of experience in Bank of Abyssinia. In Dashen Bank, among the 13 respondents, nine (69.23%) of the respondents' experience have between five to ten (5-10) years, two (15.38%) of the respondents' experience have between ten to fifteen (10 - 15) years and two (15.38%) of the respondents' experience have above fifteen (15) years of experience. This distribution underscores the diverse career trajectories represented in the study, offering a comprehensive lens through which to examine the impact of varying experience levels on the variables under investigation. The detailed exploration of professional experience enhances the contextual richness of the findings, allowing for nuanced interpretations and implications within the broader landscape of the industry.

Table.4.1: Level of Education of respondents

Item		Bank of Abyssinia		Dashen Bank	
3	Level of education	Frequency	Percentage (%)	Frequency	Percentage (%)
	Diploma	0	0.00%	0	0.00%
	Degree	8	50.00%	9	69.23%
	Masters	8	50.00%	4	30.77%
	PhD	0	0.00%	0	0.00%
	Total	16	100.00%	13	100.00%

The above table 4.1 indicated that, eight (50%) of the respondents were have BSc degree and eight (50%) of the respondents were have MSc degree education levels in Bank of Abyssinia. In Dashen Bank, nine (69.23%) of the respondents were have BSc degree and four (30.77%) of the respondents were have MSc degree education levels.

4.2.2. Results, Analysis and Discussion on Questionnaire Survey

4.2.2.1. Assess the legal framework of commercial banks to determine the value of real property of collateral purpose.

Table 4.2: Legal Framework Analysis Result Bank of Abyssinia

Legal Framework (Q1,2&3)	N	Minimum	Maximum	Mean	Standard Deviation
Your Bank has a legal frame work (guideline) for real property valuation purpose?	16	4	5	4.688	0.479
Valuators use a clearly defined valuation method type during valuation of real property in Your bank.	16	3	5	4.063	0.574
Discrepancy occurs when valuators apply more than two valuation methods during	16	2	5	3.25	1

real property valuation process.					
Valid N (Listwise)	16				

Table 4.3: Legal Framework Analysis Result Dashen bank

Legal Framework (Q1,2&3)	N	Minimum	Maximum	Mean	Standard Deviation
Your Bank has a legal frame work (guideline) for real property valuation purpose?	13	4	5	4.77	0.439
Valuators use a clearly defined valuation method type during valuation of real property in Your bank.	13	3	5	4.38	0.650
Discrepancy occurs when valuators apply more than two valuation methods during real property valuation process.	13	3	5	3.77	0.725
Valid N (Listwise)	13				

The analysis results of both selected banks on the assessment of legal framework to determine the value of real property for collateral is shown on Table 4.2, Table 4.3 and Appendices I (Multiple question 1 up to 3) Shows that the main purpose of Real property valuation in both selected banks is Security of loans and Buying of Real property. So, in order to achieve those purpose both bank of Abyssinia:(Mean 4.688, SD: 0.479) and dashen bank (Mean: 4.77, SD: 0.439) use their own guide line particularly prepared by both organization itself for valuation of real property for collateral. In addition the use of their own manual bank of Abyssinia use combination of cost and sales and also combination of cost and income valuation methods and Dashen bank use only Combination of Cost and sales valuation methods(Technique) for valuation of real property for collateral (Mean: 4.063,SD: 0.574 for Bank of Abyssinia) and (Mean: 4.38,SD:0.650 for Dashen bank) but the analysis result shows that when the selected banks applies of two or more valuation method for their real property valuation for collateral there is a discrepancy between same real property value. The findings of this

section are in support of the findings of Elizabeth, 2017, Ermiyas teshome,2020 and Mantebea, 2006 but opposed of the finding of Biniyam Zenebe, 2017.

The study by Elzabeth found that in countries such as Ethiopia where property market is undeveloped the reliable and empirical transactional market evidence are almost unavailable, application of more than one valuation method is clearly very difficult; however, value estimation should be based on selection of one or more of methodologies that will best suit the type of subject property (Elizabeth, 2017).

The Finding of Ermiyas Teshome says that most of the banks in Ethiopia developed their own manuals, and some of the banks used nationally developed EBA's Manual.

According to the finding of Mantebea,2006 Property valuation is carried out in Ghana for various purpose such as for insurance, payment of compensation for state acquired lands, taxation, rent/lease, sale and mortgages (Security of loans).

The study by Biniyam zenebe found that banks wish to value the property by a method that doesn’t increase the market value. As a result, the cost method of valuation is to lower the value figure than the income and direct comparison methods. Therefore, the cost approach of valuation is to the advantage of the banks, that is why they rely using this method (Biniyam Zenebe, 2017).

4.2.2.2. To check the consistency of real property valuation methods.

Bank of Abyssinia analysis Outputs

Table 4.4: Analysis result of Variable 2(Supervisor)

Variable 2 (Supervisor)	N	Minimum	Maximum	Mean	Standard Deviation
There is Superintendent (Supervisor) during valuation process in your Bank?	16	1	5	3.50	1.461
Superintendent (supervisor) has a power to Change the valuation Result either under-estimate or overestimate?	16	1	5	2.69	1.078
Valid N (Listwise)	16				

Table4.5: Analysis result of Variable 3(Unit price)

Variable 3 (Unit Price)	N	Minimum	Maximum	Mean	Standard Deviation
In your Bank current market price assessment helps you to improve the property valuation procedure.	16	3	5	4.25	0.683
Inflation affects the valuation improvement in your Bank?	16	3	5	4.38	0.806
Valid N (listwise)	16				

Table 4.6: Analysis result of Variable 4 (Customer satisfaction)

variable 4(Customer satisfaction)	N	Minimum	Maximum	Mean	Standard Deviation
There is a remarkable variation in the property valuation process and results in different banks?	16	3	5	3.75	0.856
There is real property valuation perspective difference from the Bank and Customer side?	16	3	5	4.50	0.816
Customers claimed Banks about the fairness of real property valuation results.	16	2	5	3.69	0.873
Customers claim related to fairness of real property valuation results has impact on your Bank?	16	1	5	3.81	1.047
Valid N (listwise)	16				

Dashen Bank analysis Outputs

Table 4.7: Analysis result of Variable 2(Supervisor)

Variable 2 (Supervisor)	N	Minimum	Maximum	Mean	Standard Deviation
There is Superintendent (Supervisor) during valuation process in your Bank?	13	1	5	2.85	1.676
Superintendent (supervisor) has a power to Change the valuation Result either under-estimate or overestimate?	13	1	5	2.46	1.561
Valid N (Listwise)	13				

Table 4.8: Analysis result of Variable 3(Unit price)

Variable 3 (Unit Price)	N	Minimum	Maximum	Mean	Standard Deviation
In your Bank current market price assessment helps you to improve the property valuation procedure.	13	3	5	4.38	0.650
Inflation affects the valuation improvement in your Bank?	13	4	5	4.77	0.439
Valid N (Listwise)	13				

