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COLLEGE OF BUSINESS AND ECONOMICS

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CREDIT REFERENCE BUREAU REPORT AND LENDING DECSION OF PRIVATE COMMERCIAL BANKS IN ETHIOPIA

By

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Declaration

I, Endalamahu Sileshi declare that, this paper prepared for the partial fulfillment of the requirements for MBA. Degree in Finance entitled "***Credit Reference Bureau Report and Lending Decision of private Commercial Bank in Ethiopia***" is prepared with my own effort. I have made it independently with the close advice and guidance of my advisor.

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Signature ——————————

Date ——————————

Certification

This is to certify that ***Ato Endalamahu Sileshi*** has carried out this research work on the topic entitled "***Credit Reference Bureau Report and Lending Decision of private Commercial Bank in Ethiopia***" under my supervision. This work is original in nature and itis sufficient for submission for the partial fulfillment for the award of ***MBA. Degree in Finance.***

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This is to certify that the thesis prepared by Endalamahu Sileshi, entitled: **Credit reference bureau report and Lending decision of private Commercial Banks in Ethiopia** and submitted in partial fulfillment of the requirements for the Degree of Master of Business Administration (Finance) complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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ABSTRACT

With the adoption of the Credit Reference Bureau regulation in Ethiopia in 2012, Commercial banks in Ethiopia have been mandated to share credit information with the CRBs in order to set up a database for all borrowers and enable checks and balances in the credit market. Therefore, the purpose of this study was to identify the role of CRB on lending decision of private commercial banks in Ethiopia. Specifically, the study sought to examine the following research objectives: the registration process, the information collected from borrowers, the information update by other banks, the use of the credit information and the regulatory requirement. The study used a descriptive research design and adopted the mixed research approach. The study used questioner and interview as a data collection method. The target population was 128 employees working in private commercial banks as a credit analyst and credit officer and 6 directors and 7 division managers were participated in the interview. The sample size of the study was 97 employees and the study used convenience sampling technique to draw the sample responses of the questionnaires were analyzed, processed and tabulated by use of a computer Statistical Package for Social Science (SPSS) version 23.0 program. The data collected was cleaned then coded and checked for any errors and omissions. Frequency tables and percentages were used to present the findings. The study found out that almost 100% agreed that registering in credit information system needs to get permission from the bureau, on average 70% of the respondent agreed that commercial banks use the credit information for lending decision, 58% of disagreed that the information collected from borrower are not accurate, 79.4% of the respondent agreed that banks update credit information of their borrowers continuously and almost 100% of the respondent agreed that the regulatory requirement meet by the banks. The study recommended that the credit reference bureau to upgrade the server, to use multiple sources to compiled the data, put stringent penalties for those who violates the directives, and also the study recommends the commercial bank management to use the credit history of the borrower to set interest rate.

Key words: *Credit Reference bureau, Credit information sharing.*

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List of Acronyms & Abbreviations

CIS	Credit Information System
CRB	Credit Reference Bureau
CRS	Credit Reference system
IFC	International Finance Corporation
NBE	National Bank of Ethiopia
PCR	Public Credit Registries
SMES	Small and Medium Enterprise
TIN	Tax Identification Number

CHAPTER ONE

INTRODUCTION

1.1 Back ground of the study

In Ethiopia, commercial banks play an important role in mobilizing financial resources for investment by extending credit to various business and investors. The main tasks of commercial banks are to offer loans, however, the major concern of any lender while advancing credit is how they will get their money back and this implies that the engagement between lenders and borrowers is accompanied by certain level of risk (Fleisig, 1995). The major types of risks faced by lending institutions globally include market risk, operational risk and performance and credit risk. The level of each type of risk mostly depends on the atmosphere that the financial institution is conducting its operation.'' Credit risk is the potential that a bank borrower or counter party will fail to meet its obligations in accordance with agreed terms "(BIS 2000, p.5). Alternatively, credit risk defined as the risk that unexpected change in a counter party's credit worthiness may generate a corresponding unexpected change in the market value of the associated credit exposure Sironi & Resty (2007). The risk attributable to loan default lead to high effective borrowing rates, through a risk premium that varies with the exposure to default. This is because the bank has to undergo cost to carefully evaluate and closely monitor the risk, especially in an environment where probability of default is high Parlour & Winton (2008).

Credit function is the main income generating activity for the Banks. This activity also involves huge risks to both the lender and the borrower. The risk of a business partner not fulfilling obligation as per the contract on due date or anytime thereafter can greatly expose the smooth functioning of Bank's business. On the other hand, a Bank with high credit risk has high bankruptcy risk that puts the depositors in risk. In order to survive and maintain adequate profit level in this highly competitive environment, Banks have tended to take excessive risks. However, it exposes the banks to credit risk. The higher the Bank exposure to credit risk, the higher the tendency of the Banks to experience financial crisis and vice-versa. The Basel Committee on Banking Supervision (1999) states that loans are the largest and most obvious source of credit risk.

The problem of nonperforming loans due to loan defaulters is one of the major causes of financial losses experienced by financial institutions. According to Basel II recommendations (Bank Committee of Banking Supervision, 2005), financial institutions in the world need to impress on the best credit risk management practices in order to avoid non-performing loans which affect their financial performance. These non-performing loans are caused by bad borrowers who are not credit-worthy. Financial institutions therefore must find a mechanism that can help to collect and store information concerning borrowers who are not only credit-worthy but also who have good credit histories. This is achieved through organizations called Credit Reference Bureaus (CRB). According to Rehm, (2002) financial institutions should improve their capabilities on management of non-performing loans and avoid management of nonperforming loans during the lending process by use of information sharing by Credit Reference Bureaus.

An increase in Commercial Bank credit risk gradually leads to liquidity and solvency problems. This two are basic risks for banks need to administer properly otherwise solvency is reduced by bad loans, negative equity almost always comes about from lending to borrowers who can't repay their loans and thus the bank incurs losses on those loans. The second key risk for banks is liquidity. Liquidity issues arise as a result of banks undertaking maturity transformation, which is taking short term deposits and lending out them out for longer terms. Those problems lead commercial banks may failed. Robert and Gary (1994) state that the most obvious characteristics of failed banks is not poor operating efficiency, however, but an increased volume of nonperforming loans.

According to NBE the introduction of CRBs in our financial landscape is an effort to encourage sharing of information by institutions so as to reduce the incidences of serial defaults by bank customers as well as minimize the incidences of non-performing loans. Credit information sharing will allow banks to distinguish between good and bad borrowers. Borrowers on the other hand will benefit from their credit histories and those blacklisted will send a moral check to maybe moral hazard counterparts. This study therefore sought to assess on the role of credit reference bureau's report on lending decision, of private commercial banks in Ethiopia.

1.2 Credit Reference Bureau in Ethiopia

Banks consciously take risk as they perform their role of financial intermediation in the economy. Consequently, they assume various risks, which include credit risk, interest rate risk, liquidity risk, foreign exchange risk and operational risk. Managing these risks is essential for their survival and prosperity. Losses from a single loan or a material breakdown in controls can eliminate the gain on many other transactions. (National Bank of Ethiopia, 2010).

Financial institutions operated in Ethiopia required to maintain a credit risk frame work based on the guideline issued by the National Bank of Ethiopia. The NBE directive to banks direct to keep their non-performing loan position below 5%. So far except the Development Bank of Ethiopia all banks in Ethiopia keeps their non-performing loan below 5%. Banks to have this position the National Bank of Ethiopia issues different directives and guidelines such as bank risk management guideline and credit reference bureau directive. Credit Reference Bureaus complement the central role played by banks and other financial institutions in extending financial services within an economy. CRBs help lenders make faster and more accurate credit decisions. They collect, manage and disseminate customer information to lenders with in a provided regulatory framework – in Ethiopia, the Banking (Credit Reference Bureau) Regulations, 2011 which was operationalized in the year 2012. Credit histories not only provide necessary input for credit underwriting, but also allow borrowers to take their credit history from one financial institution to another, thereby making lending markets more competitive and, in the end, more affordable. Credit bureaus assist in making credit accessible to more people, and enabling lenders and businesses reduce risk and fraud. Sharing of information between financial institutions in respect of customer credit behavior, therefore, has a positive economic impact.

National Bank of Ethiopia (NBE) launched credit Bureaus and credit information system in August 2011(NBE). The new system is an upgrading of what NBE had introduced in 2004 in which 12 banks operated then were involved by serving on paper based which was time consuming and capture only loan information for banks but the new technology has bigger capacity which will allow to store credit information across the entire lending markets, including information about borrowers loan performance and loan application, their identification ,collateral provided, stake holders ,guarantors, non-individual financial statements(for regulatory purpose) . This credit information system marks an important mile stone in financial infrastructure development in

Ethiopia as it introduces a state of the art of platform to facilitate sophisticated credit information sharing in the country. According to NBE Directive No CRB /01/2012. "Credit Reference Bureau" refers to the unit of measurement established underneath the full-service bank to carryout duties and responsibilities stipulated inside the directive. Credit reference system is computerized credit reference data base system set up by the National Bank of Ethiopia to facilitate the function of the credit reference bureau in which provision, updating and correction of credit information is rendered by banks and enquiries of credit information on borrowers and other related activities and banks are carried out electronically through a dedicated computer system or network.

The Credit Reference System (CRS) shall be operated by the credit reference bureau of the national bank of Ethiopia, which is one of its operational units. Access to credit reference system is restricted only to banks registered with CRS in line with the directive and other entities authorized by low or the National Bank (NBE Directive No CRB/01/2012).

The reports that generated by CRBs, containing detailed information on a person's credit history including information on their identity, credit account and loans, bankruptcies and late payments collateral that provides with estimation value and recent enquires by other banks. It can be obtained by prospective lenders only when they have permissible reason as defined in the directive, to determine the credit worthiness of the borrower credit reporting allows banks to better differentiate between good and bad borrowers. Someone who fails to pay their loan at one bank will not simply be able to walk to another bank to get another loan without the banks knowing about it.

The mandates that given to the CRB are when banks violates the directives assume a written warning for the first-time violation, penalized birr 10,000 for the second time violation that takes place within 12 months from the date of the first warning, penalized birr 10,000.00 for the second penalized birr 100,000.00 for the third violations that took place within 12 months from the date of application and Lastly suspended from using the credit reference system for the fourth violation that took place within 12 months from the date of the application of the third violation. A suspended bank may have reinstated in to the credit reference when it Has been suspended at least for three months and confirms in writing that it will fully comply with the provision of the directives.

The establishment objective of the credit reference bureau is to provide information that helps the lenders to made prudent lending decisions made on the basis of objective, accurate, complete and timely information on the credit worthiness of borrowers is one of the principal factors in ensuring the financial soundness of banks. The National Bank of Ethiopia (NBE) issues Directives No. CRB-01-2012 with the purpose to provide guidelines to banks to ensure adequate and timely information that contributes to enable a satisfactory assessment of the credit worthiness of a borrower in making prudent lending decisions.

Credit Reference Bureau are data repositories of borrower's credit information, by collect loan and other information of borrowers from creditors and other public agencies and put the information in the central database and make it available to banks. The authorized banks who had inter-linking with the database use the borrower tax identification number (TIN) to extract the credit report from the credit reference system. At the same time when extracting the credit report the system automatically generated credit reference system number and the bureau use those number to update the borrower's data getting from the banks gives loan facility to the borrower. The information in house is a borrower related to identification, loan agreement i.e. loan amount, terms and conditions, collaterals, payment performance, income and other judgment related to the borrower. If the collaterals offered by third party same will be reflected on the report.

1.3 Statement of the problem

CRBs are becoming an integral/important component of the lending process by banks and are viewed in the economy as part of the essentials elements of the financial infrastructure that facilitates access to finance (Winnie, 2012). A credit reference bureau is an institution that collects information from creditors and available public source on borrower's credit history such as credit repayment records, court judgment and bankruptcies and then creates a comprehensive credit report (IFC, 2006).

Lending, being a key pillar in the operation of commercial banks and in determining their profitability and quality of assets. In view of this fact NBE puts directive that governs all banks existed in Ethiopia. But, the role of CRB reports for lending decisions were not identified. As lending is the main business of financial institutions and loans are naturally the main asset and the major source of revenue for banks. Despite the huge income created from lending and loans are the main assets, the available information to lending decision were not critically studied, that the information extracted from the credit reference system has an advantage to made a prudent lending decision.

The role of credit reference bureaus report that is credit information on lending decision has not studied. This is therefore aimed at bridging this gap by establishing contributions on the role of CRB report on lending decision. In particular, the study seeks to ascertain whether the credit information sharing has had any role on lending decision considering the registration to the credit reference system, credit information collected from borrower, information update by another bank, the usage of credit information and the regulatory requirement. Studies related with the role of Credit Reference Bureau studied in other countries but to the best knowledge of the researcher there is no studies made in Ethiopia.

