



**Addis Ababa University**  
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**Department of Management Graduate Programs**

**Factors for Effective Anti-Money Laundering Compliance in the  
Ethiopian Banking Industry**

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Organizational Excellence**

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## DECLARATION

I hereby declare that this thesis titled **Factors for Effective Anti-Money Laundering Compliance in the Ethiopian Banking Industry** submitted to Addis Ababa university school of Business and Economics for the award of the degree of Master of Science in Management is a record of original and independent research work done by me under the supervision and guidance of Dr. Yitbarek Takele. And it has not been submitted for the award of any other degree or diploma or fellowship or any other similar title to any candidate of this or any other university/institution, and all sources of materials used for the study are accordingly acknowledged.

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## APPROVAL

This is to certify that the thesis paper, entitled **Factors for Effective Anti-Money Laundering Compliance in the Ethiopian Banking Industry**, which is submitted for the partial fulfillment of the degree of Master of Science in Management complies with the regulations and meets the standards of the institution.

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## **Abstract**

*The study aims to examine factors for effective Anti-Money Laundering compliance in the Ethiopian banking industry. In line with this, the study investigates the effect of legal enforcement mechanisms, institutional capacity, international cooperation, technological advancement, and practical challenges on the implementation of anti-money laundering regulations. The target populations of the study the researcher generalize the results are 18 banks in Ethiopia, the National Bank of Ethiopia (NBE) and Ethiopian Financial Intelligence Center (EFIC). This study employed both quantitative and qualitative approaches (mixed approach) to gather data. Hence, purposive sampling was used, and 141 questionnaires were distributed to division managers, senior compliance officers, and compliance officers of 18 Ethiopian banks directly responsible for the implementation of the AML regulation. For more comprehension 8 key informants were included. Also, the study employed both descriptive and explanatory research design. Among others, the study findings revealed that Ethiopian banks are vulnerable to predicate offences of serious criminal activities listed on AML directive like corruption, tax evasion, human trafficking, contraband, fraud, illegal-hawala, arms trafficking, market manipulation counterfeiting currency and robbery. Legal enforcement mechanisms, institutional capacity and international cooperation along with the integrity of FIC officers are found to be the key factors for AML compliance. Finally, but most importantly Ethiopian Financial Intelligence Center (EFIC) and National Bank of Ethiopia (NBE) shall make regular inspections of banks to ensure effective implementation of the Anti-Money Laundering (AML) compliance.*

***Key words: AML Regulations, Ethiopia's Banks, Ethiopian Financial Intelligence Center and FATF***

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## **List of Acronyms and Abbreviations**

<b>AML:</b>	Anti Money Laundering
<b>BOD:</b>	Board of Directors
<b>CDD:</b>	Customer Due Diligence
<b>CFT:</b>	Counter Financing of Terrorism
<b>ESAAMLG:</b>	East and South Africa Anti Money Laundering Group
<b>EU:</b>	European Union
<b>FATF:</b>	Financial Action Task Force
<b>FIC:</b>	Financial Intelligence Center (Ethiopia)
<b>KYC:</b>	Know Your Customer
<b>IMF:</b>	International Monetary Fund
<b>ML:</b>	Money Laundering
<b>NBE:</b>	National Bank of Ethiopia
<b>PEP:</b>	Politically Exposed Person
<b>SPSS:</b>	Statistical Package for Social Science
<b>STR:</b>	Suspicious Transaction Report
<b>UN:</b>	United Nations

# CHAPTER ONE

## INTRODUCTION

### 1.1. Background of the Study

The international community is concerned with growing incidence of organized crime, corruption, and terrorism and the devastating effect of these international threats necessarily involves measures to address money laundering (ML). Money Laundering allows criminals and corrupt officials to enjoy the proceeds of their crime with impunity. Money laundering can also be a problem in its own right, particularly for small or developing countries like ours with weak or under regulated financial sectors, because money laundering activities conducted on a large scale can jeopardize the integrity of a national financial system, weaken financial institutions and hinder economic development (AFDB, 2007).

Money laundering according to the Financial Action Task Force (FATF), which is recognized as the international standard setter for anti-money laundering (AML) efforts defines “Money Laundering as the processing of criminal proceeds to disguise their illegal origin in order to legitimize the ill-gotten of crime” (FATF, 2013).

The FATF combats ML and TF across the globe through its action plan known as the FATF recommendations in which, countries are required to comply with. The assumption is that when countries adopt and comply fully with these FATF recommendations, money laundering will be eradicated or at least reduced to a minimum. This makes FATF recommendations and complying them is essential to the global fight against money laundering.

In this regard, FATF requires banks’ implementation of AML measures as their activities transcend a national boundary which exposes them to money launderers.

Moreover, failure to comply with FATF’s recommendations could lead to economic sanctions, which have an adverse impact on the economy in general and the banking sector in particular as import and export activities become challenging (FATF, 2013).

In this regard, Ethiopia has joined the world in combating money laundering and terrorist financing by ratifying AML/CFT regimes in 2009 G.C., which is subsequently amended in 2013 through the Prevention and Suppression of Money Laundering and Financing of Terrorism proclamation Number 780/2013. The proclamation criminalized money laundering and financing of terrorism with the main objective of ensuring the integrity of the financial system (Tu'emay, 2013).

Following the Proclamation the FIC has issued a directive (No. 01/2014) in consonance with FATF recommendations to streamline the effort in combating ML. As per the directive, banks are required to develop compliance policies and procedures aligned with the directive.

The economic growth coupled with the steady integration of Ethiopia into international financial and trading systems is also bringing new opportunities for criminal entrepreneurialism and money laundering. Concerned government institutions suggested that they believe that bank fraud, electronic crimes, and money laundering through formal financial institutions will continue to rise. Other sources point to extensive tax evasion, commercial fraud, corruption, and cross-border smuggling as sources of illicit funds within the Ethiopian economy. Perceptions of corruption, in particular, have worsened dramatically over the last decade. One prominent organization that observes such trends, Transparency International recently rated Ethiopia “highly corrupt.” Numerous government officials in Ethiopia suggested there were growing signs of connections between official corruption and money laundering and that organized criminal activity was increasingly posing a risk to the integrity of state regulatory and law enforcement institutions. Global Financial Integrity estimates that, between 2005 and 2014, an estimated average of US\$1,259 million to US\$ 3,153 million dollars left Ethiopia as illicit financial flows, which led to an average loss in GDP growth of 2.2% per year. (Roberto, 2018)

Therefore, adoption of appropriate AML regime with all banks is an essential task to safeguard the confidence and integrity of the banking sector. In line with this, the data to be collected from banks in Ethiopia reflects the stakeholder’s opinions towards the effectiveness of AML regulations: this provides paramount importance for all stakeholders in this area. Thus, this study is scrutinized factors for an effective anti-money laundering regime in Ethiopian banking industry.

## **1.2. Distribution of the Study Area**

There are currently 18 banks operating in Ethiopia of which 16 are privately owned and 2 governments owned. As of December 31, 2020 the total capital of the banks in Ethiopia was Birr 120.81 billion of which state owned banks accounted for 48.1 percent and private banks 51.9 percent. The total deposit liabilities of the banking system reached Birr 1.2 trillion by the close of the second quarter of 2020/21. The total number of branches they were having on the stated period was 6,897(NBE, 2<sup>nd</sup> quarter 2020/21).

Except Development Bank of Ethiopia (DBE), all banks in Ethiopia provide traditional banking services for their customers as there is no bank specialized service either in mortgage or investment banking. DBE as it is policy bank and avails finance for selected projects that aligns with national development strategy.

Ethiopia is largely a cash society and overall financial penetration can be said low as the population to bank ratio stood at 14,619.3 (ibid).

Ethiopian Financial Intelligence Center (EFIC) and the National Bank of Ethiopia (NBE) are the responsible organs in ensuring AML regime in Ethiopian banking sector.

## **1.3. Statement of the Problem**

The proliferation of studies on the impact of financial crimes in general and money laundering in particular has been quite significant (see for e.g. Savona, 1996 and Kemal, 2014). However, there exists a huge gap in the existing literature pertaining to geographical coverage. Despite a large number of studies published over the last decade investigating factors affecting financial institutions for vulnerability for money laundering only few have tried to investigate the issue from a developing country perspective and no research gave an exclusive focus on commercial banks in Ethiopia. Filling the existing empirical evidence gap is the major purpose of the study.

Money laundering can harm the soundness of a country's financial sector as well as the stability of individual financial institutions in many ways. Among others, loss of profitable business, liquidity problems through withdrawal of funds, termination of correspondent banking facilities, investigation costs and fines, asset seizures, loan losses and declines in the stock value of

financial institutions can be cited as adverse consequence of money laundering. In terms of specific risk categories there are broadly identified risks such as reputational, operational, and legal risks that have recognized by banks (Paul, 2006).

Tuemay (2013) identified a number of significant vulnerabilities that exposes Ethiopia to continual incidences of money laundering. These include, prevalence of significant informal and largely cash based economy, prevalence of high-level serious crimes, such as corruption, tax evasion, smuggling trafficking (human, drugs, and arms), and illicit financial flows, limited awareness of the problems of ML, limited control mechanisms over movement of cash were stated.

Besides, the prevalence of porous borders and regional instability were also depicted on the study. In due appreciation and recognition of both vulnerabilities and risks, Ethiopia established Anti Money Laundering regime through the issuance of proclamation No. 780/2013 (that is Prevention and Suppression of Money Laundering and Financing of Terrorism).

Subsequently, the Financial Intelligence Center (FIC) issued Directive number 01/2014 on Financial Anti-Money Laundering and Countering the Financing of Terrorism and Compliance with too much emphasis on the banking sector since banks play a major role in the financial system (Biniam, 2011).As per the directive banks instituted their own AML mechanisms.

However, limitations are observed on the adoption and implementation of AML requirements as per the Financial Intelligence Center and Financial Action Task Force (FATF) requirements among commercial banks in Ethiopia. Though, they are functioning with the same regulatory environment due to internal factors peculiar to individual banks and other externalities.

This issue is evidenced by Mutual Evaluation Report of East and South Africa Anti Money Laundering Group (ESAAMLG, 2019) that categorize Ethiopia as at the enhanced follow-up stage due to minimal number of suspicious transactions reporting, increasing trend of penalties and loss of correspondent bank relationship (de-risking).

Thus, from a practical perspective, the result from this study could provide a lot for all stakeholders and policy makers through identifying the gaps and investigating critical factors for an effective anti-money laundering regime in Ethiopian banking industry.

## **1.4. Research Questions**

To gain a comprehensive understanding of the extent of compliance on anti-money laundering (AML) standards by banks, the study poses to answer the following research questions:

1. What are the factors affecting the effectiveness of Anti-Money Laundering regulation compliance?
2. What are practical challenges faced by bank employees to implement Anti-Money Laundering regulation?

While the first question will be addressed through quantitative analysis, the second question will be tackled using an in-depth interview with concerned employees.

## **1.5. The Objective of the Study**

### **1.5.1. General Objective**

The general objective of this study is to investigate factors for effective anti-money laundering compliance in the Ethiopian banking industry.

### **1.5.2. Specific Objectives**

The specific objectives of the study are:

- To examine factors affecting the effectiveness of Anti-Money Laundering compliance.
- To assess the major practical challenges in implementing Anti-Money Laundering regulation.

## **1.6. Scope of the Study**

This study is delimits itself conceptually, geographically as well as methodologically.

Conceptually: this study is confined itself to weigh up the influence of legal enforcement mechanisms, institutional capacity, international cooperation and technological advancements on the adoption of Anti-Money laundering regulations in Ethiopian banking industry.

Geographically: this study undertakes by collecting data from two government and sixteen private commercial banks that are operating in Ethiopia. The required sample size was selected and data was collected by requesting 141 banks compliance staffs. In addition, for more

comprehension 8 key informants were selected from banks risk and compliance directors, National Bank of Ethiopia and Ethiopian Financial Intelligence Center.

Methodologically: to examine the factors for effective anti-money laundering compliance in the Ethiopian banking industry this study is used explanatory research design. Thus, multiple linear regression models were used to explain the result of legal enforcement mechanisms, institutional capacity, international co-operation and technological advancements on adoption of Anti-money laundering regulation. Likewise, this study issued both primary and secondary sources of data. The primary source of data is questionnaires and in-depth interview instruments while the secondary source of data includes annual reports of the banks, FATF recommendations, different directives which are available either in the bank's premises or websites, different books and related researches, journals and articles form internet websites and magazines. Moreover, the researcher has employed mixed methods research approach and purposive sampling technique.

### **1.7. Significance of the Study**

The findings of the study have been given a good insight for all stakeholders about the effectiveness of the implementation of anti-money laundering regulation in Ethiopian banking sector. Specifically, the findings of this study identify the effects of legal enforcement mechanisms, institutional capacity, technological advancements and international co-operation on adoption of AML regulations. Likewise, the findings used to review and refined a framework for measuring and assessing ML which is an important element for the financial stability unit at central bank and Ethiopia's financial intelligence center. Moreover, the study also a paramount importance for all other stakeholders in identifying the major factors affecting the adoption of anti-money laundering regulation in Ethiopia's banking industry.

The findings also have a significant impact in terms of its contribution to scientifically investigate the challenges and weaknesses they encountered during the implementation AML regulations in Ethiopian banking industry as well as its strengths. In general, examining the factors that influence the adoption of Anti-Money laundering regulations has a lot of importance to the existing literature by providing evidence on the effect of each factor. Finally, the study findings were used as a foundation for other research who would like to undertake to research similar and/or related area of the study in the future.

## 1.8. Definition of Terms

Any variable used in the study should be defined contextually in an objectively measurable way to avoid misunderstanding between the researchers and replicators or readers of the study results. Therefore, the variables were used in this study are defined as follows:

**Compliance:** A program that ensures and monitors compliance with stated laws, regulations, rules, policies and its implementing procedures, including record keeping and reporting requirements (FATF,2012).

**Correspondent Banking:** Means a deposit account established and banking services provided by a bank (correspondent) to other bank (Respondent) to receive deposits, to make payments. Large international banks typically act as correspondents for thousands of other banks around the world (FATF, 2013).

**The Financial Action Task Force (FATF):** is an inter-governmental body established in 1989 by the Ministers of its Member jurisdictions. FATF is mandated to set standards and to promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and the financing of proliferation, and other related threats to the integrity of the international financial system. In collaboration with other international stakeholders, the FATF also works to identify national-level vulnerabilities with the aim of protecting the international financial system from misuse (FATF, 2012).

**Money Laundering:** It is a crime, of converting the property for the purpose of disguising the illicit origin of the property, source, location, disposition movement or ownership or rights with respect to the property (FIC, 2014).

## 1.9. Limitations of Study

With regards to the limitations of the study the following facts affected the breadth and depth of conclusion and recommendations of the study:

Absence of getting accurate data as the banking sector is at its infant stage money laundering risk registry were not established well, so as to estimate the amount of legitimized criminal proceeds.

As the Money Laundering is relatively new issue to Ethiopian banking industry, it is one of the under researched area, in which the researcher face limitation of related researches.

