



**ST. MARY'S UNIVERSITY  
SCHOOL OF GRADUATE STUDIES**

**DETERMINANTS OF AGENCY BANKING (CBE-BIRR) IN  
COMMERCIAL BANK OF ETHIOPIA, EXPLORATORY  
STUDY**

**BY: YONAS KESKIS**

**A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY, SCHOOL OF  
GRADUATE STUDIES IN PARTIAL FULFILMENT OF THE REQUIRMENTS  
FOR THE DEGREE OF MASTERS OF ARTS IN PROJECT MANAGEMENT**

**Advisor: Abebaw Kassie (PhD)**

**June 2021  
Addis Ababa, Ethiopia**

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## DECLARATIONS

I, the undersigned, declare that this thesis is my original work; prepared under the guidance of Abebaw Kassie (Ph.D.). All sources of materials used for the thesis have been appropriately acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

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Name

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**JUN, 2021**

## ENDORSEMENT

This is to certify that this research project, “**Determinants of agency banking (CBE-birr) in commercial bank of Ethiopia, Exploratory study**” undertaken by Yonas Keskis for the Partial fulfillment of the award of Master’s degree in Project Management at ST. MARY’S-UNIVERSITY is an original work and not submitted earlier for any degree either at this university or any other university.

---

Advisor. Abebaw Kassie (**Ph.D**)

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## **List of Abbreviations**

CBE	COMMERCIAL BANK OF ETHIOPIA
NBE	NATIONAL BANK OF ETHIOPIA
TVET	TECHNICAL AND VOCATIONAL EDUCATION
ICT	INFORMATION COMMUNICATION TECHNOLOGY
M-PESA	MOBILE MONEY
CGAP	CONSULTATIVE GROUP TO ASSIST THE POOR ( <i>CGAP</i> )
POS	POINT OF SALE
IB	INTERNET BANKING
AA	ADDIS ABABA
ATM	AUTOMOTIVE TELLER MACHINE
PIN	PERSONAL IDENTIFICATION NUMBER
SPSS	STATISTICAL PACKAGE FOR SOCIAL SCIENCES
E-MONEY	ELECTRONIC MONEY
E-PAYMENT	ELECTRONIC PAYMENT

## Abstract

The purpose of this study was to assess the determinants of CBE-birr agent banking being applied by commercial bank of Ethiopia. The researcher has utilized exploratory study in nature. The population of the study consists of the Commercial bank of Ethiopia kirkos district in general consisting 90,152 users under 49 branches as of Jan. 2021 reported by CBE. A sample of 398 customers selected. Semi-structured questionnaires with close-ended and open-ended questions, interview questions and focus group discussion were used as data collection methods. The data collected was analyzed by using stata 13 and SPSS (Statistical package for social science) 20. Descriptive statistics consisting means, standard deviations were used while for inferential statistic the researcher has used ordinal logistic regression. The research findings have shown that demographic factors have been observed as statistically significant determinants for participating in CBE-birr. Specifically, age, marital status, income, family size has been proven to be determinants. Technological challenges have revealed that poor mobile network, incompatibility between systems, lack of convenience and fear of use as major ones. The ordinal regression has also proven that technological **factors** have significance effect. Organizational **factors** as well, have significance effect as lack of trained personnel, lack of enough operators, lack of awareness on directive and usage have been stated. As per to the environmental factors commitment level of stakeholders, cost expensiveness and technical support have been listed as main challenges. The results led to the conclusion that demographic factors have significance effect on participating in CBE-birr. Technological, organizational and commitment level has significant effect. It has also been noted that the commitment level of other stakeholders has been low. The researcher has recommended that agency related laws and directives needed to be given and aware to the staff, agents and customers. With such act the bank can work on its trust around the stakeholders. the bank must adjust the system failure and incompatibility problem. Additionally, organizational and environmental factors must also be solved. Provision of sufficient and quality personnel, proper, timely monitoring, need to be done on agents and also by NBE supervision team regularly. Intensive and widespread marketing effort must be undertaken supported with understanding the stiff directive set by all the stakeholders involved.

*Key words: agents, agency banking, CBE-birr, commitment, technology*

# CHAPTER ONE

## INTRODUCTION

### 1.1. Background of the study

In today's world, technological advancements have become part and parcel of everybody's daily life directly or indirectly. According to Schnidler (2011), the introduction of information and communication technology in the changing environment of computer and telecommunication engineering has resulted for dramatic changes how businesses is about to be conducted for the competition to avail in the market. Banking industry nowadays is helped with the technologically supported activities so that customer's satisfaction would be realized. Throughout the evolution of technology, banks practice ATM, POS, internet banking, mobile banking and nowadays agent banking to make their customers closer in getting the access to their services better than before.

In recent years most of the banks in the world are spending a lot of funds in bringing the updated technology so that it will maximize the needs of the banks in the same pattern as the satisfaction of its customers (Siarni, 2006). Though financial institutions or banks are continually investing so much in the technological advancements, different factors and reasons exist as barriers for the successful execution of agency banking. As stated by Ivatury and Lyman, Customers from the remote areas are forced to travel long distances and spend huge amounts of money and time on transport to reach to a branch. To cut back these challenges, a number of central banks around the world have issued legislation that allows commercial banks to contract third party retail networks as agents (Ivatury and Lyman, 2006).

Agency banking is a banking system that provides the financial institutions services to banked and unbanked society through the banks legal agents. Such agents would consist of hotels, groceries, postal offices etc. Agents have been helpful in bringing financial service access more closely to clients (Stanford, 2013).

Agency banking has been adopted and implemented with varying degrees of success by a number of developing countries, particularly in Latin America. Brazil is often recognized as a global

pioneer in this area since it was an early adopter of the model and over the years and especially Kenya through MPESA has developed a mature network of agency banks covering more than 99% of the country's municipalities. According to Siedek (2008), Other countries in Latin America have followed suit, including Mexico (2009), Peru (2005), Colombia (2006), Ecuador (2008), Venezuela (2009), Argentina (2010), and Bolivia (2006). Other countries around the world have also utilized the agency banking model to expand financial services, including Pakistan, Philippines, Kenya, South Africa, Uganda, and India.

Agency banking has become a viable method for reaching rural areas in which it enables them to store, send and receive electronic money through the usage of agents. Regulations, laws, procedures, infrastructures, commitment level of the parties involved in it, marketing efforts in the utilization of agent banking vary across different countries.

Agency banking minimizes fixed cost; by leveraging existing retail outlets hence financial service providers don't need to invest in their own physical infrastructure and also by using mobile phones rather than POS terminals, financial service providers don't even have to incur equipment costs for each new retail outlet opened (Siedek, 2008). With the above benefits agency banking helps banks to compete in a banking industry where they will provide their services to most of the society especially to the unbanked ones.

As cited by Johnson K (2011) of the survey conducted by CGAP in 2007, observed that the benefits of using an agent bank to the client included; access since seemingly no problem of illiterates and the bank agents operate shops and kiosks within the vicinity of the villages or estates. In Brazil, access to finance was increased from 2,623 to 4,444 municipalities (89%), convenience, since less transaction cost to reach point of service, the opening hours of the agent bank are flexible and more than the bank branches, comfort, since there is no need to enter a branch but similar transactions are carried out at a local shop outlet. (<http://www.cgap.org>)

However, usage of the agent banking is a new phenomenon to the Ethiopian banking industry, which started in Ethiopia in 2014. Even some of the banks in the country employ it with the purpose not only that they will control the banking industry market demands of easy access of banks' services but also to overcome the challenges and risks to exist from fierce competition and risks related to it.



## **1.2. Statement of the problem**

The environment of banking industry in Ethiopia has been gradually evolving for years. Along with the changing technological advancements in the industry it has been the major objective of making the society to be a cashless society. Commercial bank of Ethiopia as one of the banks in the country has engaged itself in providing banking activities to its customers in a timely changing industry in a more convenient and acceptable manner. CBE has been working on providing its services to the society through more advanced methods of service delivery modes. From which it has been using ATM, POS, Mobile banking and internet banking for some time now<sup>1</sup>.

As suggested by Ivantry and Mars (2009), agency banking is implemented to increase customer base, market share, and increase efficiency in banks operation while it also reduces congestion in branch halls and increase banks revenue. Apart from that, they have also stated that customers will be beneficial by getting low cost, easy financial accessibility to banking services. Access to banking service will improve the qualities of lives of a society, despite banks growth; financial service accessibility is still very limited in Ethiopia. (Worku, 2015)

Making sure that convenience and easiness of getting the banking services will be accomplished by understanding the stakeholder needs, identifying the commitment and trust level of parties involved, user friendliness of agency related laws and directives and also by being aware of the challenges associated with agency banking implementation. As explained by Ivantry (2008), agency banking helps in recruiting new customers and making customer capable of transacting on time makes them satisfied. Even though such benefits exist in the application of agency banking, issues of stiff agency related laws, technological, organizational and environmental challenges have been significant barriers to its effectiveness. Based on the research findings of Ivantry (2008), technological difficulties and problems arise in the modern e-banking systems than the normal banking systems.

CBE-birr usage, the level of coverage it has obtained so far has been low less than 20% of users total in the country from more than 22 million account holders of the bank. Frequent complaints from CBE staff, CBE-birr end users and agents who clarified that lack of awareness, lack of training on usage and related agency laws, system incompatibility and poor mobile networks and etc being the problems for them to execute agency banking through CBE- birr. Venkatesh and Davis, (1996), stated that attitude of users towards and acceptance of a new information system

has a critical impact on successful information adoption. Aderonke and A. (2010) argue that the quality and effectiveness of a system can only be evaluated with its level of user acceptance.