1.4 Research Question

RQ1. What is the role of CRB’s on the system registration process?

RQ2. What is the role of credit information bureau’s report on lending decision?

RQ3. What type of information is gathered from borrowers?

RQ4. How often the reports update?

RQ5. What regulatory requirement that the bank fulfil using CRB’s?

1.5 Objectives of the Study

1.5.1 General Objective

The main objective of this study is to consider the role of Credit Reference Bureau on lending decision of Ethiopian private banking industry.

1.5.2 Specific objectives

The specific objectives of the study were:

- To examine getting register to the CRB’s system.
- To assess the usage of the CRB’s information for lending decision in private commercial banks in Ethiopia.
- To assess the accuracy of data gathered from the borrowers.
- To assess the credit information update by other banks rather than the user bank.

- To examine the regulatory requirement of the banks to using credit information.

1.6 Significance of the study

The study is expected to benefit lenders, who will get insight in to the importance of obtaining favorable credit history and using this to assess credit worthiness of the borrower.

The study will also impact on the policies of Credit Reference Bureau. The study will be useful to these institutions as it will highlight measures to be taken to identify the extent of the usage of credit information, regulations need to be improved, and upgrading the system to give a detailed information to the users.

Finally, this study will also serve as a guide that will inform policy makers and management of CRB as to how to improve the operation and service of the credit reference bureau so has to have a maximum benefit from the information withdrawn from CRB and also helps the interested researchers in the areas of credit reference bureau as a guide for future researchable areas under these broad topics.

1.7 scope of the study

The study involves evaluating the credit reports generated by the credit reference bureau for financial institutions on their borrowers to help them make a prudent lending decision. The study utilized a questioner designed to collect data from private commercial banks in Ethiopia on the role of the CRB report on lending Decision.

1.8 Limitations of the study

The researcher distributed 97 questioners out of those questioners 83 of them were collected, but the researcher is limited to use only 73 questioners for this study. The remaining 10 questioners are invalid for the study at cleansing. The limitation here is some of the respondents fill the questioners negligently. Therefore, may those questioners will have an impact on the final results of the study.

Other limitations of the study are the researcher used convenience non probability sampling to determine a sample size and it has criticism on sampling bias. Therefore, the researcher takes in to consideration the sample bias and use the very advantage of the convenience sampling.

1.9 Organization of the study

The research report was organized into five chapters: Chapter one focuses on the background of the study, problem statement, objectives and significant of the study. In chapter two, a range of literatures review is captured there to gather relevant information concerning credit reference bureau. In chapter three, detail of methodology followed to achieve results is outlined. It includes the study design, sampling, sampling technique and data analysis. Chapter four contained results, analysis and discussion from the study supported with findings from other research works. Chapter five focuses on conclusions and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical Literature Review

Information Asymmetry Theory

Information asymmetry in financial transaction is that one of the two parties will have more information than the other and will have ability to make a more informed decision. This can create an unevenness of power in deal which can sometimes cause the transaction to go crooked, a kind of market failure in the worst case (Yun,2009). At the time of lending, it is important to know something about the person borrowing, to make sure that they spend the money in such a way that they will be able to repay the loan, and to retain them and make sure their status of repaying of the loan. In response to this, lenders do not provide financial services to everyone that needs them. With this regard even though they might have enough funds for lending, they choose not to disburse them to potential borrowers whom they don't know about the previous status, particularly when it is too difficult and expensive to get the information they need.

Accordingly, finance theory suggest that information asymmetry can constrain all types of external financing by either limiting availability or increasing cost. Consequently, information asymmetry should affect the acquisition and use of bank lines since short term bank credit is a primarily external source of firm liquidity. In other ways information asymmetry impacts lender's willingness to lend. Additional risk comes with uncertainty in firm level performance and greater variability investment opportunities. Since information asymmetry problem increase the monitoring cost and risks for lenders, less transparent firms are less likely to obtain and use lines of credit as alternative source of credit. Finally, the information asymmetry leads to adverse selection or moral hazard problem.

A moral hazard is wherever one party is liable for the interests of another, however has an incentive to put prior his or her own interests with other. Financial Institutions before the introduction of credit referencing lacked access to trustworthy information about borrowers, there were no records of the borrowers' earnings or financial status. particularly those borrowers having past credit history in microfinance institutions. When there is no means to find the credit history about borrower's lenders will face a challenge or the situation leads to asymmetric of information (Todaro *et al.*, 2003). Asymmetric information signifies that some people are in the possession of information that other people lack. In credit markets it means that the borrower has better information than the lender about the risk of the project he or she is about to undertake.

An adverse selection is the difficulty to select and distinguish healthy companies, with high credit rating, from those that are riskier. In credit markets, adverse selection occurs before a loan agreement has taken place. It arises when the "bad" borrowers (also known as the borrowers with high credit risk) are applying for credit more intensively than the "good" borrowers, which leads to a higher probability that the loan will be granted to a high-risk borrower. Asymmetric information about the risk of the projects leads to those loan givers cannot adjust the interest rate according to the risk of each borrower; they have to offer the same interest rate to everyone. As the interest rate increase, good borrowers get even fewer and the profit of the lender decreases. (Stiglitz et al., 1981).

Moral hazard occurs after the loan has been granted and it means that the borrower provides the lender with false information about his assets, liability, capacity to repay etc. This absence of perfect information implies that the lender cannot observe the behavior of the borrower neither verifies his or her profits, which becomes a problem if the borrower does not fulfil the repayments established in the loan contract. (Varian,2002). To reduce the risks associated with asymmetric information, lenders often require collaterals in form of fixed asset.

Credit Risk Theory

Credit risk was introduced by Melton and is also known as structural theory. Melton (1974) refers to credit risk theory as which the event of default originates from an evolution of asset by entities that diffusion process has modeled with continuous parameters. Early literature on credit employs actuarial approaches of credit risk that are traditional, whose main hardship rests in their whole reliance on historical data. To date, there are three quantitative methods in the analysis of credit risk: structural approach, incomplete information approach and reduced form appraisal (Crosbie et al, 2003). Such models are normally defined "structural model" and established on variables associated with a particular issuer Cantor and Frank (1996) posit that credit risk theory is the main freely existing portfolio model for credit risk assessing. The credit risk method allows gives room for a company to combine credit risk across its whole company, and gives a statement of value-at-risk (VAR) as a result of credit resulting from upgrades, downgrades, and defaults. Credit risk model is helpful to all firms that are exposed to credit risk during their operations. According to this theory, a firm ought to develop an approach to measure credit risk across a number of instruments such as, commitments and letters of credit, traditional loans; fixed income instruments; commercial contracts for example market-driven instrument for instance swaps and receivables and trade credits (Padilla & Pagano, 2000).

Credit theory of money

Credit theories of money are concerned with the relationship between credit and money. Followers of these theories, such as Alfred Mitchell-Innes, sometimes emphasize that credit and debt are the same thing, seen from different points of view Randy Wray (2004). Followers assert that the essential nature of money is credit (debt), at least in eras where money is not backed by a commodity such as gold. Two common elements of thought within these theories are the idea that money originated as a unit of account for debt, and the position that money creation involves the simultaneous creation of money and debt. Some followers of credit theories of money argue that money is best understood as debt even in systems often understood as using commodity money. Others hold that money equates to credit only in a system based on approval money, where they argue that all forms of money including cash can be considered as forms of credit money. The first formal Credit theory of money arose in the 19th century. Anthropologist David Graeber has said that for most of human history, money has been widely understood to represent debt, though he accepts that even prior to the modern era, there have been several periods where rival theories like metallism have held power Richard Werner (2005).

According to Joseph Schumpeter, the first known supporter of a credit theory of money was Plato. Schumpeter defines Metallism as the other of "two fundamental theories of money", saying the first known supporter of metallism was Aristotle, according to Richard Werner (2005). The initial modern thinker to frame a credit theory of money was Henry Dunning Macleod, with his work in the 19th century, most especially with his The Theory of Credit' (1889). Macleod's work was extended on by Alfred Mitchell-Innes in his papers What is Money? (1913) and The Credit Theory of Money (1914), Randy Wray (2004), where he claimed against the then conventional view of money arising as a means to improve the practice of barter. In this alternative view, commerce and taxation created obligations between parties which were forms of credit and debt. Devices such as tally sticks were used to record these obligations and these then became negotiable instruments which could function as money.

Credit Rationing theory

This theory was introduced by Freimer and Gordon (1965) and compressively by Stiglitz and Weiss (1981). According to the seminal paper by Stiglitz and Weiss said that unsatisfied agents are borrowers. Asymmetric information leads to credit rationing, as lenders cannot distinguish between high quality and low-quality borrowers. However, this dominate view is not without criticism. In particular De Meza and Webb (1987) strongly contest this result. They show that asymmetric information in credit markets can lead to the opposite result which is an excess of credit (over lending).

Financial institutions because they screen and monitor borrowers more efficiently than other investors can Allen and Santomero (1998). They are specialized in gathering private information and treating it Freixas and Rochet (1999). Managing money and deposit accounts, MFIs own highly strategic information on firms' receipts and expenditures as well as the way that firms develop Diamond and Rajan (2001). Even with this excess of information, relationships between bankers and firms are not perfect. Financial institutions suffer from informational asymmetries Freixas and Rochet (1999) such that evolution of prices (interest rates) cannot clear the credit market.

The more interesting form of credit rationing is equilibrium rationing, where the market had fully adjusted to all publicly, i.e. why Financial institutions ration credit free, available information and where demand for loans for a certain market interest rate is greater than supply. Stiglitz and Weiss (1981) proved that credit rationing occurs if banks charge the same interest rate to all borrowers, because they cannot distinguish between borrowers and screening borrowers perfectly is too expensive. Both assumptions are very simplifying and do not occur in this manner in the real world. MFIs are usually able to distinguish their borrowers up to a certain degree. Moreover, banks face more than only two types of borrowers. Financial institutions usually charge more than just one interest rate to all customers. High-risk borrowers pay a higher interest rate and credit rationing is less likely. However, financial institutions cannot distinguish borrowers perfectly and screening them perfectly is impossible. Thus, credit rationing may occur.

Credit rationing is an action taken by lenders to limit or deny credit based on borrowers' creditworthiness and an overload of loan demands. Interest rates moves either up or down can lead the credit facility to credit rationing. Credit rationing originates from the occurrence of informational asymmetries: the firm knows the expected risk and return of the project for which they want bank finance while the bank only knows the average expected return and risk of an average project in the economy. Asymmetric information leads to credit rationing, as lenders cannot distinguish between high quality and low-quality borrowers. However, this dominate view is not without criticism. In particular, De Meza and Webb (1987) vigorously contest this result. They show that asymmetric information in credit markets can lead to the inverse result, which is an excess of credit (over lending).

According to Stieglitz and Weiss (1981) adverse selection and thus credit rationing still occurs if banks require collateral. They argue that low-risk borrowers expect a lower rate of return on average. Thus, they are less wealthy than high-risk borrowers on average after some periods. Low-risk borrowers are therefore not able to provide more collateral. Increasing collateral requirements may have the same adverse selection effect as a higher interest rate. Instead Bester (1985) argues that banks only offer contracts in which they simultaneously adjust interest rates and collateral requirements. He proved that there is always a combination of interest rate and collateral requirements so that credit rationing does not occur.

Credit Risk Management

Credit risk is simply defined as the probable that a bank borrower or counterparty will fail to meet its obligations in accordance with contracted terms. The objective of credit risk management is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. as per National Bank of Ethiopia risk management guide line banks required to incorporate handling of credit risk in their policies.

Effective policies and procedures enable a bank to: maintain sound credit-granting standards; monitor and control credit risk; properly evaluate new business opportunities; and identify and administer problem credits. Credit policies need to contain, at a minimum:

- A credit risk philosophy governing the extent to which the bank is willing to assume credit risk;
- Areas of credit in which the bank is prepared to engage or is restricted from engaging;
- Well defined and appropriate levels of delegation of approval, and provision or write off authorities; and
- Sound and prudent portfolio concentration limits.

To mitigate a credit risk Collateral and guarantees are the most commonly used. Although the use of different mitigation techniques individual credits transactions should be entered into the strength of the borrower's repayment capacity. Banks should also be careful that the value of collateral might well be impaired by the same factors that have led to the diminished recoverability of the credit.

The reason why banks gather information on borrowers is to assess the probability of borrower default and pricing the loan accordingly. Most information gathered is at the loan application stage but banks should seek more information from third parties like credit rating agencies and CRB's (Simson and Hempel, 1999).