In addition, as there is norm of prohibiting giving data for the third party even for academic purpose, the researcher had faced some difficulties in getting AML programs and publications at the required level, unwillingness and too much precaution with a fear of availing confidential information can be mentioned as obstacles.

### **1.10. Organization of the Study**

This study is organized into five chapters. Chapter one presents the background of the research, problem statement, research questions, objectives, scope, and significance, definition of terms and potential limitations of the study. Likewise, chapter two discusses the review of the literature. Chapter three is explained the research design and methodology. Concomitantly, chapter four briefly discusses the results and findings of the study. And the final chapter dealt with the summary of major findings, conclusions and recommendations of the study based on the findings.

# CHAPTER TWO

## LITERATURE REVIEW

The literature review is intended to reassess the work of previous authors on similar title sector, region, case or unit of study. This has helped the researcher to establish the hypothesis that the analysis should be empirically evaluated. As a result, in this chapter, the researcher reviewed theoretical and empirical literature related to AML enforcement in order to suggest a hypothesis and a conceptual structure.

### 2.1. Theoretical Review

#### 2.1.1. Money Laundering: Definition

Money laundering term is widely used and universally understood in the world, even though the term lacks a uniform meaning. In the absence of a single, all-purpose concept, the two examples below have been chosen to provide a general understanding of the term.

- The FATF defines money laundering as being: “the processing of criminal proceeds to disguise their illegal origin”.
- The Unites States Internal Revenue Service (IRS) refers to Money Laundering (ML) as: “The activities and financial transactions that is undertaken specifically to hide the true source of the money. In most cases, the money involved is earned from an illegal enterprise and the goal is to give that money the appearance of coming from a legitimate source.”

Both of them relate to disguising the sources of the funds, proceeds or properties involved, which, in addition, derive from criminal offenses or illegal activities. This leads to the conclusion that illicit money is being laundered through a number of operations, various means, different procedures and schemes.

#### 2.1.2. Money Laundering Cycles

The money laundering cycle can be broken down into three distinct stages:

- Placement Stage
- Layering Stage
- Integration Stage

### **2.1.2.1. Placement**

The placement stage represents the initial entry of the “dirty” cash or proceeds of crime into the financial system. Generally, this stage serves two purposes (a) it relieves the criminal holding and guarding large amounts of bulky cash, and (b) it places the money into the legitimate financial system. It is during the placement stage the money launderers are the most vulnerable to being caught as putting large amounts of money into the legitimate financial system may raise suspicions of officials (Business Crime Solutions, 2020).

### **2.1.2.2. Layering**

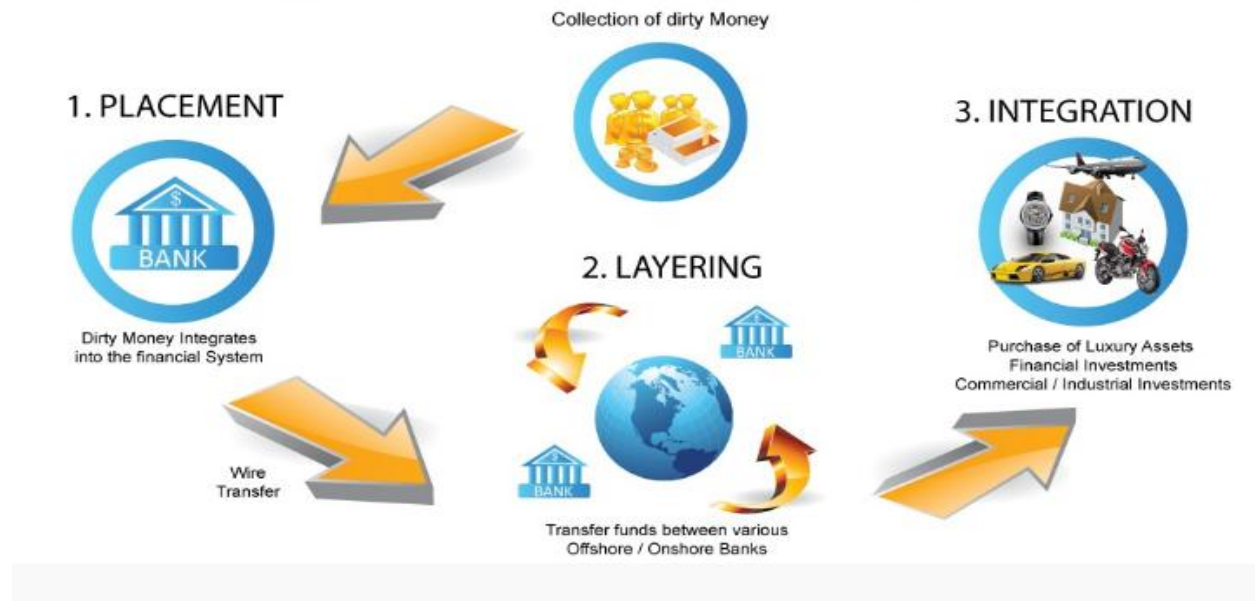
Next to placement comes the layering stage. The layering stage is the most complex and often involves the international movement of funds. The primary purpose of this stage is to separate the illicit money from its source. This is done by sophisticated layering of financial transactions that obscure the audit trail and sever the link with the original crime (ibid).

### **2.1.2.3. Integration**

The last stage of the money laundering process is termed as the integration stage. It is at the integration stage where money returned to the criminal from what seem to be legitimate sources. Having been placed initially as cash and layered through a number of financial transactions, the criminal proceeds are now fully integrated into the financial system and can be used for any purpose (ibid).

As per the above discussions, the three stages of money laundering cycles were portrayed here in below:

## A TYPICAL MONEY LAUNDERING SCHEME



Source: European Union Monetary Control Commission (December, 2020)

### 2.1.3. Theories on Anti Money Laundering

#### 2.1.3.1. System Theory

It was introduced in the 1930s by the biologist Ludwig von Bertalanffy and promoted by Ross Ashby in 1964. According to Bertalanffy (1968), system theory notes that the system consists of dynamic components that are accessible to, and communicate with their environments. When referring to processes, this often usually means that they are self-regulating (they self-correct through feedback). The idea is that operations in any operating organization operate together as a complete structure. Systems Theory suggests that, in order for any system to operate entirely, the various subsystems must work together and towards a mutual common aim of achieving a collection of goals and visions, respectively. This is the same scenario for the ML operation. In order for the process to succeed, the various processes work together. The stakeholders are one of the main pillars of the structure (Mei and Zhou, 2015).

In money laundering, there are two groups of stakeholders who are crucial for any operation to be carried out, external stakeholders, who are the real money launderers, must take the first step, and internal stakeholders, who also promote complacency, must help to hide the processes (Mei

& Zhou, 2015). In this regard, while some of the systems face difficulties in spotting money laundering transactions, the greater part of transactions are identified and hidden by internal staff and systems (Levi et al, 2014).

The application of systems theory is used to evaluate the various phases of money laundering. Overall, as stated in section 2.1.2, money laundering is revised in three separate steps, namely the placement, layering and integration phases. A critical review of the framework theory suggested that the mechanism of money laundering could be influenced either by the lack of understanding or complacency of the financial institution.

Accordingly, the theory findings form a strategic basis through which the different stages presence in the Ethiopia's banking sector.

### **2.1.3.2. The Walker-The Gravity Model**

The Walker's Gravity model was first developed by Walker (1995) and it was designed to analyze ML patterns in the Australian industry. The theory based Newton's Gravity model of Isaac. The hypothesis is that money-laundering rates are dependent on the nation's crime rate, the degree of crime sophistication, and the nation's GDP rate (Unger and Linde, 2013). It noted, however, that not all laundered money is transported internationally as domestic institutions often provide ample cover for such laundered cash.

Unger and Linde (2013) further adapted this hypothetical application in the evaluation of money laundering in the Netherlands. In its modifications, the concept of the Walker models and the nature of the money laundering case have been extended. The theory has grown to include conventional underground economic activities, such as drug-trafficking and crime, gains from the underground economy, such as tax evasion, among others (Amali, 2016). This model allows researchers to delimit the reach of money laundering operations in the Ethiopian banking sector.

### **2.1.3.4. Transparency Theory**

The theory was suggested by Amartya (2015) and assumes that transparency exists only if there is democracy and that democracy can only exist with transparency is in place. The theory indicates that greater disclosure and accountability promote the efficient distribution of resources by reducing information asymmetry. However, with political development and sociological

understanding on the rise, it is noted that many non-democratic regimes have also adopted accountability in order to handle better governance. Given that accounting information is a public good (Amartya, 2015) and that central or National Banks should have generated comprehensive disclosures to meet the public's information needs. This view flies in the face of the theory of transparency-fragility, which notes that disclosure can signify widespread problems in the banking system. As a result, this situation could lead to negative externalities, such as cash flow and concerns about the vulnerability of the financial system (Acquaah-Gaisie, 2015).

The theory of transparency has shown that disparity between national regulatory standards have led to distorted consequences. Indeed, regulatory intervention facilitates discursive activities by drawing on common understandings of issues and solutions for participants (Lilley, 2016). Banking crises are less likely to arise in countries in a system where transparency prevails.

As Michel (2010) states, there is now global accord that the war against organized crime cannot be won unless some kind of mechanism is put in place. Such compliance should be defined in part of the comprehensive disclosure practices of central banks (Olasanmi, 2010). The proliferation of electronic money, online banking, and internet casino give criminals more potential for money laundering. As stated on Ping (2010), money laundering can be carried out in easy means, such as cash smuggling and sophisticated means, through financial institutions, real-estate and gambling; money laundering can be carried out by legal activities such as foreign trade and illicit activities such as underground banks and shell companies. The basic objective of any underlying criminal activity related to money laundering is to eliminate the chances of capture and penalty, so that the ultimate purpose of profit-making can be accomplished (Mugo, 2015).

### **2.1.3.5. Economic Theory**

The classical economic theory proposed by Adam Smith in 1846 describes two fundamental factors that decide the actions of individuals (Ekelund & Hebert, 2007). On the one hand, each person acts rationally and seeks to maximize his or her personal usefulness, a concept that is known to be applied to most individual decision-making. Accordingly, this concept also extends to illicit undertakings aiming at the acquisition of personal gain (Yeandle, 2015). On the other hand, the private utility of an economic enterprise is primarily determined by the projected costs

and profits, which are regulated by the laws on demand and supply. In this classical realm of Smith, the state of a country does not lie in the hands of the individual or a firm.

As Goredama (2014), individual does not aim to uphold public interest, nor does he know how much he promotes, as he intends to do with his corresponding protection. So government should protect people from abuse and oppression. Ekelund and Hebert (2007) suggested an observable and unpretentious scheme of natural liberty. In such a system, a person may be left alone to pursue his or her interests in his or her own way, provided that he or she does not infringe the law of justice, money laundering is a practice of damaging public interest using illegitimate procurement of capital (Kern, 2011).

However, these concepts can only work if action is taken within the legal structure. In addition, AML laws and other legislation impact economies differently. However, the premise of classical economic theory is doubtful. State regulations effectively provide for competitive rewards that foster unique institutional structures (Ampratwum, 2008). Such a situation is risky, since it could retard rather than accelerate the development of society towards affluence; furthermore, it diminishes the value of the annual output of land and its labor (Gathii, 2010). Economic theory will therefore be useful in our study in informing the role of legal capability in the adoption of anti-money laundering regulation.

#### **2.1.4. Financial Action Task Force (FATF) and Its Recommendations**

The Financial Action Task Force (FATF) was formed by the G-7 countries in 1989 in Paris. FATF was established because of growing concerns over the risks faced by the financial systems, particularly by banks (FATF, 2007).

The FATF combats worldwide money laundering through Recommendations and setting standards it enacts (Terry, 2010). And the following are summary of anti-money laundering and countering financing of terrorism measures that need to be taken both at a country and bank level by FATF (Amanuel, 2016):

- Apply relevant international principles;
- Criminalize ML and enable authorities to take possession of the proceeds of ML;

- Implement CDD, record keeping and suspicious transaction reporting requirements for financial institutions and designated non-financial businesses and professions;
- Set up a financial intelligence unit to receive and disseminate STR ,
- Collaborate internationally in investigating and prosecuting money laundering.
- Customer due diligence (CDD): Banks should be prohibited from keeping unnamed accounts or accounts in obviously fictitious names and should undertake CDD when establishing business relations, there is a suspicion of ML/TF or carrying out occasional transactions.
- Record-keeping: Banks should maintain, for at least five years, the necessary records on transactions, both domestic and international, to enable them to comply with information requests from the fit authorities.
- Politically exposed persons (PEP): Banks should be required to have suitable risk management system to identify whether the customer is politically exposed persons and take reasonable steps to establish the source of funds and wealth of such persons.
- Correspondent banking: In addition to performing normal CDD, banks should gather adequate information about a respondent institution, assess the respondent institutions AML/CFT controls and clearly understand the respective responsibilities of each institution.
- New technologies: Banks should identify and assess the ML/TF risks that may arise in relation to the development of new product and business practices.
- Wire Transfers: Banks should include required and accurate originator information, and required beneficiary information, on wire transfers and related messages,

### **2.1.5. Compliance Function in Ethiopian Banks**

The combating effort of money laundering in Ethiopian banks started on 2010. As they are legally required to establish Compliance Units, with Compliance Officers at the Senior Management Level in charge of issuing compliances, in order to discharge these responsibilities (FIC, 2014). This practice is common in banks around the world. For example, Basel specified in No.24 that each bank should have an executive or senior staff member with ultimate

responsibility for co-coordinating the recognition and management of the bank's compliance risk and supervising the actions of other compliance function staff (Basel, 2005).

All banks in Ethiopia have developed their own enforcement units, empowering them to monitor money laundering crimes, develop policies and procedures, report cash and suspicious transactions to FIC, maintain documents, train staff, and assess compliance risks (Tu'emay, 2013).

### **2.1.6. Impacts of Money Laundering to the Economy**

According to (John and Gary, 2001), when an economy is faced with money laundering, there are seven major repercussions:

#### **a) Undermining the Legitimate Private Sector**

Money laundering has one of the most extreme microeconomic consequences in the private sector. Money launderers also use shell firms to cover their ill-gotten profits by combining illegal proceeds with legal funds. These front companies have access to large amounts of illegal money, which allows them to support financially front company goods and services at prices far below average. Front firms are willing to sell goods for less than the seller pays to make them. As a result, front companies have a comparative edge over real businesses that rely on financial markets for money. This makes it tough, if not impossible, for legitimate businesses to contend against front firms that receive subsidized funds, a condition that can lead to criminal enterprises crowding out legitimate businesses.

#### **b) Undermining the Integrity of Financial Markets**

Managing the funds, liabilities, and activities of financial institutions that depend on the proceeds of crime poses additional challenges. Significant amounts of laundered money, for example, can arrive at a financial institution but then vanish unexpectedly and without warning by wire transfers in reaction to non-market factors like compliance operations. This can lead to liquidity issues and bank runs.