Ngigi (2010) conducted a study on challenges of E-banking adoption which revealed that e-banking was a relatively new distribution channel in Kenya, the study found that banks had adopted moderate technology to a moderate extent and there was need to do more in this area as well as consumer awareness program not being implemented. In order to motivate greater E-banking use in poor countries, a deeper knowledge of the challenges and drivers driving E-banking adoption is crucial (Zhao et al. 2008). The researcher has identified that perception; training and awareness creation are the basis for utilization of technologically supported services. Various studies have been undertaken in Ethiopia to discover factors that influence on the usage of different e-banking projects. Agent banking or mobile money is the one. Y. Mossu, (2019), B. Abebe, (2019) and A. Abdulkadir, (2015), Despite the fact that those researchers discovered a number of elements that influence on the usage of agent banking, there is still a lot of work to be done to ensure that beneficiaries are correctly using this technology. In addition to this, on nov, 2020 more than 48,000 CBE-birr users reported as inactive, pending active, dormant, closed and suspended CBE-birr users, according to unpublished second quarter performance report on Jan. 2021. . And according to the implementation of agency banking, stakeholder analysis is one needed core concept to be done flawlessly. As different steps exist in the implementation of a project, major concepts are understanding who the beneficiaries are, what their needs are, and other related factors.

Continuing with the above stated gaps surely will be problematic for the bank in achieving future vision of being a world class bank by the year 2025. In response to the above stated problems, this study proposes to investigate several options for making the agency banking service of CBE more effective and acceptable. One could ask if CBE has done the appropriate preparations and detailed stakeholder analysis how could the described discomforts happened to exist? But with such discomfort that arises by the CBE-staff, agents and CBE-birr end users, investigation on the level of identification of needs and stakeholder analysis made by CBE, level of commitment of parties involved, agency related directives and the challenges to come up with the implementation of agency banking is vital. And previously done preparations to all of the issues stated seemed insufficiently covered and in that note it needed to be studied.

CBE.portal.internal /date January 19, 2018

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### **1.3. Research questions**

In the process of achieving the research objectives the researcher is trying to find answers for the following questions.

- a. What are the determinants of the usage of agency banking in CBE-birr?
- b. What is the perception level of beneficiaries about the stakeholder analysis done by CBE on CBE-birr usage?
- c. What is the commitment level of the users, agents involved in the implementation of agent banking system?
- d. What is the user-friendliness level of agencies related laws and regulations that exist in the implementation of agent banking system?
- e. What are the challenges faced in the usage of CBE-birr?

### **1.4. Objective of the study**

#### **1.4.1. General Objective**

The general objective of the research is to assess determinant of the usage of Mobile money solution (Agent banking) in the commercial bank of Ethiopia CBE-BIRR. In relation to this, implications of issues on the status and level of implementation along with the factors affecting which are faced during usage will be viewed.

#### **1.4.2. Specific objectives**

Beyond the general objective the study will also have the following specific objectives to account for.

- Identify the specific factors that may have an effect on agent banking
- To make feasible recommendations for future study as well as new banks entering the financial industry.

- To assess the kind of challenges they have identified as drawbacks under the usage of agency banking (CBE-birr).

### **1.5. Scope of the study**

This research was conducted specifically in commercial bank of Ethiopia Kirkos district and focused on usage of CBE-BIRR and its status at the usage of it alongside the factors to be considered. The data for the study was gathered from management of NBE, CBE-birr users, and operations staffs of ten branches. This is because they are the system's implementer and day-to-day users, and so are more likely to give the necessary information.

### **1.6. Significance of the study**

Successful usage of agent banking systems contributes to the productivity on performance of the company and further improvements in the banking industry. Hence, the main goal of this research is to assess the determinants of Mobile money solution (Agent banking) in the commercial bank of Ethiopia CBE-birr. Furthermore this research is expected to have the followingsignificances.

- This study will also help to give insights on making the execution/usage of Agency bankingbetter in the future
- This research will also help as a decision making tool regarding making quality based usageof Agency banking in the company
- The findings of this research will help to obtain information about implication of systems and it will help as a learning curve or be held as an organizational process asset for the bank
- It also helps new banks entering in to the industry to give insight which determinants affecting the usage of e-banking projects

In addition; this research will be used as a benchmark or reference for future researches to be donein the same area of study.

### **1.7. Organization of the study**

The research is organized in five chapters. The first chapter starts with a general introduction about

agent banking. It explains statement of the problem, the significance of the research, its scope and limitations. Chapter two is detailed literature review about agent banking, benefits of agent banking, financial inclusion, banking model, agent banking in Ethiopia, challenges in implementation of agent banking. The third chapter discusses in detail about the methodology of the research, data collection, and analysis techniques. Chapter four analyzes the data, discussion and results. Finally, chapter five contains conclusions, and recommendations for future works.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1. Introduction**

This chapter will review the literature review of agency, agency banking, agency theory, benefits of agent banking, financial inclusion, bank-focused model, bank-led model, non-bank led model, challenges in agency banking implementation that has been publicized by different researchers and authors. Further empirical review will also be outlined.

##### **2.1.1. Agency**

In the sense of our imagination banking operation have been thought to move to a digitalized system of operation is a recent phenomenon. Agency may only be understood as acting on behalf of another. In the context of the banking industry agency banking has been in practice for some time now specifically in India, Latin American countries and widespread in few years specifically in Kenya.

Ethiopian banking industry evolving itself to a digitalized world would foresee future obstacles or opportunities in the operations of the agency banking being effective in every way. As explained by the market business news “An agent bank or agency bank is a bank that acts on behalf of another bank or group of banks. We commonly refer to a group of banks as a syndicate. The term may also refer to a bank that acts on behalf of a person, organization, or corporation.”

##### **2.1.2. Agent banking**

Agent banking is the utilization of non-bank selected outlets to deliver services, on behalf of the bank that has chosen them, that have been authorized or approved by the appropriate authority. In doing this so, the agent has to be in line with the agreed set of terms, procedures, rules and regulations stated in the agreement. As stated by the bank of Tanzania under guidelines on agent banking for banks and financial institutions, (2017), it has outlined as “agent” means a person contracted by an approved bank or financial institutions to carry out agent banking business on behalf

of the approved bank or financial institution in the manner specified in these Guidelines; “agent banking” means the business of providing banking services to the customers of a bank or financial institution on behalf of that particular bank or financial institution under a valid agency agreement as prescribed in these Guidelines; Agency banking can be seen as a partnership between a bank and non-banks, organizations typically retail commercial outlets, ranging from lottery kiosks, pharmacies, post offices, construction good stores, and so forth, to provide distribution outlets for financial services (Kumar, Nair, Persons and Urdapilleta, 2006)

The technology deployed in banks affects its operational efficiency and determines its competitive position in the market. European central bank (1999) stated that the information communication technology development had a strong influence on the structure and the activities of the banking sector.

### **2.1.3. Agency theory**

Stephen Ross and Barry Mitnick who in group and independently had contributions to the economic theory of agency stated in a way that; Ross was responsible to for origination of the economic theory of change while Mitnick was for the institutional theory of agency. They have clarified that agency theory analyzes the relationship that will exist between business companies and their managers, who are agents by law, who are chosen to be the representative of the firm. (Stephen Ross and Barry Mitnick, 1973) In that sense they have given a lot of analysis that in agency theory the relationship between the two parties lies on undertaking the responsibilities or activities performed by the firm.

### **2.1.4. Benefits of Agent Banking to Stakeholders**

As outlined by the Dipo Fatokun (2013), the following issues were raised as the benefits of agency banking

#### **2.1.4.1. Benefits to a customer**

As stated by Dipo Fatokun (2013), customers will assure having cheapest means of accessing financial services with lower transaction cost, service closer to his immediate environment, longer opening hours, shorter lines than in branches, more accessible for less educated, the very

poor and less privileged who might feel intimidated in traditional bank branches and also benefits of greater economic development to isolated communities once they start using agency banking.

#### **2.1.4.2. Benefits to the Agent/ Agent Network Provider**

As stated by Dipo Fatokun (2013), Agents will be benefited by using agency banking in which they will get increased sales from additional foot-traffic customers, differentiation from other businesses the agents might normally operate will give them a competitive advantage over others, reputation from affiliation with well-known financial institution will improve the name of their business and will also be a great opportunity of advertisement with minimum cost and additional revenue from commissions and incentives.

#### **2.1.4.3. Benefits to the Financial Institution**

A bank can benefit from implementation of agency banking from which increased customer base and market share, increased coverage with low-cost solution in areas with potentially less number and volume of transactions, increased revenue from additional investment, interest, and fee income, Improved indirect branch productivity by reducing congestion, Dipo Fatokun (2013).

#### **2.1.4.4. Benefits to the Government**

According to Dipo Fatokun (2013), a government can benefit from implementation of agency banking through facilitation for financial inclusion, as it provides a tool for government to utilize for government to person and person to government payments (disbursements, microcredit/repayments, subsidies, tax/levies etc.) and it also facilitates of domestic remittances

#### **2.1.5. Financial inclusion**

In the modern banking industry financial inclusion has been the major principle or objective that most of the banks in the world intend to exploit. Financial inclusion has proven to be critical factor for banks in reaching their ultimate goal in one way or another by reaching the ones that haven't been approached before.

According to Rahman (2003), financial inclusion is about reaching out to the unbanked society to provide them appropriate, timely, adequate, affordable financial services.



### **2.1.6. Banking model**

Agents have been used for the basis that poor people through retail agents may be far more convenient and efficient than going to a bank branch. For many poor customers, it will be the first time they have access to any formal financial services and formal services are usually significantly safer and cheaper than informal alternatives. Muhammed (2013).

Loretta (2008) has clarified that different agent banking models are evolving over time. However, if agent banking is used to attract low income populations in often rural locations, the model depends on the banking agents. According to Loretta, the difference lies in the agreement made between the bank and the non-banked. In this retrospect the models are classified as bank-focused, bank-led, and non-bank led models.