Table 4.9: Analysis result of Variable 4 (Customer satisfaction)

variable 4(Customer satisfaction)	N	Minimum	Maximum	Mean	Standard Deviation
There is a remarkable variation in the property valuation process and results in different banks?	13	3	5	4.38	0.650

There is real property valuation perspective difference from the Bank and Customer side?	13	3	5	4.46	0.660
Customers claimed Banks about the fairness of real property valuation results.	13	3	5	4.46	0.660
Customers claim related to fairness of real property valuation results has impact on your Bank?	13	3	5	4.15	0.689
Valid N (listwise)	13				

The analysis results of both selected banks to check consistency of real property valuation methods to determine the value of real property for collateral is shown on Table 4.4 up to Table 4.9 and Appendices 1 (Multiple question No-4) Shows that both banks have supervisor during real property valuation (Mean:4.25,SD:1.461 for bank of Abyssinia) and (Mean:2.85,SD:1.676 for Dashen bank) and these supervisor has a power to improve the value of estimated real property either under estimated or overestimated in both banks to maintain the consistence of Real property valuation value .(Mean:2.69,SD:1.078 value for bank of Abyssinia and Mean: 2.46,SD:1.561 value for Dashen bank).The analysis result shows that even if both banks have a supervisor to control valuators the respondents also agree there is a difference perspective on real property valuation value between Customer and banks during real property valuation .this different perspective creates claim related to Fairness of valuation this will lead to losing of Client on those banks(Mean:4.38,4.46,4.46,&4.15, SD:0.65,0.660,0.660& 0.689) . On the other hand those selected banks respondents answered that assessment of current unit price helps them to maintain consistence of real property valuation since it gives updated unit cost this will reduce inconsistence of valuation results.(Mean:

4.25,SD: 0.683 for bank of Abyssinia) and (Mean:4.38,SD:0.650 for Dashen bank).According to respondents even if assessment of current unit price maintain consistence of real property valuation on both banks inflation, The country economic growth and Change in Government policy are affect the consistence and improvement of real property valuation in those selected banks.(Mean :4.38,SD:0.806 for bank of Abyssinia and Mean :4.77 ,SD:0.439 for Dasen bank). The findings of this section are in support of the (Babawale, 2005) in Nigeria

The study by Babawale ,2005 found that in countries such as Nigeria high inflation, lack of reliable transaction information, discriminatory government intervention and lack of transparency in the market are among the problems that affect the consistency of real property valuation practice in Nigeria.

4.2.2.3. To assess the cause of variation for values given for the same collateral by the selected banks.

This objective is mainly answered (achieved) by the cause study and document analysis part.

4.3. Document Analysis

4.3.1. Bank of Abyssinia practice for real property valuation for collateral

According to Bank of Abyssinia Real Property Valuation manual June 2021, the proper method to be employed in the determination of the value of a property depend mainly on the purpose of the assignment, the type of value sought, the type of property under consideration, and the type and reliability of available comparable market data. The appropriate models developed for valuation of properties, as dictated by the purpose of the assignment and the types of property to be valued are discussed hereunder:

4.3.1.1. Bank of Abyssinia property class

For the valuation purpose, properties are generally classified into three major classes, namely:

- **Commercial /Investment Property:** A prospective Investor on commercial property will mainly be interested in the income-producing capacity of the property.
- **Residential Property;** Are those which are mainly developed for residential purposes, whether they are owner-occupied or rented out.
- **Specialized Property;** are those that, due to some specialized physical or geographical factor, offers very little utility for any purpose other than that for which they were originally designed.

4.3.1.2. Bank of Abyssinia minimum requirement of building to be held as collateral based on their valuation manual.

Foundation: It is mandatory that the building to be valued need to have a masonry foundation with a reinforced beam on top.

Floors: The building to be valued needs to have a screed concrete floor with a hardcore base.

Infrastructure: Connected private water mains, EELPA power connections are among basic requirements.

Fence: Only a stone fence made of cement mortar or HCB combination can qualify for collateral, no wooden and corrugated iron sheet/CIS/ fences will be considered.

Facilities: For toilet facilities, pit latrines of an internal water-based system with proper septic tank facilities are required.

Drainage: Rainwater gutter and downpipe are mandatory requirements.

Doors & Windows: Should be made of durable metal or seasoned wood, no corrugated iron sheet doors or windows will be considered.

Walls: External walls need to be plastered with cement sand mortal as a protective cover. Mud wall construction needs to have concrete grade beam and cement plastered external walls. Corrugated iron sheet walling will not be allowed for estimation.

Others: thatched roofs and constructions with traditional material need to be treated in consultation with the management.

4.3.1.3. Bank of Abyssinia real property valuation methods of measurement

This manual adapts the RICS Code of Measuring Practice, 5th Edition of The Royal Institute of Chartered Surveyors. For all practical purposes and reporting needs GEA (Gross External Area) as defined in the code shall be used for cost method and for other method international recommendable consideration will apply.

4.3.1.4. Bank of Abyssinia basis and method of valuation for collateral

Similar to EBA's Real Property Valuation Standard and The International Valuation Standards, valuations for loan security (Collateral) are based on market value. The valuation manual states that due to the constraint on availability of reliable transactional market data in the City, infancy of property market in the country, and difficulty of consistency in EBA's appraisal applications, only the Cost Approach and Income Approach are employed in the valuation of most of the class of properties.

4.3.1.5. Bank of Abyssinia real property valuation methodology

There are three generally accepted valuation approaches real properties. They are:

i. Cost Approach,
ii. Comparative Sales Approach and
iii. Income Approach

According to Bank of Abyssinia valuation manual, the process of completing the cost approach analysis involves carrying out tasks at various steps. There first step in the cost approach, as in any valuation exercise, require the collection of relevant documents and carrying out a property survey. This basic pre-analysis step mainly involves the following activities:

Step 1: Documents Required for Valuation

Prior to valuation, the CRM/Credit Administrator/ Attorney should identify the property and forward the following documents for valuation. Any exceptional case respective Managers confirm to precede the valuation.

Original and photocopy to confirm by the Valuator, otherwise CRM or Officer Should sign and confirm original seen.

The valuer shall at first collect the following relevant documents title certificate/s, construction permit/s for improvements, approved plan/s, specification and Bill of Quantities prepared by qualified professional /for improvements under construction/, other relevant documents deemed necessary for the specific task.

Step 2: Carry out a survey of the property/s to acquire relevant data:

Land and title/ownership information this includes : Confirm that the ownership information, plot orientation and dimensions indicated on the title correspond with the physical property, and take the owner's address., Measure the actual plot, to determine dimensions and plot area., Take note of any encroachments or reductions of vis-à-vis the title deed., Take note of the location of the property with respect to prominent landmarks., Determine holding type and remaining holding period., Identify any easements or restrictions.