### **c) Loss of Control of Economic Policy**

Money laundering is projected to be worth between 2 and 5% of global GDP, according to International Money Fund. These illegal revenues may dwarf government budgets in some developing economies, resulting in a lack of government power over economic policy. Money laundering may have a negative impact on currencies and interest rates because money launderers reinvest assets in places where they are less likely to be discovered, in comparison where the rates of return are higher and Money laundering will exacerbate the danger of monetary volatility by causing capital misallocation as a result of artificial asset and product market distortions.

In a nutshell, money laundering and financial fraud will lead to irrational shifts in money demand as well as heightened instability in foreign capital flows, interest rates, and exchange rates.

### **d) Economic Distortion and Instability**

Money launderers are more concerned about securing their proceeds than with making a return on their investments. As a result, they spend their money in things that may or may not be economically advantageous to the country where the money is kept. Furthermore, economic recovery can be affected if money laundering and financial fraud move funds from rational investments to low quality investments that mask the ill-gotten fund.

### **e) Loss of Revenue**

Money laundering reduces government tax income, which hurts honest taxpayers indirectly. It also makes tax collection more difficult for the country. Because of the income loss, tax rates are traditionally higher than they would be if the untaxed profits of fraud were real.

### **f) Risks to Privatization Efforts**

Money laundering jeopardizes many countries' attempts to privatize their economy and enact changes. Criminal gangs have the financial resources to outbid legal buyers for previously government-owned businesses. Furthermore, although privatization programs are often advantageous socially, they may also be used to launder money. Criminals have previously been able to conceal their illegal profits and further their fraudulent activity by purchasing marinas, beaches, casinos, and banks.

## **g) Reputation Risk**

In today's world economy, countries cannot afford to see their reputations and financial institutions tarnished by a connection to money laundering. Money laundering and financial crimes such as illegal proceeds laundering, systematic financial manipulation, insider trading in stocks, and embezzlement erode investor trust and the signaling position of income. The bad publicity that these practices create decreases legitimate global prospects and long-term prosperity, thus attracting multinational criminal groups with bad reputations and short-term ambitions. As a consequence, development and economic growth could suffer. Furthermore, if a country's financial image has been tarnished, rebuilding it is challenging and costly, needing substantial government funding to fix a crisis that could have been eliminated with proper anti-money laundering measures.

So they recommend effective anti-money-laundering policies to support a number of other good governance policies that support economic growth, especially on financial sector.

### **2.1.7. The Adverse Implications of Money Laundering**

Money laundering, according to John and Gary (2001), has a negative influence on a country's economy, democracy, and social well-being. The below are some of the unfavorable consequences.

#### **a) Increased Crime & Corruption**

Money laundering leads to a rise in crime and corruption in a country. It also facilitates bribes in main gateways such as financial institution staff and managers, attorneys and accountants, the judiciary, regulatory departments, supervisory bodies, police authorities, judges, and the courts.

On the other hand, a robust and efficient Anti-Money Laundering system, combined with prompt implementation and effective compliance, reduces the lucrative facets of illegal activity and deters offenders and terrorists from using a region. This is particularly valid as illegal gains are seized and forfeited forcefully as part of a country's AML regime.

## **b) International consequences and foreign investment**

Simply having a bad reputation for money laundering or terrorist funding may have serious implications for a country's growth. Foreign financial institutions may choose to restrict their transactions with institutions in money laundering havens, subject these transactions to additional monitoring, rendering them more costly, or end correspondent or lending relationships entirely. Owing to intensified oversight of their ownership, organization, and control mechanisms, even legal companies and entities from money laundering shelters may face limited access to world markets or access at a higher cost. Any nation with a reputation for weak AML compliance is less likely to attract international private investment..

Finally, the Financial Action Task Force on Money Laundering keeps track of countries that don't follow anti money laundering regulations or participate well in the battle against money laundering. The inclusion of a country on this registry, known as the Non-Cooperating Countries and Territories list, informs the public that the identified country lacks even basic requirements. Aside from the negative consequences mentioned here, Financial Action Task Force members may implement specific counter-measures against a country that fails to address its Anti-Money Laundering deficiencies.

## **c) Social costs**

Money laundering is linked with major societal costs and risks. Money laundering is an integral aspect of making crime profitable. Drug dealers, smugglers, and other criminals may use it to extend their activities. This increases budget costs by necessitating greater law enforcement and health-care budgets, for example, to treat opioid users and reduce the serious effects that result. Money laundering moves economic influence from the economy, government, and people to criminals, among other negative societal consequences. In other words, it twists the old adage that crime doesn't pay. Furthermore, the enormous economic influence that money laundering provides criminals has a corrupting impact on all aspects of society. It has the ability to lead to the virtual overthrow of legitimate government in serious situations.

### **2.1.8. Challenges of AML Implementation and Practices**

Political Commitment, a high-level determination to solve money laundering problems, functional structures of responsibility, competence, and openness, the rule of law, and a

competent, autonomous, and productive judiciary system are all necessary structural elements of an effective Anti-money laundering system. The absence of such structural elements, as well as major limitations and deficiencies in the overall structure, can make it difficult to enforce an effective AML framework. Risk, materiality, and systemic or contextual factors might clarify why a country is compliant or non-compliant, or why a country's level of effectiveness is higher or lower than would be predicted based on technological compliance in some situations. These factors could be a big part of whether a country is doing good or worse, and they could also be a big part of assessors' guidelines for how to boost effectiveness (FATF, 2013).

Weak internal control framework, poor corporate governance framework, lack of central database, reluctance of banks to share customer information, weak legislations, lack of awareness and training on AML issues, inability to authenticate and verify documents submitted by customers, and genuines of officials documents are all challenges in implementing Anti Money Laundering by financial institutions (GIABA ,2010).

### **2.1.9. Opportunities of AML Practices in Banks**

Anti-money laundering and counter-terrorist funding policy effectiveness benefits a government both internally and globally. Minimize levels of crime, strengthened financial institution and market stability, positive effects on economic growth and trustworthiness in the international community, better risk control strategies for the country's financial institutions, and enhanced market confidence are among the benefits (Bartlett, 2002).

An Anti-money laundering enforcement program not only assists a company in complying with rules, but it may also aid in spotting opportunities or possible weaknesses along the business chain that are not necessarily relevant to anti money laundering. It also enables an enforcement officer to assist and properly advise internal stakeholders on money laundering risks, as well as promote a community that can support the company in the long term.

Sound anti-money laundering activities that reduce operational risks boost market trust in banks and, as a result, their resilience. These dangers include the possibility of financial harm to people or banks as a result of overt illegal wrongdoing, inadequate corporate controls, or violations of laws and regulations. In addition to the benefits of consumer trust, a successful anti-money laundering regime decreases the risk of the organization losing money due to theft (Basel, 2014)

## 2.2. Empirical Literatures

In order to define the knowledge gap and build the conceptual structure of this report, previous research on anti-money laundering legislation and their effectiveness have been reviewed. In addition, this section also complements the theoretical analysis of the study.

A group of studies have taken initiatives to analyze the magnitude and scale of money laundering problems (Schott, 2006; Biagioli, 2008; Zdanowicz, 2009; Walker & Unger, 2009) and to investigate how money is being laundered (Unger et al., 2006; Unger, 2007). Other studies focused on the role of technology in accordance with money laundering (Reuda, 2001), money laundering and typology techniques (Ping He, 2010; Irwin, 2011) and money laundering in Hawalla (Bala, 2005). Generally, studies have shown that the banking sector is the most volatile sector. Irwin et al. (2011) looked at the level of the money laundering issues, established risks and patterns, the techniques employed and the amount of funds involved. The results showed that money launderers favor methods that preserve high levels of anonymity and appear to be innocuous.

A literature review reveals that there is a lack of research that have empirically analyzed the problem of compliance measures. Despite limited research, several studies have looked at steps to tackle money laundering and the funding of terrorism (He, 2007; Zhu & He, 2003). Ping He (2010) looked at money-laundering strategies and discovered that money-laundering involves money theft, the use of banks or insurance firms, or the use of shell companies or front companies. The study also found that offenders frequently tend to launder money through non-facial transactions. Studies on money laundering & terrorist funding in Malaysia tend to concentrate on the creation of laws, legislation & conceptual rather than on the practical implementation of these steps (Araujo, 2008).

In order to develop an effective framework to combat money laundering it is necessary for banks and financial institutions to take strict measures and procedures to regulate them, and for that reason, know your customer rules and customer due diligence measures have been developed in response to calls for capacity building to prevent financial sectors from being exploited as platforms for money laundering. From the very beginning of anti-money laundering science, policy change on the subject of such fundamental anti-money laundering instruments has never ceased. For financial institutions, the core intention is to balance the revenues and costs and

pinpoint how the regulations for anti-money laundering affect banks and other financial institutions (Masciandaro and Filotto, 2001).

Broome (2005) highest levels of anti-money laundering compliance in individual institutions will be achieved when they are driven by a sense of self-interest. In order to achieve the effective function of anti-money laundering compliance in financial sectors and increased professional, legal, and ethical standards are needed. Al-Mubark (2003) found that banks in Dubai strongly adhere to the controlling procedures and methods of anti-money laundering measures. Awadallah (2005) recommended that the banks must adopt clear internal policies for fighting money laundering and train employees to enable them to confront such operations and account for the accuracy and caution in exploring banking and financial operations. Al-Ajis (2008) found that the banks in the Gaza Strip are compelled to refuse to open an account for a client or enter into any banking transaction when the procedures of identification are not fulfilled. Likewise, Idowu and Obasan (2012) reported there is a strong positive relationship between banks performance and adoption of sound ML policy, with a value of 0.881.

According to Delston and Walls (2009) preventive measures are required beyond financial institutions. It is true that more should be done for identifying ML activities outside financial sectors, however, bankers losing track of the relation to the Trade-based money laundering (TBML) system will result in serious consequences. Scott (2008) analyzed the link between TBML and the banking sector, and stated that ML, through trade financing, is an issue that needs to be monitored by banks that finance international trade transactions. Baity(2000) proposed that banks and non-banks should accept greater responsibility in promoting increased transparency and eliminate practices that encourage crime, undermine financial systems, and damage their own institutions due to the spreading influence of money laundering.

Zagaris and MacDonald (1992) emphasized on the audit trail, increasing regulation of non-bank business sectors, strengthening KYC requirement, increasing attention on complex, unusual and large transactions, enhancing monitoring of cash at the border, improving supervision of banks and other financial institutions, and constructing an effective international financial sub-regime (International Organization of Securities Commission(IOSCO, 2004).

Know your customer policy has emerged as an important strategy for a proactive war against money laundering, both nationally and internationally. In terms of policy, financial institutions in most countries are required to identify their clients and the legitimacy of their respective

financial transactions. Hence, KYC conformity entails the creation of auditable evidence of due diligence activities in addition to the need for customer identification. Financial institutions are required to confirm that their customers are not or have not been involved in illegal activities, such as fraud, money laundering or organized crime in order to meet KYC conformity requirements (Arasa and Ottichilo, 2015). It should be pointed out that KYC is sufficient to identify money launderers according to their names and profiles, such as By-ends and friends. On its own, it is not sufficient for continuous monitoring of ulterior motives of manipulating transactions in order to balance their banking accounts (Tuba and Van Der Westhuizen, 2013).

Pellegrina and Masciandaro (2009) emphasize the differences that exist between countries' national legislation about the criminalization of ML activities. They suggest that eliminating the possibility of exploiting the differences across countries may help in increasing the effectiveness of the AML regulations. The need for international co-operation in this improvement is supported by Ferwerda (2009).

On assessing the effectiveness of AML regulation, Barone and Masciandaro (2011) estimated the societal benefit for Europe from a drastic reduction in the money laundering multiplier effect. They found the public benefits would outweigh the cost of AML regulations.

Likewise, Barone and Schneider (2018) highlight that a causal link exists such that successful anti-money laundering regulations increase the costs for criminal organizations, which they describe as an efficient way to reduce money laundering.

Ayalew (2016) conducted a study on the role of Ethiopian Private Banks in combating money laundering and their effectiveness. Among the sixteen private commercial banks in Ethiopia, only Dashen and Berhan Banks have been targeted to make the case study in the paper. As the result of the study revealed even though the efforts in implementing AML regulations they are not strong enough to discourage money laundering. Control measures such as KYC, enhanced customer due diligence, training of staff and reporting of suspicious transactions were not adequate to help attain the goals of anti-money laundering. As a result of their ineffectiveness the adverse impact of money laundering on the economic and political, and social aspects of the country may not be controlled.

Lakew (2016) was studied the practices of Anti Money Laundering and Countering the Financing of Terrorism compliance by the Ethiopian Financial Intelligence Center by taking 8

banks and 23 experts of the Ethiopian Financial Intelligence Center different directorates. In line with this, the major findings of the study revealed that FIC face a considerable challenges to implement and practice anti money laundering regime that is weak cooperation and coordination of law enforcement agency and regulatory bodies, the existence of large amount of informal sector and cash based economy, lack of sufficient skilled man power in the country, lack of willingness to report a suspicious report specially in private banks and rampant corruption are factor of challenges gained from the research finding.

Abebe (2016) also conducted a study on the practices and challenges of Commercial Banks on Anti-Money Laundering and Counter Financing of Terrorism through selected sample 6 banks and discussion with the concerned official of the Financial Intelligence Center of Ethiopia. The findings of this study revealed that deficiency exists in the Anti-Money Laundering and Counter Financing of Terrorism implementation of commercial banks in areas such as suspicious transaction reporting , implementing know your customer and customer due diligence measures and violating confidentiality code in contrast to regulatory requirements.

### **2.3. Knowledge Gap**

Although the researcher has been actively investigating the reason that affect the Anti-Money Laundering Regulations in the Ethiopian banking sector, the influence of legal compliance mechanisms, institutional capacity, technological advancement and international cooperation on the effectiveness of anti-money laundering regulations has so far not received much attention from researchers. In Ethiopia, as discussed in the empiric literature, studies by Ayalew (2016), Lakew (2016) and Abebe (2016) concentrated only on selected Ethiopian Commercial Banks and tried to demonstrate the efforts, difficulties and shortcomings they encountered during the implementation of AML. These narrow scopes call for more research on the subject of most of the challenges and vulnerabilities found in the selected banks may not be specific to the target banks alone. There is a strong chance that other banks will have similar vulnerabilities and problems. Further research into anti-money laundering processes in other banks in Ethiopia is essential to provide a general idea of the challenges that all banks face in the battle against money laundering. In addition, the Anti-Money Laundering Law and its effectiveness should also be studied from the perspective of the National Bank of Ethiopia. In line with this, the regulatory body (National Bank of Ethiopia) and the Ethiopian Financial Intelligence Center

included in the current study for better understanding and inclusiveness of the researcher's knowledge of all commercial banks. This research has therefore added a great deal and fills the void in literature on this side.

## **2.4. Hypothesis**

After a thorough theoretical and empirical literature reviews above, the following hypothesis is adopted to investigate the influence of each explanatory variable on the adoption of AML regulations in Ethiopian banking industry.

**H<sub>1</sub>:** Legal enforcement mechanism has a positive and statistically significant effect on adoption of AML regulation compliance.