#### **2.1.6.1. Bank-focused model**

This model is the one model that most of the banks in our country are using at the moment. In this model every bank's activities focus on existing customers. According to Wumbari, the bank-focused model emerges when a traditional bank uses non-traditional low cost delivery channels to provide banking services to the bank's existing customers. (Wumbari 2009)

Wumbari further stated that this model gives services ranging from ATM to Internet or mobile phone banking to provide certain limited banking services to customers.

#### **2.1.6.2. Bank-led model**

This model holds that customers conduct financial transactions at a whole range of retail agents or through mobile phones. Customers perform transactions while using their phones, which is different from the branch base with the help of a trade partner. In this model an additional service channel, retailer is added, which has experience and target market distinct from traditional banks. It is alternative to the conventional banking system.

#### **2.1.6.3. Non bank led model**

This is the model where by the bank is not the participant rather all the activities it does is limited

to even safeguarding excess funds. This model does not get involve unless required to do so when the need arises a safe keeper for surplus funds. (Agbemabiese, Joseph, 2015)Other than that, all the other bank related operations will be operated by the agents.

### **2.1.7. Difference between Mobile banking Vs agent banking**

As clarified by Ayana Gemechu (2014) **mobile banking** is a service that enables customers to conduct some banking services such as account inquiry and funds transfer, by using of short text message (SMS). Whereas according to National Bank of Ethiopia (NBE) Directive, **agent banking** is the conduct of banking business on behalf of a financial institution through an agent using various service delivery channels. (NBE, 2012).

Mobile banking is among the bank, customer and additional technological aid material. But in agent banking an additional stakeholder will take part in to facilitate the banking services of the bank through mobile based on specified agreements between the agent and the bank.

### **2.1.8. Agent banking in Ethiopia**

In 2012, the Directive on Mobile and Agent Banking Services was published. So far, the agent banking system has been introduced by eight institutions. Dashen Bank S.C. was the first to offer the service in December of 2014. The following banks were Abay Bank, Cooperative Bank of Oromia (CBO), Lion International Bank, United Bank, Nib International Bank, Wegagen Bank, Oromia International Bank (OIB) and recently (BOA) bank of abyssinia.

Since agent banking is operated through the usage mobile solutions, United Bank S.C has introduced and is delivering more efficient services to its customers. From some of the efficient services agent banking has been enabled by the core banking system it has introduced in its operation. (United Bank S.C website, 2017)

The transition to agency banking (CBE-Birr), according to the CBE website, comes four years after the Bank began a feasibility assessment to provide the service. It allows customers to complete transactions using their mobile phones, reducing transit expenses and time. The CBE Birr will replace the traditional method of money processing. To begin the service, going to the

bank is unnecessary; instead, customers can withdraw or deposit money in the nearby agent without getting a bank account.

In addition, the CBE website has stated that CBE has mobilized deposits of 83.2 billion birr during the recently half year fiscal year, raising the aggregate deposits to 678.7 billion birr from the 451.8 billion birr of the previous fiscal year. With the introduction of agent banking by the bank, the financial inclusion to be made and has already been made will make all the efforts to make customers get the services that they have desired in their hands.

The main actors of the CBE Birr system are CBE as a service provider, individual customers, agents and Ethio Telecom, the only mobile network provider in the country. The CBE Birr system will help customers get a 24-hour service. Also, CBE Birr will reduce the conventional way of processing money. To begin the service, going to the bank is unnecessary; instead, customers can withdraw or deposit money in the nearby agent without getting a bank account. Regulation of Mobile & Agent Banking Services directive was issued in 2012. Eight banks have launched the agent banking system so far. (Addis Fortune August 22, 2017)

## **2.2. Theoretical Framework**

Researchers have been using different frameworks in the study of adopting new technological innovation. The researcher also intends to use stakeholder related, technological, commitment, training and agency related laws as context to be covered in this study.

### **2.2.1. Stakeholder analysis**

In a nutshell, people matter; and people play many different roles, all crucial to an organization's success. An organization's management needs to know the roles involve, and the viewpoints of the stakeholders playing these roles. (Ian, 2003). According to Mankelaw (1995), Stakeholder analysis looks at how groups of people might affect the outcomes of a project by the way they react. It is the technique used to identify the key people who have to be won over. It is also considered as the first step in strategic planning activities at an organizational level.

Individuals and organizations who are actively participating in the project, or whose interests

may be impacted as a result of project execution or completion, are referred to as project stakeholders. Stakeholders are those who must be considered in order to achieve project objectives, and whose participation and support are critical to the project's success. So identification of all stakeholders is an important activity of the project manager to ensure project success. Stakeholder analysis tries to identify and define key stakeholders' characteristics, as well as assess how they may affect or be influenced by the project's outcome. analyze the capacity of stakeholders to participate and comprehend the relationships between stakeholders, including an assessment of their interest and expectations. (Scholl, 2001).

According to Sanford (2013), one of the biggest challenges in rolling out banking agencies is the establishment and the effectiveness of the agent network. Agents are the touch- points where the subscribers of the service can get money into and out of the system. (Agents are often also referred to as cash-in and cash-out points). Atandi (2013) conducted a study on the challenges of agent banking experiences in Kenya and the study adopted Census Survey and it has found that the proper analysis on parties involved has an effect on implementation of agency banking. As part of the stakeholders analysis as stated by

*“Agents, being neither employees nor customers, have no access to banks IT solutions. Buthaving entrusted them with various banking responsibilities, it is the duty of the bank to provide them access. Banks must ensure that the technology platform enables agent empowerment and supports their activities.”*

As stated by Sewagegnehu Dagne (2015), in the system Agent banking is a good technique to satisfy the public need for financial services in areas where banks are concentrated. Agent banking, on the other hand, would provide banks with more resources to leverage. There are numerous ups and downs with this service because it is offered in a competitive market. The banking industry should not be terrified of the problems it faces. Obstacles to building this trust and a lack of capable agents, who can handle complex banking procedures as capably as the bank employee, are difficult challenges to be overcome.

Furthermore, most people today still prefer to deal in cash since they have concerns about security, privacy, speed, as well as, transparency of usage charges when using digital money. For all mobile

based transactions, intimation and confirmation of transactions may also be required through channels other than mobile (e.g. paper statements, e-mail) (Deloitte, 2013). We also use technology to control the world in which we live. Technology involves people using knowledge, tools, and systems to make their lives easier and better. Technology involves application of knowledge, tools and skills to solve problems and extend human capacity (Mberia, 2009). This means that technology is invented to make work easier and more effective. Any device invented and given the name technology means it makes work easier and more easily accomplished. Agency banking is a modern technology that operates with freshly invented devices such as mobile phones. Agency banking requires the outsourcing of cash transfers to these distributed networks of agents such as small shops. Technology application requires knowledge on users of mobile phones that connect with the bank's server using a network connection as well as software requirements, inter-operability and protocols accepted. Technology requirements have to be analyzed effectively so that the system shall be delivered in a more effective manner.

Management of agency banking business also requires man power and technological resources. Management of retail sized agents is a big challenge due to the risks mentioned above replicated in each agent. (Mberia 2009). The degree of training, awareness and marketing efforts employed definitely affect the implementation of every process requires detail analysis on such factors. As per to Agalla's statement, the research found out that besides resource allocation, ineffective technology and lack of staff training on relevant technology were key challenges.

### **2.2.2. Commitment And Trust Of Parties Involved**

As the major factors affecting trust of the parties involved in the implementation of agency banking convenience/practicality of using the mobile gadget is the major one. Mobile banking is not as secure as electronic, so convenience and usability are the key criteria for a bank to attract customers to use mobile services. Thus, in summary, trust can be said to be one of the most important social aspects in developing the relationship between commercial banks and their users. Viktorija S. and Daiva J. (2017)

As noted by Rajiv Lal and Ishan Sachdev, (2015), they have raised that trust in a mobile money service refers to a) trust in the brand itself, as one with which customers will be relaxed trusting

their funds, b) trust that the service's technology (e.g. mobile network connectivity) will function as promised, c) trust that Agents will do what they are supposed to with customer funds and transactions, and d) trust that individual transactions will be fulfilled as expected.

They have reasoned out that customer trust is a critical pre-requisite because a) mobile money services are new to the customer segments being served, and the idea of moving from holding physical funds to electronic is a significant behavioral shift, b) in the operation of agent banking, there are frequent scam operators who maintain to offer various financial services but ultimately run away with customers' funds, creating a general mistrust in these types of financial offerings, c) mobile money services require handing funds to individuals not personally known to customers (e.g. Agents), and d) even small disruptions in a customer's financial life from problems with the service can have significant flow effects due to the lack of savings and financial cushion in these populations. So in general they have reasoned that, trust, once lost, is very difficult to rebuild.

### **2.2.3. Agency related laws**

Agents are crucial in attracting new consumers, facilitating transactions, and maintaining client satisfaction. Customers' identities are verified both when they join up and during subsequent purchases. Customers may be unable to comprehend their rights and file claims if they are harmed as a result of the use of retail agents. Laws and regulations protect customers from fraud. Customers, on the other hand, aren't always sure how they'll be safeguarded from fraud when they engage retail agents to execute financial transactions (Lyman, 2006).

Policy makers and regulators have facilitated a range of guidelines so that e-banking system can be improved for the better and for the implementation of Agency banking and operation with increased levels of financial access to the customers. The National bank of Ethiopia's mobile and Agency banking guidelines outlines the following: The actions that an Agent is capable of performing serve as a set of minimal standards for data and network security, as well as customer protection and risk management. It also lists out responsibilities of customers, agents; and banks. It also states about the approval of application for agency banking business, all transactions involving deposit, withdrawal payment and transfer from or to an account should be real time.