Information sharing

Information sharing concerning borrowers' features and their liability will have significant effects on credit markets activity. First, it improves the banks' data of applicants' characteristics and permits a more detailed prediction of their repayment probabilities. Second, it reduces the informational rents that banks extract from their customers. Third, it helps as a borrower discipline device. Finally, it removes borrowers' withdrawal to become over-indebted by drawing credit simultaneously from many banks without any of them realizing.

Information sharing about borrowers effects the market with asymmetric information either moral hazard or adverse selection (Gehrig and Stenbacka, 2005). Moral hazard happens when a party that has agreed to a transaction provides distorted information or changes their behavior because they believe that they won't have to face any consequences for their actions. Adverse selection occurs when there is lack of information prior to make a deal. By sharing information, banks may learn about those good and bad borrowers of the competitor banks who switched from the previous banks, and reduce the adverse selection from the lender side. Hauswald and Marquez (2003) show that information processing, providing the screening bank with more informational advantage, will safeguard it from competition allowing earning rents. Advances in the screening technology, therefore, will increase returns from screening.

Stakeholders of Credit Reference Bureau

A credit reporting Bureau contains the institutions, individuals, non-individuals, rules, procedures, standards, and technology that enable information flows relevant to making decisions related to credit agreements (World Bank 2011). The Ethiopian credit reference bureau stake holders are as follows:

- Financial institutions i.e. commercial banks, development finance institutions and microfinance institutions as major data suppliers to the bureau and as users of the system,
- NBE's credit reference bureau as the one that will be owning and managing the day to day operation of the credit bureau,
- Different regulatory units of NBE as users of the credit bureau data for regulation and supervision purposes,
- Ethiopian Revenue and Customs Authority (ERCA) as supplier of individual and non-individual identification information i.e. TIN to the bureau on daily basis. Moreover, the authority will use financial statement information of non-individuals/businesses that is in-housed in the credit bureau for tax collection purpose,
- Finally, user of financial institutions whose credit information is reported and shared among the lending communities have big stake. Therefore, their credit information needs to be shared for genuine and lawful purpose and they have the right to lodge any complaints or disputes concerning their credit information either to the financial institutions or NBE's credit reference bureau.

Character Attributes

As defined by Becket al (2014), character refers to the moral obligation that a borrower feels obliged to repay the loan, being interest and principle debt. The credit provider would investigate the borrowers' past repayment records, attainable through the credit bureau examinations', and apply it while considering other supportive information such as educational background and experiences. Credit providers should commence by evaluating the borrower's capacity with ability to repay a loan periodically to full settlement. The lender needs to confirm the ability with the through perusal of supporting documents such as bank statements, income, supported by pay slip and trading turnover for institutional clients, (De Meza and Webb, 2016). The duo further observes that banks need to gather information on potential customers and assign the credit risk exposure. Boot (2015), reports that the credit information gathered would steer the bank in assessing the probability or chance of borrower default and translate the score to price the loan appropriately at the point of loan application preliminary processes.

The lenders equally need to give due attention to the credit history of the clients, as availed by the credit bureau's reporting systems as shared by other lenders, detailing applicant's past loans records. A good past record accords a customer diverse choice and rich range of credit and would be most preferred borrower type in the eyes of the lenders, as they pose a low risk of any default in the future, (Padilla, 2011). Sharpe, (1990), observes the need for lenders to rely on additional sources of information including processed information held by the bureaus through rated scores arrived at after analyzing many intervening factors parties , same sentiments are supported by Padilla (2011), who observes that raw information communicates low level meanings hence the need to further process the information to ease applicability by persons who are not credit understanding yet need to be guided by the same piece to make informed decisions such as partnerships, tendering and employment opportunities.

CRB in the Developing World

Throughout the developing world, the growing availability of consumer credit and the growing completion between financial institutions have made the necessity of credit information sharing all the more apparent. However, the extent and efficiency of information sharing mechanism vary greatly between countries and continents. Africa remains the region of the world with the least developed credit information system, yet the exploding financial sectors in many African countries have sparked interest in the feasibility of the creation of credit bureaus to help manage borrower risk under sensitive competition.

Credit reference bureau concepts introduced in 2004 in Ethiopia credit market which was more of manual-based and the establishment of a system based CRB were introduced in 2012, then after the bureau provides information about the borrowers, collecting data from lenders and some public agencies. The borrower payment history, capacity, character and collateral are a major input to determine the creditworthiness of the borrower.in accordance with the NBE directive number CRB/01/2012 updating of information done every month and submission of the data shall be made within twenty (20) calendar days from the close of each month. Banks shall make correction and subsequent updating of error files with in five (5) working days after receipt of such files from NBE. According to the revised Credit Reference Bureau Directive no CRB/ 02/2019 retaining and/or displaying the credit information submitted to it for 10 and 7 years of positive and negative credit information of the borrower.

2.2 Empirical review

The National Bank of Ethiopia (Credit Reference Bureau) directive number CRB/01/2012 or CRB/02/2019 states that the Credit Reference Bureau is establish to provide adequate and timely information that enable a satisfactory assessment of the credit worthiness of a borrower is crucial for making prudent lending decision. As a result, Jappelli and Pagano, (1999) say that credit bureaus assist in making credit accessible to more people, and enable lenders and businesses reduce financial risks. They add that credit bureaus allow borrowers to take their credit histories from one financial institution to another, thereby making lending markets more competitive and in the end, mitigate credit risks and make credit more affordable. Jappelli and Pagano, (1999) further, asserts that sharing of information between financial institutions in respect of customer borrowing behavior, has a positive economic impact.

According to Hoque (2009), managing financial resources by way of lending and borrowing is a key operational function of any financial system. Therefore, loan repayment is very important. A loan is considered as performing if the principal and interest is being paid in accordance with the agreed contractual terms of repayment. Failure to pay loans promptly may limit credit access. According to Mumi (2010) inadequate access to credit limits people from a fair share of resources in society, depriving them of basic needs and opportunities in life. Universally, financial institutions are facing problems of non-repayment of loans. This problem can be overcome through monitoring the borrowers. Thus, the idea of establishing CRB is appropriate in managing potential loan default. Studies show that CRBs allows for credit information sharing among the financial institutions.

A study by Munene (2012) on the perceived impact of credit reference bureaus in accessing finance by small and medium enterprises (SMES) in Kenya, found that Credit bureaus could alleviate a firm financing constraint by providing information on individuals borrowing and bill paying habits. It enabled the lenders assess credit worthiness, the ability to pay back a loan, and this affects the interest rate and other terms of a loan. Constant defaulters had been the cause of high lending rates (Rukwaro, 2001). Walsh, (2003) informs that having only one half of the picture (Negative Information) runs the risk of it becoming the only deciding factor - a blacklist with the potential of restricting access to credit. Milton, (2004) indicated that originally, the credit approval decision was made using a purely judgmental approach by merely inspecting the application form details of the applicant and commonly focused on the values of the five Cs of a customer.

Similar Opinions are also shared by another researcher (Mumi, 2010; Gaitho 2010) Credit reference bureaus are meant to complement the central role played by banks and other financial institutions in extending financial service within an economy. The information gathered by these bureaus is shared with potential lenders. The lenders use this information to determine the credit-worthiness of a potential borrower. The bureau collects, Manage and disseminate customer information to lenders within a provided regulatory framework, Credit histories not only provide necessary input for credit approving, but also allow borrowers to take their credit history from one financial institution to another, thereby making lending market more competitive and in the end more affordable (Nakulege, 2003) According to Sinare (2008) credit reporting agencies gather information on the experience of individual with credit leases, non-credit related bills monetary, related public records and enquires and compile a credit record. Credit reporting agencies attempt to collect comprehensive information on lending to individuals in the country in which they operate credit account information records contain a wide range of details about each account. This information generally falls into five broad categories identification information, credit account, Financial information, collateral information, and payment performance.

According to Nga'nga (2011) investigated the role of CRB in accessing loans in Kenya. His study revealed that CRBs play an important role in preventing serial loan defaulters from accessing credits from other financial institution thus cushioning financial institutions against unforeseen credit risks.

Each credit account record includes an account number, a unique identifier for each credit provider, and account ownership status in particular, single or joint account or authorized user pertinent date information includes the date the account was established; the date it was a closed or transferred to collection or other major change in status; the date account balance was settled down to zero and the date when information was last reported to the credit reporting agency Niuguna (2010) the account records also provide current balance information the largest amount ever owned on the account the size of any credit limit applicable to the account and any amount past due.

According to Jared Getenga (2007), one of the features that banks deliberate when deciding on a loan credit application is the estimated chances of recovery. To arrive at this, credit information is required on how well the applicant has honored past loan obligations. From this credit information, the lender bank identifies a relationship between past and future performance in loan repayment. This history is not within the bank's reach because the potential borrower's repayment records are scattered in the various archives of the other financial institutions where the customer has previously borrowed. When a borrower has credit information that the lender cannot access at the time of evaluating the creditworthiness of the customer, it is officially referred to as information asymmetry. Kalberg and Udell (2003) also point out that information exchange from multiple sources improves the accuracy of the signal about the quality of the credit seeker, as a result, the default rate reduces. The bank's competition for finding genuine borrowers strengthens the positive effect of information sharing on lending: when credit markets are competitive, information sharing reduces the informational interest charged and increases banking competition, which in turn leads to increased lending, Information sharing can also create incentives for borrowers to perform in line with banks' interests. According to Klein (1992) research shows that information sharing can motivate borrowers to pay their loans when the legal atmosphere makes it difficult for banks to implement credit agreements. In this model borrowers repay their loans because they know that defaulters will be blacklisted, reducing external finance in the near future.

The adverse selection model developed by Pagano and Jappelli (1993), information sharing improves the pool of borrowers, reduces defaults and decreases interest rates. It can also lead to the growth of lending. When banks are local monopolists, in some cases lending reduces, because the exchange of credit information increases the banks' possibility of price discrimination between safe and risky borrowers and the increase in lending to safe borrowers does not fully compensate for the reduction in that too risky types. When credit markets are competitive, lending activity is more likely to increase: competition limits the banks' ability to charge more interest from their customers and information sharing increases banking competition.

As per Pauly (1968), the concept of moral hazard is applied to a lending and borrowing circumstance, it means that the customer to whom a loan has been extended controls the money of the lending institution. In such a condition, the customer may use the money borrowed from the bank for his own interest and not consider the percentage stake of the bank. Banks, therefore, try to follow properly their customers as all principals do with their staffs. The follow up however requires some guarantees that proper information will be provided. Moral hazard models also imply that information sharing should reduce default rates and interest rates and increase lending of money, either because credit reference bureaus encourage competition by providing information about the past experience of the borrower and reducing informational rents (Padilla and Pagano 1996) or because they punish borrowers (Padilla and Pagano, 1997). In information exchange may make lending feasible in markets where no credit would be extended otherwise. In these models, when banks choose to communicate, they bring about a Pareto improvement by raising customers' welfare along with their own profits. As per Padilla and Pagano (1997) opinion, the disciplinary effect of credit bureaus arises only from the exchange of negative information. Credit information about past defaults generates fear of social stigma to the borrowers. Sharing white information, i.e. statistics on borrowers' characteristics, while reducing adverse selection effects, may actually decrease the disciplinary effect of credit information sharing. Accordingly, the reasonable benefit of sharing black and white information depends on the relative importance of moral hazard and adverse selection problems in the market.

Credit bureaus information helps to improve banks' knowledge about applicants' characteristics and permit more accurate prediction of repayment probability. This helps lenders to target and price their loans better easing adverse selection problems. However according to Trivelli et al. (1999) the type of information shared in CRB is usually negative information rather than positive information. Similarly, the use of CRB extends to sharing of information extracted from other sources such as criminal records, tax records etc.

Jappelli and Pagano (1999), suggests a threefold effect of financial institutions sharing borrowers' credit history information. First, they postulate that credit bureaus improve banks' knowledge about loan applicants' characteristics and allow more precise prediction of their repayment probability. This allows lenders to target and price their loans better, easing adverse selection problems according to Jappelli and Pagano (1999). The study suggests that the benefit of credit reference bureaus is greatest where each bank deals with by a large pool of customers whom it has no previous information. Second, credit bureaus reduce the informational rents that banks otherwise extort from their customers. They tend to level the informational playing field within the credit market and force lenders to price loans more competitively (Jappelli and Pagano, 1999). Lower interest rates may increase borrowers' net return and augment their incentive to borrow more. Third, credit bureaus work as a borrower discipline device according to Jappelli and Pagano (1999).