Information on Improvements on the site includes: Measurement of buildings, compound works, fences, and ancillary facilities and comparison with permitted

constructions., Construction details and improvement category., Age/remaining lives for buildings, land, and improvements., Quantities, area, volume, size or capacity., Condition and depreciation information., Costing information (original cost and major refurbishment details and costing, where available).,Component information (where applicable).,Notes on special structures.

Neighborhood information includes: General use of property, Location, Type and width of access roads, Distance from the main road, Information on local development plans in the near future, Encumbrances on the site, Availability of basic utilities

Once relevant documents are collected, and a physical survey of properties is carried out to capture pertinent characteristics and parameters of the neighborhood and the specific property, there are five steps to completing the Cost Approach to Valuation.

Step-1: Estimate the replacement cost new (RCN) of all improvements to the land

Step-2: Estimates the accrued (accumulated) depreciation for each improvement.

Step-3: Calculate replacement cost new less depreciation (RCNLD) by deducting all accrued depreciation from replacement cost new for each improvement.

Step-4: Estimates the value of land rights.

Step-5: Add all replacement cost new less accrued depreciation to the calculated land value.

4.3.1.6. Bank of Abyssinia Building categories

- Villa (Lower Villa and Higher Villa)
- Multi-story buildings
- Multi-purpose Halls & Factory Buildings

4.3.1.7. Bank of Abyssinia Quality of Building Materials

Joinery Products

The quality of joinery products can be classified as follows: -

Low Quality: low quality solid wood made of strip panels or equivalent.

Medium Quality: Kerero plywood or equivalent

Quality: Mahogany plywood or equivalent

Best quality: Antique door with Mostra Walnut Veneer or equivalent

Sanitary Fixtures

A complete set of sanitary fixtures comprises water closet, hand washbasin, bathtub or shower tray, electrical water heater, glass mirror, towel hanger, soap and soft paper holders. For missing fixtures from the complete set or combination of different quality fixtures, the valuer shall professionally judge the percentage of those items.

Luxuries Quality: type sanitary fixtures, which are listed on best quality definition and automatic type. This are applicable only for three and above stars Hotels and residences high quality equal to diplomat buildings.

Best Quality: A complete set of European standard sanitary fixtures with automatic faucet, fiber glass bath tub, bidet and hand wash basin support

Quality: A complete set of sanitary fixtures with automatic faucet, ceramic bath tub, and decorated hand wash basin and support and water closet

Medium Quality: A complete set of sanitary fixtures with manual faucet, stainless steel shower tray, and hand wash basin without support

Low Quality: dry pit latrine

Electrical Fixtures

Low Quality: Surface mounted light and socket system

Medium Quality: Globes, TCS or equivalent fluorescent fittings

Best Quality: Chandler, Prismatic, reflector fluorescent fittings or equivalent.

Luxuries Quality: type electrical fixtures, which are listed on best quality definition but Cristal type. This are applicable only for three and above stars Hotels and residences high quality equal to diplomat buildings.

4.3.1.8. Bank of Abyssinia Building Condition Factors (BCF)

Degradation of building is inevitable due to detrimental actions from improper use, external factors such as weather, wear and tear, age and inadequate maintenance. So due to the above reasons Building Condition Factors Should consider to valuate real property.

The following maximum percentage of deduction factors shall be applied to building components in the determination of the physical depreciation of developments.

Table 4.10: Bank of Abyssinia Building Condition Factors (BCF)

No.	Types of structure	Types of houses and percentages			
		Lower villa	Higher villa	G+1 and above	Multi-purpose halls & factories
1	Foundation	26%	17%	17%	30%
2	Walling	11 %	5%	5 %	5 %
3	Roofing & Ceiling	18.5%	12%	8%	18.5%
4	Internal & external Openings	8.5%	14%	10%	4.5%
5	Wall finish	10%	13%	20%	6%

6	Sanitary and electrical fixtures	6%	6%	6%	4%
7	Super-Structure	0%	13%	13%	6%

Source: Bank of Abyssinia property valuation manual

Summary of Real property valuation for collateral by using Empirical equation method in Bank of Abyssinia

1) The cost of completed buildings with the relevant documents shall be estimated using the equations specified on manual. (Lower villa, Higher villa, Multistory & Multi-purpose)

2) The analytical equations derived for the purpose shall be applied for all possible current construction materials combinations as well as for external sanitary and electrical works that occur in the course of the valuation.

3) For valuation of compound and fence works, unit prices are computed based on current construction materials, labor wages, and equipment rental rates.

4.3.2 Dashen Bank practice for Real Property Valuation for Collateral based on their Manual.

According to Dashen Bank Real Property Valuation manual for real property pledged as collateral a combined result of ratio combination of Net income capitalization method with Depreciated Replacement Cost (DRC) Method is recommended. Moreover, it specifies real properties are often considered by the bank as back-up related to any risk associated with the loan they grant for a business. So, such property is expected to endure providing utility within the collateral period thereby easily marketable. Dilapidated buildings made of mud which doesn't last the collateral period and corrugated iron sheet shelters are by no means eligible to be considered as collateral.

4.3.2.1. Dashen Bank Building class determination

The lists here under can be used as a guide to determine the building class and quality. Four major building classification groups are considered against finishing material as an indicator depicting their respective class they belong. These are: -

- ❖ Multi – story commercial Buildings (Higher Class) that is buildings which have high quality finishing materials.
- ❖ Multi – story commercial Buildings (Normal Class). that is buildings which have no high quality finishing materials.
- ❖ Three story or less Residential and commercial buildings.
- ❖ Lower villa Residential and Commercial Buildings.
- ❖ Multipurpose Halls/ware houses (grain storage facilities).

In order to simplify building class determination, work categories are classified weighted as under listed.

i. General Condition of building considers the under listed work items. This includes: excavation & Earth Work, concrete Skeleton from (super + sub), block works and masonry, fence and site work & soundness of the building of current status.
ii. Block works (Internal + External walls) includes: brick construction, hollow Block construction, stone and Combined.
iii. Window, Door and Glazing this includes: Aluminum Door and Window + Tinted glass/or normal, metal profile Imitation Type Door windows 1, normal LTZ Door widow & Wooden Door = Window
iv. Finishing (General Quality) includes: internal wall finish, external wall finish, Floor Wall finish, stair and skating finishing works, toilet wall & floor finish & ceiling Decoration with Gypsum.
v. Roof and ceiling work includes: Roof – Harvey/Decra/Clay, ceiling – Parquet, PVC Décor, DPC (Damp Proof Course) work if one roof, guard rails & floor Tiles and coping works.
vi. Electrical & Sanitary and Mechanical works

Electrical	**Sanitary**	**Mechanical**
Light Points, Socket outlets Transformer, Fire Detection & Security installation, Site Electrical works, Electrical Board installation, Lightening Arrestor, Manhole and cover marks, Tele electrical installation, Data, Telecom, IP camera & EEPCO connection.	Sanitary Fixture, Domestic water supply system, Septic Tank, Sewerage line system, Water supply pipes for, Firefighting, Domestic water pump & Water Reservoir.	Elevator split system, AC Full system, Fire pump installation & Generator.

