



The Impact of private Bank Financial Accessibility to Small and
Medium Enterprise and their contributions on Economic growth of
Ethiopia

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I, the undersigned, declare that this thesis is my original work, has not been presented in any other university and that all sources of materials used for the thesis have been duly acknowledged.

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Certification

This is to certify that Muluken Israel has carried out his research work on the topic entitled “The Impact of Private Banks Financial Accessibility to SME and their Contribution on Economic Growth of Ethiopia”.

The work is original in nature and is suitable for the submission for the award of MBA in Management.

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“The Impact of Private Banks Financial Accessibility to SME and their Contribution on Economic Growth of Ethiopia” by Muluken Israel

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Definition of Terms

ATF: Accesses to Finance and its availability

CBE: Economic Commission for Africa

EEA: Ethiopian Economic Association

ETB: Ethiopian Birr

FeMSEDA: Federal Micro and Small Enterprises Development Agency

GDP: Gross domestic product

GTP: Growth and Transformation Plan

IFC: International Financial Corporation

ILO: International Labor Organization.

IPA: Innovations for Poverty Action

MFIs: Microfinance Institutions

MoFED: Ministry of finance and economic development

M&A: Merger and Acquisitions

MoTI: Ministry of Trade and Industry Sub-Saharan Africa (SSA)

ABSTRACT

The overall objective of the study is to evaluate the Impact of private Bank Financial Accessibility to Small and Medium Enterprise and their contributions on Economic growth of Ethiopia. The study was employed quantitative method After fulfilling all of explanatory variable time-series FGLS regression basic assumptions and conducting unit root test, regression analysis is conducted.

From Cross-sectional time-series FGLS regression result the Impact of private Bank Financial Accessibility to SMEs which is accounted for an average of 29% of GDP, and represented one tenth of bank loan assets, market capitalization of equity markets for SMEs is higher than 4.2% of GDP in constant manner. In this context, the MSMEs financing gap suggests the limitations of bank lending for MSMEs financing. Financial institution has shown an encouraging growth in its growth and outreach. Private Bank Financial Accessibility to Small and Medium Enterprise portrayed by indicator of Ratio expenditure which is Ratio of Cost of Energy Consumed to Total Industrial Cost by Major Industrial Group is 2.5% probability interval to be worth which is contributed to country economy by 1.21GDP. Similarly, the result on private Bank Financial Accessibility to Small and Medium Enterprise portrayed based on portfolio of Gross Value of Production: Ratio of Value Added to Gross Value of Production by Major Industrial Group likely hood ratios of worth by 2.2% which is contributed to 2.9% for country growth. Finally, portfolio of SMEs ROE which is the Ratio of Operating Surplus to Gross Value of Production by Major Industrial Group ratio of worthiness is 7.8% which is contributed to the country GDP by 3.18 %. Finally, it is concluding that impact of private bank towards financing SMEs in Ethiopia shows relatively in infant stage.

Key words: SMEs, financial accessibility, private bank, GDP

Chapter One

1. Introductions

1.1. Backgrounds of the Study

Small and Medium sized enterprises (SMEs) have usually been perceived as the dynamic force for sustained economic growth and job creation in developing countries. They play multifaceted role such as boosting competition, innovation, as well as development of human capital and creation of a financial system.

With increased urban population dynamics of Sub-Saharan Africa (SSA), the importance of SMEs is also growing. In similar fashion, in cities and towns of Ethiopia, SMEs and the informal sector are the predominant income generating activities and thus they have a significant contribution to local economic development and used as the basic means of survival (Gebre-egiziabher and Demeke, 2004).

In SSA, given the rapid rural-urban migration and deficiency to absorb this migration, SMEs have become important urban economic activities particularly in providing urban employment. In similar fashion, in cities and towns of Ethiopia, SMEs and the informal sector are the predominant income generating activities and thus they have a significant contribution to local economic development and used as the basic means of survival (Gebre-egiziabher 2006).

The Small and Medium Enterprises informal and Small Manufacturing Enterprise sector (SMEs) contributed value added of Birr 8.3 million in 2006. Based on the 2006/7 data, this figure constitutes about 3.4% of the GDP, 33% of the industrial sector's contribution and 52% of the manufacturing sector's contribution to the GDP of the same year (Gebrehiwot, 2006). The development of the sector in Ethiopia is believed to be the major source of employment and

income generation for a wider group of the society in general and urban youth in particular. The five-year Growth and Transformation Plan (GTP) of Ethiopia envisages to create a total of three million micro and small scale enterprises at the end of the plan period (NBE, 2011).

The financing of small and medium enterprises (SMEs) is a subject of great interest among economists, practitioners, and policymakers working on financial and economic development. This attention is rooted in at least two factors. First, SMEs account for a very significant share of manufacturing employment, so their viability is important to overall employment levels in an economy (Martinez Peria, 2009).

Second, SMEs tend to be financially constrained and lack of access to finance is an important obstacle to their growth. For example, Beck, Demirgüç-Kunt, and Maksimovic (2002) show that smaller firms finance a greater share of investments through informal sources of finance, such as moneylenders, family, and friends. As a consequence, understanding how banks are willing to lend to and, more generally, serve SMEs has become important.

This is particularly relevant since the banking system is thought in policy circles to have developed a “U-shaped model” that leaves the SME segment underserved (World Bank, 2002). In other words, banks are perceived to focus on the two extremes: consumer and micro-enterprises on the one hand and the corporate sector on the other but ignore SMEs due to these firms’ idiosyncratic factors that deter their financing. Banks want to finance large corporations because they tend to be stable, have visible assets, entail risks that are easier to assess, and carry out projects that are easy to evaluate. Large corporations constitute natural clients since they are the main players in the economy. At the other extreme, there are consumers and micro-enterprises, which are atomized clients. Their very small size allows banks to diversify risk using

scoring techniques and to reduce costs (since they are mostly offered standardized products) (Martinez Peria, 2009).

Between these extremes are SMEs, which are not as diversifiable or homogenous as consumers and micro-enterprises, but are more opaque and unstable than corporations. These reasons, in conjunction with the belief of lack of worthy demand and the weakness of the legal and contractual environment in many developing countries, support the perception of low bank involvement with and interest in the SME segment (IFC, 2007).

Up until recently, the literature on SME banking argued that to the extent that banks are interested in SMEs, they engage them through the model of “relationship lending.” According to this model, banks rely on “soft” information gathered by the loan officer through continuous, personalized, direct contacts with SMEs, their owners and managers, and the local community in which they operate. This helps them mitigate opacity problems (Berger and Udell, 2006) which is also argued that small and community banks have a comparative advantage in relationship lending.

However, De la Torre, Martínez Pería, and Schmukler (2008) have recently claimed that even large and foreign banks might have incentives and a comparative advantage in serving SMEs through alternative models to relationship lending. Therefore, reducing this financing accessibility in low-income countries should raise the incentive to create SMEs and consequently improve economic growth and increase job creation. In addition, improving SMEs’ access to finance is significantly important in promoting performance and firm productivity (World Bank, 2015). In Ethiopia, despite the enormous importance of the SME sector to the national economy with regards to job creation and the alleviation of abject poverty, many of the SMEs are unable to realize their full potential of access to finance from formal bank due to the existence of

different factors that inhibit their growth and performance. The study insisted to evaluate the trend of financing by private bank gap to SMEs in Ethiopia which can be attributed to economic growth of growth.

1.2. Statements of the problem

In Ethiopia, despite the enormous importance of SMEs are unable to realize their full potential due to the existence of different factors that inhibit their growth and performance. One of the leading factors contributing to the unimpressive growth and performance of the enterprises is limited access to finance (Wolday and Gebrehiwot, 2014). In a similar way, comparing small and large firms the World Bank finds that SMEs firms face more challenges in obtaining formal financing than large firms; they are much more likely to be rejected for loans, and are less likely to have external financing from private bank (World Bank, 2015). In Ethiopia, SMEs' problem of credit access has persisted implying that changes in the banking sector structure parse are not sufficient to introduce competition in the banking industry and an improvement in SME credit access (Ashenafi, 2012).

Most private banks in Ethiopia contend that the principal way to discover potential SME clients is through existing clients based on national bank of Ethiopia regulations. SMEs that are clients or suppliers of existing clients appear to be natural candidates. In this way, banks exploit the synergies of working with different types of clients. Using information from existing firm databases, such as credit bureaus, relying on existing deposit clients, and attracting clients with bank credit are also common approaches that banks use to identify prospective SMEs. With a lower degree of importance, another practice observed is the incorporation of relationship managers from other banks, who bring their own client's portfolio (NBE, 2015).

Since 2012, most to Ethiopian bank got foreign reserved fund which is expected to credit accessibility is rooming to SMEs most of the SME was evaluated to the rate of financial accessibility from private bank was combined wouldn't got affordable chance for loan. However, the firms using rentable assets or having low assets structures, as is the case with service businesses, are subject to low financial access due to scarcity of collateral values (WHO, 2015).

Hence, the gap insisting for current study is there is no any of actual evidence the magnitude of private Bank Financial Accessibility to Small and Medium Enterprise and their contributions on Economic growth of Ethiopia. The other gap for this study found that the investment portfolios of SMEs were not identified, which lessen the probability of failure and makes banks more confident or not to issue loans based on their expertise and large assets structures.

In other hand, the purpose of this study is to shed light on current trends and practices in bank financing of SMEs in Ethiopia where the banking system is dominated by government owned banks. The Ethiopian case is interesting because government owned banks dominate the Ethiopian banking system and this makes of Ethiopia an exception within SSA and across the developing world where banking systems have much higher shares of private and foreign participation. Therefore, the study is evaluating the Impact of private Bank Financial Accessibility of SMEs and their contributions on Economic growth of Ethiopia. As per Aderaw and Manjit (2016) the share of public banks stood at 66.4% from deposit mobilized, 53.3% of loans disbursed and 38.8% of branch networks per 2014 NBE reports. Besides, as per Alemayehu, Tony and Getnet (2017) out of Birr 138.76 billion deposits mobilized in 2015 public banks accounted for 58%; out of Birr 75.5 billion loans disbursed public bank's share was 55.5%. Same study noted that capital of Birr 31.54 billion is shared by public private in 43.5:56.5 proportions in 2015 which signals the role of private banks seems to surge gradually.

1.3. Research Questions

The study forwarding the following questionnaires:

1. What is the magnitude of in private bank financing to SMEs in Ethiopia?
2. What is proportion of loans granted to manufacturing SMEs by private bank over total enterprise loans for institution at the end of year?
3. What is the extent of manufacturing SMEs Distribution of Value Added on Economic growth?

1.4. Objective of the study

1.4.1. General objective

The overall objective of the study is to evaluate the Impact of private Bank Financial Accessibility to Small and Medium Enterprise and their contributions on Economic growth of Ethiopia.

1.4.2. Specific Objective

1. To evaluate the magnitude of in private bank financing of SMEs in Ethiopia.
2. To evaluate the proportion of loans granted to manufacturing SMEs by private bank over total enterprise loans for institution at the end of year.
3. To examine the extent of manufacturing SMEs Distribution of Value Added on Economic growth.

1.5. Significance of the Study

Small and medium scale enterprises (SMEs) are lifeblood of most economies. The study will contribute in many important areas of SMEs studies. Firstly, it advances to a better understanding of how private financial source is accessible, secondly, it increases the

understanding of how SMEs contribute to overall economic activities and, third, it will pave the way forward for the government, policy makers, entrepreneurs and to the general public at large to understand the different roles of SMEs on transforming the countries development policy from agriculture-led economy to industry-led economy.

This study will also provide literature review for scholars who will wish to study related subject matter in future. The scholars will benefit from the empirical information that will be collected and analyze.

1.6. Scope of the Study

The study was selected those Manufacturing SMEs and from Private bank; united bank S. C, Zemen bank SC, Awash International Bank SC, Dashen Bank SC, Buna international bank SC and Abyssinia Bank SC as a sample among other private banks due to the concern on the availability of data from SMEs and due to bank data time limitations.

The study was evaluating the Impact of private Bank Financial Accessibility to Small and Medium Enterprise and their contributions on Economic growth of Ethiopia using U-shaped model by (World Bank, 2002) that leaves the SME segment underserved on trust worthiness which is manufacturing sector have higher capital and asset structures than those operating in wholesale and retail sectors. Subsequently these assets can be used as potential collateral values for banks and encourage them to issue bank loans based on over all bank financing loan outstanding portfolio by SMES; Number of Employees by Major Industrial Group, Total Asset: Total Value Of Fixed Assets by Industrial Group, Wage rate: Ratio of Cost of Labor to Gross Value of Production by Major Industrial Group, Rations expenditure: Ratio of Cost of Energy Consumed to Total Industrial Cost by Major Industrial Group, Ration of Working capital: Ratio

of Imported to Total Consumed Raw Material Costs by Major Industrial Group, Gross Value of Production: Ratio of Value Added to Gross Value of Production by Major Industrial Group, ROE: Ratio of Operating Surplus to Gross Value of Production by Major Industrial Group. However, the firms using rentable assets or having low assets structures, as is the case with service businesses, are subject to low financial access due to scarcity of collateral values.

