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"The Impact of Inflation on Return on Assets of Private Banks: Evidence from Ethiopia."

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Letter of Declaration

I declare this Thesis paper entitled “The Impact of Inflation on Return on Asset of Private Banks: Evidence from of Ethiopian.” Is my original work as partial fulfillment of Master of Business Administration (EMBA) at Addis Ababa University Department of Management and not submitted earlier for any Degree either at this University or any Other University.

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Taye Messele Workineh

Letter of Certification

This Certification is to certify that “The Impact of Inflation on Return Asset of Private Banks: Evidence from Ethiopian.” as partial fulfillment Master of Business Administration (EMBA) at Addis Ababa University Department of Management is an original work of Taye Messele.

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This is to certification of the Research Project prepared by Taye Messele, entitled:" ***The Impact of Inflation on the Return on Asset of Private banks: Evidence from Ethiopia"*** and submitted as partial fulfillment requirements for the degree of Master of
Executive Master Business Administration complies with the university's regulations and meets the accepted standards concerning originality and quality.
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Examiner Dr.Lakew Alemu Signature _____ Date _____

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Table of Contents

List of Tables

List of Figures

Table of Acronyms

Cases

AIR Average Inflation Rate

ALIR Average Lendig Interest Rate

ANOVA Analysis of VarianceCBE Commercial Bank of Ethiopia

CPI Consumer Price Index

EDRI Ethiopia Development Research Institute

ELIR Effecitve Lending Interest Rate

IAS International Accounting Standard

NBE National Bank of Ethiopia

ROA Return on Asset

ROE Return on Equity

SPSS Statistical Pacage for Social Science

SBB Supervion of Banking Business

VIF Varinace Inflation Factor

Abstract

The study's objective is to analyze the impact of inflations on the Asset of Ethiopian private banks from 2016 to 2020. An inferential statistics method of data analysis has been made on Private Banks to achieve the objective. The study uses both Inflation Rate (IFR) and Lending Average Interest Rate (LAIR) to measure a bank's asset. The research methodology presents the methods, techniques, scientific paths, and procedures in the 16 sampled Ethiopian private banks. The findings shows the existence of an inverse relationship between inflation and the performance of private commercial banks. This negative association was statistically significant; thus, the findings suggested that inflation was an essential factor determining the Return on Assets of private banks of Ethiopia as the p-value is 0.033. The Mean of Inflation Rate and Lending Interest Rate results are all most similar to each other that are 13.4291 and 13.664; the trend in the increase of Inflation rate was higher at the end of the last three years the study shows that is from 14.7% in the Year 2017 to 21.6% to the Year of 2020, it has increased by five percent each year. The average Lending Interest has shown a steady growth in those Years. The researcher can conclude that the revenue generated from the Lending Activities of Banks consumed by the economy's inflation rate. An Inflation adjusted financial statement would have informed that most of the Private Banks, especially for which more than 50% of their incomes were from Interest Income, registered a loss or lesser bank assets. As a recommendation, Inflation adjusted Lending Interest Rate should be applied by the Banks to alleviate impact of Inflation Rate in the Economy.

***Key Words**: **Inflation, asset, Return on Asset, Bank Performance, Effective Interest Rate**.*

Chapter One

Introduction

1.1 Back Ground of Study

The activities of Banks are to facilitate the economic activities in the country. Usually, mobilize resources from their depositors and lend money to their borrowers to generate profit. Their ultimate objective is to maximize the shareholder's interest; on the way, they contribute a lot to the growth of GDP in the county's economy. Currently, they serve as a tool to enhance the country's total savings. The private commercial banks are established under the commercial code of Ethiopia and as per the proclamation number of licensing supervision of banking business (SBB, 1994). The Researchers made much further research and empirical studies on the Impact of Inflation on the Profitability of Banks: the similar research was published by (Araya 2018) on "the impacts of inflation rate on profitability Kenyan commercial banks," Similarly, Inflation as one of the factors affecting the profitability of CBE on the research studied with the title "The factors affecting the profitability of commercial bank of Ethiopia (CBE)" by (Aksha, 2017).

This research extends the various previous studies on the impact of inflation in different Economic situations in other countries to describe this similar effect on the Ethiopian private banks for the past five years and to restate the amount of overstated or understated profit during those years. In a high inflation figure economy by recommended to follow (IAS, 29), to use the impact of inflation for internal management purpose, the management of private banks has to consider the effects of inflation on their performance. The overstatement and understatement of performance figures will be known for decision-making to anticipate the impact of inflation. The impact of inflation is the primary concern of all Governments. Currently, the Ethiopian Government is changing the Currency Notes into new ones to monitor the circulation of currency Notes in the country, helping the economy run away from the soar inflation rise in the economy because it controls the illegal cash movements in the country economy. In addition to the currency Note changing, it will enhance the country's saving at large through commercial banks. It has generated more than 13.5 billion birrs as deposits

within one month (NBE, 2020). The increases in deposition might increase the supply of money in the economy through banks; however, that might have a role in the rise of inflation in the short run, but it may positively affect the long run to manage the inflation.

The National Bank of Ethiopia introduces an Inflation-adjusted interest rate (Fortune, 2020); the draft policy will be used as an instrument to move towards a market-driven interest rate system from the current quantitative money control system. The existing lending and borrowing rates do not take the inflation rate into account. During last year, the average inflation rate stood at 13.6%. The average lending rate and deposit rates were -0.13% and -5.1%, respectively, meaning depositors lose 5.1% and banks losing 0.13% value the money annually. The above figures signify the importance of considering the impact of inflation and the Average Lending Rate on the financial profit performance reporting of the private commercial banks. The inflation rate in Ethiopia was 7.5% in 2016, 8.8 % in 2017, 14.7% in 2018, 15.4% in 2019 and 21.6% in 2020 (NBE, 2020).The average inflation over the past five years was 13.6% which refers to the common price increase in the price of goods measured against the standard level of purchasing power. The inflation rate has a significant association with the banking sector (Shahid, 2014). The Government of any country tries to balance the impact of inflation on the economy by regulating the deposit interest rate and Lending interest rate with the amount of money to be circulated in the economy because both the shortage and surplus of money affect the inflation in the economy; banks are using different measurement tools to measure their performance, some of them are: ROA, ROE, LIQUIDITY, CAPITAL ADUCACY, and ASSET QUALITY.

This study investigates whether inflation is the driving force of interest rate change or not by the Ethiopian private Banks; of course, the minimum deposit or saving rate controlled set by the Central Bank (NBE). The study is about the private banks operating in Ethiopia. Sixteen private banks are operating in Ethiopia under the firm control of the central bank (NBE). They experience stiff competition within each other's to increase their market share in the country. The increase in the Inflation rate may lead to an increase in bank profitability, as long as the banks can anticipate future inflation rates and adjust their lending interest rate to generate

higher revenue than the saving rate, which leads to higher profit and performance (Umar, 2014). This study investigates whether inflation is the driving force of interest rate change or not by the Ethiopian private Banks; of course, the minimum deposit or saving rate controlled set by the Central Bank (NBE).

1.2 Statement of Problem

Heybuns and Smith (1999) concluded that the increase in the inflation rate reduces the lending volume, negatively affecting banks' profitability. (Alfani and Rustander's, 2013) study shows Inflation does not significantly affect Private Banking Profitability in the form of Return on assets. Research conducted in Pakistan by (Shahid, 2014) concluded that there is a significant relationship between Inflation and Bank performance Indicator ROA; in some Banks, it positively impacts. In some Banks, it has a negative effect. The study of (Umar, 2014) in Nigeria found that Inflation is harming the Banking Sector's performance and a positive result when the Banks can anticipate the future impact of Inflation and adjust the interest rate. The study conducted by (Kobia 2018) shows how Inflation affects the Banking sector in Kenya. Thus some banks register loss, and some reported less profit, as shown on the ROA. The local studies by (Aksha, 2012) and (Sori, 2014) show Inflation has an insignificant effect on the performance of CBE and Private Banks. Local Studies the researcher has found on related topics were before 2014, and Inflation has shown a significant growth rate in the study period. The relationship between inflation rate and Return on assets has yet to been recognized as a significant factor by the private banks to adjust the Lending Interest Rate to alleviate the impact. The actual interest rate is the rate that removes the effects of the inflation rate on actual yield to the lender (Taylor, 1999). This research tries to show how the inflation rate affects the Return on Assets of Private Banks; neglecting this influence misinformed the stakeholders about the actual performance of the Banks. It intends to fill the gap to the level of attention should have to the impact of the inflation rate on Bank ROA as a performance indicator to apply the appropriate lending interest rate. Therefore, the novel features of this study were the inclusion of the aforementioned Average Lending Interest Rate and Inflation Rate variables to fill the literature gap and to examine the sole effects of Inflation on the Private Banking sector

in Ethiopia. Understanding of determinants of their asset is essential and crucial to the economy's strength. Internal factors like Asset size, liquidity capital adequacy are significantly impacted the banks' assets. Inflation is significantly associated with commercial banks' Return on Assets as a measure of profitability (Jordan 10). In banking literature, the determinants of Return on Assets are empirically well explored, although the definition of an asset varies among studies. Inflation measures, most banking studies have noticed that the capital ratio, loan-loss provisions, and expense management are essential factors that control high Inflation (Chan and Vong, 2010). Internal factors (bank-specific variables) such as overhead, labor productivity, liquidity, and external factors the effect inflation of private banks well explored in these studies. These mixed results of inflation impact found in different countries by different scholars on the Return on Asset of Banks as performance indicators of Banking Sector initiate this study and reexamine the current effects of Inflation on the Return on Asset of Private Banking sector in Ethiopia.

1.3 Research Question

- Cheek the relationship between Return on Asset and high inflation rate?
- The average Lending Interest Rate related to return on Asset?

1.4. Objective of the Study

1.4.1. General Objective

The Study's general objective is to assess the impact of Inflation on the Return on assets of the Private Banking Sector in Ethiopia.

1.4.2 Specific Objectives

- To analyze Return on Asset generated during the period under Study.
- To analyze o effects of the Inflation Rate on the lending Interest Rate applied.
- To analyze the impact of Lending Interest Rate on Return on Asset.

1.5 Significance of the Study

The study examines the influence of the Inflation rate and Lending Interest Rate on the Return on Assets of private Banks and evaluates the value of the reported performance;. To expose Private Banks to anticipate the impact of Inflation, apply the appropriate Lending Interest rate used as corrective measures for an accurate decision to compensate for the actual result by creating an environment that studies the anticipation of inflation rate for future revenue generation. To reduce impact of Inflation, companies have to increase earnings at a rate higher than the inflation rate (Frisch, 1990). The Study will also investigate whether the Banks have considered the influence of inflation rate in deciding their Lending rate and saving rate applied in earnings and resource mobilization or neglecting inflation impact from their decision. The Bank Directors, the Shareholders, the new investors, the Policymakers, and the Society benefits from this Study by getting accurate information concerning the financial performance against inflation impact.

1.6 Scope of the Study

This Study covered all the16 private banks operating in the industry for the past five years. The Study includes the five years rate of Inflation in absolute growth in the Ethiopian economy and the impact of inflation rate on these financial institutions' profitability performance in their balance sheet presented on that fiscal period. The Study focused on the past five years is 2015/1016, 2016/1017, 2017/2018, 2018/2019, and 2019/2020

1.7 Limitation of the Study

The extensive study on the topic is rugged to cover all a literature review. The inflation rate and Lending rate are only a few factors among many factors affecting the banking sector's performance. In addition, lack of relevant and recently published similar studies in the context of Ethiopia. Inflation affects all businesses, but the researcher only focuses on the financial sectors of Private Banking as it is more sensitive to this impact. In addition, all data are dependent on the financial statement presentation. The two Government Banks are not included in the Study.

1.9 Organization of the Study

This research has five chapters. First chapter is about the background, statement of the problem, the significance of the study, limitation of the Study. Chapter two deals with related pieces of literature, Chapter three covers research methodology. Chapter four comprises data presentation, analysis, and interpretation of the Study and Chapter Five provides a summary of findings, Conclusion, Potential Recommendations, and Suggestions for Future Studies. In addition, this study includes all relevant Consensus of legal research.