Table 4.11: Dashen Bank Building class and percentages determination

No.	Types of structure	Types of houses and percentages			
		Multi-purpose commercial buildings	G+1-G+3 (Commercial & Residential Buildings)	Lower G+0 Villa (Residential + Commercial Buildings)	Multipurpose halls/ ware house
1	General condition	18.8%	17.1%	12.8%	15.8%
2	Wall + wall finishing	33.8%	38.5%	32.1%	11.1%
3	Window door + glazing	16%	12%	21.8%	13.4%
4	Roof & ceiling	1.9%	6.8%	12.8%	34.8%
5	Floor finish	14.6%	12%	10.3%	12.3%
6	Sanitary & Electrical	15%	13%	10.3%	12.6%
	Total	**100%**	**100%**	**100%**	**100%**

4.3.2.2. Dashen Bank General methodology (Collateral estimation)

The collateral value Indexes made part of Dashen Bank manual are combined results of net income capitalized values and investment expenditures. The combination Ratio is 90% (Market income capital value) to 10% (Replacement Cost or investment expenditure) in Addis Ababa. However, in future this modality will be subjected to adjustment based on Market situations.

4.3.2.3. Dashen Bank Fence and Compound work

These components of a building are treated separately during estimation. A separate unit rates is prepared for Fence and Compound works estimation based on the materials they are made of and the finishing quality.

4.3.2.4 Dashen Bank Collateral Estimation

a) Ensure the property is fit to consider as collateral confirming it last collateral period as per policy.
b) Take photographic document of the property
c) Secure basic property right Legal Documents includes :land Holding Certificate (LHC) (Original),If leased plot, Lease agreement (Paid amount receipts), approved plans (Architectural) ,other Engineering Document (optional if availed collect) ,check Deviations on Land Holding Certificate (LHC) and Construction permit, check your Discretion limit, select and identify the building similar type from your manual that matches the collateral pledged (use the weight system), & discount for service year.

Table 4.12: Dashen Bank Collateral Estimation

No.	General Condition	Weight
1	Excavation and Concrete works	18.8%
2	Walling	33.8%
3	Window & Doors	16.0%
4	Floor Finish	14.6%
5	Sanitary and Electrical	15.0%
6	Roof	1.9%
	Sum	**100%**

Table 4.13: Look in to classified range category to identify your rate class to apply the manual

No.	Class	Condition	Weights
	Class 1	Excellent	90% - 100%
	Class 2	Good	80% - 90%
	Class 3	Average	70% - 80%
	Class 4	Economy	60% -70%
	Class 5	Poor	50% -60%

d) Calculate the foot print area of your Building

e) Location value

- ✓ Lease Hold – Total Lease Amount x $\frac{\text{Remaining lease period}}{\text{Total lease period}}$ - Paid amount
- ✓ Free hold – Total area x (Location value of appropriate grade on Land Holding Certificate (LHC)
- ✓ Result of g (location value) + Result of f (Bldg. value) = Total Collateral value
- ✓ Foreclosure value = $\frac{\text{Collateral value + Sales value}}{}$
- ✓ Sales value = Collateral value x 1.25 (overhead and profit)

4.3.3. Selected sample project estimation

4.3.3.1. Bank of Abyssinia real property valuation sample projects

Table 4.2: Bank of Abyssinia G+0 Residence property estimation form

No.	Bank of Abyssinia G+0 Residence property estimation form		
1	Project type: G+0 Residence	Date	4/18/2023
2	Location: Addis Ababa		
3	Sub-City: Bole Woreda 1		
4	Total Area	119.00m^2	
5	Rate/ Area	27,666.28 birr/ m^2	
6	Depreciated Replacement Cost	3,292,287.01 birr	
7	Total Internal Structures	-	Site Development work
8	External Sanitary Works	89,023.44 birr	
9	Septic Tank	148,407.11 birr	
10	Total Water Tanker and Stands	-	
11	External Electrical Intake Manholes	11,523.00 birr	
12	Total Fence Works	-	
13	Total Compound Works	426,209.46 birr	
14	Steam & Sauna	-	
15	Total Site Development work		
16	Total Site Development work	683,722.96 birr	
17	Total	3,976,009.97 birr	
18	Consultancy Fee	58,149.15 birr	
19	Total depreciated Replacement Cost	4,034,159.12 birr	
20	Total After Market Condition Factor	4,034,159.12 birr	
21	Location Value (LHC Area =500m2)	11,523,004.54 birr	
	Total Estimation Cost	15,557,163.65 birr	

Table 4.15: Bank of Abyssinia B+G+9 Building property estimation form

No.	Bank of Abyssinia B+G+9 Building property estimation form		
1	Project type: B+G+9 Building		
2	Location: Addis Ababa		
3	Sub-City: Bole (Around Dembel)		
4	Total Area/Volume	7,512.00 m^2	
5	Rate/ Area	50,028.82 birr/ m^2	
6	Depreciated Replacement Cost	375,816,522.06 birr	
7	Total Internal Structures	-	Site Development work
8	External Sanitary Works	751,633.04 birr	
9	Septic Tank	939,772.24 birr	
10	Total Water Tanker and Stands	-	
	External Electrical Intake Manholes	3,795,746.87 birr	
11	External Electrical Intake Manholes	1,352,939.48 birr	
12	Total Fence Works	854,209.94 birr	
13	Total Compound Works	1,250,704.00 birr	
14		-	
15	Total Site Development work		
16	Total Site Development work	8,945,005.57 birr	
17	Total	384,761,527.63 birr	
18	Consultancy Fee	6,396,660.40 birr	
19	Total depreciated Replacement Cost	391,158,188.03 birr	
20	Total After Market Condition Factor	391,158,188.03 birr	
21	Location Value (LHC Area =1,170m2)	67,067,350.00 birr	
	Total Estimation Cost	458,225,538.03 birr	

Table 4.16: Bank of Abyssinia Multipurpose Hall-Store property estimation form

No.	Bank of Abyssinia Multipurpose Hall-Store property estimation form		
1	Project type: Multipurpose Hall - Store		
2	Location: Addis Ababa		
3	Sub-City: Akaki Kality		
4	Total Volume	1,584.00 M^3	
5	Rate/ Area	3,736.17 birr/ M^3	
6	Depreciated Replacement Cost	5,918,090.51 birr	
7	Total Internal Structures		Site Development work
8	External Sanitary Works		
9	Septic Tank		
10	Total Water Tanker and Stands	159,112.09 birr	
11	External Electrical Intake Manholes		
12	Total Fence Works		
13	Total Compound Works		
14	Steam & Sauna		
15	Total Site Development work	159,112.09 birr	
16	Total Site Development work		
17	Total	6,077,202.60 birr	
18	Consultancy Fee	47,857.97 birr	
19	Total depreciated Replacement Cost	6,125,060.57 birr	
20	Total After Market Condition Factor	6,125,060.57 birr	
21	Location Value (LHC Area =1,000m2)	3,317,400.00 birr	
	Total Estimation Cost	9,442,460.57 birr	