Data was delimited to the secondary data reports from Manufacturing SMEs operational portfolio and outstanding loan of Private bank for the financial years (June 30, 2004- June 30, 2017)

1.7. Organization of the Study

The study is organized in to five chapters. The first chapter states the general introduction of the study. Chapter two presents theoretical and empirical literature review on access to finance and its availability. The third chapter outlines the research methodology. The research results and discussions presented in chapter four. The last chapter five draws conclusions and recommendations.

Chapter Two

2. Literature Review

2.1 Theoretical Definition and Concept of SME's

Universally agreed definition of SME (business entities) some of the commonly used criteria are the number of employees, value of assets, and value of sales and size of capital or turnover. However, the most common basis of defining SMEs is number of employees. As cited in Hauser, (2005) small and medium size enterprises are defined by their size. In the European Union SMEs are defined in the Commission Recommendation of May 6, 2003. Concerning to this recommendation an enterprise is regarded as small or medium sized if it has not more than 250 employees, not more than 50 Million Euro turnover resp. a balance sheet total of less than 43 Million Euro and if not more than 25% of the shares of such an enterprise are in the ownership of another enterprise.

The SMEs definition is based on the country. World Bank have not published or defined specific definition on the SME. Basically SMEs definition is based on the numbers of workers of the organizations or the annual sales of the organizations. As cited in Tom et, al., 2008 work, the African Development Bank (AfDB) defines SMEs, as an enterprise which has maximum number of 50 Employees without any requirement Revenues or Turnover (World Bank, 2015).

2.2. Financial Accessibility for SMEs

In reality there are quite a few potential sources of finance for SMEs. However, many of them have practical problems that may limit their usefulness. Among different sources here are some

of the major sources of finance for SME as initial sources or additional capital needed to conduct business.

This is potentially a very good source of finance because these investors may be willing to accept a lower return than many other investors as their motivation to invest is not purely financial. The key limitation is that, for most of us, the finance that we can raise personally, and from friends and family, is somewhat limited. (William, 2016).

Another source of business angel is a wealthy individual willing to take the risk of investing in SMEs. One limitation is that these individuals are not common and are very often quite particular about what they are prepared to invest in. Once a business angel is interested they can become very useful to the SME, as they will often have great business acumen themselves and are likely to have many useful contacts. SMEs, like any company, can take credit from their suppliers.

However, this is only short-term and, indeed, if their suppliers are larger companies who have identified them as a potentially risky SME the ability to stretch the credit period may be limited. Both of these sources of finance effectively let a company raise finance against the security of their outstanding receivables. Again, this finance is only short-term and is often more expensive than an overdraft. However, one of the features of these sources of finance is that, as an SME grows, their outstanding receivables will grow and so the amount they can borrow from their factor or from invoice discounting will also grow. Hence, factoring and invoice discounting are two of the very limited number of finance sources which grow automatically as the business grows (William, 2016).

Leasing assets rather than buying them is often very useful for an SME as it avoids the need to raise the capital cost. However, leasing is only really possible on tangible assets such as cars, machines, etc. (William, 2016)

2.3. Role of Banks towards Financing SMEs

The banking sector, as noted in Allen and Gregory (2005), specifically commercial banks, have several ways to get involved in SMEs financing, ranging from the creation or participation in SMEs finance investment funds, to the creation of a special unit for financing SMEs within the bank. Banking sector services provided to SMEs, take various forms, such as: Short term loans; Repeated loans, where full repayment of one loan brings access to another, and where the size of the loan depends on the client's cash flow; Very small loans or bank overdraft facilities are also appropriate for meeting the day to day financial requirements of small businesses, Factoring and invoice discounting, Long term loans.

Lending to small business can be difficult to financial institutions because of informational opaqueness, moral hazard, and adverse selection problems (e.g., Stiglitz & Weiss, 1981). Berger and Udell (2002) categorized small business lending by financial intermediaries into four main distinct technologies-financial statement lending, asset-based lending, credit scoring, and relationship lending. The first three technologies are usually referred to as transaction-based lending, which are based more on “hard” information than on “soft” information gathered over the course of a relationship with the borrower. Hard information is always recorded as numbers, while soft information is often communicated in text. This difference means that hard information can be collected, stored, and transmitted with relatively low cost. In addition, from the collection method point of view, those persons collecting and using hard information are

often different, while soft information is often collected and evaluated by the same person (Petersen, 2004).

Many empirical studies support the “small bank advantage” hypothesis with regard to banks’ decisions on financing small businesses. Berger and Udell (1996) found that small banks tend to invest a much higher share of their assets in small business loans.

Berger, Saunders, Scalise, and Udell (1998) studied size changes due to mergers and acquisitions (M&A) and found that bank M&A reduce small business lending. Cole, Goldberg, and White (1999) studied the lending behavior of large banks to small business and found that large banks approve their small business loans based more on financial ratios and less on the existence of prior relationships as compared with small banks, and tend to favor transactions-based lending.

However, other studies suggest that bank size does not necessarily need to decrease small business lending. For example, Strahan and Weston (1998) examined the effects of bank M&A on small business lending, and found that the M&A between small banks increased lending to small enterprises. Even though China has not experienced M&A, a similar phenomenon is the reduction of local branches during the covered sample period; hence, the bank size of local branches may not have a definite impact on small business lending. Berger, Rosen, and Udell (2001) studied the relationship between lending to SMEs and banks’ share of the local loan market. They found that the share of small business lending is roughly in proportion to small banks’ loan market share. Such phenomenon motivates us to study small business lending in China from the perspective of competition in terms of loan market structure.

A study that is of particular relevance to China is that of Berger and DeYoung (2001). They found that it is difficult for bank holding companies to control the efficiency of small banks

located at a significant distance from their headquarters. This is consistent with the possibility that relationship lending may be difficult to operate from afar. As China's financial system is dominated by four main state-owned banks and the headquarters are quite far from county-level local banks, the efficiency of small banks in making small business loans needs careful investigation. In addition to physical distance, other measures of distance can be hierarchical levels of the banks, and the loan approval rights that the local branches possess. If there are more layers between the headquarters and the local branches, relationship lending will be more difficult. On the other hand, if the local bank has 100% self-loan approval right, its physical distance from its headquarters and the bank hierarchical level are less important. China's financial system provides enough variation in loan approval rights to study its impact on small business lending.

Berger, Klapper, and Udell (2001) also raised the distressed-bank barriers hypothesis. That is, banks in financial distress are less likely to lend to small businesses. Such negative effect will be exemplified if financial distress is directly linked to the income of loan managers because the risks of these loans cannot be easily verified. Researchers also tested whether tougher supervisory standards in examining bank portfolios will decrease relationship lending. While conclusions were mixed, they generally found that tougher standards decrease small business lending. Whether such an observation applies to Africa, however, remains an open question. It has emphasized small banks' advantage in accessing soft information and assumes that banks will fully utilize such information, if acquired.

2.4. The Demand and Supply debt financing gap of SMEs

The debt financing gap of SMEs has been a point of discussion in the literature for some time now. Some studies focused on SMEs difficulties in accessing finance often called demand side

characterization of the problem while others presented the main issues in bank lending practices called supply side characterization. Understanding SMEs problem of access to finance (or financing gap) implies describing the various limitations in both the demand side and supply side. The supply side constraints focus on the source of finance, i.e., if appropriate sources of finance are not available on terms and conditions suitable to SMEs (European Commission 2001). Whereas, the demand side constraints explain if entrepreneurs or firms do not make use of existing financing opportunities due to shortage of good project, lack of persuasive business plans or the legal status of the firms.

According to this argument, it is clear that banks try to mitigate the lending risks through a capital gearing approach instead of focusing on the future income potential of SMEs. Therefore, collateral has become essential prerequisite to access bank loans (Africa Practice, 2005). Another way in which banks react to the market imperfection is by reducing the maturity of their outstanding loans. Shorter loans allow banks to monitor more frequently the firms' performance and, if necessary, vary the terms of the contracts before losses have accumulated (Hernández-cánovas and Koëter-Kant, 2008).

Consequently, bank financing to SMEs in Africa is less significant and more of short term than other developing countries (Martinez Peria, 2009). Small and Medium Enterprises in Africa are less likely to take loans from financial institutions than in any other developing regions; but many of firm and country level covariates explaining access to finance remain the same inside and outside Africa (Beck and Cull, 2014). Bank loans devoted to SMEs in Africa average only 5.4 percent while in other developing countries it amounted around 13.1 percent. And bank lending to such enterprises are costly compared to other developing countries. Fees charged on

SME loans in Africa is almost twice as high as in other developing economies (Martinez Peria, 2009).

The demand side studies suggest that, whilst overall the majority of SMEs appear not to have difficulties obtaining external finance, there is evidence to indicate that a number of groups and sectors do face distinct challenges in accessing finance (Deakins et al., 2008). The fundamental reasons behind SMEs credit demand can be found in their peculiar characteristics. Issues that involve factors such as inadequate flow of information, inadequacy of collateral, SMEs-bank relationships, business and entrepreneurial factors and legal status of the firms are often stated as major demand side constraints.

2.5. The existence of information asymmetry issues B/n banks and the potential SME borrowers

The existence of information asymmetry issues B/n banks and the potential SME borrowers have severe implications in the lending methodologies used by loan officers, i.e., bank loans depend highly on high collateral values. Johnsen and McMahon (2005) stated that because of collateral firms with more intangible assets tend to borrow less, compared with firms with more tangible assets. Beck et al. (2008) found that small firms use less external finance than large firms (especially in terms of banks and equity finance) because their lack of collateral.

Alternatively, a good lender-borrower relationship is acknowledged as a way to overcome asymmetry of information and inadequacy of collateral issues (Ghimire and Abo, 2013). When there is imperfect information, which is recurrent in most SMEs cases particularly in developing countries, a lender-borrower relationship becomes the main source of information and vital for loan approval. Mills et al. (2006) show a positive correlation between a good lender-borrower relationship and the approval of a loan. Preferences will be given to firms which have established

a strong and durable relationship with their banks and abide by all previous contractual arrangements. Petersen and Rajan (1994), Berger and Udell (1995), Miller (1995) discuss the importance of borrowers' lending history in obtaining bank loans. Being in the business for many years suggest that firms are competitive and have accumulated sufficient assets to meet the collateral requirements of the banks. In addition, the financial track record facilitates the evaluation of the lending proposals making it easier for SMEs to obtain loans from banks.

Furthermore, the time of maturity or duration required by firms to repay loans may also impact the SMEs accessibility to bank finance. Long-term loans are more difficult to obtain than short-term loans for simple reason that long-term loans require a long-term appreciation of the borrower's creditworthiness and involve elements of uncertainties. However, short-term contracts enhance the profile of the firms for future long-term contracts. It is referred to as a signaling instrument used by bankers (Flannery, 1986). Thus, short-term loans enable the lender to acquire qualitative information which reduces the problem of information asymmetry, moral hazards and adverse selection (Diamond, 1991). Empirical investigations conducted by Ortiz-Molina and Penas (2008) show that short loans facilitate SMEs' access to loans and reduce the problems associated with information asymmetry.

Owner's and manager's characteristics affect SMEs ability to access finance especially from formal financial institutions. The entrepreneurs' behavior has profound consequences on how the business is run. Schmitz (1982) highlighted that the small scale producers in developing countries fail to expand primarily because they lack managerial ability. For this reason, entrepreneur related factors take a priority position in all credit assessments by the borrowers. Kumar and Fransico (2005), found a strong education effect in explaining access to financial

services in Brazil. In a study conducted on UK SMEs, Irwin and Scott (2009) observed that graduate's entrepreneurs had the least difficulties in raising finance from banks.

Similarly, using data from SSA, Aterido, et al. (2013) found that the level of education of the owner is positively related with access to formal banking services. Owners with higher education are more likely to use and have access to formal loans.

In addition, firm level characteristics such as age, size, location, industry, and organizational structure are key determinants in accessing banks' credits. In terms of size, banks tend to issue more credit to large firms as compared to smaller firms. In China, Honhyan (2009) found that the investment portfolios of larger firms were more diversified, which lessen the probability of failure and makes banks more confident to issue loans based on their expertise and large assets structures. Furthermore, Cassar (2004) found a positive correlation between the size and banks' willingness to provide credits. Aryeetey et al. (1994) in Ghana observed that large firms were more favored by banks than small and medium-scale firms in terms of loan processing.

Additionally, young ventures at start-up levels may not have the level of expertise and success history required. Klapper et al. (2010) found that young firms (less than four years) rely more on internal financing than bank financing. Similarly, Woldie, et al. (2012) in Tanzania observed that firms at start-ups and less than five years depended more on informal financing sources. Using data from African countries, Beck and Cull (2014) showed that older firms are more likely to have a formal loan than their younger counterparts. It is generally expensive and difficult for new firms to acquire bank financing, mainly due to the information asymmetry problem and high collateral requirements.

Similarly, the location of the enterprises also plays an important role in their creditworthiness level. Berger and Udell (2006) found that the geographical proximity of SMEs to their respective banks affect positively the banks' decision-making. It enables the loan officers to obtain better environmental information about the borrowing enterprises. Gilbert (2008) pointed out that urban firms have better chance in accessing credits from banks than those who are in rural areas or poor urban areas.

The industry or sector in which the company operates may also impact the decision of banks while appraising loan proposals. Abor and Biekpe (2007) found that the Ghanaian firms involved in agricultural or manufacturing sector have higher capital and asset structures than those operating in wholesale and retail sectors. Subsequently these assets can be used as potential collateral values for banks and encourage them to issue bank loans. However, the firms using rentable assets or having low assets structures, as is the case with service businesses, are subject to low financial access due to scarcity of collateral values.