## **2.1. Empirical Literature**

Podpiera, J (2008) clearly stated his arguments that agent banking improves the productivity of institutions as they are compared to branches that are doing regular banking activities. But in due time the implementation and adoption of agent banking might get some challenges and constraints that may affect its proper implementation.

Arora and Ferrand (2007) studied “Meeting the challenge of creating an inclusive financial sector in London”. According to the study’s result, accessible financial services are the critical factors in sustaining the growth of the economy and also social security in terms of financial as well as well-being. They have claimed that agency banking has the utmost role in occupying the unbanked in to the system of financial inclusion. As poor people get to be involved in the financial inclusion they will be empowered and motivates them to have an influence on the economy of the society and the country as a whole.

### **2.1.1. Challenges In Implementation Of Agent Banking**

Challenges in implementation of a project have been defined in several ways depending on the purpose they were used for. For this research’s purpose Rockart’s (1979) definition is going to be used. He defined challenges as number of areas in which they hamper the effective implementation and execution. (Rockart, 1979)

Maganga (2012) studied strategies adopted by the commercial banks in Kenya in implementing agency banking. The study found that banks had embraced agency banking as a way of improving services to the customers and had achieved successful implementation of agency banking in Kenya. The study established that banks built on existing networks whereby banks chose retail shops, pharmacies, and other community stores where clients were regular visitors; and built a new team of dedicated staff solely focused on monitoring and training agents.

Abraham (2012) described that among the common problems known in Ethiopia which are related to electronic banking few of them are lack banking services through electronic means such as mobile, weak telecommunication, slow network connection, data security, and government policies and regulations. In Ethiopia, agent banking began in 2014. However, it

appears that it has come to a halt. Passivity is exacerbated by an inability to acquire clients and a lack of trust. (Sewagegnehu, 2015).

Additionally since mobile money solution or agent banking is part and parcel of E-banking systems and characterizing it as that Gardachew W. (2015) have stated that e-banking system would have the key challenges of low level of internet penetration and Lack of telecoms, Internet, and online payment infrastructure: Ethiopia's e-commerce development and progress is hampered by a lack of telecommunications, Internet, and online payment infrastructure. Most rural parts of the country, where the bulk of small and medium companies are concentrated, lack Internet access and hence cannot engage in e-commerce.”

Gardachew has also undertaken a survey with the objective of finding out the challenges and prospects of E-payment banking in Ethiopia and he stated that lack of suitable legal and regulatory framework for e-commerce and e-payment is also another factor. Ethiopian current laws do not accommodate electronic contracts and signatures. Ethiopian law currently prohibits electronic contracts and signatures. Ethiopia has yet to pass legislation addressing e-commerce issues such as the enforceability of electronic contracts, digital signatures, and intellectual property rights, as well as restrictions on the use of encryption technologies.

Wondwossen and Tsegai (2005) investigated the obstacles and prospects of E-payments in Ethiopia; their goal was to investigate E-payment patterns in developing countries, particularly in Africa and Ethiopia. The authors used interviews and on-site observations to investigate challenges to E-payment development in Ethiopia, and discovered that the main barriers to E-payment development are a lack of customer trust in the initiatives, a lack of payment laws and regulations, particularly for E-payment, a lack of skilled manpower, and frequent power outages.

Furthermore, Gardachew has stated that high cost of Internet is the next challenge. A major aspect is the cost of Internet connectivity in relation to per capita income. In Ethiopia, the cost of entry into the e-commerce business is higher than in industrialized countries. Expensive start-up costs, high computer and telecommunications expenditures, and license requirements are among them. In Ethiopia, frequent power outages and a lack of stable power supply are major obstacles to the proper operation of e-banking. Resistance to changes in technology among customers and staff due to lack of awareness on the benefits of new technologies, lack of trained



personnel in key organizations, tendency to be content with the existing structures.

One of the key factors or challenges for better outcome in the overall banking service is outreaching for a higher number of customers with the provision of highly valuable, efficient, and effective modes of delivery. According to international finance corporation World Bank group, the major complaint about the service is lack of agents understanding of the service and the agent's inability to maintain customers needed. For that to happen it was also outlined that lack of training and development play a major role. ( IFCWBG, 2016)

Gacheri has analyzed and did an investigation on challenges facing agent banking implementation in Kenya. The study set to establish whether the risks associated with agency banking, Policies, procedures governing Agency banking, technological, operations and awareness were hindrance to the implementation. The study had found and established the basis that technological and regulatory framework has an effect on adoption of agency banking. Besides that, he also clarified that lack of customer's willingness and trust play a major role.

## **2.2. Conceptual Framework**

A conceptual framework, according to Mugenda & Mugenda (2003), is a postulated model that identifies the concepts under research and their interactions.

Various aspects have been considered as potential variables in order to construct a conceptual framework. The conceptual framework tries to show the interaction between the dependent variable and independent variables of the research. In this part the dependent variable will be the implementation of agent banking in commercial bank of Ethiopia and the independent variables are going to be perception of beneficiaries on stakeholder analysis performed by CBE, , commitment of parties involved, agency related laws and challenges comprising technological, organizational and environmental.

The research model developed below show that stakeholder analysis, technological factors, commitment of parties involved, training, awareness and marketing effort and agency related laws have influence on the successful implementation of agent banking in commercial bank of Ethiopia while other variable are considered to be constant.

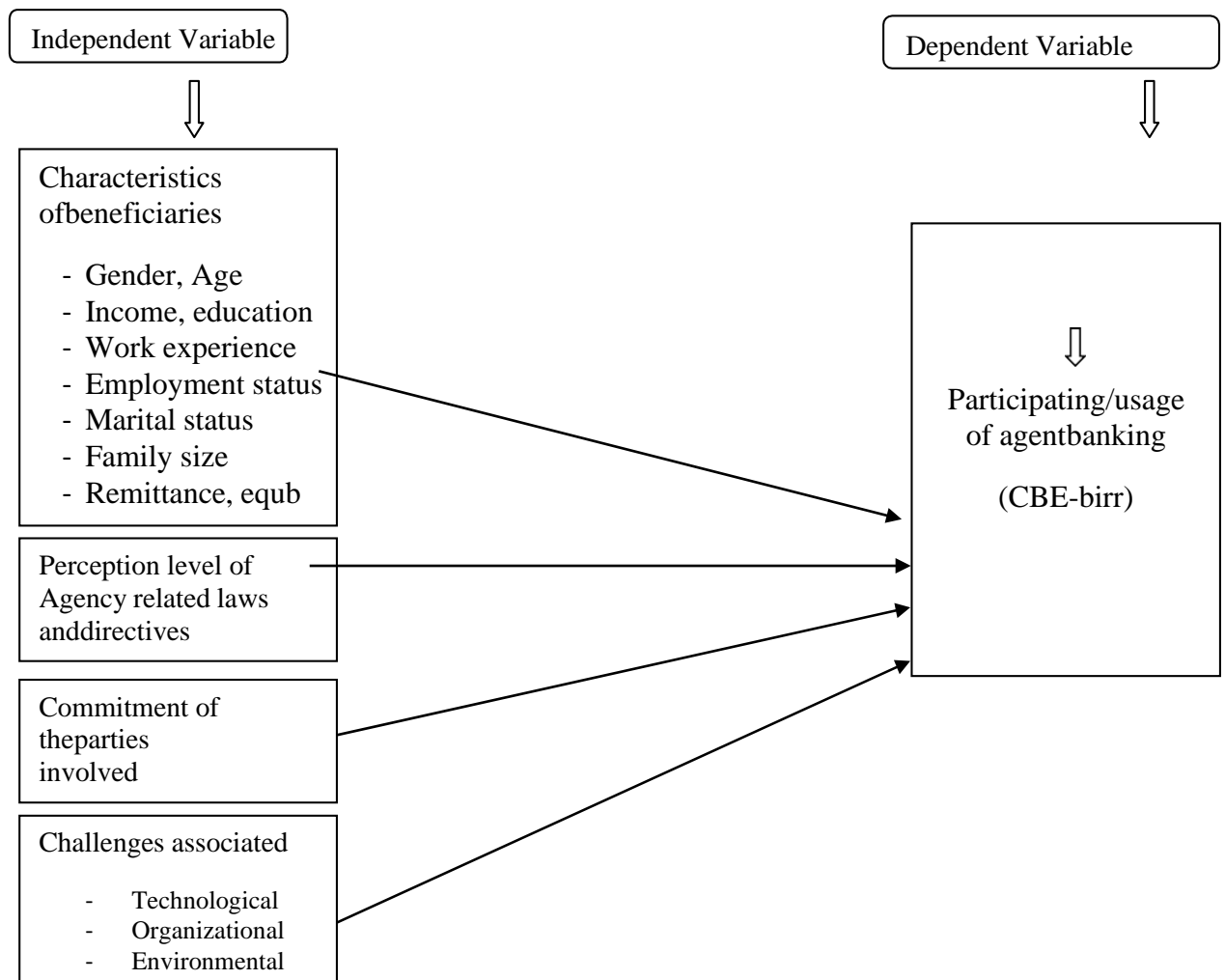


Figure 1: - Conceptual framework developed by the author

Source:-Developed by the author

# **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

### **3.1. Introduction**

The previous chapter has presented the literature reviews that have existed so far in the areas of the subject matter. This chapter will show the type of the research and the designs to be applied for the accomplishment of the objective of the study alongside the methodology ought to be employed in carrying out the research. Thus overview of methodology, research design, research approach, target population, sampling, methodology for data collection, data analysis techniques will be seen in detail.

### **3.2. Research Design**

According to Thomas 2009, a research design is the overall plan of how to go about answering research questions. He also stated that it is a blueprint for data collection, measurement and analysis. The most viable and practicable research types are discussed as

#### **a) Explorative studies**

According to Saunders et.al (2007) such studies are conducted for the purpose when the researcher wants to reveal understanding of a certain difficult situation. In such studies researchers will find out by asking what is being undertaken to seek new approaches and to search for answers for different questions raised in a new, different dimension. In the application of these studies researchers will use methods of interviews, experts' interview and conducting focus group discussions.