A study by Sinare (2008) recognized that Credit Reference Bureaus are information dealers that provide to lenders with reliable, relevant and comprehensive data on the repayment habits and the current debt of their credit applicants. According to Lewis (2004), most creditors prefer hard collateral-based credit but would still extend cash flow- based credits if they can use cheap and reliable system to share information on the character and ability of borrowers to pay.

A study by Armstrong (2008), using information gathered from several countries worldwide shows that the presence of credit records centers is associated with growth in lending volume, improvement in consumer lending, better access to financing and a more stable banking sector. In addition, Hansen et al (2004) established that many borrowers make much effort repaying their loans, but do not get rewarded for their efforts because this good repayment history is not available to the creditors that they approach for new loans. When borrowers fail to repay their loans, creditors pass on the nonpayment cost to other customers through higher interest rates among other charges. Credit reporting, therefore, allows banks to better differentiate between good borrowers and the bad ones. According to Angulin and Scapens (2000), it is difficult to have accurate information on the financial ability of prospective borrowers and even more difficult to have accurate information on their credit history. This makes it exceptionally hard for the creditors to evaluate the credit worth of would-be borrowers and their capacity to pay the loans.

According to Magara (2011), the "Five-C's" of credit appraisal are the primary components of any credit analysis. They comprise: collateral, conditions, capacity, contribution, and character of the borrower.

According to Becket (2014), character refers to the moral obligation that a borrowing client feels obliged to repay the loan, being interest and principal debt. The credit provider would investigate the borrowers' past repayment records, attainable through the credit bureau interrogations', and apply it while considering other supportive information such as educational background and experiences. Credit providers should commence by evaluating the borrower's capacity cum ability to repay a loan periodically to full settlement. The lender needs to confirm the ability with the through perusal of supporting documents such as bank statements, income, supported by pay slip and trading turnover for institutional clients, (De Meza and Webb, 2016). The duo further observes that banks need to gather information on potential customers and assign the credit risk exposure. Boot (2015), reports that the credit information gathered would steer the bank in assessing the probability or chance of borrower default and translate the score to price the loan appropriately at the point of loan application preliminary processes.

Padilla (2011), asserts that credit reports provide a credit score that is unique to a customer's character, which measures the credit risk computed from a credit bureau report using a standardized formula. A positive score is characterized by frequently paid bills; lack of defaults on outstanding balances; maintaining steady employment; On the other hand, a negative credit score is characterized by late payments; bankruptcy; fraud charges; liens or foreclosures; loss of employment. It is worth noting that sharing of negative credit information does not amount to blacklisting. However, such information is expected to be taken into account by banks while assessing applications for loans and other bank facilities.

2.3 Summary and Literature Gap

The purpose of this literature review was to investigate the role of credit reference bureaus on lending decision. This study generally highlights the various aspects of credit reference bureaus and its resulting effect on lending decisions on private commercial bank in Ethiopia. The knowledge of this information would be used in data collection so as to meet the objective of the study. The chapter covers theoretical and empirical foundations. the theoretical literature focused on Information asymmetric theory, Credit risk theory, Credit theory of money, Credit rationing theory, Credit risk management, Information sharing and theory of financial intermediation.

The empirical review of the research tries to incorporate some studies done in other countries related with the function of credit reference bureau and some of studies resulted on the idea of establishing CRB is appropriate in managing potential loan default, Studies show that CRBs allows for credit information sharing among the financial institutions and the disciplinary effect of credit bureaus arises only from the exchange of negative information.

This is therefore, this research seeks to establish the role of credit reference bureau report on lending decision on private commercial banks in Ethiopia to fill the gap that no study made in Ethiopia. Being, the credit reference bureaus reports contribute more to the lending environment and the financial stability in the economy.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter outlines the scope of methodological procedures that were used in the study, the kind of data needed to answer the research questions and the details of how this was achieved in practice. The main aspects covered include research design, research approach, target population, sample design, data collections method, instruments, and procedure that were used for data collection as well as data analysis and presentation and ethical issues.

3.2 Research Design

A research design is the overall plan for connecting the conceptual research problems to the achievable empirical research. In fact, the research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data (Kothari, 2004).

Ghain and Gronhaug, (2005) distinguished the basic difference between three main classes of research design, exploratory, descriptive and explanatory. Exploratory research is characterized as the seeking of new insights, the looking around, and the asking of questions or the bringing of some phenomenon into new light, Descriptive research is a type of research that is mainly concerned with describing the nature or condition and the degree in detail of the present situation, and explanatory research aims at gaining an explanation of a specific situation or problem, generally in the form of causal relationships. Creswell (2003) stated that the descriptive method of research is used to gather information about the present or existing condition.

This study was focused on describing the current situation of the problem and answer the research question which are in form of “What” and to highlight the most important factors that can negatively or positively affect the credit reference bureau report on the lending decision. Moreover, this research aims to explain the role of the credit reference bureau report in lending decisions and provide the necessary recommendation. Therefore, explanatory research design is being used to achieve the research objectives.

3.3. Research Approach

In order to attain the objective of the study and answer the research questions the researcher was adopted mixed research approach. The rationale of using a mixed approach is to gather data that could not be obtained by adopting a single method (Creswell, 2003). Hence, the basis of such approach helps to neutralize the limitations of applying a single approach in connection with the qualitative and quantitative nature of the research questions. Both qualitative and quantitative research have weaknesses. The researcher adopts qualitative approach seek to answer the what and why question of the research and quantitative approach to explain the data collected from the questioner.

3.4 Data collection method

For the purposes of this research, the researcher used interviews and questioner. The interviews are personal and unstructured interviews, whose aim is to identify participant's emotions, feelings, and opinions regarding in the role of credit reference bureau report on lending decision. The main advantages of face to face interview is: it is useful to obtain detailed information about personal feelings, perceptions and opinions. They allow more detailed questions to be asked. They usually achieve a high response rate., but interviewers need to have developed the necessary skills to successfully carry an interview (Fisher,2005, Wilson,2003).Unstructured interviews offer flexibility in terms of the flow of the interview, thereby leaving room for the generation of conclusions that were not initially intended to be derived regarding a research subject. However, there is the risk that the interview may deviate from the pre-specified research aims and objectives (Gill & Johnson, 2002). For the purpose of this research Credit department directors and Credit division managers were selected for interview, the reason to focus on these two areas are considering their position that the day to day credit activities of their banks pass through them for making lending decision and face different types of challenges related with credit reference bureau.

As far as data collection tools were concerned, the convince of the research involved the use of an unstructured questionnaire, which was used as an interview guide used by an interviewer who asks questions about a particular topic or issue for the research. Though a question guide is helped the interviewer to direct the interview, the specific questions and the sequence in which they are asked are not precisely determined in advance, so the researcher lead the interview towards the satisfaction of research objectives, but additional questions were made encountered during the interviews. Cohen (1989) as quoted in Sillignakis (2002) defined a questionnaire as a self-report instrument used for gathering information about variables of interest to an examination. For this study closed-ended questions are also designed in order to get a response, which narrow down the field of request for information, since the respondents chooses among fixed responses. They also help the researcher to analyze the data since the responses can be directly compared and easily intensified (Patton, 1990 cited in Sillignakis, 2002). Questionnaire surveys are versatile, can be employed among people of all ages and they are replicated from one subject to another and many questions can be answered in a short time (Aaker & Day, 1990). For the purpose of this research the questioners distributed to credit analysts and loan officers working in private banks at a main office. The main objective of this research is to examine the role of credit reference bureau on lending decision and both credit analysists and loan officer are best users of the bureau report that is the base to select them to fill the questioners.

3.5 Source of Data

The study was conducted by collecting data from both primary and secondary sources. Primary data was collected from the credit staffs of the private commercial banks based on a structurally designed questionnaire. It included both closed ended and open-ended questions, which gives the respondents an opportunity for adequate expression of their view on the questions. According to Yin (2003), structured questioners are important method for collecting primary data and that it further allows the researcher to be well focused on the specific research topic. The questionnaire was used because the researcher considered it to be more convenient as respondents could answer at their convenience. The questionnaire was developed by the researcher based on the research questions and the related literature.

The first part of the questioner is designed to gather the back ground information of the bank's staff ,part two of the questioner designed to collect information on issue related with the registration to NBE CRB system, the third part of the question designed to collect information on issue related with gathering information from borrowers, the fourth part of the question is designed to collect information on issue related with information update by other banks , the fifth part of the questioner is designed to collect information on issue related with information usage and the last part of the questioner is designed to collect information on issue related with the regulatory requirement by NBE from banks. To develop the questioner the researcher, use the National Bank of Ethiopia credit reference bureau directive as a source. The general objective of the questioner and the interview to collect data that helps to see the Role of Credit Reference Bureaus Report on lending decision's in private commercial banks in Ethiopia.

Questions present in the form of agreeing statements, relating to the concepts of Credit Reference Bureau report and to identify their intention on the Role of Credit reference bureau report on lending decision, in such a way to enable measurement of the respondent's opinions. The respondents were asked to indicate their level of agreement on a five-point Likert scale with the following ratings. Strongly agree, Agree, Neutral, Disagree, and Strongly Disagree. The questionnaire was a close ended questionnaire to elicit guided responses and for easy analysis and to obtain additional information, the respondents were requested to provide open-ended responses if they have opinions which they feel the researcher would find useful.

In addition, unstructured interviews were conducted with selected private commercial banks credit department directors and division managers. In order to get sufficient and reliable data that represents the whole banks of the selected private commercial banks both primary and secondary data was collected from each bank at the head office and branch level. Secondary data: different documents, records and reports of the industry, Regulatory organ reports, from web site, books, annual reports and magazines were used. The researcher uses secondary data to find out data's that helps strength the findings of the research those data are regulations that govern the banks and different articles.

3.7 Population, Sample Size and Sampling Techniques

3.7.1. Population

According to Zikumund (2003) The definition of population is identifiable total set of elements of interest being investigated by a researcher. The target population is defined as the entire group a researcher is interested in. The population of the present study consists of both private and public commercial banks that have operated. Hence, According to National Bank of Ethiopia web site, the total number of Commercial Banks which had been operated in the year 2019 is 18, of which 16 commercial banks owned privately. In order to undertake this study, the researcher target population is credit analyst and credit officers of private commercial bank operated in Ethiopia at head office level, because it is often impossible or too much expensive to collect data from all the potential units considering that the staff assigned at head office level have a diversified experience and face different challenges. In the selected private banks in average 8 employees assigned at head office level, therefor the total population become 128 employees that has direct relation with CRB report use for lending decision.

3.7.2 Sample size

Sampling is the process of choosing, from a much large population, a group about which wish to make generalized statements so that the selected part represents the total group (Leedy, 1989; pp. 158). For the purpose of this research the sample of 97 respondent's was drawn from the employees working on private banks and those workers have direct touch with Credit Reference Bureau report, targeting Credit Department Managers/Division Managers, Credit officers and Credit analyst worked in the 16 private commercial banks in Ethiopia. Directors and division managers were participating on the interview part. The researcher used Slovins formula to calculate the sample size.

$$n = \frac{\mathrm{N}}{1 + \mathrm{N}\,(\mathrm{e})^2}$$

Where n is the sample size,

N is the population size, and

e is the level of precision or sampling error = (0.05)

$$n = \frac{128}{1+128(0.05)^2}$$

$n = 97$

Hence, the total sample size is 97, Since the number of respondents in each bank is not the same, the number of samples for each bank was determined based on the employees assigned on each bank at their head office with proportion to the total number of population and sample size against number of employees. After each bank sample size was determined, the researcher used convenience sampling method to select the target employees since their job is directly related to the work. The researcher did not go beyond this sample size because of the assumption that increasing the number of sample size more than the specified doesn't increases additional information. Rather it could be duplication of information.

In order to collect sufficient data beside of the distributed questioner the researcher interviewed 6 credit directors and 7 credit division managers from different banks. Both position holders have a direct relation with lending decisions and scrutinized the credit reference bureau before it presents to the credit decision committee.

3.7.3 Sampling Techniques

The researcher uses convenience sampling techniques to draw sample for this study consider the limitations of the respondents, familiarity with the research objectives and handling of the reports. Convenience sampling is very easy to carry out with few rules governing how the sample should be collected. The relative cost and time required to carry out a convenience sample are small in comparison with other sampling technique. Handling of credit activities in the banks are different from bank to bank. All banks handled at head office level by credit analyst and loan officers which is both greatest and smallest amount of loans, some banks are handled at the branch level by branch manager and credit officer depends on their branch grade but the amount they process and make decision is for small amounts of loan. Basically, for the purpose of this research the researcher uses convenience sampling technique and focused to select the sample from all bank head offices to enhance the selected individuals that provide greatest insight in the research question.