Finally, poor previous experiences or other reasons often referred to as "reputational effects" discourage SMEs borrowers to apply for bank loans. For example, some borrowers may be discouraged from applying for external finance due to a first refusal, their ethnicity, sex (being female entrepreneur) and bureaucracies (Deakins et al., 2010).

Some SME owners do not even apply for loans because they think they could be rejected. The problem of gender issues is mainly related to female applicants. Female owners are more restricted to loans than men (Abor and Biekpe, 2007). A study in USA demonstrated that women are unlikely to repay debts (Mijid, 2009). Evidence has also been found in Australia and UK where women are discouraged to apply for loans as they think their application would be rejected (Freel et al. 2010). Consistent with this, Asiedu et al. (2013) found that female-owned firms in

SSA are more likely to be financially constrained than male-owned firms. Aterido et al. (2013) also showed the existence of an unconditional gender gap in Sub-Saharan Africa in access and use of financial services by enterprises and households.

2.5.1. Process of Credit Management MSEs

More than 80% of financial institution balance sheet is related to credit. For this reason, banks should take a careful care when dealing with credit. The process of credit management begins with accurately assessing the credit-worthiness of the customer base and his/her business viability. This is done by looking in to loan applications carefully which is part of the loan process. This is particularly important if the company chooses to extend some type of credit line or revolving credit to certain customers. Hence, proper credit management is setting specific criteria that a customer must meet before receiving the proposed credit arrangement. Basu and Rolfes (1995) indicate that the success of a financial institution is built on a proper and quality credit management process. As part of the evaluation process, credit management also calls for determining the total credit line that will be extended to a given customer. Several factors are used as part of the credit management process to evaluate and qualify a customer for the receipt of some form of commercial credit. This includes gathering data on the potential customer's current financial condition, including the current credit track record that discloses the character of a customer in meeting obligations as well as collateral value. As a result, the writer discusses the different procedures that can be employed in each of these areas with the sole aim of examining the present loan management procedure of financial of institution mainly bank. A weak credit risk management system is the reason for many none performing loans (Nishiru and al, 2001).

Generally, credit management has three basic steps credit analysis, credit approval and follow-up. The first two is pre-disbursement process while the last one is a post disbursement process. Credit management of banks simply put in the frame work of the above category includes the following: - Credit application Credit assessment, Credit disbursement Credit Monitoring Credit recovery and the credit application is the primary step in the credit management process.

Regardless of the size and purpose of the loan a loan application is required. Though it may appear as simple questions to the applicants they should understand the importance of the document. The application documents contain detail information about the applicant. The information among other things include: name of the applicant, address, residential address, age, telephone number, marital status, number of dependents, educational background, hometown, the type of business, business location, number of years in business, reasons for the loan, amount required, the repayment period, security pledge if any and guarantors. It is the content of this document which financial institutions can take any legal action against a borrower who defaults. Since this is the initial stage of the credit management process any error committed at this stage goes a long way to negatively affect the whole process. A loan defaulter can escape legal punishment if the content of the loan application form is not properly structured. Hence the need to evaluate the existing loan application forms to ensure that they are properly structured to protect the credit unions.

Credit Assessment

This is the procedure for gathering the necessary information on a potential borrower and projects in order to conduct risk assessment exercise to determine the associated risk. This is carefully done by the financial institutions before providing any loans. This is also done to check the viability of the proposed project to undertaken. This as well helps to examine the technical

viability, the economic viability and the financial viability of the project to be undertaken. The risk associated with the loan can be reduced by doing the above. Credit risk simply means the risk of default as a result of a borrowers' failure to repay the loan taken from a financial institution. Appropriate assessment of a customer determines the financial situation and also helps to measure capability of the customer to repay the loan when due. This involves the authentication of primary and collateral security provided by the customer which will be relied on when the repayment of the loan becomes difficult. This is a fundamental point in the credit procedure. It is said to be the heartbeat of a healthy credit portfolio. This involves collecting, analyzing and processing information as provided by the applicant on the credit application form. This helps to assess the applicants' credit worthiness and helps to reduce the difficulties between borrowers as an agents and the financial institution as the principal. The lending institutions loans management processes procedures and directives controls the loan evaluation processes. The question that must be answered before anything else is whether or not the borrowers have the financial capacity to repay the loan, that is, repay the credit when due with the appropriate interest rate.

The factors underlying the evaluation of a borrower should be based on the credit assessment principles of the financial institution which is the basic principles of lending which is also used by the financial institution, it is also known as the 5 C's which is Character, Capacity, Capital, Collateral and Conditions (Matovu and Okumu, 1996). In another context, Rouse (1989) referred to mnemonics used as common checklist to review loan application as: CCCPPARTS (Character, Capital, Capability, Purpose, Person, Amount, Repayment, Terms and Security); PARSER (Person, Amount, Repayment, Security, Expediency, Remuneration); CAMPARI (Character, Ability, Margin, Purpose, Amount, Repayment, Insurance/Security).

The disparity in the mnemonics relates to the fundamental principle of evaluating the potential of having credit repaid. Credit Appraisal thus ascertains the risks associated with lending functions in financial institutions. This is an indication that if the credit assessment is not properly done by the credit union, the risk associated with the credit will not be identified. It is generally carried out by the trained staff of the credit department of the institutions which are engaged in providing credit to their customers.

In the present case, process used in credit risk assessment and appraisal has been studied to identify the various parameters and stages in credit assessment; appraisal and disbursement processes exist in the financial institution. It is intended to make sure actions which lenders take which facilitate repayment or reduce repayment likely problems. This information about the riskiness of the borrower makes the financial institution to take remedial actions like asking for collateral, shorter duration of repayment, high interest rates and other forms of payment (Stiglitz and Karla, 1990). When a financial institution does not do it well, its performance is highly affected. Edminster (1980) stressed the importance of credit analysis when he observed that its abandonment often resulted into several banks using credit card to process. The variables we have, according to Hunte (1996) added the period taken to process loan applications, credit experience, part of collateral security to the loan approved. It was established that long waited period of time reflected a shortage of credible credit information required to make informed credit decisions and availability of funds for onward lending. This in turn leads to a bigger risk, more extreme credit rationing and low repayment rates. Hunte (1996) also realized that customers with loan experience showed the capability to manage the loans better hence good quality borrowers for the financial institution. A less borrower who is not experienced has less ability to handle a business loan and therefore is not credit worthy (Devaney, 1984; Robinson,

1962; Hunte, 1996). This shows that there are big risks linked with first time borrowers since the loan officer has scanty information on their credit records and little knowledge on their ability to repay the loan when due.

Therefore, financial institution should attach all the seriousness to the credit assessment process in order to reduce the credit risk associated with credit since loans are the largest assets of financial institution like banks. Financial institution like bank have hierarchal arrangement in order to approve loan and based on their grade branches would have a discretionary lending limit. Discretionary lending limit is the limit set to each branches based on their grade allowing them to disburse loan in different sector (credit policy and procedure of united bank s.c.)

Credit Disbursement

After an applicant has been carefully assessed and has been proven that the applicant meets the credit requirement of the credit union. The credit officer together with the credit committee gives their approval by appending their signature on the loan application form. This gives bank the right to disburse the funds to the applicant. Credit disbursement is the act of giving or paying out money to customers who have been accessed and approved to be given credit. Disbursement ensures that money is made available to the customer after all assessment has been done and approval has been given. The assessment process also ensures that the authenticity of the security and other required documentations are received certified before funds are given out to the qualified customer. If the loan pay-out control is not strong, the reliability of the loan management process will greatly be affected and can be undermined and misused by the unscrupulous staff of the organization.

Thus, documentations and pay-out of the loans are vital in the management of loans because they ensure that the lending institution has the right documentation, collateral and guarantees of the loan agreement. Insurance, signing loan contract, registration of the property/collateral the bank being primary owner. These are the pre-disbursement requirements by bank. These are significant in the case of the customers fail to pay because the financial institution would be suitably secured and have legal backing to guarantee the retrieval of the loan. This would eventually reduce the provision for bad debts that financial institutions have which will improve their financial position. Once the credit application satisfies all the bank's credit conditions, a comprehensive analysis is done to determine if the application complies with the institution's conditions then approval is given for disbursement to the applicant. Financial institution has quite a different way of disbursing loans to its members which is different from how other financial institutions do. The credit disbursement can be crediting the loan amount to the customer's account all at once or it is done phase by phase for project type loans.

Credit Monitoring Credit

Monitoring is an integral part of lending activity. Financial institutions have a great responsibility to maintain the quality of the assets and to recover the interest and principal due in time. Though adequate precautions are taken during assessment and approval of a loan, a financial institution has to be more vigilant. Unless early warning signals are captured, a financial institution may not be able to take proper remedial measures to arrest and reduce bad debt in the institution. A financial institution needs to put in place a very sound and effective credit monitoring system for watching the borrower's account from various angles for prompt action. In line with Robinson (1962) and Anjichi (1994), many of the agonies, frustrations and distress financial institutions can be reduced by good credit monitoring and follow up process. A

good supervision helps maintain a good loan. It may be by visiting the borrowers' places of business to examine the general state of affairs. Insufficient maintenance is often an early sign of financial distress. The general business policy and advice the client as to how to put things in order. A financial institution can modify its own lending policies as well as loan monitoring procedures.

Furthermore, keeping track of deposits trend and deposits balances gives a clue to the present state of affairs of the customer. Monitoring of loan facilities given to customers is an important task in ensuring that the project from which repayment will be made is successful. Huppi and Feder (1990) revealed that efficient monitoring leads to high retrieval of loans by revealing likely dangers (like loan diversions) and reminding defaulters of their responsibilities towards the lending institution, thus calling for redoubling of efforts in the direction of loan repayments. Monitoring of credit facilities has been directed characteristically on ensuring repayment when there are signs of defaults for repayment of interest and principal installments.

Credit Recovery /work out process/

It is undeniable fact that any institution in the business of lending is likely to meet customers who will default in payment or will fail to pay at all. This is why the institutions create provision for bad and doubtful debt in their books to take care of these eventualities. When despite every attempt by the lender to reach amicable arrangement for repayment and no agreement has been possible it will be necessary to treat the loan as a recovery matter. This is especially prominent in the financial institutions especially where the institutions provide services which are continuous but not one time. Loan recovery is the collection of a loan amount from a customer in default. In simple terms, loan recovery refers to the pay back of the principal loan amount together with interest. Financial institutions need to be aware of loans that are at risk of not being paid back

(also known as NPL or non-performing loan). Collections department of the bank will begin contacting the individual loan defaulter's (Kay, 2002). They must notify them of the amount owed and any interest accrued. The financial institutions may also contact any guarantor of the loan if it is a secured loan, the institution may go through the laid down legal process to take over the asset.

2.6. Credit Risk Management

OCC (2011) identifies fundamental credit risk management principles as sound underwriting, comprehensive financial analysis, adequate appraisal techniques and loan documentation practices, and sound internal controls. Rose and Kolari (1995) see credit risk as the likelihood that borrowers will not be able to repay their loans within the period agreed upon. Kay (2002) sees Credit risk as distribution of financial losses due to unexpected changes in the credit quality of counterparty in a financial agreement. Kay (2002) also sees it as the possibility of loan default or any type of inability to honor a financial agreement when due. Kay stated that the likelihood of default is estimated by specifying a model of investor uncertainty; a model of the available information and its evolution over time and a model definition of the default event.

Smook (1997) defines risk assessment as the general procedure of risk identification, quantification, evaluation, acceptance, aversion and management. He explains that risk management involves risk evaluation and risk control. In the piece he states that Risk assessment is a complex procedure of developing tolerable levels of risk to individuals, groups, or the society in general. It includes the associated procedures of risk acceptance and risk aversion. Fatemi and Fooladi (2006) characterize credit risk as risk that occurs from the ambiguity in some borrowers' capacity to meet his/her debt. At a different slant, King (2008) defines credit management as the "policies and practices businesses employ in recovering payments from their

defaulting customers”. With respect to the levels of priority in financial institutions, it is expected that their main focus is to make known that this type of risk management is efficient beyond all others.

Fatemi and Fooladi, (2006). Risk acceptance means that the risk taker is ready to admit some risks to make a gain or benefit from it. This is when the risk is not avoidable or cannot be controlled. The acceptance level is a reference level against which a risk is identified and then compared. If the risk determined is less than the level that it can be accepted, the risk is then said to be within the acceptable range. On the other hand, if it is higher than the accepted level it is seen as unacceptable and avoidable, steps may be taken to control the risk or the project in question should be stopped. Credit risk means the possibility of loan loss as a result of a borrower’s inability to make payments as per the loan agreement. Credit risk management, meanwhile, is the practicing of measures that reduces the impact of those losses by appreciating the competence of both a bank’s capital and loan loss reserves at any given period time, a process that has long been a challenge for financial institutions to fully implement. The worldwide financial predicament and the credit crunch that followed makes credit risk management very relevant.

Accordingly, regulators began to call for more transparency. They wanted to know that a bank has thorough knowledge of customers and their related credit risk. And new Basel III regulations have created an even greater regulatory trouble for banks. To abide by the more rigorous regulatory requirements and contain the higher capital costs for credit risk, many financial institutions are changing their approaches to credit risk. The institutions who see this as sternly being a compliance exercise are being short-sighted. Better credit risk management also creates a chance to greatly progress overall performance and secure a competitive advantage over the

competitors. The perception and the reception of risks differ based on the nature of the risks and depend on many fundamental factors.