#### **b) Descriptive Studies**

These types of studies are used in order to describe the details of people, events and situations. As per to the notion of Cooper and Schindler 2003, a descriptive study is used to describe or define, often by creating a profile of a group of problems, people or events, through the collection of data and tabulation of the frequencies on the variables described.

#### **c) Explanatory Studies**

These studies are reportedly taken into consideration when the researcher is in need to establish causal relationship among different variables. As explained by Saunders 2007, he stated that in explanatory studies the outcome is heavily linked to creating a viable causal relationship among variables and trying to search for solutions from such relationships by asking why and how such relationships exist.

This study was carried out by using exploratory research design since it helps to assess the determinant of agency banking usage in the light of factors affecting it. And such ideas have been highlighted to understand the most appropriate and areas to focus on. The research plan to assess the agent banking implementation process in the commercial bank of Ethiopia, and find out the status of how things are at CBE regarding agency banking implementation and usage. With that context it was appropriate for this research to use explorative research since it helped to deal with many members of the population where it's not possible to study all of them. In this way this design generalized findings to a larger population.

### **3.3. Research approach**

In undertaking researches researchers could take qualitative or quantitative approaches to best fit their research objectives. As described by Saunders et.al (2007), quantitative approaches involve in measuring numerical variables to give appropriate answers for initially raised research questions. Such approaches produce results in a way of means, modes, medians, standard deviations, correlations, regressions and etc so that they will give meaning by creating significant relationship with variables.

As to statement of Saunders et.al (2007), qualitative research approaches take the form that non numeric data that have been clearly identified will be used. In such approaches, researchers will use only the data gathered from or reported from respondents and transform them in to the required outputs. According to Creswell (2003) the use of qualitative approaches is appropriate when the variables considered under the study have certain features to discuss and clarify by stating their characteristics than quantifying their behavior or activity which is done through quantitative approach. Due to the nature of the research and to achieve the specific and general objectives of

the study, a quantitative method was used to analyze the collected data.

### 3.4. Target Population

According to Cooper and Schindler (2003), a population is a well defined set of people, group of things, households, firms, services, elements which are being investigated by the analyst. The population in this study consists of commercial bank of Ethiopia program management office and the branches operating agent banking consisting of agents and end CBE-birr users. The population of this research based on kirkos district branches operating CBE-birr and customers who use CBE-birr since the number of pending active, closed, suspended and inactive users found. As per to the unpublished internal performance review data of CBE, 49 active branches of CBE in the kirkos district with the following information as of Dec 16<sup>th</sup> 2020 consisting.

Elements	Population
Active CBE-birr users	<b>90,152</b>
<b>Total</b>	<b>90,152</b>

Table 1: - Population data

Source: CBE-birr performance review of CBE as of 16<sup>th</sup> Jan 2021

### 3.5. Sampling design and sample size

According to Croswell, sampling is the process of selecting individuals who can represent the characteristics of a greater population or elements where they were selected from. To conduct this research the researcher will use two types of sampling designs. At the first phase the researcher has found it appropriate to use purposive sampling in which the researcher believes that it will give a higher number of respondents in a limited period of time. Since the respondents using CBE-birr across CBE are assumed to be homogenous and since the company's system is centralized and assessing the different regions and districts would not bring so much difference. As a result the researcher has chosen the branches from the kirkos district of the bank. In that manner, Mexico, Sengatera, Lideta, Gezahegn Yilma, Seferian, Hiwot Amba, Torhayloch, Minassie Lema, Gofa Gabriel and Sarbet are selected. The branches selected for this research have been chosen as per to their volume of agents and end-users.

The researcher used formula of Israel (2012) to the determination of sample size and elements of population and margin of error was taken in to consideration. On the second phase, the researcher also has used convenience sampling to select CBE-birr users and agents. Having that in mind that from population of **90,152**, margin of error of 5% the sample size for the given population (**90,152**) at  $e = \pm 5\%$  is as follows.

**Equation**

$$n_0 = \frac{N}{1 + Ne^2}$$

Then the sample size is determined using

$$n_0 = \frac{90,152}{(1 + (90,152)^2)}$$

$$n_0 = \frac{90,152}{(1 + (90,152)(0.0025))}$$

Note that N is the total population,  $n_0$  is the sample size, e is the desired level of precision.

Then the sample size will be = **398**

**3.6. Data type, source and data collection instruments**

According to Kothari, (2004), this instrument of data collection is quite popular, particularly in case of big enquiries. Qualitative in nature is one of these primary data, which is usually text, based or quantitative in nature, which signifies the numerical values. Among the methods of collecting the primary data are via questionnaires, interviews, observations, group interviews, case-studies, diaries, critical incidents and portfolios.

Secondary data is data that has already been collected for use in previous studies. Secondary data can also be divided into two based on their nature. These two natures are qualitative data which comprises of biographies, personal letters, documents, diaries, records, published material, computer database, and policy statements.

The study used both primary and secondary sources of data collection. As a mixed research approach, the primary data sources to be used from qualitative as well as quantitative in nature. Qualitative data was collected from the open ended interview questions and focus group

discussion questions that the researcher forwarded to respondents while quantitative data was collected from the Likert scale close ended questions forwarded to respondents. The questionnaire was created using data from prior studies. The study relied on closed-ended questionnaires. The closed-ended questions used a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) The Likert scale questionnaires were used to examine and identify the determinants for participating in agency banking, challenges in usage of agent banking which were distributed to CBE-birr users, the open ended interview questions was used so that respondents could forward their unreserved opinions about the implementation of agent banking in commercial bank of Ethiopia. Interview questions were directed to NBE expert which help to harmonize with the result found from the Likert scale questions to find further proof on analyzing the commitment level of these stakeholder companies. branch operators that focus group discussion point were taken to support the findings in the Likert scale results.

### **3.7. Research hypothesis**

The researcher has utilized the following hypothesis based on conceptual frame work to examine what factors (independent) determine usage of agency banking (dependent).

***Hypothesis 1:** - Other things remaining the same, participation in agency banking is not statistically determined by the characteristics of beneficiaries taken collectively (age, gender, income level, marital status, family size, employment status)*

***Hypothesis 2:** - Other things remaining the same, agency banking practice is not statistically affected by the commitment level of beneficiaries, agency related laws, technological, organizational, environmental challenges taken collectively.*

### **3.8. Data Analysis & Presentation**

According to Croswell, descriptive statistics is used to analyze data with the features of tables, percentages, mean and standard deviations. The study has used both descriptive and inferential statistics in analyzing the data. A descriptive analysis is used to present and interpret the demographic data this includes, Frequency tables, Percentages employed to investigate the responses of the respondents. Data analysis was done with the help of STATA version 13). It is preferred

because it covers a wide range of the most common statistical and graphical data analysis in a very systematic way. First, data collected was collected, labeled, sorted and analyzed. To measure how the dependent variable is described by the proposed aspects or factors multiple regression analysis applied.

### 3.10.1. Model specification

Since the researcher used *ordinal logistic regression* method to analyze the hypotheses stated the following models are specified

**Model I:** - for the measuring whether characteristics of beneficiaries statistically determine the usage of agency banking (CBE-birr)

$$Y_1 = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + B_7X_7 + B_8X_8 + B_9X_9 + B_{10}X_{10} + B_{11}X_{11} + \sum$$

Where by

$Y_1$  = usage of agency banking

$B_0$  = Constant and  $B_1 - B_{11}$  are regression coefficients Independent variables are

$X_1$  = age,  $X_2$  = gender,  $X_3$  = education level,  $X_4$  = income level,  $X_5$  = employment status,  $X_6$  = work experience,  $X_7$  = receiving remittance,  $X_8$  = using equb,  $X_9$  = marital status,

$X_{10}$  = number of family size,  $X_{11}$  = having saving account

$\sum$  = error term

**Model II:** - For measuring the statistical significance effect of challenges  $Y_2 =$

$$B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + \sum$$

Where by

$Y_2$  = Practice of agency banking

$B_0$  = Constant, whereas  $B_0 - B_5$  are regression coefficients Independent variables

$X_1$  = Commitment level of beneficiaries  $X_2$  = Agency related laws

$X_3$  = Technological challenges  $X_4$  = Organizational challenges

$X_5$  = Environmental challenges &

$\sum$  = error term



### **3.9. Validity and reliability**

#### **3.11.1. Validity**

As stated by Kothari 2004, validity is a criterion that indicates the extent to which an instrument measures what it supposed to measure. It can also be understood as the degree to which results obtained from the analysis of data actually represents the understanding from it initially. In order to make validity in this research structured interviews, questionnaire and focus group discussions were used and prior to direct launch of such data collection methods the researcher asked for guidance to review the content of those stated collection methods and it was validated by the advisor so as to avoid offensive and unexpected wordings and issues.

#### **3.11.2. Reliability**

In the section of dealing with the reliability of the research it focuses on the measure of the degree in which research instruments provide or yield consistent results. In this study, data reliability was censured by testing the data collection methods.

### **3.10. Ethical considerations**

The researcher have based on the following ethical considerations. First and foremost, the research participants were given the full authority either to participate in the research or not. In relation, they were also given full autonomy to give their utmost opinion regarding the subject in study. Secondly, the responses from the participants were mysterious and kept confidential. In this, the researcher did not require the respondents give their names, addresses, phone numbers or what soever personal information of them. Thirdly, the researcher asked the full approval from all the respondents for collecting the information required the bank (CBE) for acquiring with authorization and st. mary university before collecting the information from different data sources.