Chapter Two

Review of Related Literature

2.1. Introduction

This part of the study looks into previous studies on inflation-related topics about Return on Assets against theoretical principles and facts by previous empirical studies. It summarizes the literature review on the above points and findings.

2.2 Definition of Terms

Inflation is necessary macro-economic condition that may affect banks' costs and revenues is the inflation rate (INFL). In this regard, Revell (1979) introduces the issue of the relationship between bank performance and Inflation, stating that the effect of Inflation on bank profitability depends on how Inflation affects both salaries and the other operating costs of the bank. In this context, Staikouras & Wood (2003) point out that Inflation may have direct effects: an increase in the price of labor and indirect effects, that is, changes in interest rates and asset prices, on the profitability of banks. Perry (1992) also suggests that the impact of Inflation on bank performance depends on whether the **Inflation is anticipated or unanticipated**. The anticipated expected interest rates are adjusted accordingly, resulting in revenues increasing faster than costs and positively impacting bank profitability.

On the other hand, Oguzsoy and Guven (1997) found that banks' profitability is adversely affected by an inflationary situation, making banks vulnerable to default risk, interest rate risk, and liability risk. Due to the onslaught of so many threats, the bank may face a tremendous loss in an unstable inflationary environment. Inflation is a necessary term that we are going to discusses in large. Chen (2020) stated that Inflation is a measure the rate at which the average price level of a basket of selected goods and services in the economy increases over time. Inflation indicates a decrease in the purchasing power of the currency in a country. The three classifications of inflations are Demand-pull Inflation, Cost-Push Inflation, and Money Supply inflation.

Consumer Price Index (CPI)

The CPI measures the weighted average of the price of goods and services, and they are primary consumer needs. The CPI measures the increase in the average price of Goods and Services. It is calculated by averaging the relative price of goods in one basket. It includes transportation, food, medical expense, etc. It is the price of goods available to each individual

Inflation Rate

The inflation rate is when the price of goods and services increases within the market by the law of demand and supply in the market and the collection of money in a country's market economy. The effects of Inflation help identify the shift in purchasing power of a given level of capital over time.

Actual Interest Rate

An actual interest rate is the nominal interest rate adjusted for expected inflation. It is usually measured as the difference between the nominal interest rate and the expected or actual inflation rate. It is a measure of the reward for giving up a fundamental unit of consumption for one period or, equivalently, it is the cost of borrowing one unit of actual output for one period. Inflation-adjusted or real interest rates among developed countries were quite high during the 1980s and early to mid-1990s. Indeed, real long-term rates among the Group of Ten leading industrial countries often exceeded 4 percent on an annualized basis (Group of Ten, 1995). This paper seeks to tries to show the effect of higher interest than the inflation rate on Return on Asset of banks as the major contributor of Asset of the banks is the loan and advance resulted to generate revenue as interest income.

Return on Asset

Return on asset the amount of return generated on the invested investment. Return on Assets of a bank by macroeconomic conditions such as the inflation rate, economic growth of a country where the bank operates. Empirical studies of macroeconomic influences on ROA are found in the study of Sufian & Chong (2008), Buyinsa (2010), Naceur (2003), who found that higher Gross Domestic Product (GDP) can increase banking ROA. On the other hand, a higher

inflation rate will lead to a higher bank interest rate. High interest rates will reduce the willingness of capital owners to develop productive sectors. When associated with bank performance, high inflation will increase the capital cost so that real sector investments tend to reduce bank debt, thereby reducing the level of bank profitability (Sukirno, 1998)

2.3 Theoretical Review

No specific assumptions theory agreed upon the relationship between performance and Inflation, which remains an empirical issue for further study. Still, depending on the model, theorists can predict a positive, negative, or Zero relationship on a trend of Inflation on performance. Freidman and Schawarts (1982) discovered the positive relationship between Inflation and the money growth rate. Inflation is the persistent increase in the price of goods purchased or decreased in the purchasing power of the money, measured by the Consumer Price of Index (CPI). The increase in the purchasing power of money could be one reason for inflation volatility when the aggregate demand exceeds the availability of goods and services. This volatility leads us to the theory of classification of Inflation, which is majorly related to the cause of inflation rate increases in the Ethiopian economy.

1. Demand-Pull Theory of Inflation (Excess Demand):- this Inflation is the most traditional or common cause of Inflation (Jhingan, 1997). The demand exceeds that supply. Though this may not be the stand-alone reason for the recent Inflation in Ethiopia, Scholars claims that the market characterizes it pull Inflation (Simenh,2016)
2. Cost-Push Inflation (Supply shock Inflation):- This is due to the continuous decline in the supply of Goods and Services; the first cause is the rise in the monetary wage than labor productivity. The increase in the wage rate is higher than the production cost per unit of labor; this cost increases the manufacturing cost and ultimately improves the selling price of goods and services. The second cause is the rise domestically produced or imported raw materials of production, which leads to the increase in the selling price of goods and services by the producers(Jhingan, 1997)
3. Money Supply: - solid empirical evidence exists about the direct relationship between the rise in the inflation rate and the growth in the Money supply (Freidman, 1987).

Most economists agree that the high inflation rate resulted from the increases in money supply like the recent phenomena of Zimbabwe. Inflation is a monetary phenomenon in the long run, but it is the cause of age elasticity, rise in price, and interest rate in the short run (Simenh, 2016).

2.3.1. The Effect of Inflation on Banking Performance

Boyed et al. (2011) found a nonlinear, significant negative relationship between Inflation and the Banking sector. Heybuns and Smith (1999) concluded that the increase in the inflation rate reduces the lending volume, negatively affecting banks' profitability. That means slowing the lending activities as the Inflation tends to increase by the banks to minimize the impact of Inflation on their performance. Managing this will lead banks to efficient and effective resource allocation management.

Banks are engaged in the transfer of money from savers and investors to the debtors; Inflation affects the opportunity cost of holding currency, which discourages the savers from depositing money in the Bank that directly affects the performance of the Bank because, in the era of Inflation, the depositors prefer to invest rather than saving. Asper the (NBE's annual report, 2019), all actual interest rates were negative given the high inflation rate. Annual headline inflation declined to 15.4 percent from 16.8 percent in 2019. Still, the average real interest rate stood negative 7.4 percent for saving deposits, 7.33 percent for time deposits, and negative 1.9 percent for lending interest rates. An actual interest rate removes the effects of Inflation to reflect the actual cost of the fund to the borrowers and the real yield to the lender or the investor (Taylor, 1999). The actual interest rate results from the difference between the nominal interest rate and the inflation rate. Effective interest rate reflects the purchasing power of value to the interest paid on investment or land. And represents the rate of time preference of the borrower and the lender; because the inflation rate is not constant prospective real interest rate must rely on an estimate of expected future Inflation over the time to maturity of the loan or investment.

Inflation can have hazardous effects on financial statements. It is an uncontrollable external factor for management. It dealt with, been tried to be explained the, management is advised

to watch the Inflation and calculate the possible effects on the financials. Profitability ratios, on the other hand, show dramatic changes. The sales return ratio starts with 28.7% profitability when Inflation is zero and goes to minus 15.4% at a 2% monthly inflation rate. Gross margin percentage drops by more than 3% despite the fact that both its nominator and denominator are non-monetary. The net income over assets ratio goes from 8.2% positive to 4.7% negative on the inflation scale. Any ratio with net income figure shows a dramatic decrease. The reason is that Inflation sweeps away the profits. Inflation hides the facts on financial statements. As an alternative that some of these assets can be invested in interest or dividend-earning investments like bank deposits and shares. Though both types of investments can protect the company against Inflation, Start to calculate the effects of the monetary losses on the financials even though it is not required according to IAS 29. Economic losses can still be estimated over the net financial position (even every month on balance sheets), and an adjustment can be made to the income statement for internal reporting purposes (as there is no restriction on calculating the monetary loss for internal-managerial accounting purposes) (OECD, 2003).

2.4 Empirical Studies

2.4.1 Global Studies

According to M.Umar (2014), Banks can withstand the effects of Inflation in the short run because they are more concerned with the interest rate and maturity of deposit borrowing and less concerned with the purchasing power of money. Still, in the long run, they cannot absorb the shock from this impact. Inflation on the Profitability of Banks by Umar (2014) emphasizes two: Inflation affects the purchasing power of money, bank exchange rate, cost of holding currency, loan management policy, disrupts business plan and affects equity having on the performance of Banks. Secondly, Inflation might lead to an increase in the performance banking sector as long as the banks can anticipate the future inflation rate and adjust their lending rate to generate higher revenue. In addition to the above view, Umar (2014) inflation harms the banking sector's performance, and its spillover is detrimental to the overall economy. And banks are shifting to generate revenue from rate gain and loss fluctuation

rather than productive resource management. The above fact may be actual to the Banking sector as they are highly involved in forex trading activities, even inviting themselves into the illegal forex transaction between the suppliers of currency and importers. Because of this, our banks are eager to increase the non-funded income as the primary source of revenue generation until it can cover all the administration expenses. The study made by Shahid (2014) concluded that there is a positive relationship between Inflation and performance of return on the asset because of high planning activities carried out to tackle the increase in the inflation rate by the banks. These activities show that, the need for planning to control the future impact of Inflation. According to Ramada et al. (2011), there is an indirect relationship between Inflation and Return on assets (the measuring tool for profitability) of banking performance and therefore suggested for high planning activities, low credit risk, and efficient cost management. Dependent data analysis confirms that the bank size, capitalization, labor productivity, concentration, and Inflation significantly impacted the bank profitability in Pakistan (Jawad and Ullah, 2015). The inflation rate in Kenya is constantly high compared to profitability. There is a significant negative correlation between Inflation and the profitability of banks that gives to the low values of profits. The results show how banks are affected by high inflation rates and thus affecting their profits, while some banks register losses, as shown by the value of ROA by the study (Kobia, 2018).

2.4.2 Local Studies

The research of Akhsa (2017) in the title "The factors affecting the profitability of commercial bank of Ethiopia (CBE)" has considered Inflation as one factor affecting the profitability of Commercial Banks of Ethiopia (CBE) and concluded that Inflation has a positive relationship with CBE's profitability. But this happens at the lesser Inflation rate, and the Bank can forecast future inflation rates correctly and promptly adjust its interest rate and margins. Still, this research argues against this thought; Aksha's study covers 1983 to 2012, where the Inflation rate was less than 7.5 during that period CBE was involved in the weak practice of lending during the period under study. CBE provided a loan to Government organizations by charging less interest rate which is why this research has excluded the two Government banks. According to the findings of Aksha, CBE should rely on the internal factor rather than the

external factors to continue generating its profitability. The above finding might be factual in a well-managed inflation economic environment, and inflation-adjusted interest rate applied.

The market behavior during the period of the study by Aksha are listed below

- the average Inflation was under the double digits
- slowed economic growth
- the market is not experiencing the liquidity problem

Because of this, the inflation rate on the profitability of CBE; cannot explain the current situation in the Banking sector; even the conclusion of the positive relationship between Inflation and profitability might hide the impact of Inflation by the Bank's liquidity. "Inflation and the Role of Macroeconomic policy in Ethiopia" (Semeneh, 2016) had emphasized the importance of managing Inflation in the Macro-Economic policy. The study explained evidence of the relationship between long-term price inflation and money supply growth (Freidman, 1987). The supply of money was the cause of Ethiopia's recent Inflation (EDRI, 2007). (ADB, 2011) the reported money supply had played an essential role in the long-run effect of the country's high inflation rate. In 2002 and 2006, the government money supply was increased by 18% and contributed to 12% of the increasing inflation rate.