**H<sub>2</sub>:** Institutional capacity has a positive and statistically significant effect on adoption of AML regulation compliance.

**H<sub>3</sub>:** International cooperation has a positive and statistically significant effect on adoption of AML regulation compliance.

**H<sub>4</sub>:** Technological advancement has a positive and statistically significant effect on adoption of AML regulation compliance.

## **2.5. Conceptual Framework**

Anti-money laundering regulation is needed to direct banks to act and prevent money laundering. Since the AML Regulations could be affected either positively or negatively by several dimensions. Thus, it shall better to make choice to evaluate the effectiveness of AML regulations in the Ethiopian banking industry.

Subsequently, this analysis will use faceted measurement approaches of the AML Regulations, which conceptualize that a researcher may create or choose a measuring tool for the number and types of each aspect being studied, since the types of facets are defined by the research problem being examined and may vary from study to study, organization to organization, and country to country.

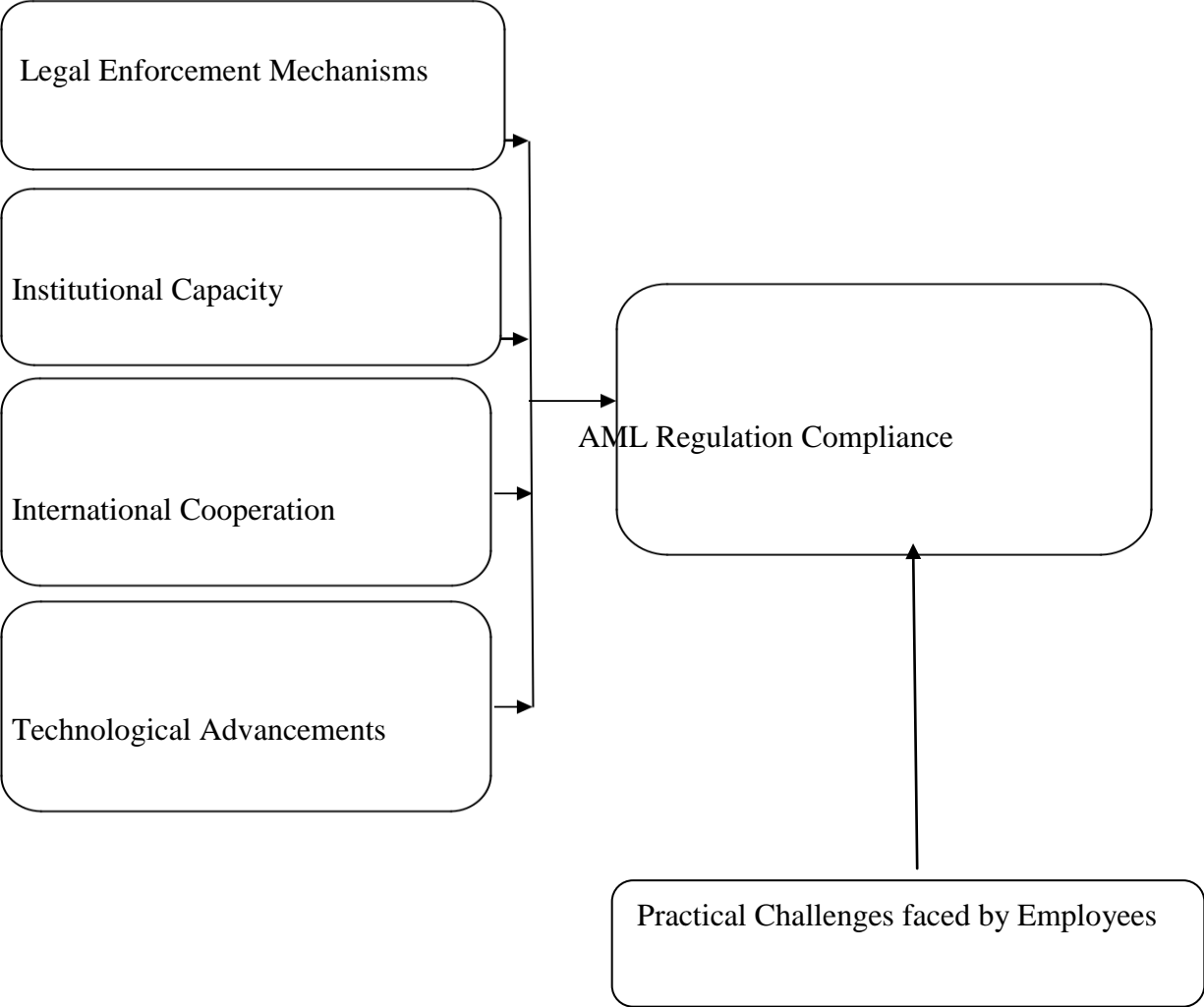
Accordingly, the report will adopt variables from the Mwirgi (2018) study to assess the effectiveness of AML regulations in the Ethiopian banking industry. These variables include institutional capacity, legal enforcement mechanisms international co-operation and technological advancement. These main variables, which are frequently discussed in the literature, are therefore briefly reviewed here under:

**Institutional capacity and adoption of Anti Money laundering regulations:** The Institutional capacity of AML agencies to execute AML legislation effectively is equally critical in the implementation of AML regulations. Sullivan (2015) argued that institutional quality is an indicator that measures the ability of governments to formulate and enforce sound policies and regulations that enable and encourage the growth of the private sector. In line with this, Fleming (2015) acknowledges that there is a negative relationship between institutional capability and the implementation of AML regulations. They pointed out that money laundering has a propensity to deter or impede legitimate enterprise, crooked financial structures, and eventually collapse the economy. As a consequence, institutional capacity affects AML, but it contributes to increased transaction costs due to the screening and reporting frequency of well-extended types of reports prepared by the banks. Fleming (2015), Goredama (2014) and Amali (2016) have suggested that institutional capacity is responsible for the effective implementation of anti-money laundering legislation, making banks more credible and attracting more clients and making significant profits.

**International cooperation and adoption of Anti Money laundering regulations:** Johnson (2012) suggested that due to the fluid nature of money laundering, international cooperation is necessary for the full effectiveness of the international anti money laundering regime. According to Irwin et al., (2011), although globalization has brought incredible benefits in terms of world trade, it has also resulted in a rise in international bribery and associated criminal opportunities. With the immediate existence and global destination of 'e' transactions, it is impossible for individual countries to effectively counter money laundering activities on their own. The lack of international cooperation therefore has a negative relationship with the implementation of anti-money laundering legislation and combined action among countries is necessary.

**Technological advancement and adoption of Anti Money laundering regulations:** Amali (2016) recommended that AML mechanism is structurally related to the technology system with

which it co-creates. Although algorithmic optimizations remain relevant and technology is essential to Anti-Money Laundering efforts, a richer nexus of interconnected human-and technology-generated decisions supports the detection of ML activity. According to Muriithi (2013), there is a negative relationship between technical developments and the implementation of anti-money laundering legislation. This is because money-launderers are in general are well acquainted in technical innovations and emerging technology, such as the Internet, provide speed and anonymity, potentially creating a distance between the launderer and law enforcement authorities. In line with this, the relationship between each explanatory variable and the effectiveness of anti-money laundering is clearly illustrated in the following diagram:



Source: Developed by the researcher adopting Mwirgi (2018)

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY AND DATA**

This part of the study was carried out carefully by the researcher as it is the blue print that guided us to achieve the desired goal. So, the research approach, the research design, target population, sample size and sampling methods, method of data collection, data sources, data collection procedure, data presentation, analysis, model specification, reliability, validity and ethical issues were explained rigorously.

#### **3.1. Research Approach**

This study is aimed to use a mixed method of research. Mixed methods research is an approach to inquiry that combines both qualitative and quantitative forms. It involves philosophical assumptions. The use of qualitative and quantitative approaches and the mixing of both approaches in a study (Creswell 2009), in selecting a research method one must need to consider the difference among the three methods since they differ in terms of paradigms, strategies and instrument to be employed in the study. Creswell (2009) identify six issues as a criterion that determines method selection: world views, strategies, instruments of data collection, research problems, experiences of the researcher and the audiences for whom the report is written. On the basis of these criteria mixed research method is found appropriate for this study as it involves pragmatic world views, collection of both quantitative and qualitative method reduce the limitation of a single method and capitalize strength of each approach.

#### **3.2. Research Design**

Research design answers questions such as: What techniques are used to gather data? What kind of sampling is used? The study design therefore includes an outline of what the researcher will do from devise research questions and their implications to the final analysis of data. A research design expresses both the structure of the research problem and the plan of investigation used to obtain empirical evidence on the relations of the problem (Cooper and Schindler, 2011).

In this regard the study is examined the key factors affecting the effectiveness of Anti-money laundering regulations as well as the challenges and Ethiopian banks while implementing anti-money laundering regulations.

Therefore, the study is mainly explanatory type and examines the activity and implementation based on qualitative and quantitative data through both primary and secondary data sources. A qualitative methodology deals with non-numerical data, whereas a quantitative methodology deals with numerical data. Hence, multiple linear regression models were used to explain the effect of legal enforcement mechanisms, institutional capacity, international cooperation and technological advancements on adoption of Anti-money laundering regulations.

### **3.3. Target population**

Research participants are units of analysis on which the investigation is focused to solve the research problem. Research participants are those respondents from whom relevant facts can be gathered to solve the problems. Participant selection must carefully be thought by the researchers in incorporating them in the study.

Subsequently, the target populations of the study the researcher generalize the results are 18 banks in Ethiopia of which sixteen are private banks and two states owned. Moreover, for more comprehension the target population includes National Bank of Ethiopia and Ethiopia Financial Intelligence Center.

### **3.4. Sampling and Sampling Techniques**

Sampling defined by Collins and Hussey (2006) as the technique of selecting essential elements from the population that will represent the population. In which, a sampling technique refers to the approach used by the researcher in drawing a sample from the population.

Purposive sampling technique is used for this study. A purposive sampling is a sample selected in a deliberative and non-random fashion to achieve a certain goal (Kumar, 2005).

Then, to achieve the study objective, using purposive sampling technique, in order to get more trustworthy and representative data all 141 division managers, senior compliance officers and compliance officers of 18 Ethiopian banks were included. Therefore, self-administered

questionnaires were distributed for these target respondents, as per information collected from Ethiopian Financial Intelligence Center.

Moreover, for more comprehension 8 key informants for in-depth interview from commercial banks risk and compliance directors, NBE and Ethiopia financial intelligence center focal persons selected for in-depth interview. Thus, a total of 149 respondents were included in this study.

### **3.5. Data Sources**

This study is collected and used data from both primary and secondary data sources.

**Primary Data Source:** Primary data is collected from the sample of target population through open-ended questionnaire which is adopted from Mwirgi (2018) study and through in-depth interviews designed by the researcher.

**Secondary Data Source:** This study is used secondary data which are gathered from different sources including regulators assessment report, annual reports of the banks, FATF recommendations, different directives which are available either in the bank's premises or websites, different books and related researches, journals and articles from internet websites and magazines.

### **3.6. Data Collection Procedure**

Quantitative data gathered through questionnaires so as to collect relevant and first-hand information from experts on the field. The researcher preferred questionnaires as the main data gathering instruments because it is easier to handle and is simpler for respondents to answer within a short period of time and enable the researcher to use representative samples as sources of data with a minimal bias. Accordingly, questionnaires prepared in English. After it gets approval the questionnaire distributed.

The questionnaire administered individually to all respondents of the study maintaining register of questionnaires, using a drop and pick up later means. The researcher assured that the respondent's information will be handled with strict confidentiality so as to get honest reply. Concomitantly, for more comprehension and to supplement the results of the quantitative data,

in-depth interview conducted in person with bank compliance heads, National Bank of Ethiopia and Financial Intelligence center officers so as to get in-depth information. To this end, structured interview guideline is prepared by the researcher and interview is conducted with target respondents. During the interview, the researcher took personal note with the full willingness of the participants.

### 3.7. Data Presentation and Analysis Technique

The data is collected from respondents is coded for analysis. Then after, the data then cleaned to ensure accuracy and completeness of the information is obtained. To address the objectives of the study quantitative data was analyzed using descriptive statistics and multiple regression analysis using SPSS Version 20 and MS excel.

On the other hand, qualitative data is analyzed by using a case study analysis method through organized facts into a logical order, categorize data into meaningful groups and interpret and scrutinized data for underlying themes and other patterns that characterize the case more broadly than a single piece of information can reveal.

### 3.8. Specification of the Mathematical Model

To investigate the relationship between each explanatory variable on the adoption of Anti-Money laundering regulations the following multiple equation model is used:

$$Y = \beta_0 + \beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\mu_i \dots\dots\dots (1)$$

Where Y= Anti-Money Laundering regulations, X1= legal enforcement mechanism, X2=institutional capacity, X3= international cooperation and X4= technological advancement. Bo is the intercept coefficient while B1, B2, B3 and B4 are the slope coefficients of the model. Where  $\mu_i$  is the disturbance term

Hence, based on the above multiple equations model and on the basis of selected variables for the study the functional relationship between the dependent and the explanatory variables is presented as follows:

Anti-Money Laundering Regulations =f (legal enforcement mechanisms, international cooperation, institutional capacity, technological advancements)

Anti-Money Laundering Regulations=  $B_0+B_1*\text{legal enforcement mechanisms}+B_2*\text{institutional capacity}+B_3*\text{international cooperation} +B_4*\text{technological advancements}+ U_i$

### **3.9. Reliability and Validity**

#### **3.9.1. Reliability**

Cronbach's alpha is a measure used to assess the reliability, or internal consistency, of a set of scale or test items. In other words, the reliability of any given measurement refers to the extent to which it is a consistent measure of a concept, and Cronbach's alpha is one way of measuring the strength of that consistency. Cronbach's alpha is compound by correlating the score for each scale item with the total score for each observation (usually individual survey respondents or test takers), and then comparing that to the variance for all individual item scores. According to rule of thumb a Cronbach's alpha value equals or exceeding 0.7 but less than 0.8 have generally considered being acceptable, a Cronbach's alpha value equals or exceeding 0.8 but less than 0.9 have generally considered good and a Cronbach's alpha value equals or exceeding 0.9 have to be considered an excellent internal item consistency. In line with this, before directly dealing with the analysis section the questionnaires internal consistence measures.

According to Kline (2005), Reliability coefficients around .90 are considered —excellent; coefficients around .80 are deemed —very good, while coefficients around .70 are —adequate. Hence as revealed in Appendix-III, the researcher has concluded and accepted the claim that all the constructs were in acceptable range in this study.

#### **3.9.2. Validity**

To check for the validity of the study parameters and to guard the study from spurious results, the researcher performed diagnostic tests for classical linear multiple regression assumptions such as test for normality, multicollinearity, heteroscedasticity and autocorrelation.

### **3.10. Ethical Issues**

In the context of research, ethics is defined as the appropriateness of the researcher's behavior in relation to the rights of the participants or subjects of the research work (Saunders, Lewis, and Thornhill, 2009). Respondents requested to provide information on voluntary basis, there was a prior communication about the purpose of the study, and confidentiality of the information was guaranteed. And the purpose of the study was disclosed in the introductory part of the questionnaire. Besides, misleading or deceptive statements were avoided, in the questionnaires.