4.3.3.2. Dashen Bank real property valuation sample projects

Table 4.17: Dashen Bank G+0 Residential Building real property collateral valuation form

Dashen Bank G+0 Residential Building real property collateral valuation form						
Project type: G+0 Residence			Location: Addis Ababa		Sub-City: Bole Woreda 1	
No.	Floor	Area	Building Class	Rate/ Area	Depreciation	D.R.C
	Main House	119	Class 3	44,389	100	5,282,291
	Compound Work	300	Mass Concrete	750	100	225,000
	Location Value	500		84,540	100	42,270,000
	Grand Total					47,777,291

Table 4.18: Dashen Bank B+G+9 Commercial Building real property collateral valuation form

Dashen Bank B+G+9 Commercial Building real property collateral valuation form						
Project type: B+G+9 Building			Location: Addis Ababa		Sub-City: Bole (Around Dembel)	
No.	Floor	Area	Building Class	Rate/ Area	Depreciation	D.R.C
	Basement Floor	794	Other	40,497	100	32,154,618
	Ground Floor	602	Other	60,848	100	36,630,496
	First Floor	701	Other	60,848	100	42,654,448
	Second-Eight Floor	4,916	Other	60,848	100	299,128,768
	Nine Floor	499	Other	47,644	100	23,774,356
	Additional Value	1	Other	25,873,794	100	25,873,794
	Fence Work	325	Fully HCB	2,070	100	672,750
	Compound Work	560	Checkered Tiles	1,215	100	680,400
	Location Value	1,170	Other	38,042	100	44,509,140
	Grand Total					506,078,770

Table 4.3:Dashen Bank Factory real property collateral valuation form

Dashen Bank Factory real property collateral valuation form						
Project type: Factory			Location: Addis Ababa		Koye Feche	
No.	Floor	Volume	Building Class	Rate/ Area	Depreciation	D.R.C
	Production Area	1,584	Class 3	5,080	100	8,046,720
	Fence Work	50	Left for plastering, Rendering or Pointing HCB	1,345	100	67,250
	Location Value	1,000	Class 3	8,650	100	8,650,000
	Grand Total					16,763,970

Based on the above tables (table 4.14-4.19) real property valuation sample projects, Bank of Abyssinia real property valuation manual for residential building as collateral valuation determination result of unit rate per meter area (27,666.28 birr for Construction cost and 23,046 Birr for Location value) is lower than the same place in Dashen Bank (44,389 birr for Construction cost & 84,540 birr for Location value) this implies that, Dashen Bank is preferable than Bank of Abyssinia in customer perspective of view. In Commercial Building real property collateral valuation method of unit rate analysis results in similar place Dashen Bank estimation rate per meter area (61,264 birr for Construction cost & 38,042 birr for location value) is greater than Bank of Abyssinia estimation rate per meter area (50,028.82 birr for construction cost & 57,322.52 birr for location value). In Factory real property collateral valuation unit rate analysis method in similar place and area the rate of Dashen Bank (5,080 birr/m3 for construction cost & 8,650 birr /m2 for location value) is greater than Bank of Abyssinia rate (3,736.17 birr/m3 for construction cost & 3,317.4 birr /m2 for location value). Finally, the rates of Dashen Bank valuation analysis are greater than Bank of Abyssinia unit rate analysis method. Based on the above result the research identifies as the main cause of the above variation are the ways of application of the same real property valuation approach and the use of different unit rate value for same location in order to determine location value.

4.4. General discussion of Real property Valuation practice for collateral Based on Case study

Real property valuation procedures employed by Bank of Abyssinia and Dashen Bank, similarities and variations are observed on major futures of the qualification and ways (procedure) employed for the valuation of property considered as collateral which may cause differences in estimated values of properties. Here I have discussed the observed similarities and differences in the valuation procedure of the two selected banks.

4.4.1. Regarding Minimum Qualification of Building to be held as Collateral

Generally, real properties are often considered by commercial banks in particular as a back-up to any risk associated with the loan they grant for a business. More or less, both the selected Banks do not consider real property as collateral if it is made of mud and its floor is not cement screed in addition if the property does not last the collateral period and corrugated iron sheet shelters. The minimum qualification for the elements of the building such as foundation, floors, internal and external wall, roof, door, and windows are similar.

4.4.2. Regarding Method of Measurement

Basically, for both banks Measuring Practice is to provide succinct, precise definitions to permit the accurate measurement of buildings and land, the calculation of the sizes (areas and volumes), and the description or specification of land and buildings on a common and consistent basis. Except a slight difference on measurement of internal structure of the building (Such as Kitchen cabinet, Cupboard etc.).

4.4.3. Regarding method of valuation

According to International Valuation Standard, Real property valuation approaches include Cost approach, Sales Comparison approach, and Income approach. Each valuation approach has alternative methods of application. To apply the above methods

the following factors are considered i.e Local standards (Manuals) ,valuer's expertise and training and available data. Unless expressly required by statute or by other mandatory requirements, no one valuation approach or single valuation method necessarily takes precedence over another. In some jurisdictions and/or for certain purposes more than one approach may be expected or required to arrive at a balanced judgment.

According to Bank of Abyssinia and Dashen bank valuation manuals Cost Approach is the proper method to be employed in the determination of the value of a real property..

But in both selected banks the way of application of cost approach for valuation of real property for collateral is not the same. According to bank of Abyssinia Empirical equation method (factor method) is applied where as Dashen bank Fixed Unit rate is applied so due to these different ways of approach the estimated amount of the same Real property which are located on the same place has different value.

4.4.4. Regarding land valuation

In Ethiopian Land is property of the Government and the people hence is not physically transferrable. Various form of land use is legally transferable when one attempts to value real property and land.

In the case of both Banks, the values of land holding rights (LHR) to properties held on a permit basis in Addis Ababa are estimated based on prepared Empirical Equation. These Empirical equation is the function of Plot Area, Zone & Plot Grad . then the land holding value will be calculated (Estimated) in Birr/m2 by considering market value indicative. For plots of land held on lease basis, the value of landholding right will be calculated by deducting liabilities on the title to the Lease Office from the indicative value calculated using the empirical equation, in proportion to the remaining lease period. In addition for both banks when land grade indicated on Land Holding Certificate (LHC) doesn't reflect the current development, the Engineer (Valuator) may fix the land grade based on the existing development status of the neighborhood, proximity to the main road and other

factors this may also the cause of variation of real property estimated value for both banks.

In addition, the market indicative value (unit rate list applicable for land grade) in both banks is different due to different factors consideration during current market price assessment.