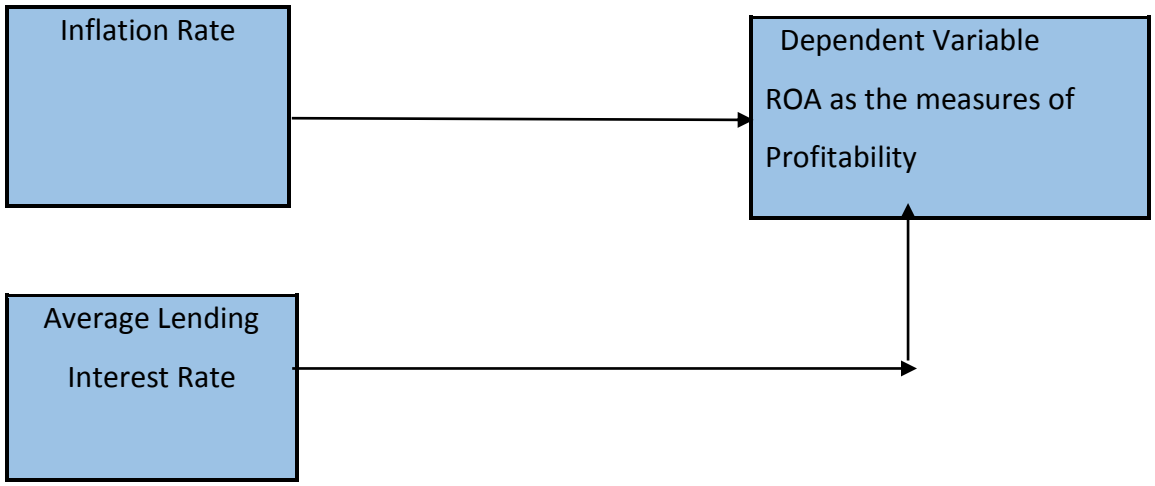
"The factors affecting the profitability of co

mmercial bank of Ethiopia (CBE)" by (Aksha 2017) has considered Inflation as one factor affecting the profitability of Commercial Banks of Ethiopia (CBE) and concluded that Inflation has a positive relationship with CBE's profitability. This happens when the Bank can forecast future inflation rates correctly and promptly adjust its interest rate and margins. Still, this research can argue against this thought, in that CBE was involved in the weak practice of lending during the period under study. No evidence was cited in an attempted effort made by the Bank to manage the inflation impact. Instead, the Bank provided loans to Government organizations by charging less interest rate; that is why this research has excluded the two Government banks. According to the findings of Aksha, CBE should rely on the internal factor rather than the external factors to continue generating its profitability. It can happen in a well-managed inflation economic environment, and inflation-adjusted interest rate applied. Of course, during the study period, the average Inflation was under the double digits, and slow

economic growth. In addition, the market was not experiencing the liquidity problem to indicate the effect of inflation rate on the profitability; even the conclusion of anticipated Inflation correctly might be covered by high liquidity by the Bank.

2.5. Conceptual Frame work

The variables being analyzed are displayed the relationship presented below. The Inflation rate is the independent variable, the average Lending Rate is the controlling Variable and the Return on Asset is the Dependent variable.



2.6. Summary of Literature Review

From the above literature review, the study can conclude that the impact of Inflation on the performance of the banking sector through the Return on Asset via the Average Lending Interest Rate due attention. In much of the literature, leaders from banks are taking various activities to reduce the effects of Inflation on their accounts, like adjusting the lending rate, slowing the lending operation, reducing credit risk, and effective and efficient utilization of resources. Thus this study shows the importance of exposing Private Bank's attention towards the level of influences that Inflation has on their performance in Return on Asset to anticipate the future impact of Inflation to take necessary corrective measures to reduce its effects.

Chapter Three

Methodology

3.1 Research Methodology

This research methodology section of the Research Project presents the methods, techniques, scientific paths, and procedures followed and used to study the study. In particular, this study is inflation on the Return on asset of the private bank Ethiopia in the years of 2016 – 2020 G.C. It presents the research design, procedures of data collection, the sampling procedure, sampling techniques and method of data analysis and Ethical Consideration.

3.2 Research Design

The method of the study was inferential research in nature, with quantitative analysis research design, using time series historical published data by the 16 Private Banks, from their websites or printed annual financial statement. Since Banks are required to disclose their financial performance to the third party, there will not be any difficulty accessing data, and it will cover the past five years of financial data.

3.3. Data Collection Method

Since this research aims to reveal the impact of the Inflation rate on the return asset of private banks, quantitative data were collected and analyzed. These quantitative data are secondary data gathered from the financial statement of the 16 Private Banks from the year 2015/2016 G.C up to 2019/2020 G.C. The inflation rate (AIR) for the same period will be collected from the website of, National Bank of Ethiopia or the Central Statistics Agency. The financial statement of the banks from their website as a soft copy or physical collection of printed copy from their office, having this source document may not be complex, because it is a mandatory requirement of the banks by low to publish to the public.

3.4. Quantitative Aspect of Research Method

The quantitative research approach deals with numerical data and statistical analyses to answer relationships among measured variables. Even if there are two strategies of inquiry under the quantitative approach, this study used a survey design due to its known advantages of inflation and the asset of the private bank. The study aims to check the relationship

between Return on assets and the high inflation rate on Return on assets of Ethiopian private banks. There is a need for a quantitative or numeric description of the relationship between the independent and dependent variables. The survey, as a quantitative research strategy, can collect quantitative data by different types. Fink (2002), as quoted in Creswell (2009), says there are four data collection types of survey, self-administered questionnaires, interviews, structured record reviews to collect financial, medical, or school information, and structured observations. The survey instrument adopted in this study to collect data was a structured record review from the institution. The following section, accordingly, reviews the issues in a sample design regarding the current research.

3.5 Study Population

The studies of the population were 16 private banks registered by the national bank of Ethiopia. All of which are listed in the following table.

Table 3.1 List of Banks

$N_{O.}$	Bank	Including study the past five consecutive years (to available data)
1	Abay Bank S.C	2015/2016 – 2019/2020
2	Abyssinia Bank S.C	2015/2016 – 2019/2020
3	Addis International Bank S.C	2015/2016 – 2019/2020
4	Awash Bank S.C	2015/2016 – 2019/2020
5	Berihan Bank S.C	2015/2016 – 2019/2020
6	Buna Bank S.C	2015/2016 – 2019/2020
7	Dashen Bank S.C	2015/2016 – 2019/2020
8	Debub Global Bank S.C	2015/2016 – 2019/2020
9	Enat bank S.C	2015/2016 – 2019/2020
10	Hibret Bank S.C	2015/2016 – 2019/2020
11	Lion International Bank S.C	2015/2016 – 2019/2020
12	Nib International Bank S.C	2015/2016 – 2019/2020
13	Cooperative Bank of Oromia S.C	2015/2016 – 2019/2020
14	Oromia International Bank S.C	2015/2016 – 2019/2020
15	Wegagen Bank S.C	2015/2016 – 2019/2020
16	Zemen Bank S.C	2015/2016 – 2019/2020

3.6 Sampling Design

The study targeted populations of the 16 Ethiopian private banks. During the study period, sixteen private banks operate in Ethiopia (as presented in Table 3.1). However, to undertake this study, the researcher selects sixteen of the population using the target population method.

3.7 Variables of the Study

3.7.1. Dependent Variable

Mostly Return on Asset is measured by either with interest rate return, market-based Return, or both. Earlier research works indicated that Return on assets (ROA) is an important measurement used in comparing the operating performance of banks (Rivard & Thomas, 1997; Kosmidou, 2008; Belayneh (2011); Chan & Vong, 2010; Anwar et al., 2011). In this study, the dependent variable was ROA. The data were taken with the average interest rate of the total assets of each bank.

3.7.2 Independent variable

Inflation Rate: There are findings of the relationship between an inflation rate and the Return on assets of a private bank. However, the studies of Guru et al. (2002) in Malaysia showed that a higher inflation rate leads to higher bank assets.

Average lending rate: The interest rate is the rate charged on the Lending operation of Banks or the Interest paid to the depositors during the period of loan or deposit. The Banks charges different interest rate to other loan sectors. The Average Lending Interest rate is the total interest income to entire loan and advances

3.8 Methods of Analysis

For the analysis of data, multiple linear regression analysis techniques are used. Regression analysis focuses on the correlation of the dependent and independent variables; the regression tries to determine whether variables forecast a given dependent variable on the data collected as tested for accuracy, uniformity, and consistency. In this study, to analyze the correlation, descriptive statistics were used to quantitatively describe the critical features of the variables using mean, maximum-minimum, and standard deviations. The correlation analysis was used to identify the relationship between the independent, dependent, and

control variables in Pearson correlation analysis. The correlation analysis indicates the degree of association between the variables (Mack et al., 2005).

The study applied the regression model (Umar, 2014), (Aksha, 2017), (Kobia 2018)

$Y= \alpha+\beta1X1 + \beta2X2 + \xi$

Y= profitability that ROA determines

α = constant term

B=Beta coefficient of variables X which measures the change Y to change the change in X

X1 = inflation rate

X2 = Average Landing Interest Rate

ξ = Error term

3.9 Ethical Consideration

Keeping Confidentiality and privacy are the main activities in research to get relevant and appropriate data, so the researcher assured the purpose of the research paper, and Confidentiality of any information gathered was kept secure in the study.

Chapter four

Presentation, Analysis, and Interpretation of Data

4.1 Introduction

Data analyses are a critical part of the study by which the researcher extracts information from data the researcher has collected. This chapter presents the results and interpretation of this study. Descriptive and Inferential statistical analyses were made using SPSS-software.From the total 16 private banks operating in Ethiopia, five years of Financial Statements data are collected. Two years' data of two banks were challenging to get. The collected data are from the form year 2016 up to the year 2020. The annual Inflation rate from the five years Financial Statement National Bank of Ethiopia (NBE) covers from June 2016 up to 2020. Returns on Assets are calculated by dividing Net Income to the Average Asset of each bank, and Average Interest Rate is calculated by dividing Total Interest Income by Loan and Advances.

4.2 Test of Data Assumptions for Linear Regression

Various data validity testing parameters are applied to check the appropriate usage of linear regression analysis in the study to validate the study's findings.

4.2.1 Multicollinearity

Multicollinearity is an assumption of a linear relationship between explanatory variables that Creates a biased regression model (Gujarati, 2004).Which means explanatory variables are very highly correlated with each other. According to brook (2008), an implicit assumption that is made when using the OLS estimation method is that the independent variables are not correlated with one another. If there is no relationship between the explanatory variables, they would be said to be orthogonal to one another.

Table 4 1Coefficient

Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.216	.891		.242	.809		
Average Lending Interest Rate	.186	.070	.313	2.669	.009	.886	1.129
Inflation Rate	-.014	.013	-.120	-1.025	.309	.886	1.129

The above table shows the multicollinearity checks the interrelation of independent variables. The more correlated they are, the more swing will occur to Regression Model, making it challenging to manage the changes in the coefficient between the independent variables. The high correlation of the independent variables indicates the presence of a Multicollinearity problem. Therefore, the Inflation Factor (VIF) value should be less than 10 (Frost, 2021).To check the Multicollinearity of the study from Table 4.1, the Tolerance and VIF columns of the Coefficients are 0.886, the lowest, and 1.129; the highest, respectively. So, both values are within the acceptable ranges of less than 10. Thus, the Multicollinearity assumption in the study is not a problem.

4.2.2 Homoscedasticity Check

It tests the result of the relationship by the disturbance in the random changes between the dependent and independent variables. In Figure 4.1 and Figure 4.2, bell-shaped normal distribution Histogram and Scatter Plot below shows, the close relationship between the Standard Regressions Residual and Frequency's near-zero of the X-axis and the Y-axis is visible, The frequency of changes on the Return on Asset, by the Inflation Rate and Average Lending Rate, are normally distributed so that there is no violation of Homoscedasticity.