## **CHAPTER FOUR**

### **DATA PRESENTATION AND ANALYSIS**

As discussed in the previous sections the major objective of this study is to investigate factors that determine anti-money laundering regulation and its effectiveness in Ethiopian banking industry. In this chapter, the collected data through questionnaires is presented, analyzed and interpreted. 141 questionnaires were distributed to compliance managerial and non-managerial staffs. As a result, the overall response rate was 100 percent. Therefore, the findings of the study were presented and analyzed in this part of the study. Since the data measurement scale that is used for this study is interval data (continuous), descriptive statistics recommended for ratio scale included the mean for central tendency and standard deviation for variability. Concomitantly, the data analysis procedures used for interval scale measurement would include but not limited to is regression analysis. The collected data was analyzed by the aid of the statistical software SPSS ver. 20 and Microsoft office excel.

Besides, as the data was obtained from interview is qualitative in nature and a detailed analysis was not made, rather the data which is collected from this source was analyzed systematically.

#### **4.1. Demographic characteristics of the respondents**

The table below summarizes, the demographic profiles of the participants (respondents) are analyzed based on the variables sex, age, and experience and job level.

**Table 4.1: Demographic distribution of respondents**

<b>Variables</b>	<b>Choices</b>	<b>Percentage</b>
<b>Gender</b>	Male	90.8
	Female	9.2
<b>Age</b>	26-30 years	3.5
	31-35 years	32.6
	36-40 years	35.5
	Above 40 years	28.4
<b>Level of Education</b>	Degree	68.8
	Masters Degree	31.2
<b>Experience</b>	Less than five year	25.5
	6-10 years	53.9
	11-15 years	18.5
	Above 16 years	2.1
<b>Job level</b>	Managerial	21.3
	Non-managerial	78.7

Source: Survey, 2021

The research would like to know gender of the respondents. The subject of gender is considered fundamental in this study largely because it could help the researcher get a balanced view from both female and male respondents. As revealed in table 4.1, the findings indicated that 90.8% of the respondents that participated in the study were male while 9.2% were female. The finding implies composition of gender affects the adoption of AML regulations in Ethiopian banks.

The study sought to investigate the composition of the respondents in terms of age brackets. This aimed at understanding how the respondents were distributed across the various age brackets and consequently their opinions on the topic of study. From the study, 3.5% the respondents fell between 26 and 30 years, then 32.6 % of the respondents fell between 31 and 35 years of age, 35.5% from 36 and 40 years, 28.4% of them were aged 40 years and above. From this we can deduce that compliance officers of Ethiopian banks are composed of different age group.

The study sought to investigate respondent's academic qualifications of compliance staffs and 68.8% are found to be Degree holders and the rest 31.2 % had acquired Master's Degree. The

outcomes indicate that respondents had at least a college degree and hence understood the information sought by this study.

The researcher was also interested to know years of respondents banking experience as it affects their response of understating the banking sector vulnerability to money laundering and effective means of combating it. The data from the study showed that respondents who were having working experience less than 5 years were 25.5%, between 6 and 10 years of banking experience were 53.9%, while between 11 and 15 years of banking experience are 18.5% and 2.1% were having more than 16 years of banking experience.

With regards to background of information the last item respondents requested were their job level in their organizational structure as it shades light on effective implementation of the AML regime and as depicted on Table 4.1 the majority 78.7% are non-managerial staffs and the rest 21.3% were working in a managerial position level.

## **4.2. Descriptive Analysis**

Descriptive statistics recommended for likert scale items included the mean for central tendency and standard deviation for variability. Standard deviation is used just to know the actual data position as it measure the amount of variation or dispersion of a set of data values. A low standard deviation ( $SD < 1$ ) indicates that the data points tend to be close to the mean, while a high standard deviation ( $SD > 1$ ) specifies that the data points are spread out over a wider range of values. Hence, to scrutinize anti-money laundering regulation and its effectiveness in Ethiopian banking industry descriptive analysis using frequency, percentage, mean and standard deviations were used.

Subsequent assessments were based on a five point likert Scale ranging from —To no extent (1) to —To a very extent (5) of which result is discussed below. i.e. A scale of 1 to 5 was provided where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5 is to a very great extent.

### 4.2.1. Bank’s Vulnerability to Money Laundering

To check the opinions of respondents with regards to Bank’s vulnerability to money laundering, the researcher included the above question and responses are disclosed below.

**Table 4.2: Bank’s Vulnerability to Money Laundering**

Bank’s Vulnerability to Money Laundering	Level	Frequency	Percent	Mean	SD
	To a little extent	1	0.5	4.46	0.67
	To a moderate extent	11	5.4		
	To a great extent	51	24.9		
	To a very extent	78	38.0		

Source: Survey, 2021

As depicted in table 4.2. large number of respondents, 129 or 91.5% believed that banks in Ethiopia affected to a great extent by Money Laundering activities. On the other hand, 11 (7.8%) and 1 (0.7%) respondents believed that banks in Ethiopia affected to a moderate and a little extent by money laundering activities respectively. The mean results of 4.46 with relatively low standard deviations value of 0.67 shows that most of the respondents of this study have opinion that banks are vulnerable to ML at least to a great extent. In general, according to the feedback from the respondents, Ethiopian banks are highly vulnerable to Money Laundering activities.

### On Bank’s Vulnerability to Predicate Offences

The Bank’s vulnerability to money laundering identified 10 criminal activities that are associated with generating proceeds of crime in Ethiopia. Corruption, Controband, Market Manipulation, Human Trafficking and Illegal Hawalla are sources of high level of threat. Hence, respondent’s opinions for ten (10) bank’s vulnerability items based on descriptive statistics are summarized as follows:

**Table 4.3: Bank’s Vulnerability to Predicate offences:**

Type of Offense	Level	Frequency	Percent	Mean	SD
Corruption	Little extent	4	2.8	4.57	0.719
	Moderate extent	7	5.0		
	Great extent	34	24.1		
	Very great extent	96	68.1		
Tax evasion	No extent	2	1.4	4.23	1.039
	Little extent	13	9.2		
	Moderate extent	12	8.5		
	Great extent	37	26.2		
	Very great extent	77	54.6		
Human Trafficking	No extent	5	3.5	4.43	1.023
	Little extent	6	4.3		
	Moderate extent	8	5.7		
	Great extent	27	19.1		
	Very great extent	95	67.4		
Contraband	No extent	2	1.4	4.47	0.930
	Little extent	8	5.7		
	Moderate extent	7	5.0		
	Great extent	29	20.6		
	Very great extent	95	67.4		
Fraud	No extent	9	6.4	3.82	1.272
	Little extent	17	12.1		
	Moderate extent	23	16.3		
	Great extent	33	23.4		
	Very great extent	59	41.8		
Illegal Hawala	No extent	-	-	4.43	0.856
	Little extent	7	5.0		
	Moderate extent	13	9.2		
	Great extent	33	23.4		
	Very great extent	88	62.4		
Arms trafficking	No extent	3	2.1	4.19	1.075
	Little extent	14	9.9		
	Moderate extent	10	7.1		
	Great extent	40	28.4		
	Very great extent	74	52.5		

Market Manipulation	No extent	2	1.4	4.44	0.913
	Little extent	7	5.0		
	Moderate extent	8	5.7		
	Great extent	34	24.1		
	Very great extent	90	63.8		
Counterfeiting currency	No extent	7	5.0	4.04	1.146
	Little extent	11	7.8		
	Moderate extent	14	9.9		
	Great extent	46	32.6		
	Very great extent	63	44.7		
Robbery/theft	No extent	2	1.4	4.14	1.025
	Little extent	13	9.2		
	Moderate extent	14	9.9		
	Great extent	46	32.6		
	Very great extent	66	46.8		

Source: Survey, 2021

On the table 4.3 above, respondents were given their opinion regarding the existence of the threats of corruption. Accordingly, on the first item, from the total respondents 130 (92.2%) are believed that corruption affects the Ethiopian banks with great extent, 4 (2.8%) believed with no to little extent and 7 (5.0%) believed with moderate extent. The results indicate that corruption is believed to be one of the potential threats among for Ethiopian banks.

The second item respondents were asked to give their opinion was on the predicate offense of Tax evasion. From a total respondents 77(54.6%) believed that tax evasion affects Ethiopian banks to a very great extent, 37(26.2%) to a great extent, 12(8.5%) with a moderate extent, 13 (9.2%) with little extent and 2 (1.4%) with no extent. It is indicated that according to respondent banks, can be used by criminals to hide income generated from Tax-evasion.

The third item respondents were asked to give their opinion was on the predicate offense of Human Trafficking. From a total respondents 95 (67.4%) believed that human trafficking affects Ethiopian banks to a very great extent, 27(19.1%) to a great extent, 8(5.7%) with a moderate extent, 6 (4.3%) with little extent and 5 (3.5%) with no extent. The result showed that banks in Ethiopia can be used by human traffickers to launder their illicit fund.

The fourth item respondents were asked to give their opinion was on the predicate offense of contraband. From a total respondents 95 (67.4%) believed that contraband affects Ethiopian banks to a very great extent, 29(20.6%) to a great extent, 7(5%) with a moderate extent, 8 (5.7%) with little extent and 2 (1.4%) with no extent. The result showed that banks in Ethiopia can be used by contrabandists to launder their illicit fund.

The fifth item respondents were asked to give their opinion was on the predicate offense of fraud. From a total respondents 59 (41.8%) believed that fraud affects Ethiopian banks to a very great extent, 33(23.4%) to a great extent, 23(16.3%) with a moderate extent, 17 (12.1%) with little extent and 9 (6.4%) with no extent. The result showed that banks in Ethiopia can be used by fraudsters to launder their illicit fund.

The sixth item respondents were asked to give their opinion was on the predicate offense of illegal hawala. From a total respondents 88 (62.4%) believed that illegal hawala affects Ethiopian banks to a very great extent, 33(23.4%) to a great extent, 13(9.2%) with a moderate extent, 7 (5%) with little extent. The result showed that banks in Ethiopia can be used by those persons who are providing money transfer having no license.

The seventh item respondents were asked to give their opinion was on the predicate offense of arms trafficking. From a total respondents 74 (52.5%) believed that arms traffickers affects Ethiopian banks to a very great extent, 40(28.4%) to a great extent, 10(7.1%) with a moderate extent, 14 (9.9%) with little extent and 3 (2.2%) with no extent. The result showed that banks in Ethiopia can be used by arms traffickers to launder their illicit fund.

The eighth item respondents were asked to give their opinion was on the predicate offense of Market Manipulations. From a total respondents 90 (63.8%) believed that market manipulation affects Ethiopian banks to a very great extent, 34(24.1%) to a great extent, 8(5.7%) with a moderate extent, 7 (5%) with little extent and 2 (1.4%) with no extent. The result showed that banks in Ethiopia can be used by market manipulators so as to clean up their ill-gotten money.

The ninth item respondents were asked to give their opinion was on the predicate offense of counterfeiting of currency notes. From a total respondents 63 (44.7%) believed that counterfeiting of currency notes affects Ethiopian banks to a very great extent, 46(32.6%) to a

great extent, 14(9.9%) with a moderate extent, 13(9.2%) with little extent and 2 (1.4%) with no extent. The result showed that banks in Ethiopia can be used by criminals' counterfeit notes so as to legitimize their illicit gains.

The tenth item respondents were asked to give their opinion was on the predicate offense of robbery and theft. From a total respondents 66 (46.8%) believed that ill-gotten money generated from either robbery or theft affects Ethiopian banks to a very great extent, 46(32.6%) to a great extent, 14(9.9%) with a moderate extent, 13 (9.2%) with little extent and 2 (1.4%) with no extent. The result showed that banks in Ethiopia can be used by criminals so to hide and legitimize gains made from robbery or theft.

In general, since the overall score of the mean values calculated across the ten predicate offences is 4.28, one can conclude that, those 10 criminal activities are considered serious threats for Ethiopian banking industry by the respondents.

#### 4.2.2. Implementation status of Anti-Money Laundering Policies

**Table 4.4: Implementation status of your bank to anti-money laundering policies**

	<b>Level</b>	<b>Frequency</b>	<b>Percent</b>	<b>Mean</b>	<b>SD</b>
<b>Implementation status of your bank to Anti-Money Laundering Policies</b>	To no extent	1	0.5	3.52	0.875
	To a little extent	11	5.4		
	To a moderate extent	64	31.2		
	To a great extent	43	21.0		
	To a very extent	22	10.7		

Source: Survey, 2021

The study is to investigate AML regulation effectiveness in Ethiopian banking industry. Hence, respondents were asked to indicate the extent in which their bank's implemented the policy. Accordingly, the study result depicted in table 4.4 above, 15.6% of the respondents responded that their bank's implemented the AML policy to a very great extent, while 30.5% of them recapitulated that their bank implemented the policy to a great extent, and 45.4 % of them stated that their bank implemented AML policy to a moderate extent. The rest 7.8% and 0.7% of them

stated that their bank implemented the policy to little and no extent respectively. From these results Ethiopian banks implement AML policy to more or less to a moderate extent.

The study further sought to ascertain the extent in which, banks implemented on the different major aspects of the AML directive. The response obtained summarized in the table 4.5 below.

### 4.2.3. Aspects of Anti- Money Laundering Policies

**Table 4.5: Aspects of Anti-Money Laundering Policies**

Aspects of ML Policies	Level	Frequency	Percent	Mean	SD
KYC Policies	No extent	2	1.4	4.30	0.910
	Little extent	6	4.3		
	Moderate extent	13	9.2		
	Great extent	46	32.6		
	Very great extent	74	52.5		
Monitoring of Accounts	No extent	3	2.1	3.96	0.992
	Little extent	10	7.1		
	Moderate extent	24	17.0		
	Great extent	57	40.4		
	Very great extent	47	33.3		
Risk Assessment	No extent	5	3.5	4.11	1.047
	Little extent	10	7.1		
	Moderate extent	10	7.1		
	Great extent	56	39.7		
	Very great extent	60	42.6		
Customer Due Diligence	No extent	5	3.5	4.00	1.146
	Little extent	14	9.9		
	Moderate extent	20	14.2		
	Great extent	39	27.7		
	Very great extent	63	44.7		

In Keeping of Records	No extent	15	10.6	3.33	1.355
	Little extent	31	22.0		
	Moderate extent	25	17.7		
	Great extent	33	23.4		
	Very great extent	37	26.2		
In relation with politically exposed person	No extent	3	2.1	4.13	0.994
	Little extent	8	5.7		
	Moderate extent	19	13.5		
	Great extent	48	34.0		
	Very great extent	63	44.7		
In recording of suspicious transaction	No extent	1	0.7	4.21	0.937
	Little extent	10	7.1		
	Moderate extent	14	9.9		
	Great extent	50	35.5		
	Very great extent	66	46.8		
Awareness and Training	No extent	2	1.4	4.33	0.882
	Little extent	3	2.1		
	Moderate extent	18	12.8		
	Great extent	42	29.8		
	Very great extent	76	53.9		

Source: Survey, 2021

As revealed in table 4.5 above, with regards implementing KYC policies 52.5 % of them said that implement it to a very great extent while 32.6 % reported that they implement to a great extent. On the other hand, 9.2%, 4.3% and 1.4% of respondents believed that implement it to moderate, little and no extent respectively.