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION AND INTERPRETATION**

#### **4.1. Introduction**

This chapter presents the results of the study findings from data gathered based on the research methodology designed for this research. This study sought to assess the determinants of the usage of CBE-birr agent banking project by Commercial bank of Ethiopia. The study also tried to determine and examine which characteristics of beneficiaries, agency related laws and directives, and challenges (technological, organizational, and environmental issues) have effect on the practice of CBE-birr project. Furthermore; the perception level of beneficiaries on stakeholder analysis made by CBE and the commitment level of parties engaging in the implementation on the project has been assessed.

#### **4.2. Questionnaire Return Rate**

To begin with, the questionnaires were distributed to fit the respondent's requirements. The researcher had distributed 398 questionnaires and collected 363 with a response percentage of 91.20%. The response rate was appropriate for the study to continue and provide reliable results as stated by Mugenda and Mugenda (2003) who revealed that above a seventy five percent response rate would be accepted as a very good scale.

##### **4.2.1. Reliability Analysis**

Reliability refers to a measure of the degree to which research instruments yield consistent results. Cronbach's alpha reliability test was run on the data collected to determine the reliability of the data. In this study, data reliability was done and results showed that all the values were above 0.70 indicating acceptable reliability. Nunally (1978) suggested that the minimum of 0.70 would be an acceptable level.

Factor	Cronbach alpha
Stakeholder analysis	0.7514
Commitment of parties involved	0.7386
Agency related laws and directives	0.7216
Technological challenges	0.8343
Organizational Challenges	0.7070
Environmental Challenges	0.7714
<b>Combined result</b>	<b>0.8312</b>

Table 2: - Reliability test resultSource: - Survey result

### 4.3. General Information of the Respondents

The section presents the general demographic information of the respondents who took part in the study. The researcher found it important to establish the general information of the respondents since it forms the basis under which the study can rightfully access the relevant information of beneficiaries of CBE-birr. The general information gathered includes the gender of the respondents, age, year of schooling, work experience, marital status, employment status, and so others as discussed below.

#### 4.3.1. Gender distribution of respondents

Based on the collected data, results presented in figure 3 show that majority of the respondents 65.01% were female while 34.99% were male. This portrays that the data collected were by both male and female though the male were the majority which implies that the operations of CBE-birr agency banking was dominated to female gender.

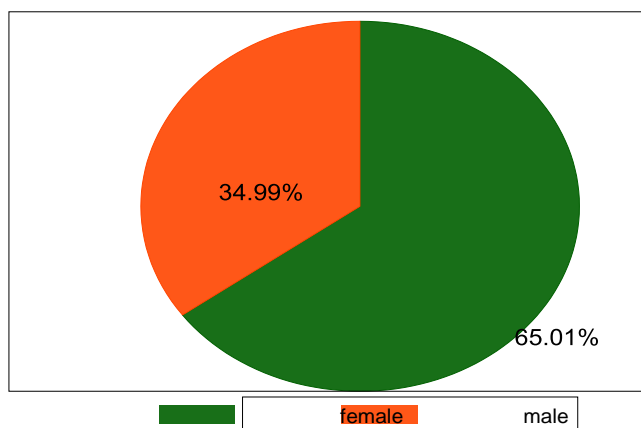


Figure 2: - gender distribution of respondentsSource: - survey results

### 4.3.2. Age distribution of respondents

The study has revealed that the age distribution by gender of the respondents has shown 94.49% of respondent's age being below 40 years of age. As to the graph shown below we see that most of the female respondents 94.92% have age distribution of less than 40 years of age, while about 93.70% of male respondents lie with age group less than 40 years of age. From these we can deduce that the age distribution of the agency banking is focused on the younger age distribution, which implied that most of the CBE-birr beneficiaries are in the productive age group which is susceptible to technological changes.

age1	Freq.	Percent	Cum.
20-29	187	51.52	51.52
30-39	156	42.98	94.49
40-50	16	4.41	98.90
Above 50	4	1.10	100.00
<b>Total</b>	<b>363</b>	<b>100.00</b>	

Table 3: - Age distribution result Source: - Survey result

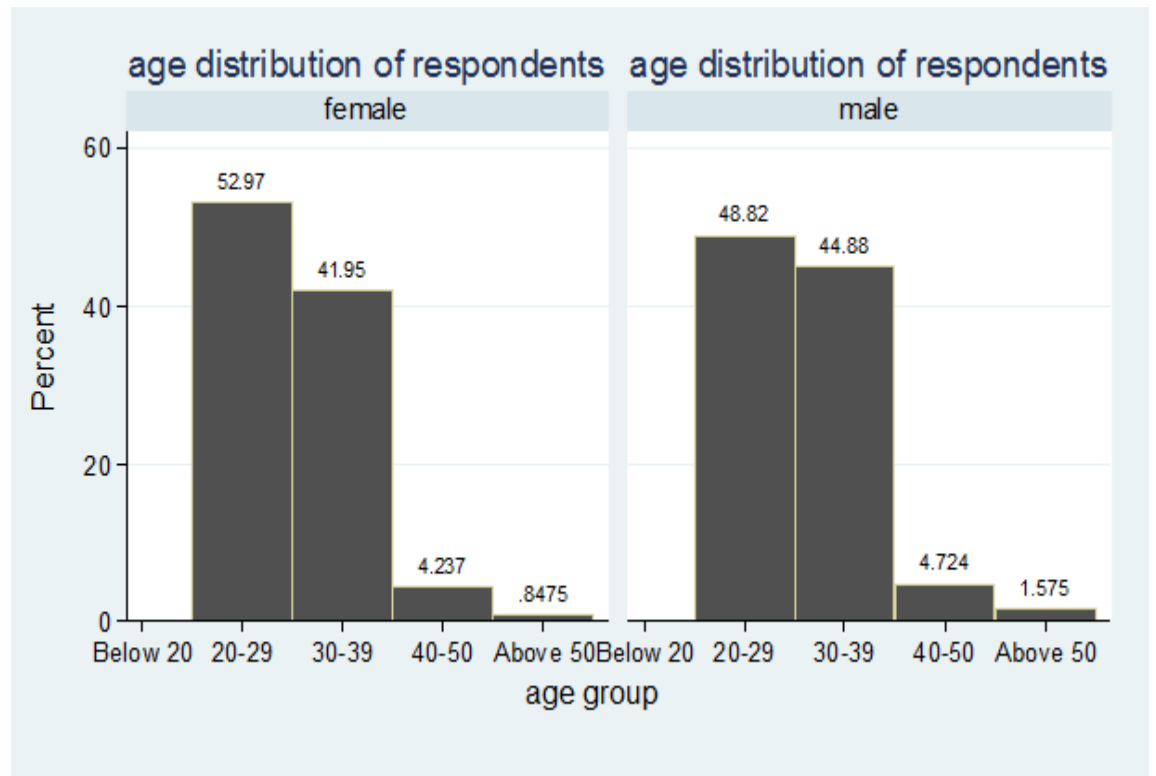


Figure 3: - age distribution by gender of respondents Source: - survey results

### 4.3.3. Distribution of Respondents by Level of Education

The respondents were asked to indicate their highest level of education reached. This was intended to establish whether level of education was a determinant for one to participate in CBE-birr agent banking. The results are presented in figure 5.

The study findings in figure 5 show that 286 (78.79%) of the respondents have reached BA/BSC degree level while 31 (7.438%) each for MA and above as well as (8.54%) secondary schooling. On the other hand, 16 (4.41%) of the respondents indicated that they had attended TVET or diploma level. All respondents also have revealed that they can read and write, which means they are literate to be aware of what CBE-birr is about. The study results show that the respondents who use CBE-birr are literate and they know the result it has.

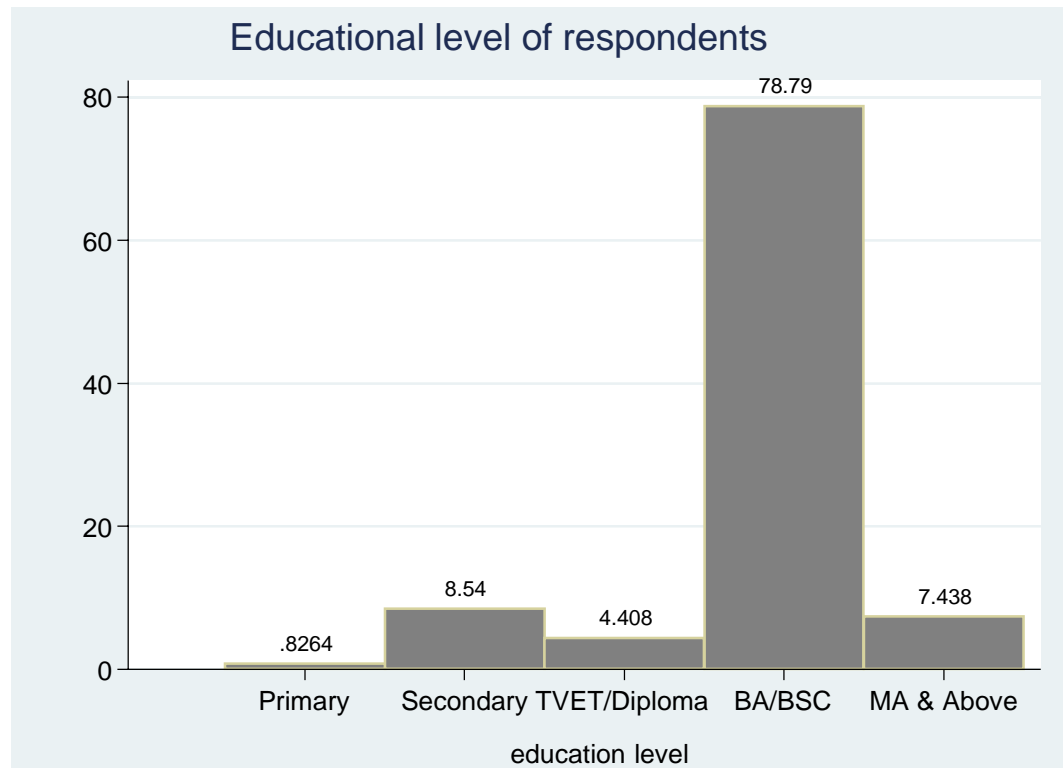


Figure 4: - educational distribution of respondents Source: - survey results

### 4.3.4. Type and employment status of respondents

As the results in the following table show, 86.77% of the 322 employed respondents have exposed

that they are permanently employed while only 1.93% of them replied their employment being temporary. Whereas, 41(11.29%) of the respondents have stated that they are not employed. From these results one can note that CBE-birr practice is focused on employed respondents. Focusing on permanent employees is better than having temporarily employed respondents because employed beneficiaries have the capacity to deliver steady fund requirements for CBE-birr participation.