The risk may include a "dread" hazard or a common hazard, be encountered occupationally or non-occupationally, have immediate or delayed effects and may affect average or especially sensitive people or systems. Risk aversion is the control action taken to keep away from risk. Risk management is concerned with the outcome of future events, whose exact result is not certain and the design of strategies to handle these uncertainties, over a variety of probable results. Generally, outcomes are categorized as favorable or unfavorable, and risk management is the art and science of planning, assessing, and handling future events to ensure favorable outcomes.

The large amount of debt that has been dispersed in the financial institutions over the years has undoubtedly resulted in bad debts and loan arrears across most of the financial institutions. This survey will concentrate on the management of credit and its impacts on the existence and profitability of the credit unions.

2.7. Credit Policies and Procedures

A Credit Policy is not something that is only operated by the Credit and risk Department. All employees involved with customers, in any way, need to be aware of the credit policy and ensure that it is operated consistently. In order to be effective, credit policies must be communicated throughout the organization, implemented through appropriate procedures, monitored and periodically revised to take into account changing internal and external circumstances. They should be applied appropriately, on a consolidated bank basis and at the level of individual affiliates in addition; the policies should address equally the important functions of reviewing. Economic conditions and the firm's credit policies are the chief influences on the level of a

firm's account receivable. Economic conditions, of course, are largely beyond the control of the financial manager. As with other current assets, however, the manager can vary the level of receivables in keeping with the tradeoff between profitability and risk. Lowering quality standards may stimulate demand, which, in turn, should lead to higher profitable receivables, as well as a greater risk of bad debt. The credit and collection policy of one firm are not independent of those of other firms. If product and capital markets are reasonably competitive, the credit and collection practices of one company will be influenced by what other companies are doing. Such practice related to the pricing „The examination of certain policy variables implies that the competitive process is accounted for in the specification of the demand function as well as in the opportunity cost associated with taking on additional receivables. The policy variables include the quality of the trade accounts accepted; the length of the credit period, the cash discount, any special terms such as seasonal dating and the collection program of the firm. Together, these elements largely determine the average collection period and the proportion of bad debt losses (Horne, 1995: 361).

2.8 Credit Analysis

Credit analysis is the primary method in reducing the credit risk on a loan request. Credit analysis is also the primary step in the credit management process. This includes, accepting application determining the financial strength of the borrowers, estimating the probability of default and reducing the risk of non-repayment to an acceptable level. In general, credit evaluations are based on the loan officer's subjective assessment or judgmental assessment technique. Once a customer requests a loan, bank officers analyze all available information to determine whether the loan meets the bank's risk-return objectives. Credit analysis is essentially

default risk analysis, in which a loan officer attempts to evaluate a borrower's ability and willingness to repay.

Similarly, Compton (1985) identified three distinct areas of commercial risk analysis related to the following questions: 1) what risks are inherent in the operations of the business? 2) What have managers done or failed to do in mitigating those risks? 3) How can a lender structure and control its own risks in supplying funds? The first question forces the credit analyst to generate a list of factors that indicate what could harm a borrower's ability to repay. The second recognizes that repayment is largely a function of decisions made by a borrower. Is management aware of the important risks, and has it responded? As (Timothy 1995) quoted, the last question forces the analyst to specify how risks can be controlled so the bank can structure to an acceptable loan agreement.

A bank's credit analysts often use the five C's of credit to focus their analysis on the key dimensions of an applicant's credit worthiness Lawrence (1997:776-777), identified five C's of credit. They are "character, capacity, capital, collateral and condition".

Character: The applicant's record of meeting past obligations, financial, contractual, and moral. Past payment history as well as any pending or resolved legal judgments against the applicant would be used to evaluate its character.

Capacity: The applicant's ability to repay the requested credit. Financial statement analysis, with particular emphasis on liquidity and debt ratios, is typically used to assess the applicant's capacity.

Capital: The financial strength of the applicant as reflected by its ownership position. Analysis of the applicant's debt relative to equity and its profitability ratios are frequently used to assess its capital.

Collateral: The amount of assets the applicant has available for use in securing the credit. When the amount of available assets larger the greater the chance that a firm will recover its funds if the applicant defaults. A review of the applicant's balance sheet, asset value appraisals, and any legal claims filed against the applicant's assets can be used to evaluate its collateral.

Conditions: The current economic and business climate as well as any unique circumstances affecting either party to the credit transaction. For example, if the firm has excess inventory of the items the applicant wishes to purchase on credit, the firm may be willing to sell on more favorable terms or to less creditworthy applicants. Analysis of the general economic and business conditions, as well as special circumstances that may affect the applicant or firm is performed to assess conditions. The credit analyst typically gives primary attention to the first two C's-character and Capacity because they represent the most basic requirements for extending credit to an applicant. Consideration of the last three C's-Capital, Collateral, and Conditions- is important in structuring the credit management and making the final credit decision, which is affected by the credit analyst's experience and judgment.

According to Golden and Walker (1993), there are five C's of bad debt; which represent things to guard against in order to help prevent problems. They include: Complacency, Carelessness, Communication breakdown, Contingency, and Competition. Complacency refers to the tendency to assume that because things were good in the past they will be good in the future. Common examples are an over reliance on guarantors, reported net worth, or past loan repayment success because it's always worked out in the past. Carelessness involves poor

underwriting, typically evidenced by inadequate loan documentation, a lack of current financial information or other pertinent information in the credit files, and a lack of protective covenants in the loan agreement. Each of these makes it difficult to monitor a borrower's progress and identify problems before they are unmanageable.

Loan problems often arise when a bank's credit objectives and policies are not clearly communicated. This is communication breakdown. Management should articulate and enforce loan policies, and soon as they appear. Contingency refers to lenders tendency to play down or ignore circumstances in which a loan might in default. Competition involves following competitors' behavior rather than maintaining the bank's own credit standards. During credit analysis bank use various lending tool and techniques.

Credit/Concentration/ limit: - Credit limit is one of the tools financial institutions use to control their loan portfolio. Setting credit limit is one of the main ways financial institution use to control its credit process to reduce risks associated with lending. Bessis (2002) shows the significance of employing the credit limit process so as to avoid any credit risk which could imperil the financial position of the institution. In Ethiopia private bank work according to the concentration limit set by national bank of Ethiopia.

Affordability:-Increased regulatory focus and rising interest rates mean lenders need to revisit their measures of affordability ahead of changes. Precisely evaluating customer's affordability and suitability are indispensable requirements for all lending institutions who wish to widen credit responsibly as well as reducing exposure to risk. As lending institutions trying to balance growth with risk, some customers are faced with insufficient disposable incomes, the current economic situation has made it necessary for lending institutions to employ a better credit

processes. Failure to implement a proper credit management process could put pressure on customers and lenders at a time when the economic climate not improving.

Affordability is the assessment of a customer's financial capabilities to fund new and outstanding loan now and in the future. Thomas (2009) indicates that when assessing the affordability of a borrower it is their lack of cash flow and not assets that causes loan default in institutions. □

Risk assessment model: - Risk Assessment Model is internal rating software intended to aid a bank or financial institution in evaluating a borrower for credit. This is in line with the requirement under the internal ratings-based processes of the Basel II Accord. Credit scoring/credit risk grading: - This is a statistical system used to foretell the possibility that a loan will be in arrears, become delinquent or a borrower will default in repayment (Loretta 1997). Credit. This method is largely accepted as the primary system of examining the creditworthiness of customers. Arrears intervention: - Arrears is a legal term used by lending institutions to describe the part of a loan that is unpaid, overdue or repayments is missed as per the agreed loan terms. Finlay (2008) indicates that pressure should be put on loan defaulters at the early stages of the default, this action reminds the defaulters about their obligations towards the institution. In line with Finlay's assertion, hinder (2004) urges financial institutions to integrate adequate communication process when retrieving debt in arrears from customers.

2.9 Credit Information

Credit information is another tool that is used by bank in credit analysis. Adequate and timely information that enables a satisfactory assessment of the creditworthiness of borrowers applying for a bank loan is crucial for making prudent lending decisions. Prudent lending decisions made on the basis of adequate information on the creditworthiness of borrowers are one of the principal factors in ensuring the financial soundness of banks. But, there has been serious

difficulty in Ethiopia of getting accurate and timely information on prospective borrowers that facilitates the making of such prudent lending decisions. One of the means for alleviating this difficulty of getting accurate and timely information on prospective borrowers is the establishment of a Credit Information Center (CIC) where relevant information on borrowers is assumed to be pooled and made available to lending banks. Binging this to our country context according to article 36 of the Licensing and Supervision of Banking Business Proclamation No. 84/1994, the National Bank Ethiopia (NBE) has issued these directives to establish such a Credit Information Center (CIC).

Though there are still serious limitations in the accuracy of the credit information extracted the summary of the directive is as follows: Banks shall provide, alter and update credit information on each and every one of their borrowers using online system. Upon written request by banks, the Supervision Department of the NBE shall provide to the requesting bank, in writing, all credit information available in the Central Database on a prospective borrower within three working days from the date of receipt of the request; Access to the Central Database shall be restricted to the user group; The role of the NBE shall be restricted to administering the Credit Information Sharing system, providing in writing credit information on borrowers available at Credit Information Center to banks, ensuring that access to online system to update or alter credit information is given only to authorized persons and ensuring that the system is operating smoothly and reliably;

The NBE shall not be responsible for any damages, claims or liabilities that may arise as a result of inaccurate, misleading or incomplete credit information on borrowers supplied to the Credit Information Center by individual banks and shared, through the NBE, with other banks.

Each bank shall provide, electronically, the initial credit and other related information to the Credit Information Center on each and every one of its borrower; each bank shall be fully responsible for providing accurate, complete and timely credit information to the Credit Information Center. In cases where errors have been made, such errors shall be corrected promptly by the concerned bank; Each bank shall be fully responsible for any damages, claims or liabilities that may arise as a result of providing inaccurate, misleading or incomplete credit information to the Credit Information Center or failure to provide, inadvertently or otherwise, information to the Center that should have been provided in line with these directives; Each bank shall use the credit information on borrowers obtained from the Central Database of the Credit Information Center only and only for making a lending decision. Such information shall be treated with utmost confidentiality and shall not be disclosed to any third party or used for any other purpose; Each bank shall be fully responsible for any damages, claims or liabilities that may arise as a result of disclosure of credit information on borrowers obtained from the Credit Information Center to third parties or use of that information for purposes other than for making a lending decision.

2.10. Non-Performing Loan

Loans and advances constitute the primary source of income by banks. As any business establishment a bank also seeks to maximize its profit. Since loans and advances are more profitable than any other assets, a bank is willing to lend as much of its funds as possible. But banks have to be careful about the safety of such advances (Radha .M, et al, 1980). Bankers naturally try to balance the issue of maximizing profit by lending and at the same time manage risk of loan default as it would impair profit and thereby the very capital. Thus a bank needs to be cautious in advancing loans as there is a greater risk which follows it in a situation where the

loan is defaulted. Under the Ethiopian banking business directive, non-performing loans are defined as “loans or advances whose credit quality has deteriorated such that full collection of principal and/or interest in accordance with the contractual repayment terms of the loan or advances in question (NBE, 2008).” It further provides that: loans or advances with pre-established repayment programs are nonperforming when principal and/ or interest is due and uncollected for 90 (ninety) consecutive days or more beyond the scheduled payment date or maturity (NBE, 2008).

In addition to the above mentioned category of non- performing loans, overdrafts and loans or advances that do not have pre-established repayment program shall be non-performing when: The debt remains outstanding for 90 (ninety) consecutive days or more beyond the scheduled payment date or maturity; The debt exceeds the borrower’s approved limit for 90 (ninety) consecutive days or more; Interest is due and uncollected for 90 (ninety) consecutive days and more; or for the overdrafts, (i) the account has been inactive for 90 (ninety) consecutive days or (ii) deposits are insufficient to cover the interest capitalized during 90 (ninety) consecutive days or (iii) the account fails to show the 20% of approved limit or less debit balance at least once over 360 days preceding the date of loan review.

2.11. Empirical Review

In spite of the above theoretical recognition of role of financial institutions and their contribution to the development of SMEs, there appears to be limited empirical evidence available and most of them generally focused on challenge of SMEs in access external finance and on role of financial institutions in economic growth. As a result, slight studies had been done on the contribution of financial institutions in the development of SMEs. One line of inquiry points to financial institutions and their role in economizing on information costs.

Ageba and Amha (2006) presented evidence on the state of SME access to finance in Ethiopia from a survey of 1000 SME in six major towns conducted by the authors. This thesis deals with the issue of SME finance and is the first empirical work on trade credit in Ethiopia. It suggests a new venue to channel funds to micro and small enterprises by linking support to micro and small enterprises, supplier's credit and bank lending. It shows that friends/relatives, suppliers credit, and Iqub¹ are the most important sources of finance in that order.

The amount involved (in both stock and flow terms) is also relatively high. Trade credit appears to be used as a substitute for bank loans. Contrary to the common belief that trade credit occurs between people with strong social ties, most micro and small enterprises that granted trade credit and those that received suppliers credit characterized their relation as 'business only'. More than half of the MSEs that granted trade credit also received suppliers credit whose amount exceeded what they received, suggesting that suppliers credit is being passed on to customers. Supplier's credit thus avails itself as a potential instrument for banks to channel finance to micro and small enterprises to improve their access to modern machinery/equipment/tools.