Chapter 5

5. CONCLUSION AND RECOMMENDATION

5.1. Conclusion

This chapter presents the conclusion and recommendation of the research which are based on the results of data analysis and discussion made on the previous chapter. Recommendations will be forwarded to assessment on real property valuation practice for collateral in selected banks in Addis Ababa. Conclusions for this study will also be based on the objectives of the research. All objectives of the research have been achieved and the research agreed out has shown that real property valuation practice for collateral in selected banks. The following conclusions and recommendations are drawn from the investigation undertaken on the research.

Accordingly, in studying the base for proper valuation method selection, literatures indicates the purpose of valuation required and the type of property that is to be valued will determine the nature of the valuation instruction, including the techniques employed and the basis on which value is to be estimated but based on my Research , currently the purpose of valuation by banks are to estimate the value of property held as collateral either for loan security, purchasing (Buying) of real property project financing or foreclosure. In most of the case the base for the selection of the method of valuation is the type of property held as collateral. Currently both selected banks have its own valuation manual and procedure in performing valuation.

As this Research indicates value obtained from the valuation process not only depends on the method of valuation & the purpose of valuation but also on the person conducting the valuation which is the valuator. As valuation is a combination of knowledge and skills that accumulated from studies and job experience, the valuer role will be to advise as what would be the best figure obtainable for a given market, at specific date so the qualification of the valuator is a prim factor in the process.

Internationally qualification like the academic/professional qualifications, demonstrated technical competence, member of a professional body, demonstrated commitment to ethical standards, compliance with state legal regulations is considered but in our country banks valuators academic qualification is the primary factor taken under consideration.

Literatures indicate the method of valuation will be different based on the type of property. for example: commercial buildings will not be evaluated by the same valuation method as residential building similarly choose of valuation method for warehouses will not be the same as apartments. In most of our banks similar method of valuation is employed despite the type of properties and the cost replacement method is the preferred method of valuation. The research has found that both selected banks has get the chance to valuate almost all type of properties including: residential buildings, commercial buildings from G+0 to high rising buildings, factory, condominium, and special use facilities like gas stations.

The researcher has found and able to understand from this research that both selected banks follows more or less common procedures regarding collecting the relevant document and carrying out property valuation for collateral which the researcher has tried to conclude and draw the process map starting the minimum document requirements to the valuation process:

First documents regarding the property will be submitted to the loan/ credit committee of the bank and this division order the client to submit required documents which may include;

- Landholding certificate (LHC) (attested copy)
- Approved architectural plans with site plan on it (Original)
- Lease agreement, if land holding is on lease basis
- Bill of quantity (not mandatory)

After this, the loan committee checks the submitted documents according to the company credit policy and procedures of the bank and also directives of municipalities or sub-cities

pertinent to property valuation and decide on the sufficiency of the given property for valuation. If it is decided to be evaluated then it will order the valuation department to conduct the valuation. Based on the request and order given by the committee assigned valuator will carry out a survey on the property to acquire relevant data for the valuation.

The survey may include; Land and title/ownership information ,Confirm that the ownership information, plot orientation and dimension indicated on the title corresponds with the physical property, Carryout measurement of actual plot, to determine dimensions and plot area, Take note of location of the property with respect to prominent land marks, Identify any easements or restrictions, Information on improvements on the site, Measurement of buildings, compound works, fences and ancillary facilities, Construction details and improvement category, Condition and depreciation information, Neighborhood information, Take representative picture, General use of property, Location, Type and width of access road, Distance from main road & Availability of basic utilities

Once relevant documents are collected and physical survey of properties are carried out to capture the pertinent characteristics and parameters of neighborhood and specific property the valuator maker interprets the data, estimates the value of collateral based on the bank valuation method and produces collateral estimation result reports then the collateral valuator checker, checks and ensures the appropriateness of all collateral property documents and the valuation process undertaken by the valuator maker. The valuator checker may conduct site visit to countercheck the physical conditions of collateral properties, if necessary then he confirms the genuineness of collateral estimation results reports.

About the practice of land valuation, it can be concluded that there is no valuation for land in any of the banks in Ethiopia but they consider the land use right of the given property in the valuation process. The existing land legislation in our country ignore land value as land is public property and hence no compensation should be considered for the

property of the government. Here are the main challenges and difficulties in land valuation:

Finally, about practice of the property valuation it can be said that:

- Regarding valuation method: there is no significant change in the valuation method and procedures employed in the valuation process. The reason could be banks want to avoid risks and stick to use valuation method like cost replacement method which don't give representative value of the market, due to unavailability of realistic market data & information, banks tend to relies on more general valuation method and also the instability of the market unable banks not to foresee the future to take reasonable risks.
- Regarding Way of conducting valuation method: there is no any similarity between Banks on the application of same valuation method and this will lead a high variation of valuation results of the same property.
- Regarding valuation trend and competition between banks: there is high variation of valuation result between banks. One bank property valuation result highly varies from other bank valuation result of the same property valued at the same year which makes customers to search and find the best offer at different banks before accepting the result. Nevertheless, it has been noticed that there is an increase in customer requesting for valuation and there is high competition between banks.

5.2. Recommendations

These researches were intended to study the practice of real property valuation for collateral in selected banks in Addis Ababa and hence on the basis of the research finding recommendation are given here below;

- It is better to use similar valuation methods, standards and best practices with similar properties in similar areas.
- Banks should not stick to one or two valuation method in fear of the problem of loan recovery. Valuation method selection at least shall be based on type of property.
- At least elements of the EBA's real property valuation manual be enforced by each member bank.
- digitalize and make information exchange between Banks easy.
- Selection of valuation method shall not only base in protecting the bank interest by not taking any risk but customer satisfaction shall also be considered by providing market representative value.
- Banks Should Arrange training program for their valuators.

References

Aluko, B. T. (2007). Examining valuers' judgment in residential property valuations in metropolitan Lagos, Nigeria. Property Management.

Appraisal Institute. (2001). The Appraisal of Real Estate (12th Edition). Chicago: Appraisal Institute.

Aspelmeier, J. (2005) Table of critical values for Pearson's r.

Babawale, G. K., & Ajayi, C. A. (2011). Variance in residential property valuation in Lagos, Nigeria. Property Management.

Babawale, G. (2012). An assessment of the current standard of real estate valuation practice in. Elixir International Journal.

Biniyam Zenebe. 2017. Effectiveness of income valuation method as an alternative. 2017.

Chang-Richards, A. Y., Wilkinson, S., Seville, E., & Potangaroa, R. (2011). Identifying factors affecting resource availability. University of Canterbury. Civil and Natural Resources Engineering. Retrieved from University of canterbury Web site: http://hdl.handle.net/10092/11689

Elizabeth, S. (2017). Assessment of Real Property Valuation Method Practice in Ethiopian Banks-In Addis Ababa.

Elli Pagourtzi, Vassilis Assimakopoulos, Thomas Hatzichristos, Nick French,. 2012. Real estate appraisal:a review of valuation methods . Athens,Greece : Journal of Property Investment & Finance, 2012.

EMF-ECBC. (2017). Study on the Valuation of Property for lending purpose. European Mortgage Federation-European Covered Bond.