Employment status of respondents				
Are you employed?	Type of employment			Total
[Freq Percentage]	No employment	Permanent	Temporary	187
Yes	0	315 (97.83)	7 (2.17)	322
No	41 (11.29)	0	0	41
<b>Total</b>	<b>41</b>	<b>315</b>	<b>7</b>	<b>363</b>

Table 4: - Employment status of respondents

Source: questionnaire results

#### 4.3.5. Distribution of Respondents by Income by gender

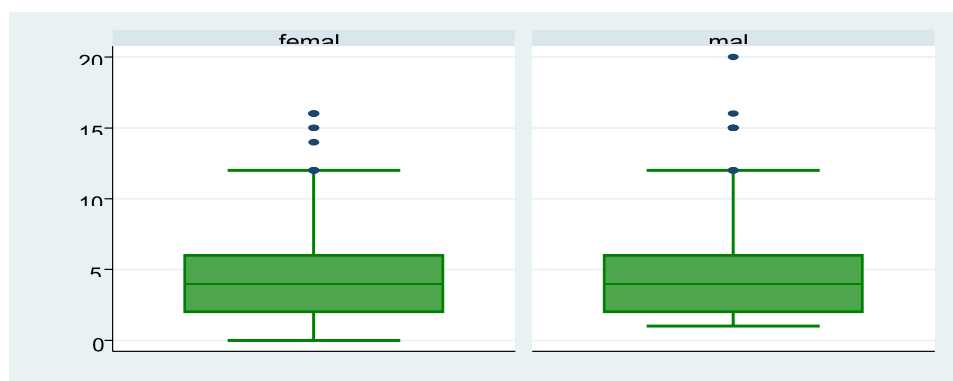


Figure 5: - Income distribution of respondents by age Source: - questionnaire results

The respondents were asked to indicate their level of income. The study was interested in the income level of the respondents so as to examine whether income has variation between male and female operating CBE-birr. The results are presented in the figure 6.

Box plots were used to show the distribution of a variable (income) at a distinct situation by gender and show what kind of variation exists. The above graph has shown that the income distribution for male respondents has higher variation or skewed than that of the female respondents even though the inter-quartile range seems equal. In addition, the mean income for male and females' is equal.

#### 4.3.6. Distribution of Respondents by Marital status

Marital status	Frequency	Percent	Cumulative
Single	204	56.20	56.20
Married	159	43.80	100.00
Total	363	100.00	

Table 5: - Marital status distribution of respondents Source: - questionnaire results

The above table has shown that most of the beneficiaries (56.20%) are single, which implies that the level of hardship on them to use the agency banking is lesser than that of the married beneficiaries because married respondents have the responsibility of many.

#### 4.3.7. Distribution of work experience of respondents

From the figure below we can observe that (73.83%) of the beneficiaries have work experiences less than 4 years of service. In line with that, as depicted in the age distribution, 94.49% of the beneficiaries being below the age of 39, relatively we can say that the CBE-birr more focuses on the younger generation having less work experience and probably energetic to technological adoption and innovations.



Figure 6: - work experience distribution of respondentsquestionnaire results

#### 4.3.8. Distribution of remittance, equb, saving account status of respondents

With the objective of identifying whether beneficiaries receive remittance, participate in equb, and have saving account or not, beneficiaries were asked to respond whether the stated elements hold true. According to their responses 92.01% of them said that they don't receive remittance, but 74.66% and 92.29% of the respondents have revealed that they use Equb for saving their money and have a saving account in CBE.

As per to the response the mean amount of birr saved using equb is 920.86 which is higher than that of saving through CBE's saving account 907.36. This implies that most of the respondents heavily rely on saving through Equb than the regular bank saving system. In addition, the responses have also revealed that a mean of 1737.16 is saved for CBE-birr with an average usage frequency of 4.58 in a month. The results show that beneficiaries are more attached to saving birr using equb than saving account. This is strictly against the implications of financial inclusion.



The results are presented in the following table 4.3.

Experience	Remittance	Use Equb	Saving account		
No	Freq. <b>334</b>	92	28		
	Percent <b>92.01</b>	25.34	7.71		
Yes	Freq. <b>29</b>	<b>271</b>	<b>335</b>		
	Percent <b>7.99</b>	<b>74.66</b>	<b>92.29</b>		
	Remittance frq	Equb Amount	Saving amount	CBE-birr saveamount	CBE-birr frequency
Mean	0.107	757.56	432.12	410.19	4.58
St.deviation	0.360	920.86	907.36	1737.16	3.28
Min	0	0	0	0	0
Max	2	7500	7000	12000	20

Table 6: - remittance, equb, & saving account distribution of respondents Source: - questionnaire results

#### 4.4. Discrete data findings and interpretation

The findings of the discrete data is analyzed as follows

##### 4.4.1. Overall implementation of CBE-birr

The research intends to know what the current determinants of the agency banking CBE-birr that is implemented by commercial bank of Ethiopia. In order to achieve respondents were asked how they respond on the implementation successfulness.

Based on their responses majority, 61.16%, stated that they disagree that the implementation of the CBE-birr being successful. While only 37.74% state that they agree on CBE-birr being successful in its implementation. From this response we can dictate that there exist some drawbacks or barriers in the implementation .

<b>The implementation of CBE-birr is successful</b>			
	Freq.	Percent	Cum.
Strongly Disagree	115	31.68	31.68
Disagree	107	29.48	61.16
Neutral	4	1.10	62.26
Agree	103	28.37	90.63
Strongly Agree	34	9.37	100.00
Total	363	100.00	

Table 7:- Implementation of CBE-birrSource: - questionnaire results

#### **4.4.2. Perception of beneficiaries in stakeholder analysis taken by CBE**

This research intended to find the perception level of beneficiary's on stakeholder analysis made by CBE regarding CBE-birr practice. Respondents were asked questions about stakeholder analysis and involvement as well as interaction to meeting the interest of the different stakeholders involved in the CBE-birr implementation. The respondents were asked to rate in a likert scale as 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. For the purpose of analyzing the data findings these responses were re-coded and condensed in to 1 2 = To low extent, 2 = to moderate extent, and 3 = to very large extent.

Respondents revealed that CBE's identification on who the stakeholders are has been to moderate extent according to 204(56.20%) and also 108(29.75%) to low extent respectively. Furthermore, a total of 306(84.30%) of the respondents has replied that CBE has understood the stakeholder needs up to moderate extent. Even 248 (68.32%) of the respondents have revealed that they would agree on CBE's agency banking being implemented with the interest of the stakeholders as to low extent.

		CBE has identified well about who the beneficiaries of CBE-birr are	CBE clearly understands the stakeholders needs	The agency banking is being implemented with the interest of the stakeholders	CBE's agent banking is used to provide accessibility to the unbanked society	Starting objective of Agency banking implemented by CBE is to increase convenience	Stakeholders are enabled to get involved prior to CBE-birr Pilot
To low extent	Freq	<b>108</b>	<b>156</b>	<b>248</b>	<b>241</b>	<b>197</b>	<b>333</b>
	percent	<b>29.75</b>	<b>42.98</b>	<b>68.32</b>	<b>66.39</b>	<b>54.27</b>	<b>91.74</b>
To moderate extent	Freq	<b>204</b>	<b>150</b>	44	6	66	30
	percent	<b>56.20</b>	<b>41.32</b>	12.12	1.65	18.18	8.26
Very large extent	Freq	51	57	72	116	101	0
	percent	14.05	15.70	19.56	31.96	27.55	0.00
Mean		2.71	1.73	1.51	1.66	1.73	1.08
St. deviation		0.97	0.72	0.80	0.93	0.87	0.27

Table 8:- perception of respondents on stakeholder analysis Source: - questionnaire results

Note that the agency banking being implemented against the interest of the stakeholder's matters has a huge influence in the effectiveness of the implementation. This result is supported by the statement made by Barney and Hanson (1994), which stated that firms that understand the stakeholder's interest and needs and who work cooperatively in line with the requirements of stakeholders strive for more success than those who doesn't even consider stakeholder interest and needs. To the best of my knowledge, beyond such statement there has not been any research that was done directly reflecting the perception levels of beneficiaries on stakeholder analysis on agency banking implementation.

In similar note respondents have also replied to the questions of whether CBE has began implementing CBE-birr with the intention of providing accessibility to the unbanked society, intention of bringing convenience, and whether if beneficiaries got involved prior to pilot testing. According to their response, 241(66.39%) of the respondents have revealed that CBE-birr agency banking is not intended to provide accessibility to the unbanked society, 197(54.27%) of them said that they agree to low extent that CBE-birr intends to bring convenience and 333(91.74%) of them

replied that they perceive that CBE has not involved at all beneficiaries from the base. In line with the statements of Barney and Hanson, lacking cooperation and involving stakeholders could be fatal.