The second item respondents were asked to give their opinion was on Monitoring of Accounts and transactions as it helps to effectively implement the AML regime. And from a total of

respondents 33.3% implement account monitoring to a very great extent and 40.4 % implement to a great extent. Similarly, 17%, 7.1% and 2.1% of them said implement account monitoring to moderate, little and no extent respectively.

The third item respondents were asked to give their opinion was on making risk assessment as it helps in identifying areas in which the bank is very much susceptible to ML risk and effectively implements the AML regime. And from a total of respondents 42.6% implement risk assessment to a very great extent and 39.7 % implement to a great extent. Likewise, 7.1%, 7.1% and 3.5% respondents believed banks implement risk assessment to moderate, little and no extent respectively.

The fourth aspect of AML policy respondents were asked to give their opinion was on customer due-diligence implementation. And from a total of respondents 44.7% implement customer due-diligence to a very great extent and 27.7 % implement to a great extent. While 14.2%, 9.9% and 3.5% believed banks implement customer due diligence to moderate, little and no extent respectively.

The fifth aspect of AML policy implementation respondents were asked to give their opinion was on in Keeping of records. And from a total of respondents 26.2% implement record keeping to a very great extent and 23.4 % implement to a great extent, 17.7 % to a moderate extent ,22% to a little extent and 10.6% to no extent respectively.

The sixth item respondents were asked to give their opinion was on determination of Politically Exposed Persons as it helps to effectively combat corruption consecutively ML regime, and from a total of respondents 44.7 implement PEPs determination to a very great extent and 34 %to a great extent. On the other hand, 13.5%, 5.7% and 2.1% respondents believed that banks implement PEPs to moderate, little and no extent respectively.

The seventh item respondents were asked to give their opinion was on reporting of suspicious transactions to FIC, and from a total of respondents 46.8% report to a very great extent and 35.5 %to a great extent. And the rest 9.9%, 7.1% and 0.7% of them said report to moderate, little and no extent respectively.

The last item respondents were asked to give their opinion was their attempt in creating awareness and provision of training, and from a total of respondents 53.9 % implement this aspect of the AML policy to a very great extent while 29.8%, 12.8%, 2.1%, 1.4% responded they implement it to a great extent, moderate extent, little extent and no extent respectively.

Finally, and most importantly when the mean results are thoroughly scrutinized, it is obvious that the mean scores of all variables are 3.33 and above which entails that almost all the responses spread between great extent and very great extent.

The respondents were also asked to indicate the extent in which the AML directive affected the following aspects of their bank.

#### 4.2.4. Aspects of Money Laundering

**Table 4.6: Aspects of Money Laundering**

Aspects of Money Laundering	Level	Frequency	Percent	Mean	SD
Prohibited Business	No extent	3	2.1	3.86	1.032
	Little extent	17	12.1		
	Moderate extent	17	12.1		
	Great extent	64	45.4		
	Very great extent	40	28.4		
Reputational Risk	No extent	3	2.1	4.26	0.865
	Little extent	4	2.8		
	Moderate extent	9	6.4		
	Great extent	63	44.7		
	Very great extent	62	44.0		
Termination of banking business	No extent	5	3.5	4.08	0.979
	Little extent	4	2.8		
	Moderate extent	20	14.2		
	Great extent	58	41.1		
	Very great extent	54	38.3		
Penalties and enforcement of law	No extent	4	2.8	4.13	0.985
	Little extent	7	5.0		
	Moderate extent	15	10.6		
	Great extent	56	39.7		
	Very great extent	59	41.8		

Source: Survey, 2021

The results presented in table 4.6 depicted that from a total of respondents 45.4 % felt that the AML directive help them not to deal with prohibited business to a great extent and 28.4% ,12.1%, 12.1% and 2.1% to a very great, moderate, little and no extent respectively.

With regards to preventing banks from reputational risk 44% of respondents indicated that the AML directive helped them to a very great extent and 44.7% ,6.4%, 2.8% and 2.1% to a great , moderate, little and no extent respectively.

When respondents were asked to give their opinion the impact of the AML directive in assisting them not to be liable of termination of banking business by other financial institutions 41.1% responded it helped them to a great extent and 38.3%, 14.2%, 2.8%, and 3.5% to a very great, moderate, little and no extent respectively.

The last item respondents were asked to give their opinion was how the directive affected them not being liable to penalties and from the total of respondents 41.8% felt the directive helped to not to be penalized to a very great extent and 39.7%, 10.6%, 5% and 2.8% to a great , a moderate, a little and no extent respectively.

In general, since the overall score of the mean values calculated across the four aspects of money laundering impacts banks is 4.13, in which one concludes that banks activity could be hampered by not effectively implementing the AML directive.

#### 4.2.5. Legal Enforcement Mechanism

**On the extent of legal enforcement mechanisms in the adoption of AML Compliance in banks:**

**Table 4.7: Legal Enforcement Mechanism**

	Level	Frequency	Percent	Mean	SD
<b>Legal Enforcement Mechanism</b>	To no extent	3	2.1	4.26	0.816
	To a little extent	2	1.4		
	To a moderate extent	9	6.4		
	To a great extent	68	48.2		
	To a very extent	59	41.8		

Source: Survey, 2021

With the objective of identifying the influence of legal enforcement mechanisms respondents were asked their opinion and as depicted on table 4.7, 48.2% respondents indicated that the legal enforcement mechanisms affect the extent of AML compliance in their bank to a great extent and 41.8%, 6.4%, 2.1% and 1.4% to a very great extent, to a moderate extent, to no extent and little extent respectively.

#### 4.2.6. Aspects of Legal Enforcement Mechanisms

**Table 4.8: Aspects of Legal Enforcement Mechanisms**

<b>Aspects of Legal Enforcement Mechanisms</b>	<b>Level</b>	<b>Frequency</b>	<b>Percent</b>	<b>Mean</b>	<b>SD</b>
Criminalization of ML	No extent	2	1.4	4.50	0.833
	Little extent	5	3.5		
	Moderate extent	4	2.8		
	Great extent	39	27.7		
	Very great extent	91	34.5		
Investigation capacity of FIC	No extent	4	2.8	4.13	1.023
	Little extent	9	6.4		
	Moderate extent	14	9.9		
	Great extent	51	36.2		
	Very great extent	63	44.7		
Integrity of FIC	No extent	4	2.8	4.33	0.976
	Little extent	7	5.0		
	Moderate extent	6	4.3		
	Great extent	45	31.9		
	Very great extent	79	56.0		
Unavailability of National ID	No extent	1	0.7	4.46	0.770
	Little extent	2	1.4		
	Moderate extent	12	8.5		
	Great extent	42	29.8		
	Very great extent	84	59.6		

Source: Survey, 2021

Further analysis of which legal enforcement mechanisms affect Ethiopian banks in the adoption of the AML directive revealed that criminalization of money launderers, as revealed in table 4.8 above, 34.5 % agree it affects to a very great extent and the rest 27.7%, 3.5%, 2.8% and 1.4% to a great extent, to a little extent, to a moderate extent and no extent respectively.

When asked on investigating capacity of FIC, respondents gave their opinion the extent from a total of respondents 44.7% responded that it affects to a very great extent , while 36.2%, 9.9%, 6.4% and 2.8% to a great extent, to a moderate extent, to a little extent and to no extent respectively.

They were asked to indicate about integrity of Financial Intelligence Center affected adoption of AML directive and from a total of respondents 56% responded that it affects to a very great extent and 31.9% to a great extent. On the other hand, 5%, 4.3% and 2.8% respondents responded that it affects to a little extent, moderate extent and no extent respectively.

In addition they were asked the extent of unavailability of National ID, and they responded it affects effectiveness of AML regime in Ethiopian banking 59.6% to a very great extent and 29.8% to a great extent. And the rest 8.5%, 1.4% and 0.7% respondents believed it affects effectiveness of AML regime to a moderate, a little and no extent levels respectively.

In general, since the overall score of the mean values of the legal enforcement mechanisms is 4.355 one can conclude that, those four items could impact effectiveness of AML.

#### 4.2.7. Institutional Capacity

**On the extent of institutional capacity mechanisms in the adoption of anti-money laundering regulations in banks:**

**Table 4.9: Institutional Capacity of a bank**

	<b>Level</b>	<b>Frequency</b>	<b>Percent</b>	<b>Mean</b>	<b>SD</b>
<b>Institutional capacity Influence</b>	To no extent	1	0.7	4.32	0.72
	To a little extent	2	1.4		
	To a moderate extent	8	5.7		
	To a great extent	70	49.6		
	To a very extent	60	42.6		

Source: Survey, 2021

With the aim of identifying the influence of the banks internal compliance arrangement, commitment of bank officials, skills and expertise respondents were asked their opinion on the banks institutional capacity and as depicted on table 4.9 from a total of respondents 49.6 % respondent that institutional capacity affect to a great extent and 42.6% gave their opinion saying that institutional capacity of the bank affect effectiveness of AML regime to a very great extent. The rest 5.7%, 1.4% and 0.7% respondents believed that institutional capacity affects to a moderate extent, a little extent and no extent respectively.

## 4.2.8. Aspects of Institutional Capacity

**Table 4.10: Aspects of Institutional Capacity**

Aspects of Institutional Capacity	Level	Frequency	Percent	Mean	SD
All Staffs Knowledge	No extent	6	4.3	3.38	1.268
	Little extent	33	23.4		
	Moderate extent	14	9.9		
	Great extent	43	30.5		
	Very great extent	45	31.9		
Independence of Compliance Unit	No extent	8	5.7	3.47	1.285
	Little extent	30	21.3		
	Moderate extent	26	18.4		
	Great extent	33	23.4		
	Very great extent	44	31.2		
Commitment of bank officials	No extent	29	20.6	2.73	1.218
	Little extent	33	23.4		
	Moderate extent	34	24.1		
	Great extent	37	26.2		
	Very great extent	8	5.7		

Source: Survey, 2021

Further analysis how institutional capacity affects Ethiopian banks in the adoption of the AML directive was conducted. In line with this, 31.9 % respondents agree all bank staff knowledge affects to a very great extent and 30.5% of respondents agree that it affects to a great extent. Correspondingly, 23.4%, 9.9% and 4.3% respondents said that all banks staff knowledge affects to a little extent, a moderate extent and no extent respectively.

When asked on the need of independency of compliance unit to report to BOD's from a total of respondents 31.2 % agree to a very great extent and 23.4% to a great extent. Concomitantly, 21.3%, 18.4% and 5.7% respondents agreed that the need of independence unit to little, moderate and no extent respectively.

In connection with institutional capacity respondents were asked the need of commitment of the bank main officials like BOD's and members of executive management to effectively implement the AML directive 26.2 % agree to a very great extent and 24.1 % to a moderate extent. The rest 23.4%, 20.6% and 5.7% respondents agree to little, no extent and very great extent respectively.

Correspondingly, the standard deviation scores on aspects of institutional capacity items were overall spread far from the mean, with the broadest range being on independence of compliance unit.

#### 4.2.9. International Co-operation

**On the extent of correspondent banks and remittance service agent's influence in the adoption of AML regime in banks:**

**Table 4.11: Correspondent Banks and Remittance service agent's pressure**

	Level	Frequency	Percent	Mean	SD
<b>Correspondent Banks and Remittance Service agent's Pressure</b>	To no extent	3	2.1	3.68	1.123
	To a little extent	22	15.6		
	To a moderate extent	34	24.1		
	To a great extent	40	28.4		
	To a very extent	42	29.8		

Source: Survey, 2021

As indicated in table 4.11 above, with the aim of implementing international standards Correspondent banks have been seen pressurizing Ethiopian banks to implement the AML standards and to measure their influence respondents were asked their opinion how it affects them in which they have responded it affects them 29.8% to a very great extent and 28.4% to a great extent. On the other hand, 24.1%, 15.6% and 2.1% they have responded it affects them to a moderate extent, to a little extent and no extent respectively.

Besides, the mean result on remittance service agent’s pressure has shown a value of 3.68 and a standard deviation value of 1.123. The standard deviation is also relatively higher, indicating high variation in response.

**On the extent of correctness of correspondent banks request response:**

**Table 4.12: Correctness of response on correspondent bank’s request**

	<b>Level</b>	<b>Frequency</b>	<b>Percent</b>	<b>Mean</b>	<b>SD</b>
<b>Correctness of response on correspondent bank’s request</b>	To no extent	3	2.1	3.77	1.10
	To a little extent	18	12.8		
	To a moderate extent	33	23.4		
	To a great extent	42	29.8		
	To a very extent	45	31.9		

Source: Survey, 2021

Furthermore, as depicted in table 4.12 above, when respondents were asked how correctly they respond to correspondent banks 31.9% of them responded that they give correct answers to a very great extent and 29.8% of them responded they give correct answers to a great extent. Likewise, 23.4%, 12.8% and 2.1% they give correct answers to a moderate extent, little extent and no extent respectively. The standard deviation results in table 4.12 depict that there was great disparity among the respondents.

#### **4.2.10. Technological Advancement**

**On the extent of technological advancements in the adoption of AML regulations in banks:**

**Table 4.13: Technological Advancements**

	<b>Level</b>	<b>Frequency</b>	<b>Percent</b>	<b>Mean</b>	<b>SD</b>
<b>Technological Advancements Influence</b>	To no extent	6	4.3	3.70	1.069
	To a little extent	11	7.8		
	To a moderate extent	39	27.7		
	To a great extent	49	34.8		
	To a very extent	36	25.5		

Source: Survey, 2021

As revealed in table 4.13, with the aim of identifying the influence IT system to effectively implement the AML regime, respondents were asked the extent in which technological advancement could affect them and from a total of respondents 34.8% of them responded that it affects them to a very great extent, 25.5% to a great extent and 27.7% of them to a moderate extent. And the rest 7.8% and 4.3% it affects them to a little extent and no extent respectively.

### On the banks IT system

**Table 4.14: IT System banks are using**

<b>IT System banks are using Impact on ML</b>	<b>Level</b>	<b>Frequency</b>	<b>Percent</b>	<b>Mean</b>	<b>SD</b>
	To no extent	6	4.3	3.79	1.174
	To a little extent	16	11.3		
	To a moderate extent	30	21.3		
	To a great extent	38	27.0		
	To a very extent	51	36.2		

Source: Survey, 2021

As revealed in table 4.14, the study sought to identify how they rate the IT system they are using in their bank to identifying suspicious transaction and perform KYC, and from a total of respondents 36.2% responded that it helps them to a very great extent, 27 % of them to a great extent and 21.3% to a moderate extent. And the rest 11.3% and 4.3% respondents believed to a little extent and no extent respectively. The result depicted that respondents are not very much comfortable on the existing AML technology to effectively implement the AML regime on the hand as their risk profile changed due to the growth of electronic bank.