Ermiyas Teshome. 2020. PRACTICE OF REAL PROPERTY VALUATION FOR COLLATERAL:CASE STUDY ON SELECTED BANKS. 2020.

Ethiopian Bank Association's. 2016. EBA REAL PROPERTY VALUATION MANUAL. 2016.

Ethiopia, National Bank of. 2010. National Bank of Ethiopia Report. 2010.

Gadkari,j.k.(2006). Valuation for Banking .CEP.Chennai: https://www.pvai.org/valuation_for banking .php.

Geltner, David M. 2004. Commercial Real Estate Analysis and Investments. Massachusetts : Massachusetts Institute of Technology, 2004.

Georgia Warren Myers. 1013. "Is the valuer the barrier to identifying the value of sustainability. 1013,

Habitamu Bishaw ,2020. Understanding the bases and approaches of Mortgage Valuation in Ethiopia .

IVS Council. (2011). International Valuation Standard. London: The International Valuation Standard Council.

K.Adetiloye, P.Ekw. 2014. 2014, Asian Economic and Financial Review. A Review of Real Estate Valuation and Optimal Pricing Techniques.

Mantebea, T. (2006). Property Valuation in Ghana: Constraints and Contradictions.

Miller & Geltner, David M. 2004. Commercial real estate Analysis and Investments. Massachusetts : Massachusetts Institute of Technology, 2004.

Millington, A.F. 2000. An Introduction to property valuation. UK : Elsevier to, 2000.

Mintesnot Seyoum(MA) & Semeneh Bessie (PhD). 2018. The Impact of National Bank of Ethiopia's 27% Bond Purchase Directive on Credit Performance and Profitability of Private Directive on Credit Performance and Profitability of Private. 2018.

National Bank of Ethiopia. 2010. National Bank of Ethiopia Report. 2010.

Onyejiaka, Joseph Chukwudi, Oladejo1, Esther Ifeanyichukwu2, Emoh, Fidelis Ifeanyi3. 2015. CHALLENGES OF USING THE COST METHOD OF VALUATION IN VALUATION PRACTICE: A CASE STUDY OF SELECTED RESIDENTIAL AND COMMERCIAL PROPERTIES IN AWKA AND ONITSHA, ANAMBRA STATE, NIGERIA..

Pornchokchai. 2006. Kuala Lumpur, Malaysia : s.n., 2006. paper presented at the world valuation congress XI. A Road Map for the Development of Valuation Infrastructure in Developing Countries.

(RICS), Royal Institution of Chartered Surveyors. 2012. RICS Valuation – Professional Incorporating the International Valuation Standards. Norwich : the Royal Institution of Chartered Surveyors (RICS) Surveyor Court, 2012.

Standards, RICS Valuation – Professional. 2012. RICS Valuation – Professional Standards: Incorporating the International Valuation Standards. Norwich : Incorporating the International Valuation Standards, 2012.

Standard, International Valuation. 2011. International Valuation Standar. London : The Interanational Valuation Standard Council, 2011.

Tirsit .L,2018 . The nature of property valuation for mortgage lending purpose in the case of Bahirdar city .

Walker,H.W. Degree of Freedom .Journal of Educational psychology .31(4)(1940)253-269

Warren-Myers, Georgia. 1013. 1013, Journal of Property Investment & Finance, pp. pp. 345 - 359. Is the valuer the barrier to identifying the value of sustainability.

Wyatt, P. 2007. Property valuation in an economic context. s.l. : Blackwell publishing, 2007.

Zenebe, Biniyam. 2017. Effectiveness of income valuation method as an alternative. Addis Ababa : s.n., 2017.

A. Formats of Site Development

	Total Depreciated Repacement Cost			**375,816,522.06**		
	Total Area In the compound			**7,512.00**		
	0 Internal Structure					
	1 Septic tank					
	Capacity determination of septic tank					

No.	Building's total floor area* in M^2	Capacity of septic tank in M^3
1	Below 200	10
3	1000	20
4	2000	30
5	3000 and Above	60

					7,512.00	
			value		60.00	
Costing of septic tanks						
For masonry septic tank						
	Y=7332.18X+75085.31	X =		60.00		
		Y =		**515,016.11**	**515,016.11**	
	2 External Water supply and Drain Lines					
	a) For a total built-up area of a upto 200m2					
	Y= 4.37-0.014X	X =		7,512.00		
		y				
	d) For a total built-up area of buildings in the compound					
	Y=0.2					
	E=YP	**E=**		**751,633.04**	**751,633.04**	
	Where P is the total building cost					
	3. External Electrical Works					

No	Building's total floor area in M^2	Percentage of total building cost for		
		Intake line & manholes	Compound lighting	Total
1	Below 200	0.35	0.26	0.61
1	200	0.35	0.26	0.61
3	1000	0.59	0.45	1.04
4	2000	0.89	0.69	1.58
5	3000 and above	1.01	0.36	1.37

					7,512.00
	External Electrical Intake Manholes		**3,795,746.87**	interpolated value	1.01
	External Electrical Compound Lighting			interpolated value	0.36
		381,305,127.54			

No	Project cost	Consultancy as % of project cost
i	0.0 - 1,500,000.00	4.25
ii	1,500,001.00 -3,000,000.00	3.75
iii	3,000,001.00- 9,000,000.00	3.25
iv	9,000,001.00 - 15,000,000.00	2.75
iii	3,000,001.00- 9,000,000.00	3.25

				8,945,005.57

No	Specific Consultancy Service	Percentage
i	Architectural	45%
ii	Structural	30%
iii	Electrical	10%
iv	Sanitary	10%
v	Quantity surveying and cost estin	5%

		1,016,590.89	
Consultancy fee	**9,961,596.46**		

Appendices I

Spss outputs of Multiple Questions
Part 1

Bank Of Abyssinia

Question. 1 Frequencies

	N	Responses Percent	Percent of Cases
Purchasing of real property	13	27.7%	81.3%
Selling of Real Property	10	21.3%	62.5%
(Guaranty) Security of loans	16	34.0%	100.0%
Tax Assessment	1	2.1%	6.3%
Rental Purpose	3	6.4%	18.8%
Asset Acquisition	4	8.5%	25.0%
Total	47	100.0%	293.8%

Question. 2 Frequencies

	Responses N	Percent	Percent of Cases
Cost approach method	4	23.5%	25.0%
Combination of Cost and Sales Technique	6	35.3%	37.5%
Combination of Cost and Income Technique	6	35.3%	37.5%
Combination of Sales and Income Technique	1	5.9%	6.3%
Total	17	100.0%	106.3%

Dashen bank

Question. 1 Frequencies

	Responses N	Percent	Percent of Cases
Purchasing of real property	13	27.7%	81.3%
Selling of Real Property	10	21.3%	62.5%
(Guaranty) Security of loans	16	34.0%	100.0%
Tax Assessment	1	2.1%	6.3%
Rental Purpose	3	6.4%	18.8%
Asset Acquisition	4	8.5%	25.0%
Total	47	100.0%	293.8%