3.8 Data Analysis

Data analysis is a process of inspecting, cleansing, transforming, and modeling data with the goal of discovering useful information, informing conclusions, and supporting decision-making. Besides, the researcher also attempts to analyze the various issues related with Credit Reference Bureau Legal and regulatory requirements. The researcher analyzed the data by descriptive statistics and the analysis using tables and percentages of the Likert scale aided by Excel 2016 and SPSS version 23. The data presented in the next chapter.

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND ANALYSIS

This chapter deals with the data presentation, interpretation and analysis of the study. It has two parts. The first is background of the respondents; and the second part deals with issue related with the role of Credit Reference bureau on lending decision on private commercial banks in Ethiopia.

To achieve the objectives of the research a total of 97 questionnaires were prepared and distributed to credit employees who have direct relation with Credit Reference Bureau report. Out of these questionnaires, 83 of them were collected with a response rate of 85.5%. However, only 73 responses were valid with complete answers. Therefore, only 73 questionnaires were used for further analysis. To enhance the quality of the obtained data, Likert type questions were used whereby respondents indicated the degree to which the variables were practiced in a five-point Likert scale. The data has then been presented in both quantitative and qualitative forms followed by discussions of the data results. In addition, four Director and three Division Managers were participated on the interview made face to face and telephone conversation from different banks.

4.1 Background of the Respondents

Explanation of the characteristics of the sample target population gives some basic information about the sample and their composition to the reader, therefor the researcher includes the following variables Work experience, Educational level, and position in the bank of the respondents. This aspect of the analysis deals with the personal data of respondents. The table below shows the details of background information of the respondents.

Work Experience

Table 4.1. Work Experience

	Service year	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5-8yrs	30	41.1	41.1	41.1
	8-15yrs	36	49.3	49.3	90.4
	15-20yrs	5	6.8	6.8	97.3
	above 20 yrs	2	2.7	2.7	100
	Total	73	100	100	

Source: Survey Result

The researcher sought to find out how long the respondents had worked in their respective position. The findings are shown in table 4.1 above. In general from the total number of respondent 58.9 % of the respondents had a working experience more than eight years this individuals will have an experience in both pre and post of implementation of CRB then this groups of individuals think to contribute more for the research, here one thing need to be considered the work experience of the employees mentioned here is not directly related with the experience in credit. To make it brief previously banks recruit employees for the position of junior bank clerk and the employees to become a loan officer need to serve the bank a minimum of three years and above but know fresh degree holder graduates can be assigned as a loan officer after took on the job training. The remaining 41.1% also having experience 5-8 years these employees also have a great input to the research because they know the development of the bureau status through time.

Educational Level

Table 4.2. Educational level

	Qualification	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BA/BSC	42	57.5	57.5	57.5
	MA/MSC	31	42.5	42.5	100
	Total	73	100	100	

Source: Survey Result

As depicted from Table 4.2 in the above out of the 73 respondent's 57.5% or 42 of the respondents are first degree holders and the remaining 42.5% are holder of second degree. As learnt from this figure all the respondents are educated, then believes that they provide supportive ideas on the researched topic. Accordingly, all the respondents are degree holder and out of that 42.5% are post graduates. It means they are educated enough to adopt and apply the system of credit reference bureau and also, they are well positioned to assess the implications of all the entries in the CRS.

Current Position

Table 4.3 Current Position

	Postion	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Credit Analysit	46	63	63	63
	Loan Officer	27	37	37	100
	Total	73	100	100	

Source: Survey Result

The researcher sought to find out the respondent's position in the respective banks. The findings are shown in table 4.3 above. The study found out that of 63% of the respondents are Credit analysts and the remaining 37% of the respondents are loan officers both positions have direct relation with credit service with different scope and have important roles in determining whether an individual or business is deemed worthy of receiving a loan. Loan officers walk clients through the entire process of loan application and approval, while credit analysts dig deep into credit history to advise on the riskiness of extending credit to the client. This shows that most of the respondents were loan officers and credit analyst would therefore have an in depth understanding of loan processing. Regarding to credit reference system access both have same but the credit analyst looking the details of the report thoroughly compared with different parameters when come to loan officer use the report to see the default history of a borrower and the identification parts and mostly the loan officer also the one who continuously update the credit information.

4.2 Credit Reference Bureau Analysis

The general objective of this study to identify the role of credit reference bureau report on lending decision and the researcher focused on registration on credit reference system, credit information collected from borrowers, credit information collected from another bank, credit information usage and the regulatory requirement and analyzed hereunder.

4.2.1 Registration To CRS

The respondents were asked that in order to access credit reference system need to be registered. From the finding majority of the respondent indicate that to access the credit reference system banks first should make registration. Accordingly, the interviewees were required to indicate whether they knew what a Credit Reference Bureau (CRB) is and needs registration to access CRS. From their respond, all the interviewees (100%) unanimously agreed that they were aware of what CRB is and needs registration to access the database of the credit reference system. It implies that the credit reference system is highly monitored and no one can not able to use unless registered to the system.

Further, the National Bank of Ethiopia in its directive number CRB/01/2012 and CRB/02/2019 boldly mentioned that under article number 5.all financial institutions shall register with credit reference system by lodging a written application to the Credit Reference Bureau after all ensuring all infrastructure requires by credit reference system put in place shall register within seven working days. Therefore, it is possibly concluded that the requirement set by the credit reference bureau meet its objective. Accordingly, the interviewees were requested to indicate some of the functions of CRBs. The interviewees reported that CRBs are used for providing a person's or entity's credit history, sharing credit information analysis, storing and dissemination of information from lenders on borrowers loans (both performing and non performing), they are also used for generating reports for borrowers upon request, helping in identification of serial credit defaulters and provide credit rating or scoring of a customer.

In related to ask the banks are giving credit service without having a registration in CRS ,here also 100% reject the statement of giving credit service to their borrower prior to made registration .In same directive and article the bureau puts that no financial institutions shall extend new or renew, reschedule or refinance the existing loans unless it is registered with the Credit Reference System. Then, it is possible to conclude that no financial institutions avail a credit service to the borrower unless registering to the credit reference system. Therefore, learnt from the study no banks were giving a credit facility to their borrower before made registration in the system.

4.2.2 Resource Requirement

Table 4.4.The credit refrence bureau creates extra burdens to the banks resource requirment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	3	4.1	4.1	4.1
	Agree	4	5.4	5.4	9.5
	Neutral	12	16.4	16.4	25.9
	Disagree	10	13.7	13.7	39.6
	Strongly disagree	44	60.4	60.4	100
	Total	73	100	100	

Source: Survey Result

As per NBE directive number CRB/01/2012 or in the revised directive number CRB/02/2019 financial institutions required to establish a work unit, staffed with at least two officers at head office level which is fully dedicated for the Credit Reference System. This officer facilitates the issues in between the bank and the bureau. But at the user of the report level each individual will assigned on their assignment place to access the credit reference system with their own identification. Therefore, the researcher wanted to identify that any burdens that the banks face with related to use credit reference system like staff requirement, fees related, accessories and others. Accordingly, as per the survey result 74.1% disagreed on the statement that the banks were not face extra burden to use the credit reference system. But the remaining 9.5% and 16.4 % agree and neutral. As per the survey result it is possibly to conclude that accessing the credit reference system were not create extra burdens to the banks. It implies that the commercial banks operated in Ethiopia complains to use the CRS.

Further, the interview is forwarded to the interviewees the same question to give a brief of the burdens , in their answers materially the bureau were not create burdens everywhere in the office the staff assigned to give a credit service same individuals has a computer to do other activities but here the computer need to the internet access to reach in credit reference system. Therefore, it may create a network burden but compare with the information not to be consider as a burden. In other way even if the benefit of the credit information is vital sometimes may the Ethio Telecom network fail or the credit reference system server down banks are unable to get credit information of the borrower then the banks holds the borrower files till the credit reference system working in between the customers find another bank because they do not have an information about credit reference system are same to all banks as junction banks loss a clients, and it is create a cost to the banks, finally some of the interviewees conclude that the benefit they got have more advantage compare with the client loss.

4.2.3 User Friendly System

Table 4.5. Cedit Reference System is a user friendly system for registration process

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	**3**	**4.1**	**4.1**	**4.1**
	Agree	3	4.1	4.1	8.2
	Neutral	6	8.2	8.2	16.4
	Dis Agree	49	67.1	67.1	83.6
	Strongly dis agree	12	16.4	16.4	100
	Total	73	100	100	

Source: Survey Result

User-friendly describes a hardware device or software interface that is easy to use. It is "friendly" to the user, meaning it is not difficult to learn or understand. While "user-friendly" is a subjective term, and have several common attributes found in user-friendly interfaces such as simple, clean, intuitive and reliable. The goal of a user-friendly product is to provide a good user experience. Accordingly, to this sense the researcher asks the respondents that the credit reference system is a user-friendly system.as per their response shown in table 4.5 above 67.1% were disagree,16.4% strongly disagree and 4.1%,4.1% and 8.2% were strongly agree, agree and neutral. Therefore, majority of the respondents dis agreed with the statement then it is possibly concluded that the CRS is not a user-friendly system, which means it is difficult to use.

Further to get a detailed information same question forwarded to the interviewees most of them agreed and explained that the interface used to record the data is not self-explanatory to dig more about each field possibly in a batch update interface. Therefore, if the system interface is not user friendly the data updated by it would take time of the users and has a negative impact on other activities.

In general, the researcher asks the respondents to give further explanation with registration, some of the respondents put their observations, first the credit reference system took time to respond because the NBE server accessed by all banks at the same it needs to update the server to make accessible to all without any challenge. Secondly sometimes the borrowers spouse or guarantors tax identification number (TIN) becomes new on such conditions the identification data were not extracted easily this may be a problem of tax and revenue authority whose responsible to issue the TIN or the NBE server this also needs to adjust by discussing with the responsible organ lastly at the time of registering the borrower data in the credit reference system when an error occur it has not and edit option to amend the error before it is registered in the system.

4.2.4 Information from Borrowers

According to National Bank of Ethiopia directive borrower means a person applying for a new credit or holding an existing credit account or both and Bank is a company licensed by the National Bank of Ethiopia to undertake banking business in Ethiopia or a Bank owned by the Government.

The National Bank of Ethiopia directive number CRB/01/2012 or CRB/02/2019 under article number 7.1 request each financial institution shall receive from its borrowers and guarantors written and sign off consent to access their credit information. The very purpose of receiving consent from borrowers and guarantors are to get their right to collect and disseminate credit information of them. Accordingly, the researcher asks the respondents that they get the borrower consent prior to collect their credit information. The result shows that as table 4.6 below out of 73 respondents 34 or 46.6% were strongly agree, 32 or 43.8 % are agree and 8.2% and 1.4% of the respondents are neutral and disagree respectively. The majority of the respondent 90.4% are agreed and collect the consent from the borrower to collect the credit information to assess the creditworthiness of the customers but the remaining 9.6% are neutral and disagree the statement here is possibly concluded that to see the credit worthiness of their borrower the employees were collect credit information without having the credit consent from the borrower and guarantor. May be the consent received from the borrower does not used to assess the credit worthiness of the borrower rather the credit information about the borrower is the one used. But here those employees who are neutral or disagreed the statement violated the rule of the National Bank of Ethiopia and also violates the rights of the borrower because spying their information without the knowledge of them even if the information collected for the benefit of them. If the final decision of the credit worthiness assessment is negative based on the extracted credit information the borrower has the right to sue the banks. Finally, concludes that all employees should take in to consideration each and every rule mentioned in the directive.

Table 4.6.Banks receive a written and sign off consent from borrower to access their credit information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	**34**	**46.6**	**46.6**	**46.6**
	Agree	32	43.8	43.8	90.4
	Neutral	6	8.2	8.2	98.6
	Dis Agree	1	1.4	1.4	100
	Total	73	100	100	

Source: Survey Result

Related with the previous question the researcher asks that the format used to collect the consent from borrowers are easy to understand. The purpose of this question is that when the borrowers or guarantors gives their consent to access their credit information are, they willingly give. When we see other countries experience the information shared by banks are not limited in credit information only, they share tax records, court cases and others. According to Carolina, (1999), the type of information shared in both types of bureau is mainly “black” information i.e. negative information i.e. defaults or arrears and not white information i.e. positive information. In addition, the use of CRB extends to sharing information merged from other sources such as criminal records, tax records etc. Carolina adds that in some case, all these data of information is compiled together and used to assign credit scores of borrowers based on statistical risk analysis. Therefore, the borrower should understand when they share the information and the bank also responsible to educate them about the purpose of the information gathered. Considering this, as shown in Table 4.7 below 49.3.% are disagree,28.8% strongly disagree and 6.8% and 15.1% are neutral and agree respectively. To conclude the statement that the format used to collect the consent from borrowers are easy to understand. But still 21.9% of the respondents agreed that the borrowers are not understand the format used to give the consent even if the borrowers not understand the format the responsibility of creating awareness to the borrower is the employee who are presented the format to borrowers to make their sign. Till now the credit reference system is limited to collect the data only from the banks but to the future it starts to collect data from different organization to see the details of the borrower's credit like other developed countries did it becomes a challenge to banks start to develop these habits now. This effort should include what is called due diligence that is, the attempt to know your customer.