2.12. Conceptual frame work

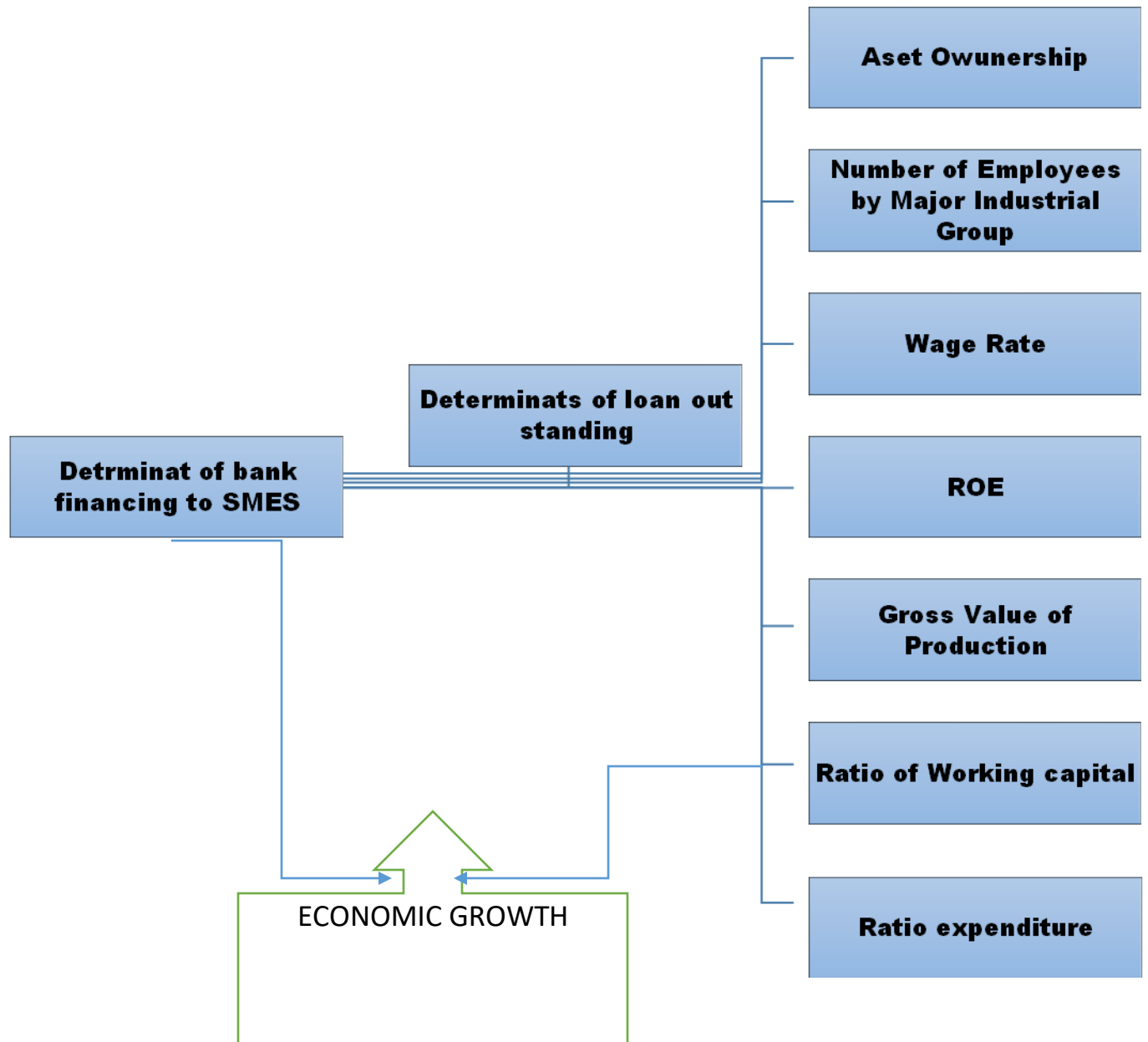


Figure 1: “U-shaped model” that leaves the SME financial accessibility from bank (World Bank, 2002).

CHAPTER THREE

3. Research Methodology

3.1. Introductions

The purpose of this chapter is to present the research approach adopted by the research. The first part presents the model specifications to be tested. The second part presents the study design used for the research. Target population and sample are presented in the third part and the final part discusses the method used for data collection, analysis and presentation.

3.2 Study Design

Quantitative research approach is used since it helps to conduct systematic empirical study of observable phenomena via statistical or mathematical techniques (Kothari, 2004). The objective of quantitative research is to develop and employ mathematical models, theories and hypotheses pertaining to phenomena. The process of measurement is central to quantitative research because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships. Quantitative research is generally made using scientific methods, which can include: The generation of theories, the development of instruments and methods for measurement variables, Collection of empirical data and analysis of data.

This study follows a deductive reasoning in describing the event. By applying the selected theory to explain the event, event characteristics will serve as empirical facts supporting the validity of the theory. Deduction is also the most commonly used research approach in combination with positivism (Lipsey & Chrystal, 2007).

However, it is believed the study is purely deductive as part of the research purpose. A quantitative strategy is best suited as the research has a large focus on numbers and the use of hypothesis and statistical tools to analyze them.

The knowledge that is sought-after has to be measured in order to answer the research problem and the knowledge gap. In this study, this approach enabled to evaluating the impact of bank financing to SMEs and its contributions on economic growth of Ethiopia taking to evaluate evidence from years 2004 to 2017. Thus, this enabled to test the theory in the context of Ethiopia.

3.3. Target Population and Sample

3.3.1 Target Population

The target population was taken from six selected Private bank of Ethiopia selected based on data availability in the manner the research requires and manufacturing financial portfolio from 2004-2017) fiscal year.

3.3.2. Sample size and sampling method

The researcher needs to have a large sample size in order to get more accurate results and have a high likelihood of detecting a true result. Thus the research used Purposive sampling method. Besides, since the number of banks in the country is small and due to the data nature (panel data), the sample should contain monetary policy that have longer period so as to get sufficient observations.

3.4 Data Collection instrument

To comply with the research objectives, the researcher focused on secondary data, which was obtained from publications of National Bank of Ethiopia (NBE) and Statistical data base of Central Statistics Agency (CSA) and statistical data base of International Monetary Fund (IMF).

And this is because the advantage of using secondary data includes the higher quality data compared with primary data collected by researchers themselves; the feasibility to conduct panel evidence, which is the case in this study; and the permanence of data, which means secondary data generally provide a source of data that is both permanent and available in a form that may be checked relatively easily by others.

3.5. Method of data analysis

Whatever a good quality of data one have, it could give no meaning unless appropriate method of analysis is used. Accordingly, with the secondary data both descriptive and econometrics method of analysis made to falsify the hypothesis which states that the coefficient of financial accessibility to SMEs is zero. Based on the theoretical considerations and the empirical review, the model specifications of this study will be as follow:

3.5.1. Model specifications

In the long-run steady state, SMEs desired capital stock (kt^*) is assumed to be proportional to expected output of Financial accessibility form bank world bank (2002):

U shape model which is $(Y_t e) (1) Kt^ = a (Y_t e)$*

Because of difficulty in identifying theoretically correct specification and obtaining the necessary and reliable data in Ethiopia, this paper does not attempt to build and estimate using logit model of impact of SMEs financial accessibility from bank in Ethiopia. Due to this fact, rather it is more of exploratory data analysis. Nevertheless, the findings of this analysis may give supportive idea for those who tries to build a full – scale fundamental relationship between private investment and macroeconomic variables in this county, which can then be used to develop appropriate caravel of investment behavior.

Macroeconomic variables assumed influence the gap between actual investments to desired investment included in the empirical analysis are:

Over all bank financed to SMES, Number of Employees by Major Industrial Group, Asset Owner ship: Total Value Of Fixed Assets By Industrial Group, Wage rate: Ratio of Cost of Labor to Gross Value of Production by Major Industrial Group , Ratio expenditure: Ratio of Cost of Energy Consumed to Total Industrial Cost by Major Industrial Group, Ration of Working capital: Ratio of Imported to Total Consumed Raw Material Costs by Major Industrial Group, Gross Value of Production: Ratio of Value Added to Gross Value of Production by Major Industrial Group, ROE: Ratio of Operating Surplus to Gross Value of Production by Major Industrial Group , Real GDP , Inflations

$$PI/ GDP = f (Ln BL, LnNe, LnAOs, LnWr, LnRx, LnRWc, LnGVP, LnROE, LnGDP, LnIF (-1), D).$$

Which is:

$$f(x) = a_0 + \sum_{n=1}^{\infty} \left(a_n \cos \frac{n\pi x}{L} + b_n \sin \frac{n\pi x}{L} \right)$$

Where

BL: Over all bank financing to SMES
Ne: Number of Employees by Major Industrial Group
AOs: Asset Owner ship: Total Value of Fixed Assets by Industrial Group,
Wr: Wage rate: Ratio of Cost of Labor to Gross Value of Production by Major Industrial Group,
Rex: Ratio expenditure: Ratio of Cost of Energy Consumed to Total Industrial Cost by Major Industrial Group,

RWc: Ration of Working capital: Ratio of Imported to Total Consumed Raw Material Costs by Major Industrial Group,
GVP: Gross Value of Production: Ratio of Value Added to Gross Value of Production by Major Industrial Group,
ROE: Ratio of Operating Surplus to Gross Value of Production by Major Industrial Group,
Real GDP: BDI/ GDP (-1) = lagged ratio of government budget deficit to GDP.
Inflations
D = Dummy variable to capture structural change (D= 0 for the period 2004– 2017, and
D= 1 for the remaining period)

Model distribution

To avoid non-stationary and spurious results, analyzing the nature of each variable about their distribution (normal or skewed) and its trend (stationary or non-stationary) is the first task in econometric regression. To this affect, first, the ratio rather than the level is preferred for each variable. Believing that this does not avoid the spurious result particularly due to serial correlation of macroeconomic variables, for most of the variables that are expected to suffer from non-stationary, real ratios or growth rates will be used. These variables are real per capita GDP growth rate, real foreign reserve and real exchange rates real credit availability. All the variables were tested for normal distribution. It was found that all variables were almost normally distributed results.

CHAPTER FOUR

4. Analysis and Discussion

4.1. Summary of Descriptive Statistics

There has been a growing evidence of the link between financial accessibility and economic growth. But when it is viewed at sector-wise, private investment practice in the sub city and further in the country, there has been a debate on the relationship between them. In some countries there was evidence of the crowding out impact of private bank access to loan for SMEs on a country, while there has been the crowding in evidence taken 14 years' annual data from manufacturing sector.

This study found out the existence of the crowding out the Impact of private Bank Financial Accessibility to Small and Medium Enterprise and their contributions on Economic growth of Ethiopia. The study also evaluates the macroeconomic determinants of financial accessibility in Ethiopia private banks for the last one and half decades (2004-2017) in long run perspective by means of a regression analysis based on the co-integration of variable relevance.

Table 1: Summary of Descriptive Statistics					
Variable 	Obs	Mean	Std. Dev.	Min	Max
lnBL 	44	10.74607	1.277762	8.834	13.043
lnNe 	44	5.774643	2.060168	2.5	8.702
lnWr 	44	11.45821	2.126145	8.632	16.132
lnRex 	44	9.245643	2.261997	4.717	12.915
lnRWc 	44	16.07343	14.43761	2.383	55.241
lnGVP 	44	2.460286	.0827595	2.351	2.642

GDP 	44	13.04793	.5458198	12.328	14.412
InROE 	44	.3361214	.3305143	.0358	1.2857
INF 	44	9.795071	3.315134	6.5	19.55

BL: Over all bank financing to SMES, **Ne:** Number of Employees by Major Industrial Group, **AOs:** Asset Owner ship, **Wr:** Wage rate, **Rex:** Ratio expenditure, **RWc:** Ration of Working capital, **GVP:** Gross Value of Production, **ROE:** Ratio of Operating Surplus to Gross Value of Production by Major Industrial Group, **Real GDP: BDI/ GDP (-1), Inflations**

*****Source from researcher financial survey data, 2019**

From above 1, Summary of Descriptive Statistics, regarding to private bank availability of loan to SMEs is in mean difference of 10.74607 which is indicates that the median of loan approval rights is statistically significant in all specifications, and the first-stage regressions can explain over 10.7% of the variation in the loan approval from bank financing to SMEs. The study shows the self-loan approval right affects SME lending after controlling institutional lower than expected, one more percent of self-loan approval right will lead to 0.11 more lending to SMEs at 10.7% approval.

Similarly, to mean the Number of Employees by Major Industrial Group is 5.774643 which is number of employees is one criterion for accessibility of loan from private bank of Ethiopia. clearly shows the most frequently mentioned reasons such as SMEs employment size were beyond the target for bank credit facilities SME were aware of MFIs loan facilities to minimizing the difficulty to form a group which is a requirement for MFIs loans, and no MFIs operates in the area (70% percent). Other reasons were also including inadequate collateral, high borrowing cost and fears of in ability to repay, and difficulty of the process to be given a loan is always depending on ability of employee work out.