### 4.3. Assumptions of Multiple Linear Regression Model

Before directly dealing with the regression model the researcher conducted important tests in relating to the classical linear regression model to guard against the possibility of obtaining and interpreting spurious regression results. The results of the tests are presented in the following sections. These were required to show that the estimates technique, Ordinary Least Squares (OLS) had a number of desirable properties usually known as Best Linear Unbiased Estimators. As a result, the researcher tested the Normality, Multicollinearity, Autocorrelation and

Heteroscedasticity tests using appropriate tests and the results of the tests are presented here under:

### **Normality Test**

The histogram of residuals allows us to check the extent to which the residuals are normally distributed. The residuals histogram in Appendix IV shows a fairly normal distribution and all the variables are negatively skewed which is more of approached to normal distribution. Thus, the researcher concluded that the study result analysis of the explanatory variable is normally distributed as expected.

### **Multicollinearity**

If one explanatory variable has shown exact linear relation with the other explanatory variable, then the model suffer from perfect collinearity, as a result it cannot be estimated or satisfied the OLS properties. For the purpose of measuring the existence of multicollinearity problem in the model the researcher was used Variance Inflation Factor (VIF). As noted by Gujarati (2004), the rule of thumb suggested that if variance inflation factor (VIF) exactly or exceeds 10 there is a problem of multicollinearity. As shown in Appendix V the researcher measured the VIF and gets a value of less than 10 for all the explanatory variables. Consequently, one can know that there is no serious multicollinearity problem among the variables that can be included in the model estimation.

### **Autocorrelation**

According to Gujarati (2004), the best renowned test for detecting serial correlation is Durbin Watson test. The Durbin Watson statistics has a value between 0 and 4 both inclusive. Consequently, if the  $d$  computed nearest to 2 in application, it is assumed that there is no autocorrelation problem. Thus, as shown table 4.15 below the computed “ $d$ ” in this study was 1.782 which is nearest to 2 implying the absence of autocorrelation problem in the specified multiple equation models.

### **Heteroscedasticity**

Heteroscedasticity occurs when the error variance has non-constant. In line with this, it can think of the disturbance for each observation as being drawn from a different distribution with a different variance. In other words, the variance of the observed value of the dependent variable around the regression line is non-constant. We can think of each observed value of the dependent

variable as being drawn from a different conditional probability distribution with a different conditional variance.

The researcher examines a scatter plot of the residuals against the predicted values to evaluate whether the homogeneity of variance assumption is met. If it is met, there should be no pattern to the residuals plotted against the predicted values. In the scatter plot shown in Appendix VI, one can see a staircase pattern, which suggests heteroscedasticity is not a problem for the model.

#### 4.4. Results and Discussions of Multiple Regression Models

To complement the descriptive results, the researcher conducted regression analysis. In regression model, one variable, called the dependent variable, is expressed as a linear function of one or more other variables, called the explanatory variables. In such model it is assumed implicitly that causal relationships, if any, between the dependent and explanatory variables flow in one direction only, namely, from the explanatory variables to the dependent variable. Since correlation doesn't leads to causation, the researcher used a regression analysis in order to verify the influence/ effects of each independent variable (legal enforcement mechanism, institutional capacity, international cooperation and technological advancement) on the dependent variable that is AML regulations effectiveness. In line with this, the overall regression analysis results and discussions were presented as follows:

**Table 4.15: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.649 <sup>a</sup>	.422	.401	.312

Source: Own computation via SPSS Version 20

##### 4.4.1. Goodness of Fit Statistics

Goodness of fit statistics intended to show how well does the model containing the explanatory variables that can explain variations in the dependent variable. As depicted in table 4.15 above, the adjusted R-squared (the coefficient of determination) of the model was 0.442. The result indicated that, the change in institutional capacity, international cooperation, legal enforcements and technological advancements collectively explains 44.2% of the variation in AML regulations

effectiveness. In contrary, the remaining 56.8% of changes on AML regulations were explained by other exogenous factors which were not included in the current study.

**Table 4.16: Coefficients of multiple regression models**

VARIABLES	<i>Coefficients</i>
Institutional Capacity	0.348*** (0.078)
International Cooperation	0.105** (0.00257)
Technological Advancement	0.686 (0.453)
Legal Enforcements	0.426** (0.193)
Constant	1.444*** (0.507)
N	141

Standard errors in parentheses,\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Source: own survey result (2021)

#### **4.4.2. Discussions and Interpretations on Significant Explanatory Variables**

As depicted in table 4.16 above, variables that were found to be statistically significant includes: institutional capacity, legal enforcements mechanisms and international cooperation. Hence, those significant explanatory variables were found to be important factors to influence AML regulations effectiveness in Ethiopian banking. In contrary, technological advancements is not statistically significant even at the 10% significance level.

The coefficient estimates of the significant explanatory variables that are institutional capacity, legal enforcements and international cooperation were 0.348, 0.426 and 0.105 respectively. In light of the above summarized regression model the possible explanation for each significant explanatory variable as follows:

### **Legal Enforcement Mechanisms**

In view of the above regression model in table 4.16, the relationship between AML regulations and legal enforcement mechanisms were positive, the relationships is statistically significant at 5% level of significance. The slope of legal enforcement mechanisms is 0.426. The result suggested that, the adoption of AML regulations increases by a factor of 0.426 when a legal enforcement mechanism increases by one unit keeping other factors constant.

### **Institutional Capacity**

The coefficient estimate of institutional capacity in the above regression model revealed positive and statistically significant association with AML regulations effectiveness at 1% level of significance. The slope of institutional capacity is 0.348. The magnitude of the coefficient indicated that AML regulations effectiveness increase by a factor of 0.348 when institutional capacity increases by one unit, keeping other independent variables constant.

### **International Cooperation**

As revealed in table 4.16 above, the relationship between international cooperation and AML regulation was negative and statistically significant at 5% level of significance. The slope of international cooperation is 0.105. The result indicated that AML regulation effectiveness increase by a factor of 0.105 when international cooperation increases by one unit, keeping other explanatory variables constant.

### **Technological Advancement**

Although the coefficient of Technological Advancement has the expected positive sign, the result indicated that it is not significant at even 10%. Hence, interpretation is not provided. The findings of the study is inconsistent with Fleming (2015) agree that there exist a negative relationship between institutional capacity and adoption of anti money laundering regulations but

consistent with Muriithi (2013) there exists a negative relationship between technological advancements and adoption of AML regulations effectiveness.

#### **4.5. Results of In-depth Interview**

The purpose of qualitative research approach in this particular study was to supplement the quantitative approach and in investigating other key factors and challenges that could not be obtained from secondary sources. Accordingly, key informant interview with 6 senior bank compliance officers, one National Bank of Ethiopia senior expert and one Ethiopian Financial Intelligence Center expert was conducted.

The interviewees were those with major responsibility of ensuring the banking sector to effectively implement in the AML regime and they had over 10 years of experience. To this end, the interview questions were focused on the identification of challenges and factors that influence effectiveness of AML regulation specific to Ethiopian Banking industry that were not incorporated in the quantitative part of the study.

It was learned that institutional capacity components play a major role in enabling bank employees to implement the letter and the spirit of the law governing AML compliance. Particularly, the inadequate commitment by BOD/Senior management and the competing objectives of deposit maximization with compliance pose a threat for the vulnerabilities identified in the quantitative section 4.2.1.

Same as with quantitative analysis the following legal enforcement mechanisms impact confirmed with the interview. Such as integrity and independence of Financial Intelligence Center (FIC) affect the combating ability of money laundering as the reporting entities like banks needs to ensure what they are reporting is kept in a confidential manner.

So as not to implement effectively the AML regime respondents agree on the challenge of FIC notbeing equipped with adequate human resource facilities to analyze suspicious transactions. Moreover, it is using in-house developed software, which is not standard analytical software.

The recent regulation that limits physical possession of currency notes will be challenging for criminals to keep their ill-gotten fund in cash.

Respondents from the banks side said that, as FIC does not give either feedback or report status of reported suspicious transactions reporting officers are discouraged to report suspicious transactions.

On the other hand towards effective implementation of the AML regime the Financial Intelligence Center projected the problem on banks as there is a misconception of losing customers and lagging behind of the market.

Respondents identified the challenge of human resource constraint at compliance unit of banks affect adherence to AML regulation compliance. The result is the same as with institutional capacity analysis found in questionnaire.

So as to enhance effectiveness of AML regime respondents stressed that offenders needs to be criminalized and their property generated from ML needs to be confiscated.

In addition most of respondents agree that the Financial Intelligence Center's crime investigators needs to be capacitated as a knowledge gap is observed in analyzing reported suspicious customers.

The assessment also points out that the prevalent growth of mobile, agent and internet banking products increase vulnerability of banks to money laundering risk.

Foreign financial institutions are reported to be sensitive to money laundering reputational risk and exert pressure on banks to meet AML international standards.

The current system of availing national ID card might be abused as it gives opportunity a person to have multiple forged IDs, in which the respondents said that efforts of Ministry of Peace in issuance of national ID needs to be expedited so as to implement the AML regulation compliance effectively.

Hence, the analysis conducted in this chapter provided a comprehensive list of findings, if properly addressed, could improve the AML regulations compliance effectiveness in Ethiopian banking. In the next chapter the researcher focused on what it considers to be the major findings emerged from the analysis. Besides, the researcher concludes and suggests based on the study findings.

## CHAPTER FIVE

### CONCLUSIONS AND RECOMMENDATIONS

This study is sought to investigate the factors for effective anti-money laundering compliance in the Ethiopian banking industry. Correspondingly, the various sections are presented in this chapter include summary of major findings, conclusions and recommendations.

#### 5.1. Conclusions

The main objective of this study was to have an in-depth look at on the factors that affect Anti-Money laundering compliance in Ethiopian banking industry. After a thorough analysis the researcher has concluded that major predicate offenses criminals generate income, legal enforcement mechanisms, institutional capacity of banks, pressures of correspondent banks and money transfer agents either directly or indirectly affects the combating of money laundering. In line with this, the assessment identified that the vulnerability of the banking sector in Ethiopia to money laundering is high as the AML requirements are not fully implemented by banks.

Specifically, the analysis on predicate offenses reveals that corruption, tax evasion, human trafficking, contraband, fraud, illegal hawala, arms trafficking, market manipulations, counterfeiting of currency notes and robbery are sources of high level threat which makes the banking sector vulnerable to money laundering.

Apparently, the assessment indicates that banks are aware and strive to implement the Anti-Money Laundering directive so as to maintain their reputation being not linked with criminal activities, not being liable of termination of banking relationship by another financial institutions and fulfil their AML obligation taking adequate measures not to be penalized by supervisory organs of Ethiopian Financial Intelligence Canter (EFIC) and National Bank of Ethiopia (NBE).

The study also identified that legal enforcement mechanisms are essential for the effective implementation of the AML directive though investigative capacity and integrity of FIC officers is found to be not commendable by the respondents. Besides, the current system issuance of National ID allows a person to have multiple IDs which makes it difficult to identify the right person and is a challenging task for banks.

Furthermore, the study deduces that banks own institutional capacity is also a critical factor on the effective implementation of the AML regime this includes staff and management being equipped with adequate knowledge on the concept and methods of money laundering, establishment of independent compliance unit being directly accountable to the BODs so as to report freely breaches of compliance matters and unwavering commitment of bank officials were stated. Finally, the study concludes that most of banks are not equipped with a system that can support them either to perform Know Your Customer or identifying of suspicious transactions.

## **5.2. Recommendations**

So far, the analysis conducted in this study provided a bird's eye view on the factors for effective anti-money laundering compliance in Ethiopian banking industry. Apparently, with the intention of elevating the effectiveness of anti-money laundering regime in Ethiopian banking industry based on the major findings of this study, the following recommendations are forwarded:

- The national ID project headed by Ministry of Peace should be expedited so as to minimize forged IDs and effectiveness of anti-money laundering (AML) regulation.
- Ethiopia Financial Intelligence Center (EFIC) and National Bank of Ethiopia (NBE) should make regular inspection of banks so as to ensure effective implementation of the anti-money laundering regime.
- The researcher suggests that Ethiopian Financial Intelligence Center (EFIC) should automate the process of receiving critical information from banks and also give feedback on the status of suspicious transaction reports sent from banks. Moreover, it needs to be equipped with adequate and skilled manpower to analyze complicated criminal activities.
- All banks should be equipped with adequate compliance staffs and standard anti-money laundering software that could enhance effectiveness of their anti-money laundering compliance.
- The researcher suggests that prosecutors shall criminalize money launderers, to effectively implement the anti-money laundering directive and discourage those who have intention to get involved in criminal activity.
- Finally, as the study focuses on the banking sector only further researches need to be made on other financial and non-financial sectors vulnerable to money laundering.

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# APPENDIX

## Appendix I: Survey Questionnaire

Addis Ababa University

College of Business and Economics

Department of Management Graduate Program

**Dear Respondent,**

I am currently attending a Master's degree in Masters of Science in Management with specialization area in Quality Management and Organizational Excellence at Addis Ababa University. In line with this, I am undertaking a thesis on Factors for Effective Anti-Money Laundering compliance in the Ethiopian Banking Industry. In so doing, questionnaire is prepared to gather raw data and you have been duly selected.

Hence, your response is very crucial for the fulfillment of my study. This questionnaire will take approximately 15 to 20 minutes to be completed and I greatly appreciate your contribution. I can assure you that your response is confidential and only used for academic purpose.

If you are interested to send the result of the questionnaires and to give any comment or suggestion you may also use my email address [keyohannesfetene@yahoo.com](mailto:keyohannesfetene@yahoo.com)

**Regards,**

Lastly, I would like to thank you in advance for your participation and given your golden time.

### Section one: Background Information

- 1.1. Gender:  
Female\_\_\_\_ Male\_\_\_\_
- 1.2. Age:  
From 21 to 25 years\_\_\_\_  
From 26 to 30 years\_\_\_\_  
From 31 to 35 years\_\_\_\_  
From 36 to 40 years\_\_\_\_  
Above 40 years\_\_\_\_\_

1.3. Level of Educational qualification:

College Diploma \_\_\_\_\_  
 Degree \_\_\_\_\_  
 Master's Degree \_\_\_\_\_  
 Other please specify \_\_\_\_\_

1.4. Years of experience in the banking sector

Less than 5 year \_\_\_\_\_  
 6-10 Years \_\_\_\_\_  
 11-15 Years \_\_\_\_\_  
 Above 16 Years \_\_\_\_\_

1.5. Which of the following best describes your job level in your organization structure?

- Managerial \_\_\_\_\_
- Non-Managerial \_\_\_\_\_
- Other (please explain) \_\_\_\_\_.