Table 4.7.The format used to collect the consent from borrowers has difficult to understand.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Agree**	**11**	**15.1**	**15.1**	**15.1**
	Neutral	5	6.8	6.8	21.9
	Dis Agree	36	49.3	49.3	71.2
	Strongly dis agree	21	28.8	28.8	100
	Total	73	100	100	

Source: Survey Result

4.2.5 Accuracy of Information from Borrowers

Banks operated in Ethiopia segregate their borrowers based on small, medium and corporate borrowers based on the loan approved. The information gathered from borrowers is the main inputs to the banks to made a useful decision. With relation to lending borrowing process most of the information is gathered from borrowers then this information is expected to be accurate. The medium and corporate customers request a credit facility requested a financial statement that should be audited by authorized auditors. but small business was not requested an audited financial statement to process their loan request rather they prepare by themselves and present same to banks to request the loan. Having this in mind the researcher requests the respondents that the information collects from borrowers are accurate. As shown in table 4.8 below 32.9% are strongly disagree ,26% disagree and 30.1% agree, 8.2% strongly agree and 2.7% are neutral respectively. Accordingly, it can be concluded that the information gathered from borrowers are inaccurate as well as accurate. As we try to see from the previous explanation the data collected from small business financial statement were not audited obviously those statements are not expect to be accurate because those statements are prepared to satisfy the lenders and in other way the medium and corporate business financial statement is audited by third party therefor those financial statement are accurate.

Further, the researcher to fill the difference of the data shown in the agreement and disagreement interviewed some banks Division Managers and Directors and learnt that banks give loan to consumers as well as traders. The traders who request the loan is categorized as small, medium and corporate. Therefore, as per their request the document required also different when the clients request a loan required a financial statement for financial analysis of the borrower. Some times to see the detail analysis of the clients the financial statement present by small business were not complete therefore to make a decision the banks highly depend on the collateral value.

Table 4.8.Banks collect accurate information from borrowers.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	6	8.2	8.2	8.2
	Agree	22	30.1	30.1	38.4
	Neutral	2	2.7	2.7	41.1
	Dis Agree	19	26	26	67.1
	Strongly disagree	24	32.9	32.9	100
	Total	73	100	100	

Source: Survey Result

4.2.6 Borrower Capacity

Capacity is the evaluation of the company's or individual's ability to repay the loan, here the banks needs to know how the customer will repay the funds before it will approve your loan. To determine the capacity of the borrower financial statement and credit history are significant to analyze the credit worthiness of the clients. The balance sheet, income statement, cash flow statement, and financial projections all provide critical information about the borrower's creditworthiness and capacity to repay. Analysis of revenues and profit margins, cash flow, leverage, liquidity, and capitalization are required in sufficient detail to determine strengths that the lender wants to preserve and weaknesses that may impact the borrower ‘s repayment capacity. If the bank fails to undertake rigorous analysis upfront, its capacity to protect itself against future repayment problems is limited and the quality of the loan portfolio will inevitably suffer. A credit history of the borrower should be obtained to determine the owner’s record of fulfilling his/her financial obligations. Therefore, the researcher asks the respondents to agree or disagree on the statement, as shown in table 4.9 below 47.9% are agree, 26% are strongly agree and 12.3% disagree ,1.4% strongly disagree and 12.3% are neutral respectively. From the response conclude that majority of the respondents agreed the information collected about borrowers use to determine the borrower capacity. Surprisingly 12.3% the respondent is disagreed on the statement and difficult to conclude how those employees determine the borrower capacity. According to the information gathered through the interview agreed that the information collected about borrowers are used to determine the borrower capacity, to clarify this from the financial statement it is possible to see the trends of the financial status and from credit history possibly see the customer past credit experience. In addition, the final credit decision is subjective because the most important factor in the decision is management of the borrower.

In accordance with the Beck (2007), increased information sharing allows for more informed risk assessment, improves access to credit for groups that have traditionally under served, enables greater and broader access to capital for small businesses and entrepreneurs, generally enables better lending decisions with lower rates of delinquency and default. However, lack of accurate information sharing on the credit history and current financial ability of prospective borrowers makes it extremely difficult for lenders to correctly assess their credit worthiness and likelihood to repay their loans.

Table 4.9.The information collected about borrowers use to determine the borrower capacity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	**19**	**26**	**26**	**26**
	Agree	35	47.9	47.9	74
	Neutral	9	12.3	12.3	86.3
	Disagree	9	12.3	12.3	98.6
	Strongly disagree	1	1.4	1.4	100
	Total	73	100	100	

Source: Survey Result

4.2.7 Information from another Bank

Under article number of 7.4 of directive number CRB/01/2012 or CRB/02/2019 financial institution required to update their own credit information on each and every one of their existing borrowers provided to the credit reference system on an ongoing basis; but they shall at minimum, update such information once in a month for banks.

The credit reference bureau directive requests each bank to update their borrower credit status once in a month following to this the researcher asks the respondent that update continuously or not as shown in table 4.10. below 39.7% of the respondents strongly agree, again 39.7% agree that banks continuously update their own credit information on each and every one of their existing borrowers and the remaining 1.4%,8.2% and 11% of the respondents are neutral, disagree and strongly disagree respectively. The majority of the respondent agreed that they update their borrower credit information but almost 19% of the respondents disagreed from this result the researcher learnt that the credit reference bureau was not follow such banks regularly and penalized.

Further same question forward to Division Managers and Credit Directors to fill the gaps why some times banks use a letter request from other banks to request the credit information about their borrowers and push the borrowers to discuss with the previous loan to update the credit information. Following to this, the result gained from the interview are same in all interviewee. That is, registration of the facility provided by the bank is taken place regularly but sometimes banks were not update some facility like default, overdraft and merchandise loan not update regularly at the time of extension unless closed by the borrower. Therefore, the study found that when the borrowers status changed that to default some banks not updated the customer file properly and also the supervision organ also not follow such kind of problems then there is a gap in between the user and supervisor part. To fill such kind of gap the supervisory body that is National Bank of Ethiopia should pose a penalty to those banks who purposely not update some customer files. Even if as mentioned in CRB Directive number CRB/01/2012/ or CRB/o2/2019 article 6.2 the Credit Reference Bureau shall not responsible for any damage, claims or liabilities that may arise as a result of in accurate , misleading or incomplete credit information on borrowers supplied to the Credit Reference System by individual financial institutions and shared through it with other financial institution.

Table 4.10.Banks continiously update their own credit information on each and every one of their existing borrower.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	29	39.7	39.7	39.7
	Agree	29	39.7	39.7	79.5
	Neutral	1	1.4	1.4	80.8
	Dis Agree	6	8.2	8.2	89
	Strongly dis agree	8	11	11	100
	Total	73	100	100	

Source: Survey Result

4.2.8 Updating Error Files

National Bank of Ethiopia under its directive number CRB/01/2012 or CRB/02/2019 article number 7.5 Mentioned that Financial Institutions shall make corrections and subsequent updating of error files within five (5) working days after receipt of such files from National Bank. Mostly the error files were identified by the other bank or by borrowers apply for other loans in another bank and present same to credit reference bureau for amendment. As per the definition given by credit reference bureau error file refers to a file originated by the system, after validation for quality on monthly and or quarterly batch update file is run, and constitute credit information which is not prepared in line with the data standardization manual and data submission specification. Following this, the researcher asks the respondents that update the error file within the time frame as shown in the table 4.11 below 53.4% of the respondents are strongly agreed, 28.8% agree and 6.8% and 11% of the respondents are neutral and disagree on the statement. Accordingly, the majority of the respondents agreed on the statement. Therefore, it can be concluded that banks updating the error files with the given time frame. The remaining 17.8% of the respondents are neutral or disagreed the statement these employees may not face such a problem on their responsibility. The researcher found from this study that some of the employees do their works without reading the rules and procedures issued by the National Bank of Ethiopia because such kind of ignorance will lead the banks to penalty.

Table 4.11.Banks shall be make correction and subsquent updating of error with the reasonable time frame.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	39	53.4	53.4	53.4
	Agree	21	28.8	28.8	82.2
	Neutral	5	6.8	6.8	89
	Disagree	8	11	11	100
	Total	73	100	100	

4.2.9 Submission of Credit information

Referring to National Bank of Ethiopia directive number CRB/01/2012 or CRB/02/2019 Each financial institution shall be fully responsible for submitting accurate, complete and timely credit information to the Credit Reference System.

Accurate information is an information should be fair and free from bias, Accuracy of information is just not enough. It should also be complete which means facts and figures should not be missing or concealed and Information should be communicated in time so that receiver of the information has enough time to decide appropriate actions based on the information received. Following to the directives and assumptions the researcher asks the respondents the statement that the banks submit accurate, complete and timely information. As shown in table 4.12 below 67.1% are strongly agree and 32.9% agree on the statement. The study found that unanimously 100% of the respondent agreed that the banks are responsible to submit complete, accurate and timely credit information to credit reference system.

According to the information gathered from the interview all the interviewees agreed that providing accurate, complete and timely data is the responsibility of the bank because the final user the credit information is the bank itself and as the same time if banks provide a wrong information to the credit reference system and identified same by the supervisory organ the banks will be penalized till to stop access the Credit Reference System. In addition, comments forward from the interviewees are accuracy and complete is subjective and interpret depends on the users therefore expected from the National Bank of Ethiopia a standard that helps the users to follow.

Table 4.12.Banks shall fully responsible for submitting complete,accurate and timely credit information to Credit Reference System

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	49	67.1	67.1	67.1
	Agree	24	32.9	32.9	100
	Total	73	100	100	

4.2.10 Borrower Character

Lenders have to believe that a business owner is a reliable individual who can be depended on to repay the loan. Character is the single most important factor considered by bank. Banks wants to do business with people who are honest, ethical and fair. The knowledge, skills and abilities of the owner and management team are vital components of this credit factor. Additionally, the lender needs to be confident the applicant has the background, education, industry knowledge and experience required to successfully operate the business.

Following to the concept the researcher asks the respondents that credit information of the borrower that shall be used to determine the borrower character to which 58.9% strongly agree,34.2% agree and 5.5% and 1.4% of the respondents disagree and strongly disagree respectively. Accordingly, the majority of the respondent agreed that the credit information collected about borrowers used to determine the character of them.

According to the information gathered from the interview the same question forwarded, the interviewees agreed that evaluation of the business owner's is highly subjective and determine the character by willingness of the customer not the ability. But it is a tool that have creates an opportunity to see the borrower character by taking data from the credit information and interview them relatedly. Therefore, the credit reference system becomes a clue to know about the borrower character.

Table 4.13.Banks provide credit information that shall be used to see borrower character

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	43	58.9	58.9	58.9
	Agree	25	34.2	34.2	93.2
	Disagree	4	5.5	5.5	98.6
	Strongly Dis Agree	1	1.4	1.4	100
	Total	73	100	100	

Source: Survey Result

Credit Risk

The following question asked the respondent to give with analysis. Do you think lack of information has contributed to wards Credit risk (information asymmetry, adverse selection and moral hazard) problems in lending activity of the bank?

Most of the respondents in their response accept the statement and the reason mentioned by the respondents on their agreement is when banks deciding to process a loan application first consider the estimated chance of recovery, to arrive at this, credit information is required on how well the applicant has honored past loan obligations and then confirmed that the credit information is important to reduce adverse selection of borrowers. Because lack of information leads to adverse selection. Credit Reference Bureaus are a typical response to information asymmetry problems between lenders and borrowers. Accordingly, to be concluded that lack of information contributed to wards information asymmetry, adverse selection and moral hazard.

When the lender has lack of knowledge on the borrower activities leads to a moral hazard problem. Then, Credit information sharing reduces the potential effects of moral hazard by assuring there are consequences to a borrower's future application of credit. Japelli and Pagano (2002), state that, lenders' information sharing induces borrowers to exert effort because they inadvertently "perform for a larger audience", that is, if they are delinquent on their contractual obligations, their misconduct will be disclosed to a wide variety of lenders. Thus, in this context information sharing mitigates borrowers' moral hazard.