Study result regarding to wage rate by Industrial Group mean difference is 11.45821 which is employment opportunity is showing 11% growth rates. This shows manufacturing of SMEs is growing up its employment opportunity in continuous positions.

From the result regarding to Ratio expenditure which is Ratio of Cost of Energy Consumed to Total Industrial Cost by Major Industrial Group mean 9.245643 at standard deviations of 2.261997. This indicated that expenditure could assess the SMEs for loan portfolio which is exactly the more you control your expenditure the greater opportunity it gets for loan.

From result on ration of Working capital which is Ratio of Imported to Total Consumed Raw Material Costs by Major Industrial Group, is indicating on mean difference of 16.07343 which is deviating by 14.43. Hunte (1996) also realized that customers with loan experience showed the capability to manage the loans better hence good quality of borrower's working capital.

This means that Working capital which is Ratio grew up by 16.07% are significant in the case of the customers to pay their loan. Because, bank would be suitably secured and have legal backing to guarantee the retrieval of the loan from working capital growth. This would eventually reduce the provision for bad debts that financial institutions have which will improve their financial position. Once the credit application satisfies all the bank's credit conditions, a comprehensive analysis is done to determine if the application complies with the institutions conditions then approval is given for disbursement to the applicant. Financial institution has quite different way of disbursing loans to its members which is different from how other financial institutions do. The credit disbursement can be crediting the loan amount to the customer's account all at once or it is done phase by phase for project type loans.

Result indicated on Gross Value of Production to the Ratio of Value Added to Gross Value of Production by Major Industrial Group shows in mean of 2.460286 on standard deviations of .0827595. This shows Gross Value of Production is showing growth 2.4% per annum that linked with first time borrowers since the loan officer has scanty information on their Gross Value of Production should assess on their ability to repay the loan when due. Therefore, bank attach all the seriousness to Gross Value of Production assessment process in order to reduce the credit risk associated with credit since loans are the largest assets link to banks arrangement in order to approve loan and based on MSEs Gross Value of Production would have a discretionary lending limit. Discretionary lending limit is the limit set to each branch based on its grade allowing it to disburse loan in different manufacturing sector of SMEs.

Result in SMEs ROE profit which is the Ratio of Operating Surplus to Gross Value of Production by Major Industrial Group is indicated to the mean difference of 0.3361214 showed variations to standard deviations of .3305143. SME shows growth profitability is by .33% per annum which is the procedure for loan gathering the necessary information on a potential and profitability of borrower projected from previous financial statement portfolio to minimize the credit risk assessment exercise to determine the associated risk by bank before providing any loans. This is also done to check the viability of the proposed firm profitability to be undertaken. This as well helps to examine the technical viability, the economic viability and the financial viability of the project to be undertaken. The risk associated with the loan can be reduced by doing the above table 1 result simply means the risk of default as a result of a borrower's failure to repay the loan taken from a bank is minimal.

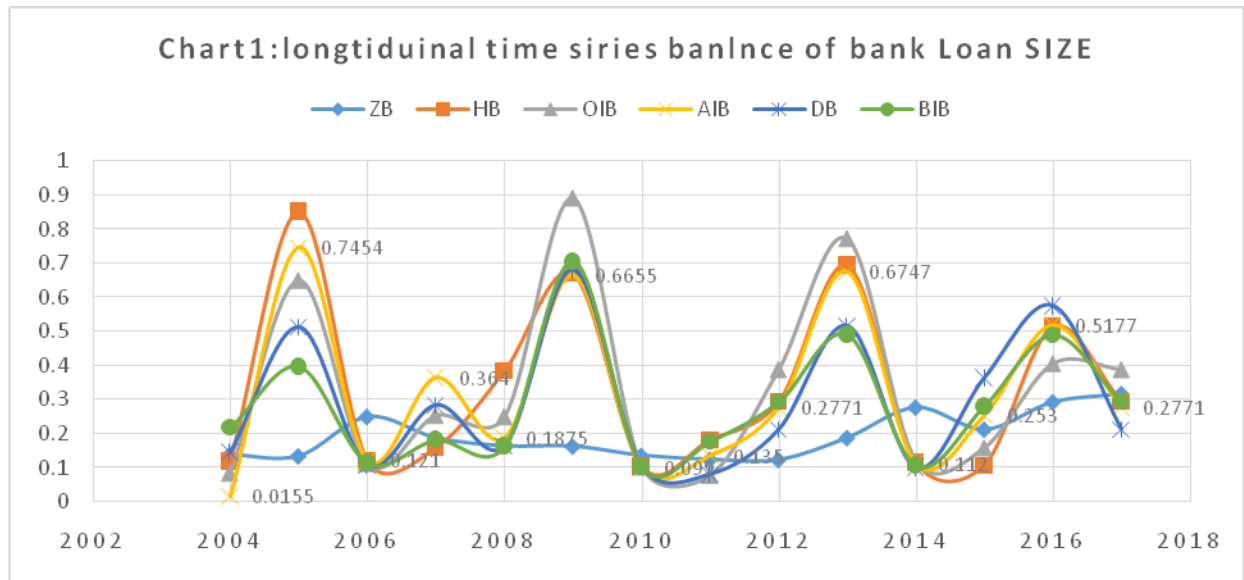
Appropriate assessment of a customer determines the financial situation and also helps to measure capability of the customer to repay the loan when due. This involves the authentication of primary and collateral security provided by the customer which will be relied on when the repayment of the loan becomes difficult.

This is a fundamental point in the credit procedure. It is said to be the heartbeat of a healthy credit portfolio. This involves collecting, analyzing and processing information as provided by the applicant on the credit application form based on their previous annual financial statement and feasibility study.

Annually inflations mean difference rate is 9.795071 which is varied on standard deviations 3.315134 to SMEs by 9.7% is relatively stable. It is the content of this document which bank can take any inflations assessment action against a borrower who defaults. Since this is the initial stage of the credit management process any error committed at this stage of inflations goes a long way to negatively affect the whole process by lessening the demand of borrowers. A loan defaulter can be hit by inflations if the content of the loan increment form is not properly structured. Hence the need to evaluate the existing loan provisions forms to ensure that they are inflations considered structured to protect the SMEs from financial distress to be able to the score less than 10%.

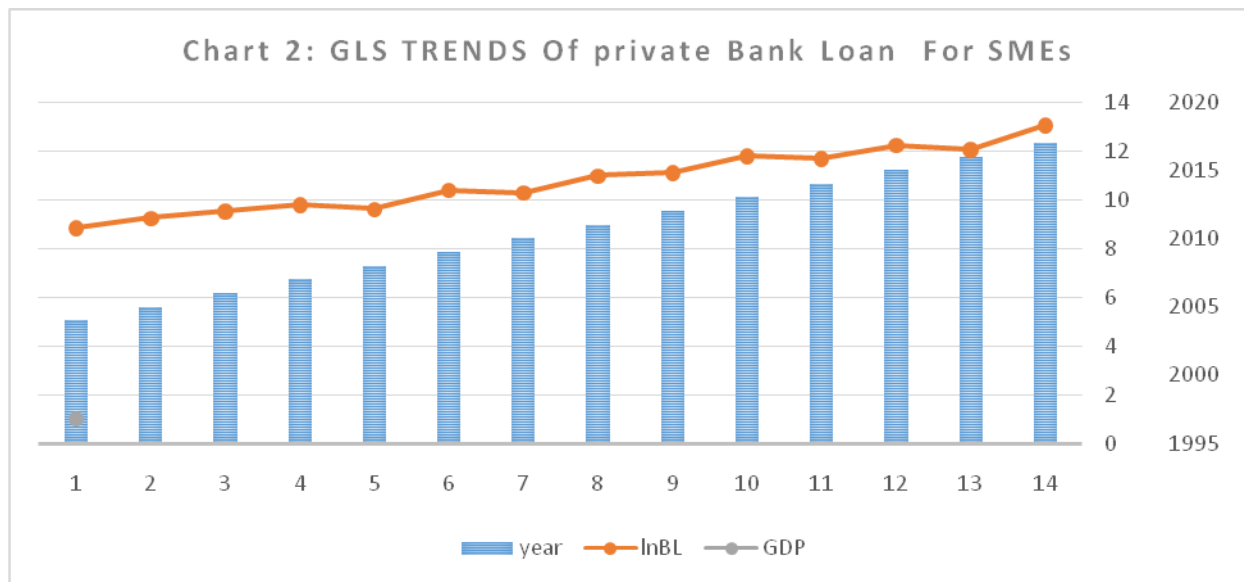
Annual mean of GDP growth to 13.04% which is varied to devotions by .5458198. Bank loans to SMEs consist of 13.04% of GDP and 18.7% of total bank lending in the manufacturing, with a decreasing trend of the latter since the 2008/09 global financial crisis. This implies that further policy support for bank loans to SME finance is needed. However, such policy support alone is not sufficient to provide long-term financing to growth-oriented SMEs because of the nature of the banking sector's short term credit in the region and rigid banking regulations. Furthermore, the bank dominant system makes SMEs more vulnerable to financial shocks if these Country GDPs do not grow less to their funding during crises. The GDP increasing modalities beyond conventional bank lending can therefore be a better alternative platform for the financing needs of SMEs and expanding their financial accessibility.

4.1. Annual Trends of Private Bank Financing to SME's



***Source from researcher financial survey data, 2019

From above Chart about longitudinal of time series balance private bank loan size shows loan difference Hibert Bank borrowed 74% of loan outraces next to Oromia international bank by 50% and awash Bank by 40% lending to loan portfolio this 2006, 2010 and 2014, banks decline their loan size by 10-15% annually but in 2016 and 2017 those private bank shows highest loan size performance. Given the bank dominant financial system in Ethiopia still limited access to bank credit is a persistent problem for SMEs lending has declined over the course of the financial Performance of firms. As bank primary function is to expand the information available to a lender to improve loan decisions. This is because borrowers can have an incentive to withhold adverse information from lenders to increase their chances of receiving a loan by improving the appearance of creditworthiness. In this context, the successful credit bureau system should have two important features. These are: a) the accuracy and security of the information collected and b) protecting the privacy of borrowers.



From chart 2; SME bank loans were averages of 10.7% and 18.7% of total bank lending for the region in 2004-2017. Although this illustrates the poor access to bank credit for SMEs, these numbers do not show the whole picture of the region due to its diverse economic structure. For example, while SMEs have relatively high access to bank credit in developed countries, such as China, the Republic of Korea and Thailand, they have critically low access to bank credit in developing or less developed countries, such as Pakistan, Afghanistan and Fiji (WHO, 2015) In this context, the share of SME loans to growth stood at an average of 18.5% in advanced countries and an average of 5.3% in developing and less developed countries as of 2015.

The financing needs of SMEs are dependent on their stage of growth. Chart 2 illustrates the conceptual combination of life cycle depend on SMEs to capital and credit providers from bank shows relatively medium level. For instance, while in the early stage of SME growth, the financial needs of SMEs are generally met by family, friends and founders, while in the steady growth stage, the banks are one of the capital providers amongst other investors. The latter is because only at this stage do SMEs have an ability to provide requested collateral and business track records to banks.

Therefore, to tap bank credits by SMEs that are in the other growth stages, such as the startup and expansion stages, the policies related to financial infrastructure, such as credit guarantees, credit registries or bureaus and collateral registries, need to be developed by countries.

Credit guarantee schemes are relatively well-established in Ethiopia by funding outstanding guaranteed liabilities consist to Ethiopian MSEs are unprofitable, these institutions in emerging and low income of firms. These suggest that SME access to guarantees is still being restricted in emerging and low-income economies such as in Ethiopia.

On the other hand, it is questionable whether guarantee schemes are sustainable in advanced countries when considering unprofitable business. In this respect, guarantee operations for SMEs should be well designed to ensure sustainable guarantee services. If credit guarantee schemes are not well established for SMEs, they can lead to increased risk of adverse selection and moral hazard. For example, credit guarantees schemes may discourage financial institutions from closely monitoring SME borrowers, resulting in the use of funds inconsistent with loan objectives. These schemes may also prolong the life of poorly performing SMEs though guaranteed loans by discouraging them from developing their management without any collateral requirements, as owner assets are not at risk in the case of default.

It is a challenge to design and manage credit guarantee schemes in weak institutional environments where good governance is difficult to establish (Hibret bank Bultin, 2017). In this respect, suggest that best practices for credit guarantee schemes involve the following features: (a) credit assessments and decision making should be made by the private sector, (b) to minimize moral hazard problems, capping coverage ratios and the payout of the guarantee should be determined until recovery actions are taken by the lender, and (c) the use of risk management

tools should be encouraged. However, many existing schemes do not have these features, which prevent their impact in improving SME lending.

4.2. Estimation Result using Time series properties '2004-2017'

Test of stationery

Table 2: Unit root test with trend and intercept term

Variables	ADF	
	Levels	Differences
lnBL	-3.243	-3.732*
INNe	-3.263	-3.815*
InWr	-3.332	-3.6345*
InRex	-3.584	-4.230*
lnRWc	-2.346	-4.212*
InEDS	-2.520	-4.112*
InGVP	-3.332	-3.443*
InROA	-2.211	-3.605*
INF	-3.243	-3.342
GDP	-3.057	-3.695*
(critical value at 5% = -3.600)		

**implies the null hypothesis of non- stationery can be rejected at 5% level of significance.*

***Source from researcher financial survey data, 2019

The unit root test implies that the null hypothesis of non-stationery cannot be rejected at 5% level of significance for all the variables at level. However, for the difference we can safely reject the null hypothesis of non-stationary at 5% level of significance. The unit root test above shows that all the variables used in the model are found to be non-stationary at their level values. ow datat privet bank 2004 up to 2017 bank.xlsx", sheet ("Sheet1") fi

Co-integration Test

Table 3: Unit root test with trend on residuals

ADF (test statistic -5.553)
(critical value at 5% = -3.600)

***Source from researcher financial survey data, 2019

Therefore, the variables in the model are co-integrated using the Engle Granger (1987) approach. The co-integration test suggests the existence of long run equilibrium and hence the formulation of ECM will be possible. (Guajarati D, 2003). The single equation ECM is estimated below.