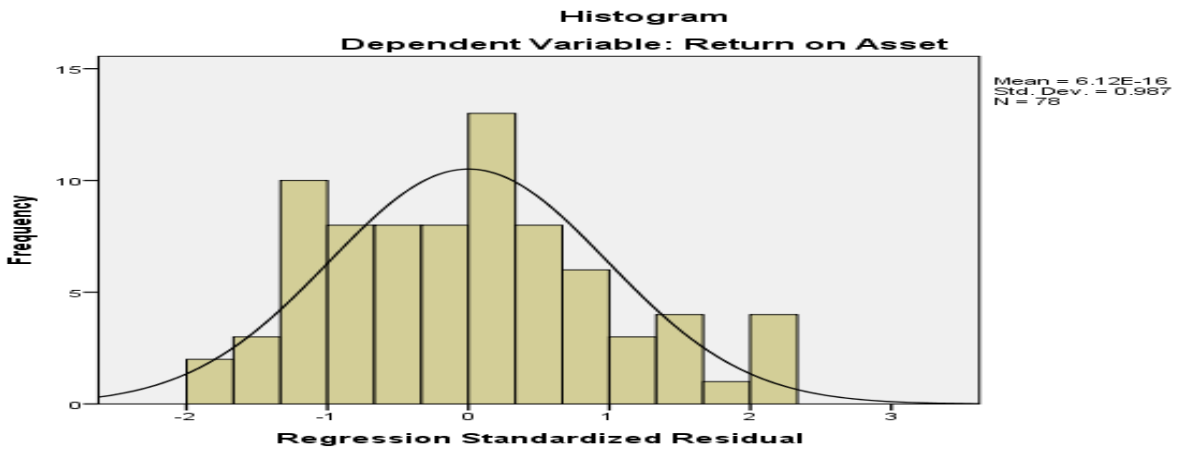


Figure 4 1Homoscedasticity

The above histogram shows Histogram indicates the relationship of variables is normally distributed.

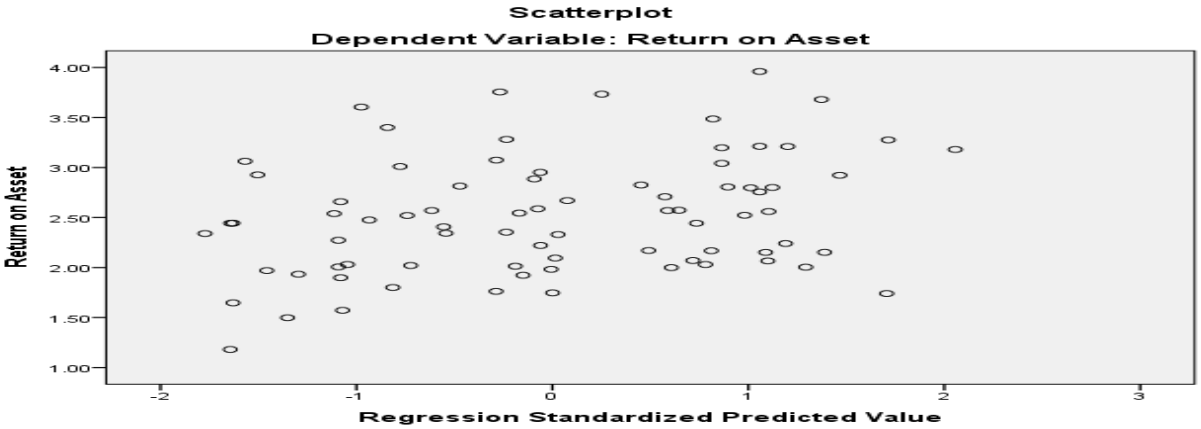


Figure 4 2 Scatterplot

The above Scatter Plot of Figure 4.2 checks the Homoscedasticity of the relationship among the variables, which looks concentrated pattern at Zero of the X-axis and Y-axis of Regression, standardized predicted value, and residual.

4.2.3 Normality Check

This test checks the data distribution in data collected how the data are approximately normally distributed the classic bell-shaped graph. According to (Hair et al., 2003), Normality is

the data distribution in each dependent variable and independent variable in the collected data. Skewness and kurtosis values show the test of Normality distribution in the data.

Figure 4.3 the Skewness for the data distribution is at point Zero, which shows the Normality of Distribution in the study. Skewness provides information regarding the symmetry of the distribution, whereas Kurtosis includes information regarding the Peakedness of the distribution (Pallant, 2001). In addition, Malhotra and Birks (2007) propose that standard probability plots take as an informal means of assessing the non-normality of a set of data. The graphs of the P-P plots are a straight line that reveals normal distribution, as suggested by Hair et al. (1998); these mean the variable in the model indicates straight line represents continuous of the two independent variable Average lending rate and Inflation Rate. The normal distribution makes a straight diagonal line, and the plotted residuals compare with the diagonal. If a distribution is expected, the residual line will closely follow the diagonal (Hair et al., 1998).

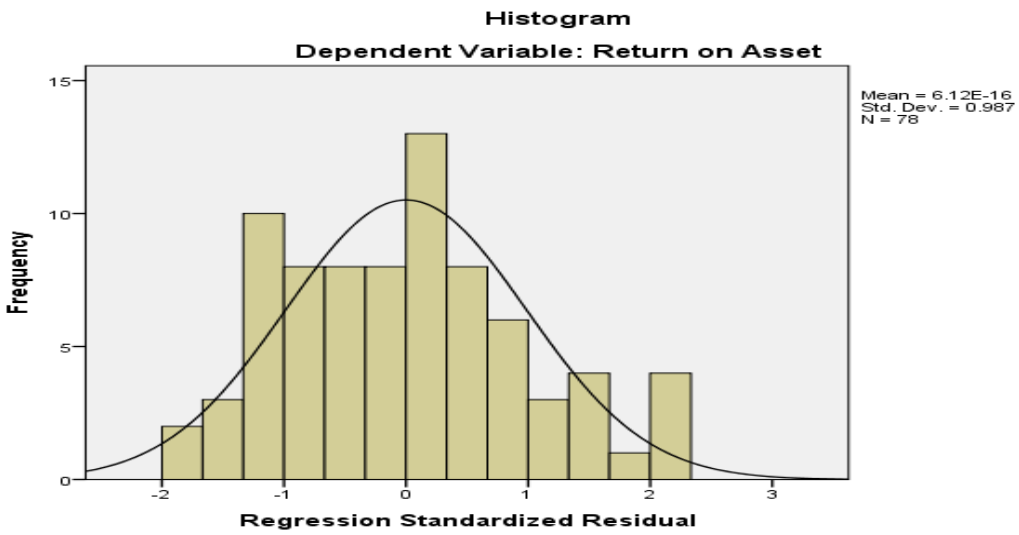


Figure 4 3 Histogram

shows the normality distribution in data of the dependent variables and independent variables by classic bell-shaped Histogram.

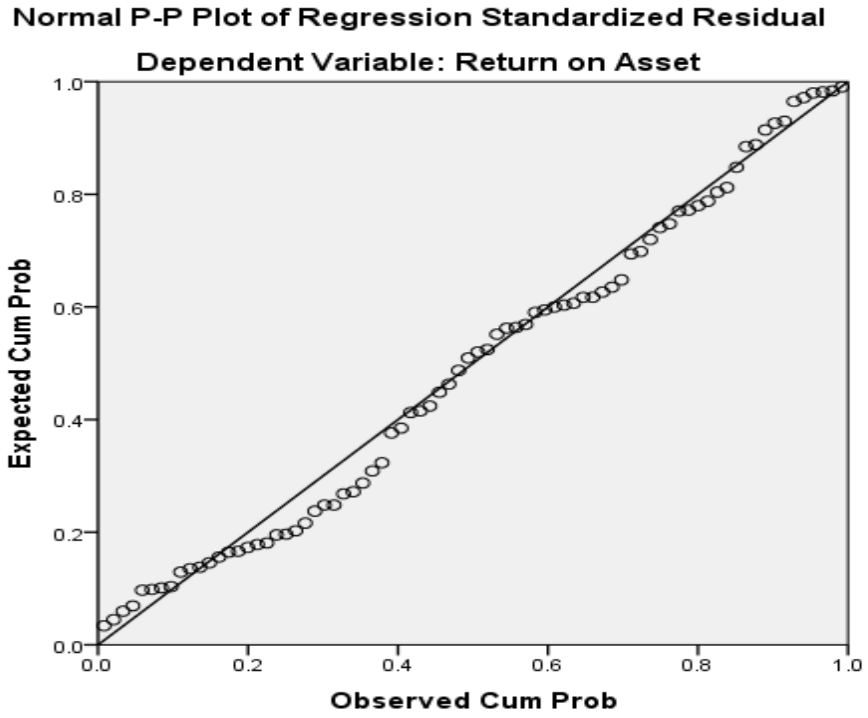


Figure 4 4 P- Plot of Return on Asset

The normal distribution of Return on Asset makes a straight diagonal line, and the plotted residuals compare with the diagonal. That is a distribution is normal, the residual line will closely follow the diagonal.

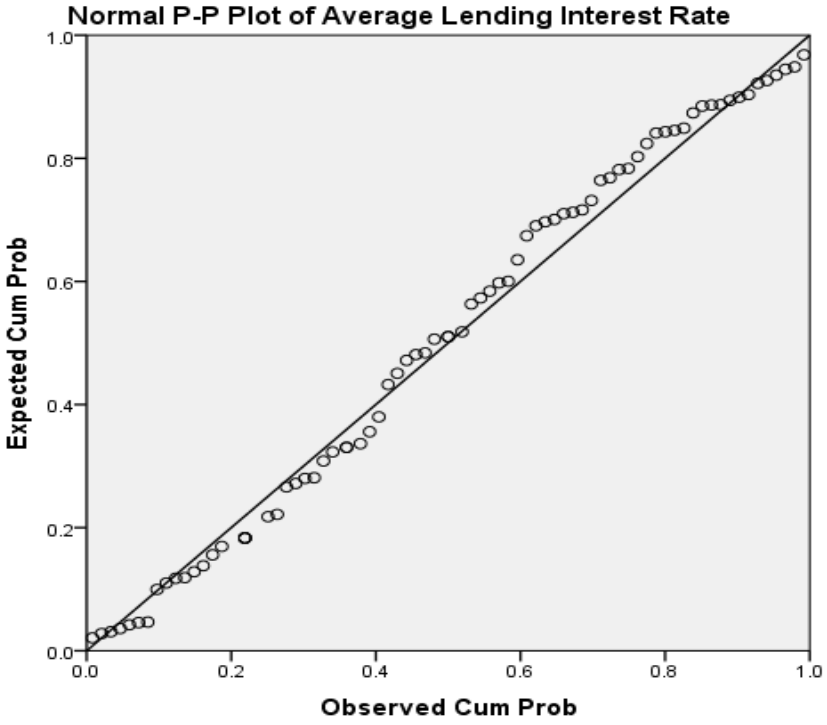


Figure 4 5 P- Plot of Average Lending Rate

The normal distribution of Average Interest Rate makes a straight diagonal line, and the plotted residuals compare with the diagonal. That is the distribution is normal and the residual line will closely follow the diagonal.

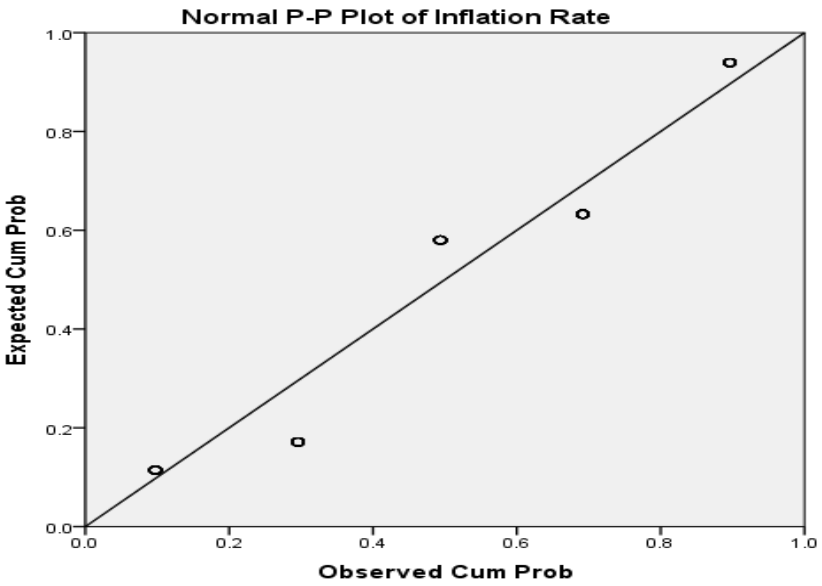


Figure 4 6 P-P Plot of Inflation Rate

The normal distribution of the Inflation Rate makes a straight diagonal line, and the plotted residuals compare with the diagonal. That is, the distribution is normal, and the residual line will closely follow the diagonal

4.2.4 Linearity Check

Linearity checks that all the independent variables and the dependent variable should have a straight regression line. This assumption checks before analysis by examining scatterplots of the dependent variable against each independent variable.