4.2.11 CRS for Lending Decision

As per National bank of Ethiopia directive number CRB/01/2012 or CRB/02/2019 Each financial institution shall use the credit information on borrowers obtained from Credit Reference System only for making lending decision.

Following to this the researcher asked the respondent that the credit information of borrowers obtained from the credit reference system use for making lending decision as shown in the table number 4.14 below the respondents of 46.6% are strongly agreed 23.3% agreed and the remaining 9.6%,17.8% and 2.7% are neutral, disagree and strongly disagree respectively. Accordingly, the majority of the respondents agreed on the statement, then it can be concluded that banks are using the credit information extracted from credit reference system for lending decision. But out of the total respondents 15 of them which is 20.5% of the respondent disagreed on the statement. Mostly those employees who disagreed the statement is basically used the credit information gathered from the credit reference system but may they think the credit information as the compliance requirement like a legal or regulatory requirement. Here, the study leaves a big assignment to each bank to give a training to the credit staffs that helps to identify the purpose of the documents collected from the borrower as well as extracted from the system.

According the information gathered through interview all the interviewees are agreed that they use the information extracted from the credit reference system but it is not the only input that used to make a decision. The banks use the financial statement for financial analysis and projections. As per the directive issued by the National Bank of Ethiopia with related of the credit reference bureau article number 8.2 no financial institutions shall extend new loans or advances to a defaulter in any form. But a financial institution may extend additional loans and advances to borrower who defaulted from own financial institution with a view to rehabilitate loans and advance. Therefore, from the study result it can be concluded that the information gathered from credit reference system used to approve the loan or to make lending decision.

Table 4.14 The bank shall use the credit information of borrowers obtained from the credit reference system for making lending decision.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	34	46.6	46.6	46.6
	Agree	17	23.3	23.3	69.9
	Neutral	7	9.6	9.6	79.5
	Disagree	13	17.8	17.8	97.3
	Strongly Dis Agree	2	2.7	2.7	100
	Total	73	100	100	

Source: Survey Result

4.2.12 CRS for Amount Grant

A Credit is the trust which allows one party to provide resources to another party where that second party does not reimburse the first party immediately, but instead arranges either to repay or return those resources at a later date. The resources provided may be, or they may consist of goods or services (Gitahi, 2013). The role of credit reference bureau is to generate detailed information on an individual's or rather institution's credit history such as credit accounts, their personal identification numbers, late payments, dishonor of cheques, proven cases of fraud, forgeries and so on. The Credit Reference Bureau eliminates corrupt borrowers that aim at borrowing from different banks with the intention of defaulting hence aiding financial institutions in capturing the credit worthiness of borrowers and minimize risk. Therefore, the researcher asks the respondent that use credit reference bureau report to determine the amount grant.

As shown in table 4.15 below 26% of the respondents strongly agree 45.2% agree and the remaining 12.3% ,6.8% and 9.6% are neutral, disagree and strongly disagree respectively on the statement that bank use the credit information of borrowers to determine the amount that grant. Accordingly, majority of the respondents agreed on the statement, therefore it can be concluded that the credit information use to determine the amount that grant to the borrower. From total of the respondent disagreed on the statement that the information extracted from the credit reference system used to determine the amount that grant.

According to the information gathered from interview the information gathered from credit reference system is used to determine the amount that grant to the borrower, to clear how it is done the researcher ask the interviewees. As per the response when the customer has a clear credit history, clear default history and good repayment habit possibly determine the grant amount above the collateral margin amounts.

Table 4.15 The bank shall use the credit information of borrowers to determine the amount that grant.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	19	26	26	26
	Agree	33	45.2	45.2	71.2
	Neutral	9	12.3	12.3	83.6
	Disagree	5	6.8	6.8	90.4
	Strongly Dis Agree	7	9.6	9.6	100
	Total	73	100	100	

4.2.13 CRS to Identify Defaulters

As per the National Bank of Ethiopia directive number CRB/01/2012 or CRB/02/2019 Defaulters means a borrower, other than that under export credit guarantee facility of Development Bank of Ethiopia, whose outstanding loan as been classified as "substandard" and/or "doubtful" and/or "Loss".

As per applicable regulation of the National Bank of Ethiopia directive number of SBB/52/2012 the loan become substandard when short term loan past due 90 days or more but less than 180 days and medium and long-term loans past due 12 month or more, but less than 18 months. Doubtful are loans past due in between 180 and 360 days for short term and in between 18 months and 3 years for medium and long-term loans. Non-performing loans classified as a loss status when past due for 360 days and more for short term loans and 3 years and more for medium and long-term loans.

The researcher asks the respondent that the credit information extracted from credit reference system shall use to identify defaulter's through their credit history. The result shown in table 4.16 below 50.7% of the respondents strongly agree,42.5% agree and 5.5%and 1.4% are neutral and disagree on the statement. Therefore, the majority of the respondents agreed that use the credit information to identify that the borrower is defaulted or not. Despite of the fact the credit information helps to identify the defaulters as the same time the credit reference system has own problems on identification of defaulters ,that is when the borrower stay as a defaulter in long time and come and pay all due amount in lump sum automatically the status of the loan changed to regular.

According to the information gather from the interview all are agreed that the credit information helps to identify the defaulter, but still have a problem need to solve. That is, if the regular loan of a borrower was stay in default status for some period and the borrower settle that loan within a regular time the previous data erased and shown the status as regular loan. The researcher therefore recommends the credit reference bureau to identify such kind problems and gives a remedial action early. Otherwise such kind of loopholes identified by the borrowers they use wrongly and affect the benefit of the credit reference system.

Table 4.16 Information from CRS shall use to identify defaulters through their credit history and obligations and thus mark them a risky client.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	37	50.7	50.7	50.7
	Agree	31	42.5	42.5	93.2
	Neutral	4	5.5	5.5	98.6
	Disagree	1	1.4	1.4	100
	Total	73	100	100	

Source: Survey Result

4.2.14 CRS for Lending Interest rate charge

Crowley (2007) defined interest rate as money borrower pays for the use of money they borrow from a lender/financial institutions or fee paid on borrowed assets. Interest rate between lending and deposit rate used for making judgment on banks efficiency in case of individual bank spread, or banking system 's efficiency in case of overall spread of banking system (Maudos and Solis, 2009).

According, to the National Bank of Ethiopia directive number NBE/INT/2017 the mandate to determine the lending rate on loans and advances given for each bank.

The researcher asks the respondent that banks use the credit information extracted from credit reference system for determine lending interest rate charge as per the response collected from the respondent's shown in table 4.17 below 34.2% of the respondent strongly disagree,32.9% disagree on the statement but the remaining 13.7%,16.4% and 2.7% are neutral, agree, and strongly agree. Therefore, the majority of the respondent disagreed on the statement, then the study indicate that credit information sharing did not affect the lending interest rate charge.

According to the information gathers from the interview all are disagreed on the statement. Banks set interest rate on loan given in to consideration the competitors rate set for loans and advance to become competitive in the market. According to the response Banks experience to set interest rate in Ethiopia is almost the same first they made survey of others bank interest and based on the data collected on the survey decide their own interest for short term, medium and long-term loans. In addition, when the borrower fails to pay their obligation on the contractual period banks set additional penalty charges. The researcher therefore recommends that the banks to see other countries experience that different study shows that banks use the credit history to negotiate the interest rate charge. In theoretical model of credit information system, Jappelli and Pagano (1993) shows that exchange of information on borrower type decrease default rate and reduce average interest rates. In a related paper Padilla and Pagano (1997) show that information sharing among borrowers would lead to lower interest rate and increased lending.

Table 4.17 The bank shall use the credit information of borrowers to determine the interest rate charge.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	2	2.7	2.7	2.7
	Agree	12	16.4	16.4	19.2
	Neutral	10	13.7	13.7	32.9
	Disagree	24	32.9	32.9	65.8
	Strongly Dis Agree	25	34.2	34.2	100
	Total	73	100	100	

Source: Survey Result

4.2.15 CRS for Collateral Reputation

Boot et al, (2013) observed that the security required by the lenders is necessitated by their desire to hedge borrowers chances of default, most of the time, the collateral is valued either by the lenders staffs or by a licensed independent valuer who present a written reports expressing their opinion on the market and intrinsic value to enable the credit provider make a decision on suitability of the properties to secure the loan. The borrower is then made to accept terms envisaged in the loan agreement, empowering the credit provider to liquidate the asset if the borrower defaults for a certain period of time or number of loan repayment instalments' in conformity to the prescribed laws regulating the lending business.

Collateral is defined as an asset that upon liquidation is adequate to cover most or all of the lender's risk exposure including principal, accrued interest and collection costs (Larr, 1994). In general, physical assets such as buildings, real estates an, machineries and others are considered as collateral.

Respondents were asked that credit information of borrowers use to reduce reliance on collateral offered as shown in table 4.18 below 15.1% strongly disagree and 50.7% disagree the remaining 11% ,20.5% and 2.7% are neutral, agree and strongly disagree. Accordingly, the majority of the respondent are dis agree on the statement and it can be concluded that the credit information does not used to reduce reputation collateral.

According to the information gathered from the interview the interviewees agreed that sometimes a loan is granted to the borrower on deficit of collateral and clean base for high value customers whose credit history is clean, good repayments history and longtime relation with the bank. This is, therefore the researcher concludes that banks provide a loan facility to those high-risk taker borrowers with out or with deficit collateral and this shows that banks are highly concentrated on collateral rather than seeing the borrower ability to repay the loan. Accordingly, the study recommends that banks should focus on the ability of the borrower to repay the loan instead solely depend on the collateral value.

According to Adudaet *al* (2012),lenders are urged to appraise the ability of the borrower to repay, instead of solely relying on the security along with collateral provided, as this will enable them measure the ability of the clients to service the loans as well as mitigate default, this is in tandem with the fact that collateral does not necessarily gesture ability to repay an obligation, but a demonstration of wealth which could be inherited, this leads to most credit providers relying on the cash-flow patterns of clients to determine amounts to advance as loans and periodic repayments of instalments, which can be monthly or quarterly or at some pre-agreed frequency.

Table 4.18 The bank shall use the credit information of borrowers to reduce reliance on collateral offered.					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Strongly Agree	2	2.7	2.7	2.7
	Agree	15	20.5	20.5	23.2
	Neutral	8	11	11	34.2
	Disagree	37	50.7	50.7	84.9
	Strongly Disagree	11	15.1	15.1	100
	Total	73	100	100	

Source: Survey Result

4.2.16 CRB for Multiple Borrowing

The study established that CRB has significantly reduced the cases of multiple borrowing. One of the functions of CRB is to offer banks access to databases that capture relevant aspects of the customer's debt or borrowing history, and thus reducing the screening process and sought to establish how CRB has achieved this thus far. CRBs have played a key role in helping the creditors in decision-making.

Accordingly, the respondent asked to agree or disagree with the statement that the CRB has reduce multiple borrowing as shown in Table 4.19. 39.7% of the respondent strongly agreed while 49.1% agreed and 6.8%,1.4% and 3% are neutral, disagree and strongly disagreed on the statement. The study shows that the majority of the respondent agreed that CRB has reduce multiple borrowing.

The interviewees were also requested to indicate their agreement with that CRB has reduced of multiple borrowing. Majority of the respondents agreed that CRBs have contributed to control of multiple borrowing. The researcher therefore conclude that credit reference bureau has reduce multiple borrowing.

Table 4.19. CRB report has reduced multiple borrowing.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	29	39.7	39.7	39.7
	Agree	36	49.1	49.1	88.8
	Neutral	5	6.8	6.8	95.6
	Disagree	1	1.4	1.4	97
	Strongly Disagree	2	3	3	100
	Total	73	100	100	

Source: Survey Result

4.2.17 Data Access Restriction

According to National bank of Ethiopia Credit Reference Bureau directive number CRB/01/2012 or CRB/02/2019 article no 7.11 to ensure the integrity and security of the data, each financial institution shall make sure that Credit Reference System at the financial institution is operated with strict data access procedures.

Data integrity refers the overall completeness, accuracy and consistency of the data and data security is protecting data against unauthorized access or corruption.

Accordingly, the respondent asks that the banks operated with strict data access procedure. As per the study. As shown in the table 4.20 below 57.5% are strongly agreed, 41.1% agreed and 1.4% neutral on the statement that banks to ensure the integrity and security of the data, shall make sure the credit reference system at the bank is operated with strict data access procedure.

According to the information gathered from the interview majority of the respondents agreed on the statement to keep the integrity and security of the data each user at any level has his/her identification number and easily identified who is access the borrower credit information. Therefore, from the result of the study, it can be concluded that the of data access restricted only to the authorized users and it is as per the National Bank of Ethiopia requirement.