Test of specification error

Ramsey RESET test is applied using powers of the fitted values of $\Delta \ln PI$

Ho: model has no omitted variables

H1= model has omitted variables

$$F(3, 17) = 2.09$$

critical F (3, 17) at 10%=2.44

$$\text{Prob} > F = 0.1390$$

Since critical F (3, 17) at 10%=2.44 > F (3, 17) = 2.09

We do not reject the null hypothesis in favor of the alternative hypothesis, thus there are no omitted variables in the model implying that the Variable is correctly specified.

White test

White's test for Ho: homoscedasticity against

Ha: unrestricted heteroskedasticity

$$\chi^2(5) = 23.77 \text{ Prob} > \chi^2 = 0.0002$$

Table 4: Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	23.77	5	0.0002
Skewness	3.77	2	0.1518
Kurtosis	2.29	1	0.1302
Total	29.83	8	0.0002

***Same conclusion, we reject the null hypothesis

***Source from researcher financial survey data, 2019

According to Brook, (2008) indicated that if the P-values of these test statistics are considerably in excess of 0.05, then the test give conclusion that there is no evidence for the presence of hetro-scedasticity. It is clear evident that the errors are homoscedastic. Therefore, based on this statistic we fail to reject the null hypothesis that is indicated as there is no Heteroscedasticity for the models.

Multicollinearity Test

Table 5. Correlation matrix (obs=44)									
	GDP	lnBL	lnNe	lnWr	INF	lnRex	lnRWc	lnGVP	ln ROA
GDP	1.0000								
lnBL	0.9585	1.0000							
lnNe	0.7495	0.7279	1.0000						
lnWr	0.1171	0.1381	-0.1074	1.0000					
INF	0.4254	0.4813	0.5733	-0.1720	1.0000				
lnRex	0.4391	0.4336	0.3550	-0.5104	0.5761	1.0000			
lnRWc	0.0586	-0.0225	0.3118	-0.2757	0.3051	0.2126	1.0000		
lnGVP	0.8917	0.8270	0.7809	0.2346	0.3718	0.2347	0.0805	1.0000	
lnROA	-0.1257	-0.1199	0.0008	0.1788	-0.2542	-0.3614	-0.0493	-0.0617	1.0000

***Source from researcher financial survey data, 2019

The correlation matrix shown in Table 5 indicates that the country private investment practice indicators are highly correlated among themselves with the country macroeconomics index calculated. In view of this, the Cross-sectional time-series FGLS regression approach was used. The individual country private investment variables and the combined to ecumenical growth index were introduced into the model one at a time, resulting in nine estimated models. Also, variance inflation factors (VIF) analysis was conducted.

The results (available on demand) show that the presence of multicollinearity is minimal in each of the models estimated. Multicollinearity is deemed to be high if VIF is greater than five (as a common rule of thumb) and according to Kutner, Nachtsheim, and Neter (2004 Kutner, M., Nachtsheim, C., & Neter, J. (2004). VIF of 10 should be the cut off.

4.3. The Impact of private Bank Financial Accessibility to Small and Medium Enterprise and their contributions on Economic growth of Ethiopia

4.3.1. Regression results (dependent variable—BLA)

4.3.1.1. Coefficient of Determination LR chi2 (8) and adjusted R2

Coefficient of determination FGLS model measures what percentage of a change in the dependent variable can be measured or explained by the change in the independent variables. It is also explaining the level of the explanatory power. If R-squared = 0 (no explanatory power)

This means that none of the change in the dependent variable can be measured by the change in the independent variables. The estimated equation is useless.

If Wald chi2 (8) = 1 (full explanatory power)

This means 100% of the change in the dependent variable can be explained by the change in the independent variables. But, the adjusted R-squared is a modified version of R-squared that has been adjusted for the number of predictors in the model. The adjusted R-squared increases only if the new term improves the model more than would be expected by chance. It decreases when a predictor improves the model by less than expected by chance. On this study, both the R-squared and adjusted R-squared look better, Also the coefficient estimates are significant because their p-values are less than 0.05 except few. The results obtained shows that, Wald chi2 (8) = 365.12. This means that Prob > chi2 = 0.000 significance change in the dependent variable can be explained by the change in independent variables.

Table 6: Regression results (dependent variable—BLA)						
Cross-sectional time-series FGLS regression						
Coefficients: generalized least squares						
Estimated covariance	=	1	Number of obs	=	44	
Estimated autocorrelations	=	0	Number of groups	=	14	
Estimated coefficients	=	9	Time periods	=	1	
Wald chi2(8) = 365.12						
Log likelihood	=	12.22176	Prob > chi2	=	0.0000	
GDP	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
lnBL	.2988431	.0488551	6.12	0.000	.203089	.3945973
lnNe	-.00675570	.0314221	-0.21	0.830	.0683419	.0548305
lnWr	-.0024963	.0201986	-0.12	0.902	.0420848	.0370922
INF	-.0177754	.0127139	-1.40	0.162	-.0426941	.0071433
lnRex	.0255949	.0211248	1.21	0.226	-.015809	.0669987

lnRWc	.0023447	.002304	1.02	0.309	-.002171	.0068605
lnGVP	2.277448	.7850889	2.90	0.004	.7387021	3.816194
lnROA	-.00782230	.0950181	-0.08	0.934	-.1940544	.1784098
_cons	4.203392	1.568412	2.68	0.007	1.129361	7.277422

BL: Over all bank financing to SMES, **Ne:** Number of Employees by Major Industrial Group, **Wr:** Wage rate, **Rex:** Ratio expenditure, **RWc:** Ration of Working capital, **GVP:** Gross Value of Production, **ROE:** Ratio of Operating Surplus to Gross Value of Production by Major Industrial Group, **Real GDP: BDI/ GDP (-1), Inflations**

*****Source from researcher financial survey data, 2019**

It is from above table 6: result which is researcher used natural logarithms of Overall bank financing to SMES, Ne: Number of Employees by Major Industrial Group, Wr: Wage rate, Rex: Ratio expenditure, RWc: Ration of Working capital, GVP: Gross Value of Production, ROE: Ratio of Operating Surplus to Gross Value of Production by Major Industrial Group, Real GDP: BDI/ GDP (-1), Inflations, the estimated parameters show flexibility of private investment with respect to these independent variables.

According to results obtained from estimation, we can observe that relationship of Inflation and ratio of expenditures, number of employees, wage rates and ratio of working capital as well as ratio of operating surplus are rejected as these variables appear to be statistically insignificant. Over all bank financing to SMES, GVP: Gross Value of Production, Real GDP: BDI/ GDP (-1), variables are significant according to Cross-sectional time-series FGLS regression 1%, 5% and 10% significant level criteria. In the following lines, we discuss quantitative effects of these variables on SME financing.

In this section discussion of t-test from previous Cross-sectional time-series FGLS regression test is conducted by comparing the value of t-statistics of each independent variable with the t-table. Using Stata 13.0. It can easily know the result of t-test by comparing Probability of t-value with level of significance. In this study a 1 percent α or 99% confidence level is used to interpret the results. If the probability of t value <0.01 , then we may conclude that the independent variable is significant toward dependent variable. The explanation of t-test for each independent variable will be presented below:

Summary of Research Outcome

From Cross-sectional time-series FGLS regression result the Impact of private Bank Financial Accessibility to Small and Medium Enterprise and their contributions on Economic growth of Ethiopia. The development of financial accessibility of private bank in Ethiopia to SMEs is still in the early stages in the Ethiopia indicated to coefficient of 0.2988431 at 1% significance level which is accounted for an average of 29% of GDP, and represented one tenth of bank loan assets, market capitalization of equity markets for SMEs is higher than 4.2% of GDP in constant manner. In this context, the MSMEs financing gap suggests the limitations of bank lending for MSMEs financing. However, underdeveloped capital market financing and NBFs do not seem a realistic option for financing SMEs in the region in the short term. National SME finance policies related to access to finance in the region across Asia still focus mainly on enhancing bankability. However, a balanced approach is needed to design extensive policy measures for banks, capital markets and NBFIs to promote SME access to finance in Ethiopia for the longer term.

The number of borrowers, average loan size has increased in a remarkable way during their employment rate increase which is the SMEs has a serious hindrance in gaining access to products and services from financial of bank, particularly from banks. Inadequate collateral, difficulty of processes, fear of inability

to repay, and high borrowing cost were frequently mentioned reasons by SMEs for inaccessibility of banks products and services (Gebrehiwot, 2006).

Regards the forms of wage rate of SME to the banks offered short term loans, cash credit, and over draft facility to finance SMEs working capital requirements and wage rate efficiency. Similarly, banks also offered medium and long term financial assistance by way of term loans. This is in line with the traditional role of commercial banks. In general, although limited provision of banks products and services, banks help the SMEs development and growth. Apart from banks, MFIs played significant role in SMEs development process.

In the context of Ethiopia, MFIs were established to broaden access to financial services for poor and small enterprises. MFIs provided both term loan and installment loans. It was shown that access to MFIs enabled SMEs, particularly small enterprises that are underserved by banks, to overcome financing constraints and thereby accelerating their growth rate. Despite their importance in SMEs growth, MFIs still provided inadequate wage rate to finance SMEs working capital as well as investment needs.

Result regarding to Ratio expenditure which is Ratio of Cost of Energy Consumed to Total Industrial Cost by Major Industrial Group is shows in a coefficient of 0.0255949 at 5% significance level. Private Bank Financial Accessibility to Small and Medium Enterprise portrayed by indicator of Ratio expenditure which is Ratio of Cost of Energy Consumed to Total Industrial Cost by Major Industrial Group is 2.5% probability interval to be worth which is contributed to country economy by 1.21GDP.

Further, financial institutions addressed some of the problems that SMEs face in the process of expenditure if it is higher than total sale, banks flexing loan terms and conditions/requirements to enhance SMEs access to banks financial resources and postponed loan maturity period to overcome SMEs financial distress. According to Ghimire (2013) found that the Private bank most of the time used alternative collateral and credit facilities to address from MSEs if more expenditure rate is higher in financing constraints and postpone loan maturity period and refinancing future potential expenditure declamations to overcome loan settlement problems.

According to NBA bulletin (2015) stated that Banks may be willing to provide an overdraft of some sort and may be willing to lend in the long term where that lending can be secured on major assets such as land and buildings or if the Ratio of Working capital which is Ratio of Imported to Total Consumed Raw Material Costs by Major Industrial Group above 25% per annum. However, raising medium-term finance to fund operations is often more difficult for SMEs as banks are traditionally rather conservative.

Result regarding to Gross Value of Production which is the Ratio of Value Added to Gross Value of Production by Major Industrial Group indicated on coefficient 2.277448 at 5% significance level. Private Bank Financial Accessibility to Small and Medium Enterprise portrayed based on portfolio of Gross Value of Production: Ratio of Value Added to Gross Value of Production by Major Industrial Group likely hood ratios of worth by 2.2% which is contributed to 2.9% for country growth.

The researcher confirmed how this funds or sources be workable based on Gross Value of Production and working environment to help SMEs in thier need. However, this shows that there is untapped Gross Value of Production for the source of formal finance which will reduce the constraint of accessing the finance (William, 2016). Crowd funding facilitates the raising of capital for a variety of purposes, using numerous variations of the model based on the Gross Value of Production is a typology of how the operators in the market can potentially be segregated.

Most banking platforms can connect cash-starved creative entrepreneur's profits level should be more than 10% with audiences looking to fund creative projects because they are passionate about their 'substance', rather than seeking to generate a financial return from them, as well as with investors offering capital on better terms than traditional sources of finance for the sector, such as banks or publishersNesta (2012).

Gebrehiwot and Wolday (2006) found that in the context of much financial accessibility for SMEs previous ROE portfolio is needed, because SME are more vulnerable to market changes and often have inadequate management capabilities because of their financial distress. Low profitability and shortages of working capital were the two most frequently mentioned underlying causes of these business failures. SME activities are extremely volatile with a large number of them starting up while many others are closing down.

CHAPTER FIVE

5. Conclusion and Recommendations

5.1 Conclusions

From Cross-sectional time-series FGLS regression result the Impact of private Bank Financial Accessibility to Small and Medium Enterprise and their contributions on Economic growth of Ethiopia. The development of financial accessibility of private bank in Ethiopia to SMEs is still in the early stages in the Ethiopia indicated to coefficient of 0 .2988431 at 1% significance level which is accounted for an average of 29% of GDP, and represented one tenth of bank loan assets, market capitalization of equity markets for SMEs is higher than 4.2% of GDP in constant manner. In this context, the MSMEs financing gap suggests the limitations of bank lending for MSMEs financing.