**Section two: Questions on Anti-Money laundering compliance directive**

1. How do you rate your Bank's vulnerability to Money Laundering?

To a very great Extent	To a great Extent	To a moderate Extent	To a little extent	To No extent

2. How do you rate your Bank's vulnerability to predicate offences of:

No.	Predicate Offence	Rate				
		Very great	Great	Moderate	Little	Not at all
2.1.	Corruption					
2.2.	Tax evasion					
2.3.	Human Trafficking					
2.4.	Contraband					
2.5.	Fraud					
2.6.	Illegal Hawala					
2.7.	Arms Trafficking					
2.8.	Market Manipulation					
2.9.	Counterfeiting currency					
2.10.	Robbery/Theft					
2.11	Others (that you may specify in which your bank is more susceptible) _____					

3. To what extent of your Bank implemented the anti-money laundering policies?

To a very great Extent	To a great Extent	To a moderate Extent	To a little extent	To No extent

4. To what extent does your bank implement the following aspects of AML regulations/Policies?

Rate on a scale of 1 to 5 where 1= no extent, 2= little extent, 3=moderate extent, 4= great extent and 5 is to a very great extent.

<b>Aspects of AML Policies</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
KYC Policies (Customer acceptance, Identification, and Screening)					
Perform ongoing Monitoring of accounts and transactions					
Risk Assessment					
Perform CDD (Customer Due Diligence) in correspondent banking relation					
In Keeping of records					
In determination of Politically Exposed Persons (PEP)					
On Reporting of Suspicious Transactions					
In creating awareness and providing training					
Others (Specify_____)					

5. To what extent does the anti-money laundering directive affected the following aspects in your bank? Use a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5 is to a very great extent.

<b>Aspects of ML</b>	1	2	3	4	5
Not to deal with Prohibited Business					
Preventing your bank from Reputational Risk					
Not being liable to Termination of Banking Business by another financial institutions					
Not being liable to Penalties					

### **On Legal Enforcement Mechanisms**

6. To what extent do legal enforcement mechanisms at the country affect the adoption of AML compliance in your bank?

To a very great extent      [ ]      To a great extent      [ ]  
 To a moderate extent      [ ]      To a low extent      [ ]  
 To no extent at all      [ ]

7. Rate the extent to which the following aspects of legal enforcement mechanisms in Ethiopia affect the adoption of anti-money laundering regulations in your bank? Rate on a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5 is to a very great extent.

<b>Aspects of Legal Enforcement Mechanisms</b>	1	2	3	4	5
Criminalization of Money Launderers					
Investigating capacity of Financial Intelligence Center					
Integrity of Financial Intelligence Center					
Unavailability of National ID					
Others (you may specify)_____					

**On Institutional Capacity of a bank**

8. To what extent do institutional capacity mechanisms affect the adoption of anti-money laundering regulations in your bank?

- To a very great extent      [ ]                      To a great extent                      [ ]  
 To a moderate extent              [ ]                      To a low extent                      [ ]  
 To no extent at all                      [ ]

9. To what extent do the following aspects of institutional capacity affect the adoption of anti-money laundering regulations in your bank? Rate on a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5 is to a very great extent.

<b>Aspects of Institutional Capacity</b>	1	2	3	4	5
All the bank Staff Knowledge					
Independence of your banks Compliance Unit (to report to BOD)					
Commitment of the Bank officials (BOD and Executives)					
Others (You may specify_____)					

### **On International Cooperation**

10. To what extent do correspondent banks and remittance service agents affect the adoption of AML regime in your bank?

To a very great extent	[ ]	To a great extent	[ ]
To a moderate extent	[ ]	To a low extent	[ ]
To no extent at all	[ ]		

11. How do you rate the extent of correctness of your response to Correspondent Banks?

To a very great extent	[ ]	To a great extent	[ ]
To a moderate extent	[ ]	To a low extent	[ ]
To no extent at all	[ ]		

### **On Technological Advancements**

12. To what extent do technological advancements affect the adoption of AML regulations in your bank?

To a very great extent	[ ]	To a great extent	[ ]
To a moderate extent	[ ]	To a low extent	[ ]
To no extent at all	[ ]		

13. How do you rate the IT system you are using at your bank in for identifying suspicious transaction and perform KYC?

To a very great extent	[ ]	To a great extent	[ ]
To a moderate extent	[ ]	To a low extent	[ ]
To no extent at all	[ ]		

**Thank you for taking time to complete this questionnaire! Your assistance is highly appreciated!**

## Appendix II: Instrument for In-depth Interview

I want to thank you for taking the time to meet with me today. My name is Yohannes Fetene and I would like to discuss about your views and experiences on the key factors, major challenges and strengths while adopting anti-money laundering regulations compliance in Ethiopian banking. The interview will take half an hour. I will be taking notes because I don't want to miss any of your comments. All responses will be kept confidential. This means that your interview responses will not be shared with any one and I will ensure that any information include in the report does not identify you as a respondent. Remember, you don't have to talk about anything you don't want to and you may end the interview at any time.

Are there any questions about what I have just explained?

Are you willing to participate in this interview?

Thank You!!!!!!

### 1. Summary of the respondent profile

- a. Level of education\_\_\_\_\_
- b. Years of experience\_\_\_\_\_
- c. Current position\_\_\_\_\_

### 2. Views of the respondents on the key factors in implementing enhanced AML regime in Ethiopian banking?

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### 3. Views of the respondents on other factors in connection with the implementation of Anti-Money Laundering regulations?

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4. Views of respondents on the major challenges/weakness in implementing enhanced AML regime in Ethiopian banking?

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5. Views of respondents on the major strengths in implementing enhanced AML regime in Ethiopian banking?

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6. How do you see the effectiveness of Anti-Money laundering regulations in Ethiopian banking industry?

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7. What possible alternative solution (s) and strategies would you recommend(s) in solving the challenges encountered while implementing AML regulations in Ethiopian banking industry?

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8. Please add any additional comments in which you believe that must be considered in enhancement of AML compliance effectiveness of Ethiopian banks?

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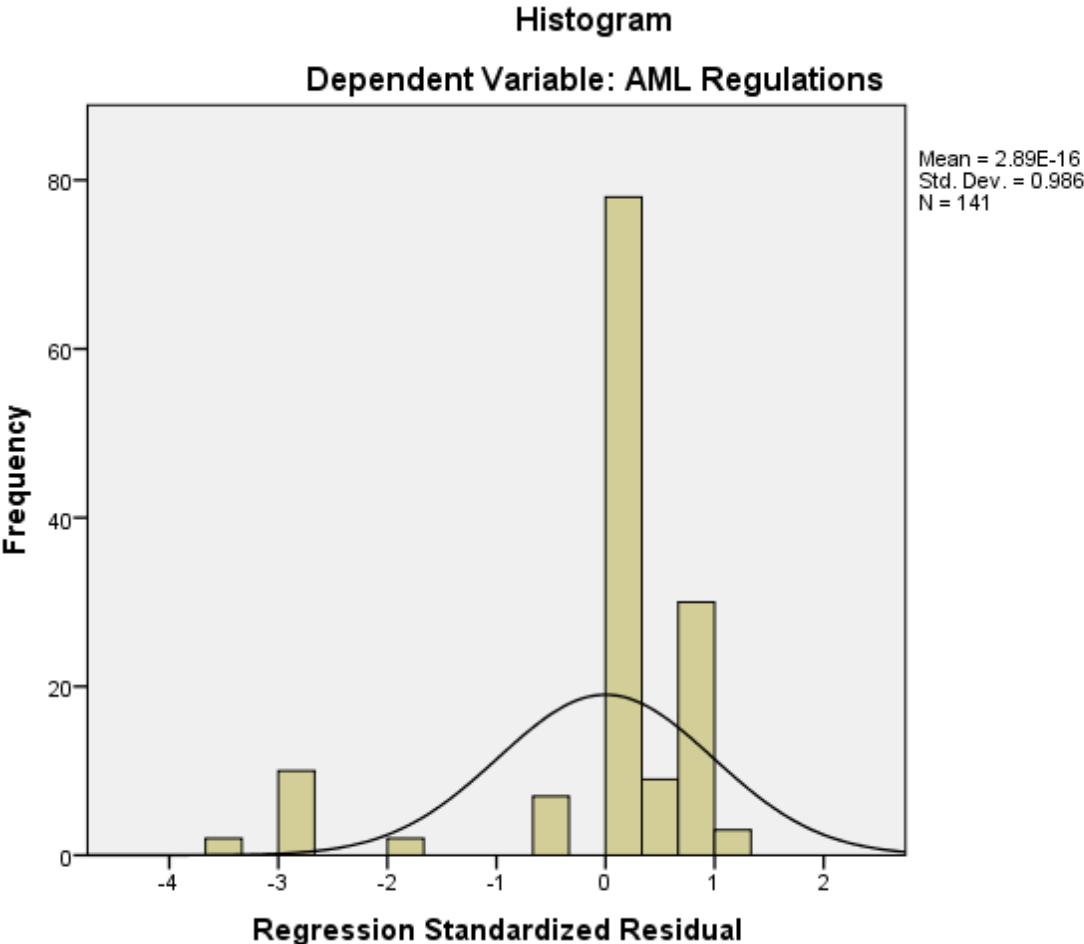
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**Thank you for giving your time!**

### Appendix III: Reliability Analysis

Variables	Reliability Analysis		
	Number of Items		Cronbach Alpha Values
	Initial	Final	
Bank's vulnerability to predicate offences of Money Laundering	10	10	0.902
Aspects of AML policies	8	8	0.818
Aspect of ML	4	4	0.761
Aspects of Legal Enforcement Mechanisms	4	4	0.717
Aspects of Institutional Capacity	3	3	0.840
<b>Total</b>	<b>29</b>	<b>29</b>	
<b>Overall</b>	<b>42</b>	<b>42</b>	<b>0.724</b>

# Appendix IV: Normality Assumption Test Result

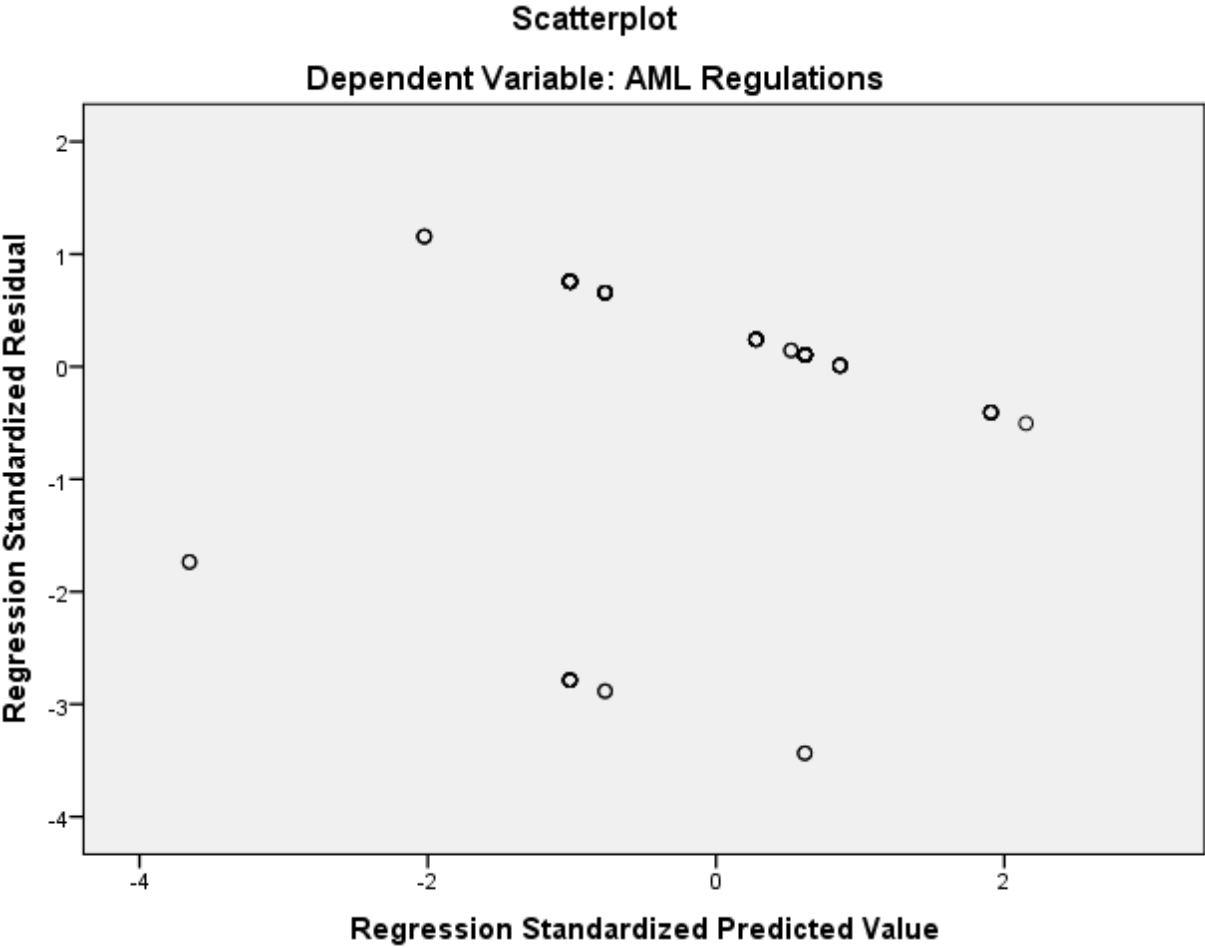


### **Appendix V: Multicollinearity Test Results**

<b>Independent variable</b>	<b>VIF</b>	<b>Tolerance</b>
Institutional capacity	1.054	0.949
Legal enforcements	1.012	0.988
International cooperation	1.033	0.968
Technological advancements	1.033	0.968

**Source: -Survey Result (2021)**

**Appendix VI: Scatter Plot of the residuals against the predicted values**



## Appendix VII: List of Banks in Ethiopia with their Capital

Capital in Millions Birr

<b>Banks</b>	<b>As at December 31, 2020</b>	<b>% are of share of banks capital to commercial banking capital</b>
<b>1. Public Banks</b>		
1. Commercial Bank of Ethiopia	50,323.44	41.65
2. Development Bank of Ethiopia	7,748.10	6.41
<b>Total Public Banks</b>	<b>58,071.54</b>	<b>48.07</b>
<b>2. Private Banks</b>		
1. Awash Banks	10,945.60	9.06
2. Dash Bank	5,848.70	4.84
3. Abyssinia Bank	4,658.20	3.86
4. Wegagen Bank	4,388.40	3.63
5. United Bank	4,604.90	3.81
6. Nib International Bank	5,166.60	4.28
7. Cooperative Bank Of Oromiya	4,317.70	3.57
8. Lion International Bank	2,974.90	2.46
9. Oromia International Bank	3,865.20	3.20
10. Zemen Bank	2,793.60	2.31
11. Buna International Bank	2,738.10	2.27
12. Berhan International Bank	3,081.40	2.55
13. Abay Bank	3,088.40	2.56
14. Addis International Bank	1,196.30	0.99
15. Debub Global Bank	1,373.20	1.14
16. Enat Bank S.C	1,697.50	1.41
<b>Total Private Banks</b>	<b>62,738.70</b>	<b>51.93</b>
<b>3. Grand Total Banks</b>	<b>120,810.24</b>	<b>100.00</b>

Source: Second Quarter 2020/21 Fiscal Year Series Bulletin, NBE