Table 4.20.Banks to ensure the integrity and security of the data and make sure the credit reference system operated with strict data access procedure.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	42	57.5	57.5	57.5
	Agree	30	41.1	41.1	98.6
	Neutral	1	1.4	1.4	100
	Total	73	100	100	

Source: Survey Result

4.2.18 Confidentiality

As per the NBE directive the credit information shall be treated with utmost confidentiality and shall not be disclosed to any third party or used for any other purpose.

The respondent asked about the credit information confidentiality as per their response shown in the table 4.21 below 54.8% strongly agree ,34.2% agree, 8.2% neutral and 2.7% disagree. Accordingly, it can be concluded that the data extracted from credit reference system is more confidential. But 10.9 % of the respondent are neutral and disagree this implies that those employees are not familiar with the National Bank of Ethiopia directive. If those employees identifying when disclosing of the information to the third party the bank become fully responsible as stated in article 7.13 of the NBE directive.

Table 4.21.The bank shall use the credit information utmost confidentiality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	40	54.8	54.8	54.8
	Agree	25	34.2	34.2	89
	Neutral	6	8.2	8.2	97.3
	Disagree	2	2.7	2.7	100
	Total	73	100	100	

Source: Survey Result

4.2.19 CRB for Financial Discipline

What Is Financial Discipline? Merriam-Webster defines "discipline" as "a way of behaving that shows a willingness to obey rules or orders." ... Financial discipline refers to how well you are able to conform your spending and saving to the plans that you have set to achieve your monetary goals.

The survey result shows that in the table 4.22 below from the total respondents 17.8% strongly agree, 37% agree, 13.7% neutral ,20.5%disagree and 11% strongly disagree on the statement that CRB helps to introduce culture of financial discipline since consumers knows that they are monitored. Accordingly, it is difficult to conclude only focused on the survey result even if the agreed respondent's number above the average because the respondents who are neutral and disagreed on the statement also reach to half of the respondent. For further explanation same questions were asked the interviewees and they agreed that CRB helps to introduce financial stability to support their idea raise the National Bank of Ethiopia directive that prohibited banks not to extend new loans or advance to a defaulter. Where borrowers know this automatically use the grant amount to the intended purpose unless and otherwise the awareness is not creating on borrowers' side the borrower may divert the loan amount and face default. therefor the researcher concludes that CRB help to introduce financial discipline when it communicates properly to lenders and borrowers properly.

Table 4.22.CRB has helped instill culture of financial discipline since consumers know that they are monitored.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	13	17.8	17.8	17.8
	Agree	27	37	37	54.8
	Neutral	10	13.7	13.7	68.5
	Disagree	15	20.5	20.5	89
	Strongly Disagree	8	11	11	100
	Total	73	100	100	

Source: Survey Result

4.2.20 CRB for Security Access

As per the survey result shows in the table 4.23 below 58.9% of the respondents strongly agree on the statement and 41.1 % agree almost hundred percent of the respondent agreed on the statement that the bureau assures the appropriate access level assigning for the authorized users in the bank. Accordingly, it can be concluded that the Credit Reference Bureau follows the appropriate security access of the banks. This helps the credit reference bureau to minimize the risk of unauthorized access.

According to the information gathered from the interview the majority of the respondent agreed that the credit reference bureau control the access of the users.

Table 4.23.The bureau assures that the appropriate security access level assigning for the authorized users in the bank.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	43	58.9	58.9	58.9
	Agree	30	41.1	41.1	100
	Total	73	100	100	

Source: Survey Result

Lastly, the study sought the interviewees to comment CRS includes features to pop up better loan management. The interviewees assented that the credit information extracted from CRS is not full, it should incorporate data from other sources like financial statement presented for tax purpose and extracted tax clearance from Ethiopian Revenue Authority data base instead of the customer brought hard copy. They further added that, the credit reference bureau Should revisit each elements of the report because some of the information is irrelevantly existed and necessary information is ignored that is the amount that grant to the borrower through time and also create a mechanism to score the credit status of the borrower and this helps to identify whose customers are good or bad credit experience .Lastly, they comment the credit reference bureau to evaluates the market requirement and update the directive spontaneously. In addition, from the bank side also expected to create an awareness to borrowers on Credit Reference Bureau function side by side with sign off the consent it helps to minimize the risk of bad debts.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter is divided in four parts namely summary of the study, discussion, conclusions, and finally the recommendations section. The summary section provides a snapshot of the key elements of the study; that is, study objectives, methodology and the findings. The subsequent section deals with exhaustive discussions of the key findings of the study in relation to the specific study objectives. Conclusions sections presents the findings and results of this study as detailed in chapter four. The chapter ends by making recommendations for improvement on the various aspects of CRS.

5.1 Conclusion

The main objective of this study is to identify the role of credit reference report on lending decisions of private commercial banks in Ethiopia. Therefore, the finding of the study conclusion present in the following section of the research.

5.1.1 Summary of Finding

The purpose of this study was to examine the role of Credit reference bureau report on lending decision. The main purpose of the study was to investigate the role of credit information sharing on lending decision of private commercial bank in Ethiopia. Specific objectives of the study included examining the issue related to getting register to the CRB's system, assess the usage of the CRB's information for lending decision, assess the type of data gathered from the borrowers, assess the credit information update by other banks rather than the user bank and examine the regulatory requirement of the banks to using credit information.

In line with the objective of the research, which is to make an assessment on the role of credit reference bureau report on lending decision of private commercial banks in Ethiopia, the researcher used a descriptive type of study. In addition, the survey method has been employed in the study which comprises of semi-structured questionnaires and unstructured interviews. The questionnaires and interviews were designed to solicit data on the role of credit reference bureau report issues the researcher address the following research questions namely:

1. What is the role of CRB's on the system registration process?

2. What is the role of credit information bureau's report on lending decision?
3. What type of information is gathered from borrowers?
4. How often the reports update by other banks?
5. What regulatory requirement that the bank fulfil using CRB's?

Accordingly, the major findings of the study are:

5.1.1.1 Getting register to NBE CRB's credit reference system.

- 100% of the respondent agreed that the users need to be registered in the CRS in order to access the NBE's CRB database.
- Banks should not provide credit service to their borrower prior to made registration on the Credit Reference Bureau.
- The resource requirement that is staffing, infrastructure and related fee were not create extra burdens to the banks related with register in Credit Reference Bureau. But sometimes the Bureau server down which creates customer shift cost even if all banks use the same server.
- Majority of the respondent disagreed that the credit reference system is not user-friendly system.

5.1.1.2 Gathering information from borrowers.

- The written and sign off consent is must to access borrowers credit information.
- The format used to collect the consent from borrowers are easy to understand.
- Banks that collects additional information from small sized business is not accurate.
- The credit information collected from borrowers helps to see their capacity to repay the loan.

5.1.1.3 Credit information update by other banks.

- Banks continuously or in a given period of time update credit information of the borrowers.
- Banks are regularly making correction when the error happen in borrower file.
- All the respondent agreed that banks are responsible to submit complete, accurate and timely credit information to credit reference system.

- Majority of the respondent agreed that credit information use as a tool to identify the borrower character.
- Lack of information contributed towards information asymmetry, adverse selection and moral hazard.

5.1.1.4 Credit information usage.

- Banks use the credit information extracted from the credit reference system for lending decision.
- The credit information of borrowers uses to determine the amount that grant.
- Majority of the respondents agreed that the credit information use to identify the defaulters.
- Banks are not use the credit information to determine the interest rate charge.
- Credit information of a borrowers does not used to reduce reputation collateral.
- The majority of the respondent agreed that CRB report helps to reduce multiple borrowing.

5.1.1.5 Regulatory requirement by the NBE for banks.

- Majority of the respondent agreed that the credit reference system at the bank is operated with strict data access procedure.
- The survey result shows that the majority of the respondents agreed that banks use credit information confidentially and not disclosed to a third party.
- CRB has helped instill culture of financial discipline by creating a know how that consumers are monitored.
- Majority of the respondent agreed that the Credit Reference Bureau assures the appropriate access level assigning only for the authorized users in the bank.

5.2. Conclusion of the study

- The study revealed that to access the data base of the Credit Reference Bureau banks should get permission from the bureau in advance and also banks not extend new loans to their borrowers prior to register on Credit Reference system. In addition, the infrastructure requirement to register in the bureau not create extra burden to the banks but the system is not user friendly and sometimes the credit reference bureau server is down and banks unable to extract the borrower credit information and it creates customer switching cost.

The study conclude that the registration process is highly monitored by Credit Reference bureau rather no assessment was done by the bureau to resolve the user's problem.

- From finding of the study to process loan in a bank borrowers should sign off a written consent to share the information and the format used to collect the consent from the borrowers are easy to understand as the same time the information collected from the borrower is able to see the capacity of the borrowers but the banks are not collected from borrowers about their employment and income. The study concludes that to collect information from the borrowers need to get their consent and the information get from the borrowers helps to see the capacity of the borrower.
- From finding of the study banks update the status of their borrower in CRS continuously and also regularly makes a correction on error files. The credit information that updates and submit by other banks are complete, accurate and timely. The credit information submit by other banks helps to determine borrower character and lack of information leads to information asymmetry, adverse selection and moral hazard. The study conclude that the credit information collected by other banks met the requirement of the central bank directive in other way the objective of the Credit Reference Bureau met and also credit information sharing reduce information asymmetry, adverse selection and moral hazard problems.
- The study revealed that the credit information extracted from the CRS use to make lending decision, determine the amount grant, identify the defaulters and used to reduce multiple borrowing. But it is not use to determine interest rate charge and reputation collateral. The study therefore concludes that credit information sharing has vital for making lending decision, determination of amount grant and identifying defaulters but it does not impact on interest rate charge determination and physical collateral.
- From the finding of the study confirms the banks operated with strict data access procedure, keeps confidentiality and not disclosed to the third party, bureaus instill financial discipline and assure the access assigned to the authorized person. The study therefore conclude that the regulatory requirement set by the central bank said to be fulfilled.

5.3 Recommendation

Given from the finding of this study some of the conclusions are the CRB server sometimes down, the collected data is incomplete, credit information is not full, credit history of the borrower changed when lumpsum payment is made, the management of commercial banks are not used the credit information to set the interest rate and credit officers or credit analysists ignored the credit reference bureau directive unknowingly and negligently. Therefore, the researcher forwards the possible recommendation to credit reference bureau, management of commercial bank and credit officers or credit analyst respectively as follows.

- ❖ The study established that the credit reference bureau server is sometimes down and it happens the banks face customer switching cost. Therefore, the credit reference bureau takes into consider the number of banks and upgrade the server that the banks to give efficient service to their borrowers.
- ❖ The study established that the credit reference bureau collects data from lender and borrowers to create credit information. Therefore, to have a complete data the study recommends credit reference bureau to compiled data from other source like tax record, courts and others. Kalberg and Udell (2003) point out that information exchange from multiple sources improves the precession of the signal about the quality of the borrower.
- ❖ The study established that the credit information collected is not full. Therefore, the study recommends credit reference bureau to adopt full file information sharing that provides more comprehensive view of their borrower’s credit worthiness. It can be improving knowledge of applicant’s character, past behavior and debit exposure.
- ❖ Credit Reference Bureau gave emphasis on the update of borrower’s credit information, but the study found that some employees not done. Therefore, the study recommends the credit reference bureau puts stringent penalties for such banks breaches the directive.
- ❖ The study established that the default credit history of the borrower changed when they made payment in a lumpsum. Here credit reference bureau should do an assessment of the problem and the study recommends that the credit history must keep in progress of their status periodically, otherwise the credit reference bureau lose its wider role that is to ensure the availability of credit information in the form of credit histories of the borrower.

- The study established that the Management of Commercial Banks were not use the credit information to determine interest rate. The study conclude that the lending institutions take other countries experience and use the credit information to set interest rate. Therefore, it becomes one of the factors used to compete with other competitors and as well as helps to hold a customer that has good credit history. Jappelli and Pagano (1993) show that the exchange of information on borrower type and loan repayment behavior decreases default rate and reduces average interest rate. Further related studies on the same done by Padilla and Pagano (1999) show that information sharing among borrowers would lead to lower interest rates and increased lending.
- The study established that the management of commercial banks are highly depend on collateral base to give credit facility. The study recommends that commercial banks should focused on less collateral presentation to satisfy the majority of their clients by looking their credit history and took considerable credit risk.
- The study established that some credit officers or credit analyst negligently or without knowing ignored some parts of the credit reference bureau directive. The study recommends that those employees needs to update themselves by reading the directive if do such problems without knowing and if did such ignorance related with negligence the employee should think that their banks will penalize if the problem is identified.

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