Table 4 2 Linearity Table of inflation rate

			Sum of Squares	df	Mean Square	F	Sig.
Return on Asset * Inflation Rate	Between Groups	(Combined)	.037	4	.009	.025	.999
		Linearity	.005	1	.005	.015	.903
		Deviation from Linearity	.031	3	.010	.029	.993
	Within Groups		26.357	73	.361		
	Total		26.394	77			

Table 4 3 Linearity Table average lending rate

			Sum of Squares	df	Mean Square	F	Sig.
Return on Asset * Average Lending Interest Rate	Between Groups	(Combined)	24.193	64	.378	2.232	.055
		Linearity	1.957	1	1.957	11.560	.005
		Deviation from Linearity	22.235	63	.353	2.084	.072
	Within Groups		2.201	13	.169		
	Total		26.394	77			

As it is seen from ANOVA Table 4.2 and 4.3 below, the deviation from Linearity is 0.993 and 0.072 > 0.05, and it concludes that the relationship between the variables is Linear. Of course, Linearity is not a concern when the condition of Normality and Homoscedasticity is positive.

4.3 Descriptive Statistics

In this study, to better understand the background of Banks in years and names, frequency analysis has been used.

Table 4 4 Descriptive Statistics

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
ROA	78	2.78	1.18	3.96	2.5206	0.06629	0.58547	0.343	.333	0.272	-0.289	0.538
ALIR	78	4.05	11.42	15.47	13.4291	0.11178	0.98723	0.975	-0.021	0.272	-0.877	0.538
INF	78	14.10	7.50	21.60	13.6641	0.58001	5.12247	26.240	0.272	0.272	-1.199	0.538
Valid N	78											

4.3.1 Return on Asset

The above Table 4.4 indicates the descriptive statistics of the study during 2016-2020 collected data of the 16 Private Banks. All variables comprised 78 observations, and the profitability measure used in this study (ROA) indicates that the Private Commercial Banks earned profit before tax over the last five years. From the total sample, the Mean of ROA was 2.5206 with a minimum of 1.18 and a maximum of 3.96. The standard deviation of ROA was 0.59 over the last five years that Means the profitability variation among Private Banks was insignificant. The result implies that these Banks need to optimize the use of their assets to increase their profitability.

Regarding explanatory variable there are some imperative statistics that have to be mentioned. Average Lending Interest Rate which is measured as by the bank interests. It is confirmed in the table below that the average of lending interest rate (mean = 13.4291) with a maximum of 15.47 and a minimum of 11.42 interest rate. The standard deviation indicates that for the sampled private banks lending interest rate varies by 0.98723 or 1 lending interest rate from the average value of 13.4291 lending interest rate. This also indicates as there is low dispersion in the lending interest rate of the sample leading interest rate (LIR) during study period and also the other explanatory variable inflation rate is measured by the decrease of private bank assets the average of inflation on the private banks (mean =13.6641) with the maximum of 21.60 and minimum the of 7.50 inflation rate. The standard deviation indicates for the sampled of private banks of inflation rate varies 5.12247 this indicates as there is high dispersions in private banks means inflation is highly affected the asset of private banks.

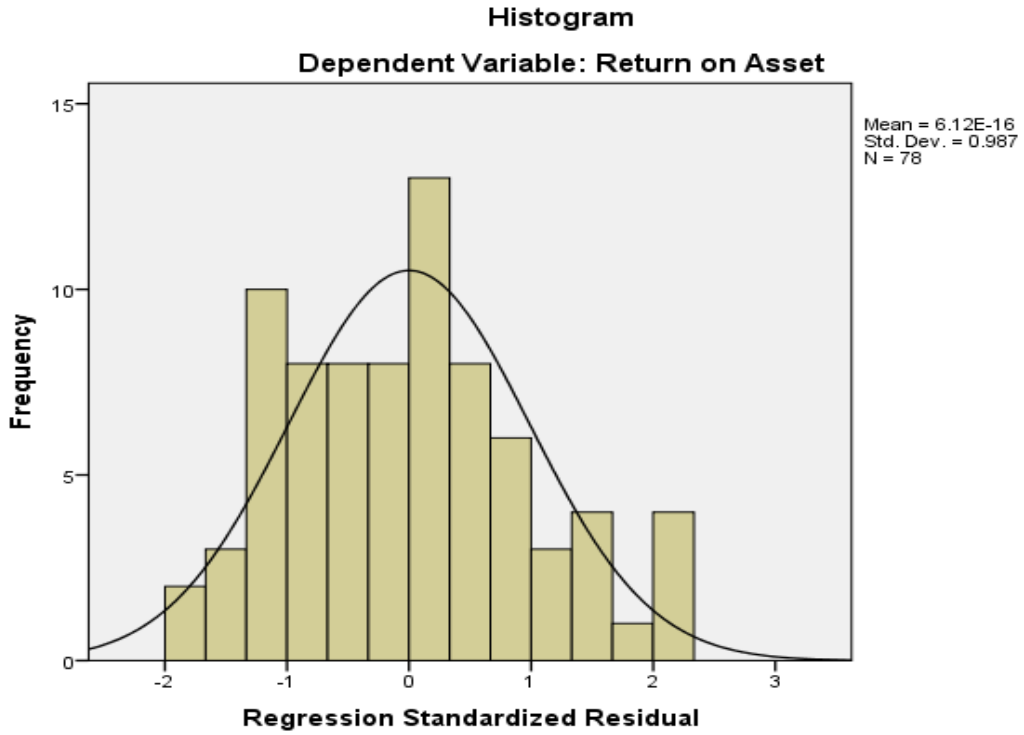


Figure 4 7 Histogram of Return on Asset

4.3.2 Average Lending Interest Rate

Bar Graph 4.8 below, from the total of 16 private Banks for the Year 2016 up to the Year 2020 G.C 78 observations the number of the maximum Lending Interest rate applied between 12.5 and 13 %, the second frequency of Average Lending Rate applied by the Banks is 13.5%, the third Average Lending Rate is 12.5. , the smallest Average Lending Rate used by the Banks is 11.42. The Mean Average Lending Rate is 13.4291%, with a standard deviation that indicates that the sampled private banks lending interest rate varies by 0.98723 or 1 lending interest rate from the average value of 13.4291 lending interest rate. This also shows low dispersion in the lending interest rate of the sample leading interest rate (LIR) during the study period. This Average Lending Interest rate results from the total interest income recognized by dividing the entire loan and advances, directly affecting banks' profitability. This average Lending interest rate is applied to compensate for the Impact of the Inflation Rate. The effective interest rate calculates from the difference between the Average nominal interest rate minus the Average

inflation rate to offset the impact of Inflation, that is, Effective Lending Interest rate (ELIR) = Average Lending Interest Rate (ALIR) –Average Inflation Rate (AIR) from the findings, ELIR=13.43%-13.66% = -0.23% loss of income in the credit operation is earned by the Private Banking Industry.

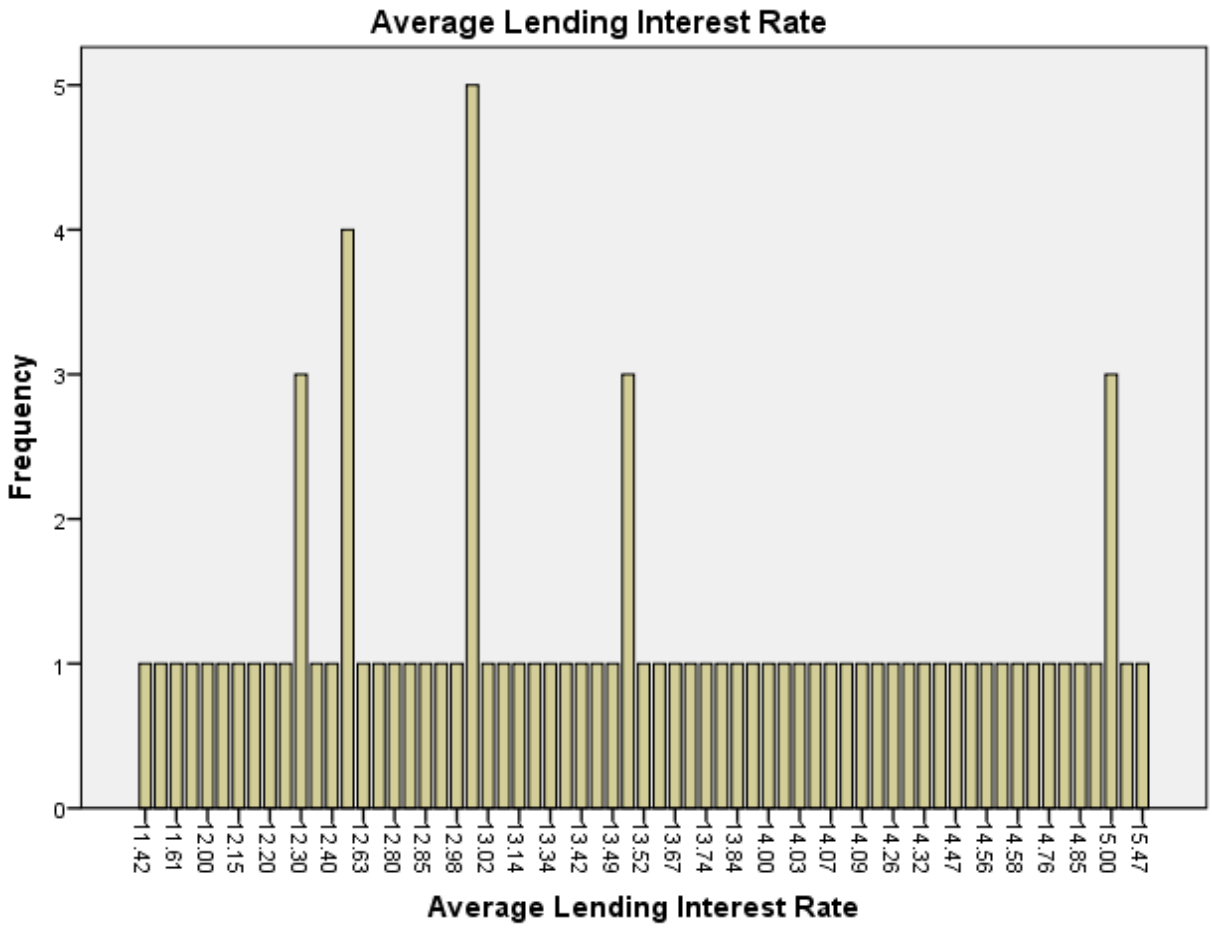


Figure 4 8 bar Graph

4.3.3 Inflation Rate

Table 4 5 frequency table inflation rate

Inflation Rate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7.50	15	18.8	19.2	19.2
	8.80	16	20.0	20.5	39.7
	14.70	15	18.8	19.2	59.0
	15.40	16	20.0	20.5	79.5
	21.60	16	20.0	20.5	100.0
	Total	78	97.5	100.0	
Missing	System	2	2.5		
Total		80	100.0		