Private Bank Financial Accessibility to Small and Medium Enterprise portrayed by indicator of Ratio expenditure which is Ratio of Cost of Energy Consumed to Total Industrial Cost by Major Industrial Group is 2.5% probability interval to be worth which is contributed to country economy by 1.21GDP. Similarly result on private Bank Financial Accessibility to Small and Medium Enterprise portrayed based on portfolio of Gross Value of Production: Ratio of Value Added to Gross Value of Production by Major Industrial Group likely hood ratios of worth by 2.2% which is contributed to 2.9% for country growth. Finally, is conclude that impact of private bank towards financing SMEs in Ethiopia shows relatively in infant stage. SME activities are extremely volatile with a large number of them starting up while many others are closing down Programs to increase financing for SME often begin with training and business development services to strengthen firms' management and productivity.

5.2 Recommendations

In this respect, suggest that best practices for credit guarantee schemes involve the following features: (a) credit assessments and decision making should be made by the private sector, (b) to minimize moral hazard problems, capping coverage ratios and the payout of the guarantee should be determined until recovery actions are taken by the lender, and (c) the use of risk management tools should be encouraged. However, many existing schemes do not have these features, which prevent their impact in improving SME lending.

To overcome the constraint of bank lending for SMEs, the diversification of financing modalities is required as an alternative channel for providing growth capital, with more sophisticated and innovative institutional arrangements needed in order to effectively meet their financial needs. However, underdeveloped capital market financing and NBFs do not seem a realistic option for financing SMEs in the region in the short term.

National bank, CBE, and private bank of Ethiopia should enhance those SME finance policies related to access to finance in the region across enhancing bankability. However, a balanced approach is needed to design extensive policy measures for banks, capital markets and private bank, CBEs to promote SME access to finance in Ethiopia for the long term.

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Appendix

Appendix

histogram year

(bin=3, start=2004, width=4.3333333)

. quantile year

. twoway (scatter year lnBL) (rarea year GDP lnBL)

. dotplot lnBL GDP

. summarize lnBL lnNe lnWr lnRex lnRWc lnGVP GDP

Variable	Obs	Mean	Std. Dev.	Min	Max
-----+-----					
lnBL	14	10.74607	1.277762	8.834	13.043
lnNe	14	5.774643	2.060168	2.5	8.702
lnWr	14	11.45821	2.126145	8.632	16.132
lnRex	14	9.245643	2.261997	4.717	12.915
lnRWc	14	16.07343	14.43761	2.383	55.241
-----+-----					
lnGVP	14	2.460286	.0827595	2.351	2.642
GDP	14	13.04793	.5458198	12.328	14.412

. summarize lnBL lnNe lnWr lnRex lnRWc lnGVP GDP lnROA

Variable	Obs	Mean	Std. Dev.	Min	Max
-----+-----					
lnBL	14	10.74607	1.277762	8.834	13.043
lnNe	14	5.774643	2.060168	2.5	8.702
lnWr	14	11.45821	2.126145	8.632	16.132
lnRex	14	9.245643	2.261997	4.717	12.915
lnRWc	14	16.07343	14.43761	2.383	55.241
-----+-----					
lnGVP	14	2.460286	.0827595	2.351	2.642
GDP	14	13.04793	.5458198	12.328	14.412
lnROA	14	.3361214	.3305143	.0358	1.2857

. table year lnBL, contents(mean sd) by(GDP)

variable sd not found

r(111);

. xtset GDP year, yearly

panel variable: GDP (weakly balanced)

time variable: year, 2004 to 2017

delta: 1 year

.

. xtpoisson GDP lnBL lnNe lnWr lnRex lnRWc lnGVP GDP lnROA, re exposure(lnBL)

note: you are responsible for interpretation of non-count dep. variable

Fitting Poisson model:

Iteration 0: log likelihood = -30.930338

Iteration 1: log likelihood = -30.930338

Fitting full model:

Iteration 0: log likelihood = -50.473811

Iteration 1: log likelihood = -30.93052

Iteration 2: log likelihood = -30.930345

Iteration 4: $\log \text{likelihood} = -30.930339$

Random effects u_i ~ Gamma	Obs per group: min =	1
	avg =	1.0
	max =	1

GDP	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
lnBL	-.1018823	.2513809	-0.41	0.685	-.5945799	.3908152
lnNe	.0000135	.0861265	0.00	1.000	-.1687913	.1688182
lnWr	-.0011199	.0556881	-0.02	0.984	-.1102665	.1080267
INF	.0001124	.0371908	0.00	0.998	-.0727802	.0730051
lnRex	-.0010997	.0614751	-0.02	0.986	-.1215886	.1193892
lnRWc	-.0001372	.0066122	-0.02	0.983	-.0130969	.0128225
lnGVP	-.0567274	2.717819	-0.02	0.983	-.5383555	5.2701
GDP	.1076414	.7156212	0.15	0.880	-1.29495	1.510233
lnROA	.0008257	.2628555	0.00	0.997	-.5143617	.516013
_cons	.0534961	5.124615	0.01	0.992	-9.990565	10.09756
ln(lnBL)	1 (exposure)					
/lnalpha	-18.35384	667.2975			-1326.233	1289.525
alpha	1.07e-08	7.13e-06			0	.

. xtglm GDP lnBL lnNe lnWr INF lnRex lnRWc lnGVP lnROA, panels(iid) corr(independent)

Correlation: no autocorrelation

GDP	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
lnBL	.2988431	.0488551	6.12	0.000	.203089	.3945973
lnNe	-.0067557	.0314221	-0.21	0.830	-.0683419	.0548305
lnWr	-.0024963	.0201986	-0.12	0.902	-.0420848	.0370922
INF	-.0177754	.0127139	-1.40	0.162	-.0426941	.0071433
lnRex	.0255949	.0211248	1.21	0.226	-.015809	.0669987
lnRWc	.0023447	.002304	1.02	0.309	-.002171	.0068605
lnGVP	2.277448	.7850889	2.90	0.004	.7387021	3.816194
lnROA	-.0078223	.0950181	-0.08	0.934	-.1940544	.1784098
_cons	4.203392	1.568412	2.68	0.007	1.129361	7.277422

```
. xtreg GDP lnBL lnNe lnWr INF lnRex lnRWc lnGVP lnROA, be
the panel variable GDP may not be included as an independent variable
r(198);
```

```
. stcox lnBL lnNe lnWr lnRWc lnGVP, strata(GDP)
data not st
r(119);
```

```
. summarize INF lnBL lnNe lnWr lnRex lnRWc lnGVP GDP lnROA
```

Variable	Obs	Mean	Std. Dev.	Min	Max
INF	14	9.795071	3.315134	6.5	19.55
lnBL	14	10.74607	1.277762	8.834	13.043
lnNe	14	5.774643	2.060168	2.5	8.702
lnWr	14	11.45821	2.126145	8.632	16.132
lnRex	14	9.245643	2.261997	4.717	12.915
lnRWc	14	16.07343	14.43761	2.383	55.241
lnGVP	14	2.460286	.0827595	2.351	2.642
GDP	14	13.04793	.5458198	12.328	14.412
lnROA	14	.3361214	.3305143	.0358	1.2857

```
. pwcorr GDP lnBL lnNe lnWr INF lnRex lnRWc lnGVP lnROA
```

	GDP	lnBL	lnNe	lnWr	INF	lnRex	lnRWc
GDP	1.0000						
lnBL	0.9585	1.0000					
lnNe	0.7495	0.7279	1.0000				
lnWr	0.1171	0.1381	-0.1074	1.0000			
INF	0.4254	0.4813	0.5733	-0.1720	1.0000		
lnRex	0.4391	0.4336	0.3550	-0.5104	0.5761	1.0000	
lnRWc	0.0586	-0.0225	0.3118	-0.2757	0.3051	0.2126	1.0000
lnGVP	0.8917	0.8270	0.7809	0.2346	0.3718	0.2347	0.0805
lnROA	-0.1257	-0.1199	0.0008	0.1788	-0.2542	-0.3614	-0.0493

	lnGVP	lnROA
lnGVP	1.0000	
lnROA	-0.0617	1.0000

```
. lnBL, by(year)
```

Kruskal-Wallis equality-of-populations rank test

+-----+		
year	Obs	Rank Sum
+-----+		
2004	1	1.00
2005	1	2.00
2006	1	3.00
2007	1	5.00
2008	1	4.00
+-----+		
2009	1	7.00
2010	1	6.00
2011	1	8.00
2012	1	9.00
2013	1	11.00
+-----+		
2014	1	10.00
2015	1	13.00
2016	1	12.00
2017	1	14.00
+-----+		

```
chi-squared = 13.000 with 13 d.f.
probability = 0.4478
```

```
chi-squared with ties = 13.000 with 13 d.f.
probability = 0.4478
```

```
. swilk year lnNe lnNe lnWr lnRex lnRex GDP lnRWc lnROA
```

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
+-----+					
year	14	0.96453	0.656	-0.829	0.79644
lnNe	14	0.94377	1.041	0.078	0.46880
lnNe	14	0.94377	1.041	0.078	0.46880
lnWr	14	0.94188	1.076	0.144	0.44292
lnRex	14	0.96816	0.589	-1.042	0.85118
lnRex	14	0.96816	0.589	-1.042	0.85118
GDP	14	0.92924	1.310	0.531	0.29776
lnRWc	14	0.78708	3.940	2.700	0.00347
lnROA	14	0.79066	3.874	2.666	0.00383

```
. sktest lnBL lnWr lnWr INF lnRex lnRWc lnGVP GDP lnROA
```

Skewness/Kurtosis tests for Normality

----- joint -----					
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
+-----+					
lnBL	14	0.7293	0.2896	1.40	0.4974
lnWr	14	0.1661	0.4999	2.78	0.2497
lnWr	14	0.1661	0.4999	2.78	0.2497
INF	14	0.0017	0.0047	13.02	0.0015

lnRex	14	0.7745	0.9261	0.09	0.9557
lnRWc	14	0.0037	0.0239	10.42	0.0055
lnGVP	14	0.5240	0.5570	0.81	0.6660
GDP	14	0.0804	0.1474	5.08	0.0791

Source | chi2 df p

Heteroskedasticity| 23.77 5 0.0002

Skewness | 3.77 2 0.1518

Kurtosis | 2.29 1 0.1302

Total | 29.83 8 0.0002

ADF

Variables	Levels	Differences
lnBL	-3.243	-3.732*
INNe	-3.263	-3.815*
lnWr	-3.332	-3.6345*
lnRex	-3.584	-4.230*
lnRWc	-2.346	-4.212*
lnEDS	-2.520	-4.112*
lnGVP	-3.332	-3.443*
lnROA	-2.211	-3.605*
INF	-3.243	-3.342
GDP	-3.057	-3.695*

(critical value at 5%=-3.600)

year	lnBL	lnNe	lnWr	INF	lnRex	lnRWc	lnGVP	lnAOs	GDP	lnROA	ZB	HB	OIB	AIB	DB	BIB
2004	8.834	3.25	8.632	6.5	8.077	2.383	2.375	7.368	12.328	0.0358	0.1374	0.119	0.0845	0.0155	0.1453	0.2174
2005	9.236	4.878	10.921	7.008	7.087	10.747	2.351	7.359	12.437	1.2857	0.1342	0.852	0.6498	0.7454	0.5128	0.3968
2006	9.511	3.1	11.445	8.147	7.561	10.82	2.351	6.889	12.54	0.115	0.2498	0.118	0.112	0.121	0.106	0.114
2007	9.788	2.5	11.34	10.162	12.915	15.103	2.351	6.261	12.618	0.106	0.1875	0.158	0.253	0.364	0.284	0.181
2008	9.609	5.789	11.542	6.711	7.479	55.241	2.442	6.616	12.746	0.3674	0.1638	0.3842	0.2498	0.1875	0.1638	0.1628
2009	10.381	4.3	16.132	8.882	4.717	2.707	2.506	6.5	12.853	0.4658	0.1628	0.6686	0.8912	0.6655	0.6825	0.7053
2010	10.276	7.39	12.868	8.546	9.308	7.321	2.506	7.131	12.914	0.299	0.1358	0.103	0.102	0.099	0.103	0.102
2011	10.966	8.123	9.23	19.55	12.042	38.044	2.475	8.178	13.066	0.135	0.1241	0.181	0.077	0.135	0.081	0.177
2012	11.092	6.342	9.932	8.944	9.297	20.812	2.474	8.818	13.181	0.2641	0.1232	0.2932	0.3878	0.2771	0.2123	0.2929
2013	11.781	4.894	14.732	9.293	8.224	7.39	2.475	9.376	13.261	0.572	0.1878	0.6934	0.7722	0.6747	0.5166	0.4909
2014	11.682	5.569	10.313	8.358	10.8	8.464	2.475	9.429	13.361	0.102	0.2771	0.115	0.118	0.112	0.1	0.106
2015	12.21	8.298	11.936	12.009	9.137	10.446	2.475	9.778	13.453	0.077	0.2123	0.106	0.158	0.253	0.364	0.28
2016	12.036	7.71	8.975	11.009	11.388	17.5	2.546	9.573	13.501	0.6168	0.2929	0.5132	0.4052	0.5177	0.5759	0.4891
2017	13.043	8.702	12.417	12.012	11.407	18.05	2.642	.9.872	14.412	0.2641	0.3168	0.2932	0.3878	0.2771	0.2123	0.2929