Question. 2 Frequencies

	Responses N	Percent	Percen of Cases
Cost approach method	3	23.1%	23.1%
Combination of Cost and Sales Technique	6	46.2%	46.2%
Combination of Cost and Income Technique	4	30.8%	30.8%
Total	13	100.0%	100.0 %

Question. 3 Frequencies

	Responses N	Percent	Percent of Cases
Nationally Prepared Manual	5	25.0%	31.3%
Particularly prepared by the Bank itself	15	75.0%	93.8%
Total	20	100.0%	125.0%

Question. 4 Frequencies

	Responses N	Percent	Percent of Cases
The country economic growth activity	11	22.4%	68.8%
Availability of Expert in the country	2	4.1%	12.5%
Change in Government policy	12	24.5%	75.0%
Growth of private business makers or developers	3	6.1%	18.8%
Learning and growth of the professional/ asset valuator	6	12.2%	37.5%
Inflation	15	30.6%	93.8%
Total	49	100.0%	306.3%

Question. 3 Frequencies

	Responses N	Percent	Percen of Cas
Nationally Prepared Manual	5	31.3%	38.5%
Particularly prepared by the Bank itself	11	68.8%	84.6%
Total	16	100.0%	123.1%

Question. 4 Frequencies

	Responses N	**Percent**	**Percent of Cases**
The country economic growth activity	12	37.5%	92.3%
Availability of Expert in the country	2	6.3%	15.4%
Change in Government policy	6	18.8%	46.2%
Growth of private business makers or developers	3	9.4%	23.1%
Learning and growth of the professional/ asset valuator	4	12.5%	30.8%
Inflation	5	15.6%	38.5%
Total	32	100.0 %	246.2%

Question. 5 Frequencies

	Responses N	Percent	Percent of Cases
The method to employed for Real Property valuation	6	20.0%	37.5%
The purpose of the valuation	5	16.7%	31.3%
Experience of valuator	10	33.3%	62.5%
Guideline of Real Property Valuation	9	30.0%	56.3%
Total	30	100.0%	187.5%

Question. 5 Frequencies

	Responses N	**Percent**	**Percent of Cases**
The method to employed for Real Property valuation	**4**	**17.4%**	**30.8%**
The purpose of the valuation	**8**	**34.8%**	**61.5%**
Experience of valuator	**5**	**21.7%**	**38.5%**
Guideline of Real Property Valuation	**6**	**26.1%**	**46.2%**
Total	**23**	**100.0%**	**176.9%**

Appendices-2

Questioners

Dear respect,

The aim of this questionnaire is to bring about information on practice and its to assess real property valuation practice for collateral in the case of two selected Ethiopian private commercial banks. A for research purpose designed to fulfill an academic requirement for MSc degree program in Construction Technology and Management (CoTM), Addis College. The objectives of this thesis is assessment on real property valuation practice for collateral in Addis Ababa in the case of two selected Ethiopian private commercial banks. In addition, its specific objectives are:

- Assess the legal framework of commercial banks to determine the value of real property of collateral purpose.
- Assess the purpose and methods of valuation practiced for those selected banks to determine the value of real property for collateral purpose.
- To check the consistency of real property valuation methods.
- To assess the cause of variation for values given for the same collateral by the selected banks..

The information supplied in this completed questionnaire was be used for academic purposes only. All specific company and respondent information was be kept confidential at all times. Only generalized analysis of the information contained within this completed questionnaire was be utilized in the research process. Feel free to give your own views and information on this matter according to the best of your knowledge.

Thank you for your cooperation

Yirga Tesfaye

QUESTIONNAIRES

Company/ Bank Name ……

Part I. PERSONAL DETAILS FOR RESPONDENTS

Item		Mark (x)
1	**What is your Position?**	
	Director	
	Manager	
	Principal	
	Team leader	
	Senior	
	Junior	
2	**Which of the following corresponds to your experience in property valuation?**	
	Less than 5 Years	
	Between 5 to 10 Years	
	Between 10 to 15Years	
	More than 15 Years	
3	**What is your level of education?**	
	Diploma	
	Degree	
	Masters	
	PhD	

PART II: QUESTIONNAIRES

Choose the best one based on your bank trend. (Make A circle of your answer)

1) Which one is the reason or purpose of Real property valuation in your Bank?
   - A. Purchasing of real property
   - B. Selling of Real Property
   - C. (Guaranty) Security of loans
   - D. Tax Assessment
   - E. Rental Purpose
   - F. Asset Acquisition

2) Select the types of property valuation techniques that you use in your bank?
   - G. Cost approach method
   - H. Sales comparison
   - I. Income capitalization approach method
   - J. Combination of Cost and Sales Technique
   - K. Combination of Cost and Income Technique
   - L. Combination of Sales and Income Technique

   If other …….

3) During Your real property valuation process experience what kind of Guideline do you use in your Bank?
   - A. Particularly prepared by the organization itself
   - B. Nationally Prepared Manual
   - C. International Standards

   If other…….

4) Select factors that affect the valuation amendment (improvement) in your Bank?
   - A. The country economic growth activity
   - B. Availability of Expert in the country
   - C. Change in Government policy
   - D. Growth of private business makers or developers
   - E. Learning and growth of the professional/ asset valuator
   - F. Inflation

5) What is the cause of variation for real property valuation in your Bank?
   A. The method to employed for Real Property valuation
   B. The purpose of the valuation
   C. Experience of valuator
   D. Guideline of Real Property Valuation
   If other …….

PART III: QUESTIONNAIRES

Instructions for completing the questionnaire

Please complete the attached questionnaire by using the following instructions.

For understanding and opinion, questions indicate by using the following rating scale and designation.

- 5 = Strongly agree
- 4 = Agree
- 3 = Neither Agree nor Disagree
- 2 = Disagree
- 1 = Strongly disagree

Item		**5**	**4**	**3**	**2**	**1**
1	Your Bank has a legal frame work (guideline) for real property valuation purpose?					
2	Valuators use a clear defined valuation method type during valuation of real property in Your bank.					
3	Discrepancy occurs when u applies more than two valuation methods during real property valuation process.					
4	There is Superintendent (Supervisor) during valuation					

	process in your Bank?					
5	Superintendent (supervisor) has a power to Change the valuation Result either under-estimate or overestimate?					
6	In your Bank current market price assessment helps you to improve the property valuation procedure.					
7	Inflation affects the valuation improvement in your Bank?					
8	There is a remarkable variation in the property valuation process and results in different banks?					
9	There is real property valuation perspective difference from the Bank and Customer side?					
10	Customers claimed Banks about the fairness of real property valuation results.					
11	Customers claim related to fairness of real property valuation results has impact on your Bank?					

Part IV: Case Study

Valuation of different types of real property.

No	Types of property	Number of properties valuated (in Number)
1	Residential building	1
2	Commercial building	1
3	Industrial building	1