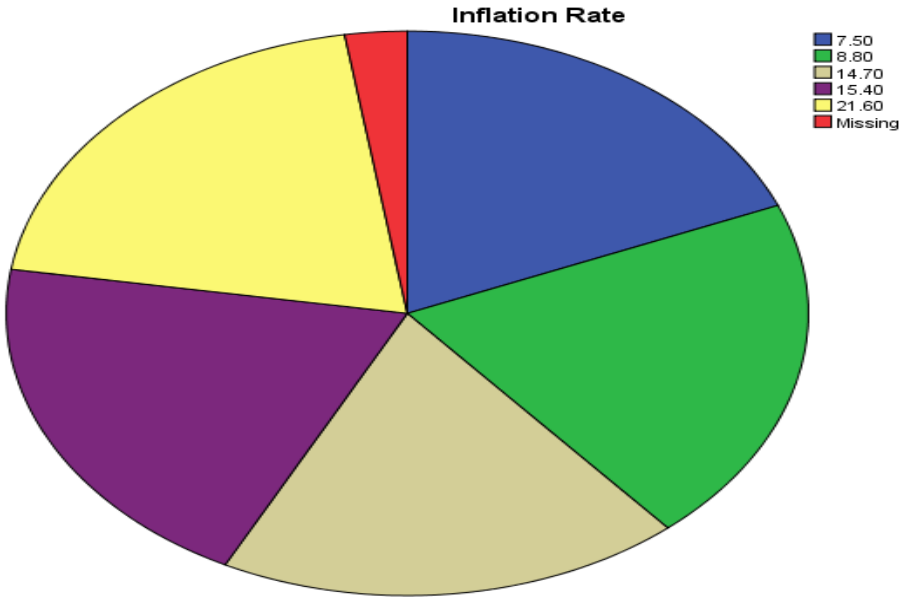


Figure 4 9 Pie Chart

As the below Pie Chart and Table 4.5 indicate, 20.5 % of the Inflation rate Registered in the country's economy in 2017, 2019, and 2020. The inflation rate shows which is 19.2% in 2016 and 2018. These descriptive statistics show the probability of getting in the years 2017, 2019, and 2020 is higher Inflation Rate, which illustrates the greater dominance of the inflation rate. As indicated in Table 4.5, the Mean Inflation rate for the Five Years of the study is 13.6641 with a standard deviation of 5.12247, showing the more significant probability variation of an increase of value to affect Banks' profitability negatively. The Mean Average Lending Rate and Inflation Rate are almost equal, so Private Banks' asset is highly impacted in Return on Asset by the two explanatory variables. Also, this indicates that high dispersions in private banks mean inflation has positively affected the asset of private banks.

4.3.4 Trend of Mean of the Three Variables

From Graph 4.10, we can see the trends in the constant increase of Inflation Rate, the increase in the Average Lending Rate remains steady, and the declining trend on the Return on Asset, the ability of Banks to generate profit from their asset is decreasing.

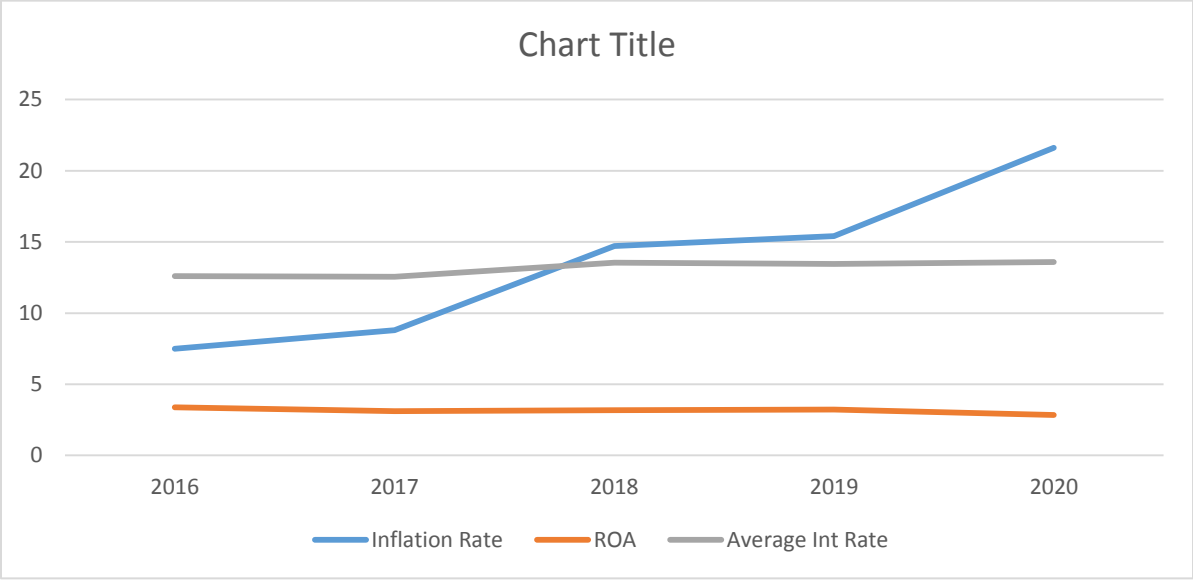


Figure 4 10 Trend of Mean of the Three Variables

4.4 Inferential Analysis

4.4.1 Correlation Analysis

The correlation analysis is made between the Return on Asset as a measure of profitability and the independent explanatory variables Inflation Rate and Average Lending Rate. Correlation Analysis deals with measuring the closeness of the relationship in the regression equation. We say there is a correlation when the two series of items vary together directly or inverse.

If the correlation value is 1, then, they have a perfect positive linear relationship;

If the correlation value is between 0 and 1, they have a positive linear relationship; if the correlation value is 0, there have no linear relationship; if the correlation value is between -1 and 0, they have a negative linear relationship. If the correlation value is -1, they have a perfect negative linear relationship.

Table 4 6 Correlations

		Return on Asset	Average Lending Interest Rate	Inflation Rate
Return on Asset	Pearson Correlation	1	.272*	-.014
Average Lending Interest Rate	Pearson Correlation	.272*	1	.338**
	N	78	78	78

To identify the relationship between the Average Lending Interest rate and Inflation rate on the Return on asset, Pearson correlation was used; Pearson correlation coefficients were used. The correlation coefficient shows the extent and direction of the linear relationship between the Average Lending Interest Rate and Inflation Rate of return of the asset.

The above correlation Table shows the relationship between the dependent variable (Return on Asset) and the independent variable (Average Lending Rate and inflation rate). The value of the correlation of the variable Return on Asset and Average Lending Rate is 0.272. The value is between 0 and 1, so; there is a positive linear relationship. The second variable in the above table shows the relationship between the dependent (Return on Asset) and the independent variables (Inflation Rate). The value of the correlation of the two variables Return on Asset and Inflation Rate is -0.014, the value there have between -1 and 0 so, there are negative linear relationships.

4.5. Regression Analysis

4.5.1. Model Goodness Fit Test

Table 4 7 ANOVA

Correlations.1 Standard ANOVA table of Inflation rate and Average Lending rate

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.295	2	1.147	3.571	0.033
Residual	24.099	75	.321		
Total	26.394	77			

As shown in the above 4.8 table, the significance of Independent variables on the dependent variables Returns on Asset. ANOVA checks the importance of the outcome ROA by using Mean as Average Lending Interest Rate and Inflation Rate; especially, the F-value indicates the ratio of the Return on Asset that results from suiting the model, relative to the wrongness still exists in the model. For these data, F is 3.571, which is significant at 0.033 p< (0.05). This result shows less than a 5% chance that an F-ratio would happen by chance alone. Therefore, it implies that the regression model results significantly explained the Average Lending Rate and Inflation Rate if we used the Mean value of Return on Asset.

4.5.2. Model Structure

From Tables 4.9, the dependent variable is Return on Asset, and the independent variables are Inflation Rate and Average Lending Interest Rate. Then the model structure shows dependent and independent variables.

Y = (Return on Asset)

X = (Average Lending Rate) + (Inflation Rate) these alternative models will fit using SPSS

The standard ANOVA obtained from the SPSS software value is given in the above table using these two models.

Table 4 8 Correlation Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.216	0.891		.242	0.809
Average Lending Interest Rate	0.186	0.070	0.313	2.669	0.009
Inflation Rate	-0.014	0.013	-0.120	-1.025	0.309

4.5.3 Model Summary

The primary purpose of the regression analysis in this study is to find an equation that uses to solve the impact of Independent variables on the dependent variable. The typical form of regression equation takes the following form.

$$Y = \alpha + \beta 1X1 + \beta 2X2 + €$$

Table 4 9 Correlation Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.295a	0.87	0.63	0.56685

According to, and Festinger (2005), linear regression is a method of calculating or predicting a value on dependent variables having Marczyk, DeMatteo more than one explanatory variable. Such as correlations, statistical regression checks the relationship of variables. , the primary purpose of regression is prediction. Multiple R is a correlation between the observed values of Y, the values of Y predicted by various regression models. Therefore, significant values of the multiple R represent a significant correlation between the expected and detected values of the outcome and adjusted R square. The standard regression coefficient (beta weight) was determined to compare the effect each independent variable had on the variability of the overall performance from the multiple regression equation (beta weight). The model summary Table 4.10 shows the strength of the relationship between the independent and the dependent variable. Based on the above table of the model summary result, when overall performance tests on the two independent variables, the independent variables contribute to the statistically significant relationship ($p< 0.05$) between the dependent variable. The Coefficient of determination R2 measures whereby good a prediction of the dependent variable we can make by knowing the independent variables. Accordingly, 56.68% of the variation accounted for the dependent variable is due to the combined effect of the

independent variables. But, sometimes, R2 tends to overestimate the model's success when applied to the real world. Therefore, to see the success of our model in the real world, adjusted R2 is chosen R2. Thus as per the finding, the value of the adjusted R2 is 0.063%.

Moreover, from the findings in the above table, the value of R-Square is a commonly used statistic to evaluate model fit. R-squared defined that the square of a correlation coefficient; must lie between 0 and 1. If this correlation is high, the model fits the data well, while if the correlation is low (close to zero), the model is not providing an excellent fit to the data. The adjusted R-squared compares the value of independent variables of regression models that contain different numbers of predictors, and it could control the extremes and the belatedness of the model. The value measures how well the regression model explains the actual variations in the dependent variable (Brooks, 2008). R-squared statistics and the adjusted R-squared statistics of the model was (87%) and (63%) respectively. The estimation shows, particularly the adjusted R-Squared, indicates that the changes in the independent variables explain 63% of the changes in the dependent variable. This means the independent variable (inflation rate, average lending interest rate, and interest rate) private bank collectively explain 63 % of the changes in assets. Thus the variables are suitable explanatory variables to identify the effects of the inflation rate on private banks in Ethiopia. However, the remaining 37% of changes were explained by other factors not included in the model.

4.5.4 Model Parameter

Table 4 10 Correlation Model Parameter

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
(Constant)	0.216	0.891		.242	0.809	-1.559	1.991		
Average Lending Interest Rate	0.186	0.070	0.313	2.669	0.009	0.047	0.324	0.886	1.129
Inflation Rate	-0.014	0.013	-0.120	-1.025	0.309	-0.040	0.013	0.886	1.129

Table 4.10 the B value shows the relationship between Return on Asset and explanatory variables. The positive value of coefficients indicates the positive relationship between the dependent variable Rate Return on Asset and Average Lending Rate. In contrast, a negative coefficient represents the negative relationship between the Inflation rate and Return on assets. The standardized beta value for the average lending rate is 0.186 tells us that the variable has significant importance for Return on Asset. Therefore Inflation Rate and Average Lending Interest Rate affect the Return on assets. The p values of all independent variables are less than 0.05 indicates a positive, negative and significant relationship between the independent variables (inflation rate and average lending rate) and dependent variable (asset return). Since the coefficient of the independent variables was statistically at a level of significance, alternative hypotheses related to the inflation rate and average lending rate were accepted.

$\beta 0 + \beta 1x +$

The regression equation of the study looks like this;

$$Y = \alpha + \beta 1X1 + \beta 2X2 + €$$

In the equation, explanatory variables X1-x2 represent independent variables. Covariates are not of theoretical interest but may impact the dependent variable y and should be controlled. The residual effect of the independent variables of interest is noticed more specifically. Covariates capture systematic errors in a regression equation while the error term (E) captures random errors (Bhattacherjiee, 2012).

Equation; $Y= \alpha + \beta 1 (IFR) + \beta 2 (ALR)$

Where:

Y = Return to Asset (RA)

IFR= Inflation Rate

ALR = Average Lending Rate

$Y= 0.216 + (-0.014) X1+ (0.186) X2 + €$

This means that a one-unit increase in the Inflation Rate will have a -0.014 unit decrease in the Return on Assets of each bank, and a one-unit increase in the Average Lending Rate will have a 0.186 unit increase in the Return on Asset.

4.6. Discussion of Findings

From the above **Multiple Correlation and Regression analysis**, because for two or more independent variables, the relationship is known as multiple correlations, and the equation as a model is Multiple Regression equation (Kothari, 1990). The coefficient of the multiple regression analysis of the study is positively correlated at 0.186 for Average Lending Interest Rate and negatively correlated to the Inflation Rate at -0.014, since there is no Multicollinearity problem in the model assumption, the two independent variable have strong correlation to the Return on Asset of Private Banks.

From the Time series data gathered, the researcher observed the secular trend in the growth of Inflation Rate in the Economy and the steady growth of the Average Lending Interest Rate to affect the Return on Assets of Private Banks. The Mean of Inflation Rate and Lending Interest Rate results are all most similar to each other that are 13.4291 and 13.664, which means they canceled out each other. The Mean of the two Independent variables is relatively equal. 0.186 for Average Lending Interest Rate and negatively correlated to the Inflation Rate at -0.014; since there is a Multicollinearity problem in the model assumption, the two independent variables strongly correlate to the Return on Asset of Private Banks. Still, the increase of Inflation rate was high at the end of the last three years. The study shows 14.7% in the Year 2017 to 21.6% in the Year 2020 has increased by five percent each year, and the Lending Interest remains constant in those Years. Return on asset was showing decline trends during those Years, which mean the asset of performance of the Banks, was decreasing in the increasing of Inflation figure in the Economy.

The Pearson's correlation of Inflation Rate and Return on assets is negative with the finding figure of -0.014 (between -1 and 0). There are negative linear relationships between them. The relationship between the Average Lending Interest Rate and Return on assets is Positive, with the finding result of 0.186 (between 0 and 1). That means the increase in the Inflation rate will result in a decrease in the Return on Assets; this ultimately affects Banks' asset performance. The variables of the research are statistically significant to each other with the analysis of

variance value of Sig (P-value of 0.033). Meaning the Inflation Rate significantly affects the Bank's assets. As per the finding, the value of the adjusted R2 is 0.063%. The standardized beta value for the average lending rate is 0.186. It indicates that this variable has a relatively strong degree of importance for Return on Asset. It tells us that there is an effect of the Inflation Rate and Average Lending Interest rate on the Return on Asset. The p values of all independent variables are less than 0.05. The regression model would significantly average lending rate and inflation rate if we used the mean value of Return on asset. The Mean of the Inflation Rate 13. 6641 and std. of 0.58 against the Mean of 2.5206 of Return on Asset with Std. of 0.06629 indicates the inflation values are widely spread. The Mean of the Average Lending Rate and Inflation Rate 13.429 is far from the Mean of Return on assets, which shows the effects of these factors on bank assets.

All Private Banks have registered a positive nominal gross profit during the period under study, which indicates the banking sector in Ethiopia is highly profitable. The earning per share of the Banks is attractive to invest in the industry. The earnings of significant income of the Banking sector are from the Credit operation, International Banking operation, and other Banking operational service charges. The Inflation rate highly impacts those Banks whose primary income is mainly dependent on the Interest income. The average lending Interest rates applied are almost similar or opposing to the average Inflation rate, which means they need to be cautious about the Inflation figure in the Economy. The utilization of Effective Interest Rate in the future cash flow of the lending operation was under debate in the (IFRIC, 2008) In a link to the changes in the Inflation Index, that is the effective interest rate should be constant throughout the contract signed between the borrower and the Lender. Still, contracts of Private Banking sectors allow the amendments of Lending interest Rate within the agreed period Contracts. Supports the view of the application of Inflation-Adjusted Interest rate so that changes in the Inflation could result in changes in the application of Interest Rate because the average effective interest rate -0.23. The Banks draft on the Operational Directive on Financial Sector Operations requires adjusting financial reporting in Nations where the cumulative inflation rate over three years approaches or exceeds 100 percent. Countries in this

situation have to apply ISA29 in reporting their Financial reports (World Bank 1991). According to the above Statement, the Inflation rate growth in Ethiopia from 7.5 to 21.6 within five years tells the importance of applying the Inflation adjusted Financial Statement as per the declaration of the draft.

Chapter Five

Summary, Conclusions and Recommendations

In this section of the study includes a summary of the findings, conclusions derived from the results, further recommendations, and suggestions.

5.1. Summary of the Findings

This study indicates or conceptually exposes the Private Banks Operating in Ethiopia to the impact of the economy's inflation rate the Return on Asset as measure of performance. 16 Private Banks are operating in Ethiopia, their 5 Years of Financial Data were considered for the study (2015/2016 up to 2019/2020 G.C). Regression Analysis was applied using those banks' secondary data. The Return on Assets measures the profitability of Banks. Because ROA is used to compare companies in similar industries (Magaret, 2021). The ability to generate profit depends on their Asset size, which helps to uniformly evaluate the capacity of Banks Management performance from the total asset apart from their age Size. The ideal ROA of companies is more than 5%, or the higher the rate, the better the performance; in contrast, Private Banks under the study has generated the Return on Asset of less than 3.5%. The Dependent Variable ROA was studied by the Independent explanatory variables Inflation Rate and Lending Interest Rate. The study's findings the Inflation Rate is negatively correlated to the Return on Asset and Positively Related to the applied Lending Interest Rate.

Inflation affects banks' Return on Asset through different channels, and its impact on profitability can be positive or negative Wamucii (2010) studied to have an inverse relationship between Inflation and the performance of Banks. The findings of the study are consistent with that of wamucii in Kenya. Wanjohi (2003) established Inflation as a significant positive relationship with ROA because it affects the cost and revenue of organizations. If inflation is not anticipated, the banks may be slow in adjusting their interest rate, which adversely or negatively affects bank profitability (Umar, 2014). On the other hand, i.e., inflation is anticipated, banks may get an opportunity to adjust their interest rates accordingly and resulting in revenues that increased faster than costs. Despite this fact, the coefficient

estimate of inflation in this study revealed a negative association with the Return on Assets of the private banking sector in Ethiopia. It shows the existence of an inverse relationship between inflation and the performance of private commercial banks. This negative association was statistically significant; thus, the findings suggested that inflation was an essential factor determining the Return on Assets of private banks of Ethiopia as the p-value is 0.033 for the variables is significant. Because of a lower real interest rate to the real inflationary rate, costs increased faster than revenues. For instance, the Mean Average Lending Interest Rate during the period under study was 13.42%, and The Mean Inflation Rate was 13.66%. The difference between the two was expected to be Positive and higher. But the Actual Interest Rate is Negative, which means the Banks are unable to compensate for the impact of inflation on their performance (Taylor, 1999). It indicates the lending Interest rate in Ethiopia was below the Inflation Rate. In conclusion, the result clearly shows as private commercial banks' profitability is influenced by inflation. Utu(2018) Inflation contribute to the increase on the Return on Asset of banks because they will definitely increase Lending Interest Rate, however if Banks do not have increase in the lending interest rate would found themselves in decreased result of Return on Asset, ultimately to lesser profit.

5.2 Conclusions

From the Findings, the researcher conclude that the Mean of the Inflation Rate and Lending Interest Rate are almost equal, which means the revenue generated from the Lending Activities of Banks consumed by the economy's inflation rate. An Inflation adjusted financial statement would have informed that most of the Private Banks, especially for which more than 50% of their incomes were from Interest Income, would have registered a loss or less financial performance. The more significant portion of gross profit of Private Banks from the lending operations and the nominal income with a higher percentage, but comparing it with the inflation rate figure within the economy shows negative or almost zero. To alleviate this problem, banks should anticipate the future effect of Inflation in deciding the Interest rate for lending activities or reserve some amount of profit as compensation for the impact. For every

one-unit increase in the Inflation Rate, 0.014 units decrease in the ROA, which gives, the importance of anticipating the future effect inflation rate by Private Banks.

Every unit increase Lending Interest Rate increase, 0.186 company increases in the ROA, which gives importance to applying Inflation-adjusted Lending Interest Rate to Banks' lending activities. They will be able to compensate for the impact of Inflation on their profit performance. The profit figures reported the declared dividends and taxes paid are high in comparing with the Inflation rate.

This study's specific objective is to ascertain the impact of Inflation on Private Banks. The steady growth of the Lending Interest Rate is not parallel to the Growth of the Inflation Rate. In connection to this, at the early stage of the Inflationary figure, Banks can withstand this impact, but at the time of the inflated Inflation figure, Banks cannot absorb the shock in the long run.

Private Banking performance is highly dependent on the gross profit of lending operations; in contrast, the trends on the Inflation rate show a continuous increase of 5% each year,

And the Average Lending Rate tends to be steady; this, in comparison, may drive the Banking Sector into difficult situations. If inflation is controlled by the Private Banks, will have a positive impact on the Return on Asset by anticipating the future influence of Inflation (Utu, 2018).

5.3 Recommendations

- Banks should anticipate the future effect of Inflation in deciding the Interest rate for lending activities or reserve some amount of profit as compensation for the impact
- Applying the Inflation adjusted financial Statement as per the declaration of the draft for internal Management Accounting purpose(OECD,2003)
- Application of Inflation-Adjusted Interest rate so that changes in the Inflation could result in changes in the application of Interest Rate because the average effective interest rate
- The result implies that these Banks need to optimize the use of their assets to increase their profitability.

5.4 Suggestions further study

Future researchers can further study the impact of Inflation of the capital employed by the shareholders against the current values of their asset (ROI) and financial statement presentation as Inflation adjusted financial statement presentation.

Reference

Ahmad, K. (2014) Impacts of Inflationary Trends on Banks' Performance, *International Journal of Accounting and Financial Reporting*. ISSN 2162-3082, Vol 4, No.1

Dr.Aksha, K. (2017) the factors affecting the profitability of commercial bank of Ethiopia: an Econometric Analysis, *published on the international journal of management IT and Engineering,* ISSN: 2249-0058 Impact Factor 7.199, Vol 7 Issue 8.

Mohamed U, Danjuma M, Mohammad A. (2014) Conceptual Expositions of the Effect of Inflation on the Bank Performance. *Journal of World Economics Research*. Vol 3. No 5 pp 55-59.

D. Oleka C. (2014) Empirical Study of the Impact of Inflation on Bank Performance: Implication for Investment Decision Making in Banking Industry in Nigeria. *Humanity & Social Science Journal. Vol* 9. No 2. PP 61-71

Haroon Khan A. (2015) the Impact of Inflation on Financial Performance. *International Journal of Innovation and Economic Development.* Vol. 1, No 4, PP 42 – 48

Getachew W. (2018) the Relationship between Inflation and Economic Growth in Ethiopia. *Budapest International Research and Critics Institute – Journal* (BIRC-Journal) Vol.1 Pp 264- 271

Kobia Araya M, (2018) Effect of inflation rate on profitability Kenyan commercial banks. *School Business university of Kenya.*

Kothari, C.R., (1978)*Research Methodology Methods Techniques Seconded Revised Edition, New Delhi, Vikas Publishing House Pvt. Ltd*., 1978.

Tan, Aron Yang and Floros, Christos (2012) Bank Profitability and Inflation: The case of China. *Journal Economic Studies*. Vol 39 No. 6. PP 675- 695. ISSN 0144-3585

Lery A, Irvan R. (2013) The Impact of Inflation on private Banking profitability. *International Journal of Science and Research* (IJSR), Indian Online ISSN: 2319-7064

Moye D. and Tursoy T. (2020) Impact of Inflation and Exchange Rate on the Financial Performance of Commercial Bank of in South Africa. *MARPA Munich Personal RePEc Archive* .Paper No 101383

Abis G. and Cherkos M. (2018) Do Price Influence Growth? Estimating the Inflation Threshold of the Ethiopian Economy. *Journal of Economics and Sustainable Development*. ISSN 2222-1755 (paper) 2222-2855(Online) Vol. 9. No.1

Rashid A. (2017) Impact of Inflation and Interest Rate Uncertainty on Performance and Solvency of Conventional and Islamic Banks in Pakistan. *Journal of Islamic Banking and Management*. Vol 7. No 2 PP 156-177.

Thomas J. Brock. (2020) A Guide to Inflation, Investopedia

Mark p. Taylor. (1999) Real Interest Rate and Macroeconomic Activity. *Oxford Review of Economic Policy*, Vol. 15, No. 2 pp. 95-113

Jim frost (2021) Multicollinearity in Regression Analysis: Problems, Detection, and Solutions. *Statistics Solutions Advancement through Clarity*. April 23 2021 at 11.27

Yaqqov and Jacob Yaron (1991) Inflation Adjustment of Financial Statement, *World Bank 1818 H street NW,Washington DC 20433.* May 19191 WPS 670.

Hair, J. F. Jr., Anderson, R. E., Tatham, R. L. & Black, W. C. (1995). *Multivariate Data Analysis (3rd ed)* New York: Macmillan.

Sorei Tefera. (2014) Factors Affecting Bank Profitability: an Empirical Study on Ethiopian Private Commercial Banks*" Addis Ababa University*, vol. 1 page 1-63

OECD Comptes nationaux et Statistiques rétrospectives (2003), *Inflation Accounting A Manual on National Accounting Under Conditions of High Inflation* (Edition complète - ISBN 9264149228 - Fr. à paraître), Volume 1996, Number 1,.

Utu.La *Effects of Extern Factors on Return on Asset (ROA) in Banking Industry in Indonesia Stock Exchange*. International Journal of Scientific & Engineering Research Volume 9, Issue 12, December-2018 1119 ISSN 2229-5518

National Bank of Ethiopia (2019) Annual Financial Report

Bank of Abyssinia S.C (2016-2019) *Annual Financial Report*

Buna International Bank S.C (2016-2019) *Annual Financial Report*

*Abay Bank S.C (*2016-2019) *Annual Financial Report*

*Dashen Bank S.C (*2016-2019) *Annual Financial Report*

*Debub Global Bank S.C (*2016-2019) *Annual Financial Report*

United Bank S. C (2016-2019) *Annual Financial Report*

Awash Bank S.C (2016-2019) *Annual Financial Report*

Nib Bank S.C (2016-2019) *Annual Financial Report*

Berhan Bank S.C (2016-2019) *Annual Financial Report*

Zemen Bank S.C (2016-2018) *Annual Financial Report*

Wegagen Bank S.C (2016-2020) Annual Financial Report

Lion International S.C Bank (2016-2020) Financial Report

Enat Bank S.C (2016-2020) Financial Report

Oromia International Bank S.C (2016-2020) *Financial Report*

Oromia Cooperative Bank S.C (2016-2020) *Financial Report*

Addis International Bank S.C (2016-2020*) Financial Report*

Appendices

Financial Year	Name of Banks	Net Income	Average Assets	Return on Asset	Interest Income	Total Loans and Advance	Average Lending Interest Rate	Inflation Rate
2016	Abay Bank S.C	134400000.00	6187000000.00	2.17	418846022	3119000000	13.43	7.5
	Abyssinia Bank S.C	341066502.00	16828069220.00	2.03	1097716495	8011609504	13.7	7.5
	Addis International Bank S.C	78933577.80	2462189887.00	3.21	149771050	1063100000	14.09	7.5
	Awash Bank S.C	798546540.40	31100000000.00	2.57	1922544327	15450800000	12.4	7.5
	Berihan Bank S.C	244846576.10	7196302723.00	3.40	460419113	3775529000	12.19	7.5
	Buna Bank S.C	175307231.40	6820959469.00	2.57	491082086	3631844775	13.52	7.5
	Dashen Bank S.C	665426769.00	28576433848.00	2.33	1508762051	12478656382	13.00	7.5
	Debub Global Bank S.C	47570938.80	1291959979.00	3.68	84243855	591284491	14.25	7.5
	Enat bank S.C							
	Hibret Bank S.C	299981437.70	17269872962.00	1.74	1226179216	8423375110	14.56	7.5
	Lion International Bank S.C	244767490.80	8119231644.00	3.01	527201904	4303387848	12.25	7.5
	Nib Bank S.C	321127664.90	15830321762.00	2.03	1141051271	9508760592	12	7.5
	Cooperative Bank of Oromia S.C	25861504.20	1154531438.00	2.24	823669491	5851657783	14.08	7.5
	Oromia International Bank S.C	227532102.00	11281588879.00	2.02	763348889	6206088528	12.3	7.5
	Wegagen Bank S.C	334947803.40	16189764130.00	2.07	1024149673	7506215842	13.64	7.5
	Zemen Bank S.C	189035914.90	7374171617.00	2.56	367057544	3253943050	14.00	7.5
2017	Abay Bank S.C	174300000.00	7405500000.00	2.35	549135357	4274000000	12.85	8.8
	Abysinia Bank S.C	493122940.10	21076436770.00	2.34	1589840189	13927238753	11.42	8.8
	Addis Internationa Bank S.C	82691002.10	2938397349.50	2.81	199766952	1581300000	12.63	8.8
	Awash Bank S.C	920110800.00	35563395500.00	2.59	2587583784	19904490646	13.01	8.8
	Berihan Bank S.C	332088544.90	8842587982.50	3.76	687936260	5366658000	12.82	8.8
	Buna Bank S.C	206227000.00	8331150734.50	2.48	633149000	5189649000	12.2	8.8
	Dashen Bank S.C	967690525.20	31600517950.00	3.06	2057768039	17717486528	11.61	8.8
	Debub Global Bank S.C	47393731.00	1677432694.50	2.83	105319573	780769241	13.49	8.8
	Enat bank S.C	102557000.00	4069578500.00	2.52	303444000	2450484000	12.38	8.8
	Hibret Bank S.C	342089491.80	19586395285.50	1.75	1549032808	11847923285	13.07	8.8
	Lion International	245647467.10	9547580726.50	2.57	763607998	5585675118	13.67	8.8

	Bank S.C							
	Nib Bank S.C	515409750.80	18425015412.00	2.80	1500417612	10711303668	14.01	8.8
	Cooperative Bank of Oromia S.C	167712567.40	14205794339.00	1.18	1116611289	9679602793	11.54	8.8
	Oromia International Bank S.C	265077932.70	13787247900.00	1.92	910745724	7041785113	12.93	8.8
	Wegagen Bank S.C	495699085.00	18569466284.50	2.67	1345231967	10235072882	13.14	8.8
	Zemen Bank S.C	249393475.80	8521614052.00	2.93	463185639	3970610184	11.67	8.8
2018	Abay Bank S.C	293300000.00	10474500000.00	2.80	873302000	6003000000	14.55	14.7
	Abysinia Bank S.C	543909800.00	28653920160.00	1.90	2721259000	21770072000	12.52	14.7
	Addis Internationa Bank S.C	103315100.00	3815287406.00	2.71	288772000	2056900000	14.04	14.7
	Awash Bank S.C	1374895200.00	47647449000.00	2.89	4201567000	31304000000	13.42	14.7
	Berihan Bank S.C	287653800.00	12278425621.00	2.34				
	Buna Bank S.C	334059600.00	11431247000.00	2.92	1032553000	6942000000	14.87	14.7
	Dashen Bank S.C	800118200.00	40024990026.00	2.00	3243903000	23057535000	14.07	14.7
	Debub Global Bank S.C	99380400.00	2661799205.00	3.73	213473000	1553742000	13.74	14.7
	Enat bank S.C							
	Hibret Bank S.C	494883200.00	24966917804.50	1.98	2264370000	16773111111	13.54	14.7
	Lion International Bank S.C	336231700.00	12647763904.50	2.66	1172711000	9381688000	12.51	14.7
	Nib Bank S.C	461126400.00	23854315531.00	1.93	2072786000	16851918699	12.32	14.7
	Cooperative Bank of Oromia S.C	468871900.00	23806136785.50	1.97	1787913000	14711523000	12.15	14.7
	Oromia International Bank S.C	656629400.00	20044819460.50	3.28	1505568000	9968573000	15.10	14.7
	Wegagen Bank S.C	735061600.00	24170037719.50	3.04	2115769000	14785041000	14.31	14.7
	Zemen Bank S.C	239623300.00	11053981243.50	2.17	712405000	4995010000	14.26	14.7
2019	Abay Bank S.C	478100000.00	13715500000.00	3.49	1103991000	7711000000	14.32	15.4
	Abysinia Bank S.C	714000000.00	35638730500.00	2.00	3504386000	23735010000	14.76	15.4
	Addis Internationa Bank S.C	143617600.00	4865415500.00	2.95	407783000	3020614815	13.53	15.4
	Awash Bank S.C	2341115700.00	64951740000.00	3.60	5977046000	47262000000	12.65	15.4
	Berihan Bank S.C	406037100.00	16620266500.00	2.44	1535806000	12486227642	12.03	15.4
	Buna Bank S.C	437521700.00	13757964000.00	3.18	1281948000	8287000000	15.47	15.4
	Dashen Bank S.C	895318200.00	50821902000.00	1.76	4301332000	32366183000	13.29	15.4
	Debub Global Bank	198762900.00	7825311024.00	2.54	321668000	2401169000	13.46	15.4

	S.C							
	Enat bank S.C	162017100.00	7841960500.00	2.07	742829000	5093548000	14.58	15.4
	Hibret Bank S.C	685960800.00	31883498500.00	2.15	3148306000	21611563000	14.57	15.4
	Lion International Bank S.C	486867500.00	17355565000.00	2.81	1672354000	11622376000	14.39	15.4
	Nib Bank S.C	649905900.00	30203174500.00	2.15	2858493000	19250471000	14.85	15.4
	Cooperative Bank of Oromia S.C	536909100.00	35839419000.00	1.50	2749372000	21404500000	12.3	15.4
	Oromia International Bank S.C	700942200.00	27788020000.00	2.52	2218072000	15323833000	14.47	15.4
	Wegagen Bank S.C	514597300.00	28580461500.00	1.80	2518986000	19679578125	12.8	15.4
	Zemen Bank S.C	445099200.00	13563963500.00	3.28	1015048000	7609536000	13.34	15.4
2020	Abay Bank S.C	448206500.00	17654864500.00	2.54	1507163000	11613432000	12.98	21.6
	Abysinia Bank S.C	756000000.00	48092212500.00	1.57	4848899000	37247900000	13.02	21.6
	Addis Internationa Bank S.C	191963800.00	6002638000.00	3.20	515893000	3481700000	14.82	21.6
	Awash Bank S.C	2519752200.00	81961681500.00	3.07	7872829000	57274000000	13.75	21.6
	Berihan Bank S.C	495240200.00	20263919500.00	2.44	2064342000	16514736000	12.5	21.6
	Buna Bank S.C	407428700.00	16680959000.00	2.44	1670695000	11362269000	14.7	21.6
	Dashen Bank S.C	1252951000.00	62239868000.00	2.01	5824000000	42067537000	13.84	21.6
	Debub Global Bank S.C	263370100.00	6650043500.00	3.96	521742000	3478280000	15	21.6
	Enat bank S.C	167688500.00	10182755000.00	1.65	1047439000	8379512000	12.5	21.6
	Hibret Bank S.C	789740700.00	39367270000.00	2.01	4229123000	32531715385	13	21.6
	Lion International Bank S.C	546447300.00	26087064000.00	2.09	2676643000	19081734000	14.03	21.6
	Nib Bank S.C	916741700.00	38090587000.00	2.41	3901744000	28901807407	13.5	21.6
	Cooperative Bank of Oromia S.C	827833300.00	33215278986.00	2.49	4146999000	29333460000	15	21.6
	Oromia International Bank S.C	745554600.00	32805392000.00	2.27	2954615000	22727807692	13	21.6
	Wegagen Bank S.C	754217100.00	33964805500.00	2.22	3245295000	23249128000	13.96	21.6
	Zemen Bank S.C	698837300.00	21770632399.00	3.21	1462028000	9747395000	15	21.6