		The level of awareness creation that has been done by CBE for branch implementer is enough	The level of awareness given to the society on the implementation of the agency is enough	I have been trained successfully about the usage of agent banking	I would like to get additional training on CBE-birr	CBE-birr has reduced the number of customers in branches halls	Stakeholder analysis made regarding agent banking by CBE is enough
To low extent	Frequency	<b>307</b>	<b>351</b>	<b>298</b>	41	<b>335</b>	<b>281</b>
	Percent	<b>84.57</b>	<b>96.69</b>	<b>82.09</b>	11.29	<b>92.29</b>	<b>77.41</b>
To moderate extent	Frequency	18	3	9	3	9	30
	Percent	4.96	0.83	2.48	0.83	2.48	8.26
Very large extent	Frequency	38	9	56	<b>319</b>	19	52
	Percent	10.47	2.48	15.43	<b>87.88</b>	5.23	14.33
Mean		1.26	1.06	1.33	<b>2.77</b>	1.13	1.37
St.dev		0.63	0.32	0.73	<b>0.64</b>	0.47	0.72

Table 9:- conti. Perception of respondents on stakeholder analysis Source : - questionnaire results

Alongside the responses they have given above respondents were asked to reply on level of awareness given for branch implementers, for the society and they were asked to level their perception accordingly. As per to their response 307(84.57%) of them stated that the level of awareness created to branch implementers is low extent, while only 38(10.47%) of them replied as it being enough to larger extent. In related terms 351(96.69%) of them have also stated that the awareness creation done to the public or the society is not enough. From the results revealed one can judge and conclude that CBE has not yet done enough on providing awareness to the bank community and the society as well.

Additionally, 298(82.09%) of the respondents have stated that they haven't been trained up to the point of this response and 319(87.88%) of them said that they would like to get training on CBE-birr agent banking. After all the stated analysis, 335(92.29%) of them replied that they don't

believe that the CBE-birr agency banking implementation has reduced the number of customers at the branch halls. And at the same time 281(77.41%) don't believe that the stakeholder analysis done by CBE for the implementation of CBE-birr agency bank is enough. From this one can take that the stakeholder analysis needed to be done precisely and most of the respondents have been involved little on the stakeholder analysis even though it needs to be done correctly and considering all the matters and interests of the stakeholders. And it shows that there is a strong perception that the stakeholder analysis done by CBE is not enough.

#### 4.4.3. Commitment and trust level of parties

Respondents were asked to state their level of commitment on CBE-birr. As to response, 67.77% (with mean of 2.46 standard deviation of 1.48), 64.74% (with mean 2.48 and standard deviation of 1.37), 58.40% (with mean 2.64 and standard deviation of 1.43), 78.24% (with mean 2.07 and standard deviation 1.20) have combined disagreement that CBE-birr secures their financial information, are willing to invest in CBE-birr, makes life easy for them, and they have trust and commitment respectively for the implementation. This shows how low committed beneficiaries are about using CBE-birr.

Items	Mean	Sta. deviation	Percentage of responses				
			SD	D	N	A	SA
Security of financial information	2.46	1.48	<b>33.33</b>	<b>34.44</b>	1.65	14.05	16.53
Willingness to invest	2.48	1.37	<b>30.30</b>	<b>34.44</b>	0.28	27.27	7.71
Make life easy	2.64	1.47	<b>31.13</b>	<b>27.27</b>	0.00	29.48	12.12
Implementation as expected	2.56	1.43	<b>31.40</b>	<b>29.20</b>	1.10	28.65	9.64
I trust and am committed	2.07	1.20	<b>39.12</b>	<b>39.12</b>	0.28	17.91	3.58

Table 10:- commitment and trust level of parties involved  
Source: - questionnaire results

#### 4.4.4. Agency related laws and directives

With the intention of understanding how friendly and easy agency related laws and directives are, the responses of the respondents have shown that the beneficiaries haven't received training, they are not aware of the legal actions to be taken into consideration with a mean of (53.99%)2.46, (54.85%)2.38 and 1.01 standard deviation each respectively. And based on their responses they have been indifferent to state whether the legal directives might be friendly or might also limit the activities of the commercial bank of Ethiopia with 26.17%, 34.16% respectively. In related termsthey (35.26%) are also neutral on that the legal requirements asked by the bank are enough to understand stakeholders. This indicates that the respondents are not confident enough to state confidently about agency related laws.

Items	Mean	Sta. deviation	Percentage of responses				
			SD	D	N	A	SA
Received training on directive	2.46	1.01	<b>19.28</b>	<b>34.71</b>	26.45	19.56	0.00
Aware of legal actions	2.38	1.01	<b>23.97</b>	<b>29.20</b>	31.96	14.60	0.28
Laws & directives are friendly	2.54	1.09	21.21	27.82	26.17	24.52	0.28
Laws limit activities	2.65	1.09	20.94	18.73	34.16	25.90	0.28
Legal requirements enough & fair	2.70	1.02	15.98	23.42	35.26	25.07	0.28

Table 11:- agency banking related laws and directivesSource: - questionnaire results

These results support the results from whose objective was to find the level of understanding of customers' on agency banking laws and it has clearly stated that 90% of customers believe that they should get training and awareness on agency related laws. In addition, the results of Elizabeth Mungai (2016), which the researcher tried to uncover the factors influencing agency banking, have revealed that the provision of training and awareness on agency banking as critical factors for the effective operation of agency banking.

#### 4.4.5. Technological factors

The practice of agency banking requires consistent technological provision. Since technological requirements are anchors for the successful implementation of agency banking they need to be operating without problem. The following table depicts the responses given by the respondents in relation to the technological challenges associated with practice of CBE-birr in commercial

bank of Ethiopia.

Hereby the findings clearly show that there are different situations considered as challenges in CBE-birr practice. Accordingly, 61.43%, 70.52%, 68.87%, and 71.08% of the beneficiaries have stated that poor mobile network with mean 3.41 and standard deviation of 1.65, lack of inconvenience for 24 hours in 7 days with mean 3.65 and standard deviation of 1.49, beneficiaries fear to use CBE-birr with mean 3.60 and standard deviation of 1.57, willingness and trust issues with mean 3.67 and standard deviation of 1.50 respectively have been challenges in the practice of CBE-birr.

Items	Mean	Sta. deviation	Percentage of response				
			SD	D	N	A	SA
Device not reliable	2.16	1.35	<b>41.87</b>	<b>33.61</b>	0.83	14.33	9.37
Poor mobile network	3.41	1.65	22.31	16.25	0.00	<b>21.21</b>	<b>40.22</b>
Inconvenience	3.65	1.49	15.43	13.77	0.28	<b>30.85</b>	<b>39.67</b>
Fear of use	3.60	1.57	19.83	9.92	1.38	<b>28.10</b>	<b>40.77</b>
Willingness & trust to accept	3.67	1.50	15.70	12.95	0.28	<b>30.58</b>	<b>40.50</b>
Information security	2.46	1.48	33.06	34.71	1.65	14.05	16.53
System incompatibility	3.55	1.48	16.53	11.85	7.44	<b>28.65</b>	<b>35.54</b>

Table 12:- technological challengesSource: - questionnaire results

Additionally, 64.19% of the respondents stated that system incompatibility between the CBE-birrsystem and the ry and already installed system (Core-banking system) has been seen a major problem and challenges noted. These pointed out findings are consistent with the findings of Fred(2013) which stated that poor technological challenges specifically mobile network and inconvenience of agency banking have effect on the operations of agency banking. Further Wambari Andred had undertaken research of mobile banking in developing countries with the objective to understanding the challenges in mobile money banking, and the research has shown that incompatibility, slow in willingness and application problems were found to be challenges.

#### 4.4.6. Organizational factors

Agency banking requires the establishment of organizational requirements. The stated questions in the following table show conditions that needed to be fulfilled by the organization. But having organizational based shortfalls hamper the effective implementation of the project. The table

shown below depicts about the organizational challenges faced up in the practice of agency banking/CBE-birr.

Items	Mean	Standard deviation	Percentage of responses				
			SD	D	N	A	SA
Enough branch operators	3.22	1.51	22.04	16.53	0.00	<b>39.39</b>	<b>22.04</b>
Trained manpower	3.52	1.46	15.98	14.88	0.28	<b>38.02</b>	<b>30.85</b>
Awareness on CBE-birr usage	3.48	1.47	19.01	10.47	1.38	<b>41.32</b>	<b>27.82</b>
Awareness on directive	3.55	1.45	16.25	13.50	0.28	<b>39.39</b>	<b>30.58</b>
Expensive cost	3.52	1.48	15.15	17.36	1.65	<b>32.51</b>	<b>33.33</b>
Technical support	2.40	1.34	29.75	36.91	7.71	14.33	11.29
Monitoring & controlling	3.23	1.49	20.94	17.36	0.00	<b>40.50</b>	<b>21.21</b>

Table 13:- organizational challengesSource: - questionnaire results

From the findings that we observe above, we can take that 68.87% with of respondents mean 3.52 and standard deviation of 1.46 have agreed that lack of trained manpower being a major challenge. In relation 61.43% of the respondents said that they agreed on the issue of lack of enough branch operators being considered as one challenge. From the point of awareness level on CBE-usage 69.14% with mean 3.48 and standard deviation 1.47 agreed that it is also a challenge faced on the practice. 61.71% of the overall respondents have agreed that monitoring and controlling of the activities and processes in CBE-birr practices being major challenge. At the same time 65.84% agreed also that cost expensiveness can be a challenge. The results also show that 69.97% stated that awareness level on directives related to agency banking proved to be challenges. From the above findings one can note that these kind of organizational challenges have negative effect on CBE-birr practice.

#### 4.4.7. Environmental factors

Environmental issues are those which surround the implementation process starting from legal framework to end to end competition with the competitors. The environmental challenges as to the responses of respondents are 81.27% with 4.22 mean and 1.01 standard deviation, 56.20% with

3.14 mean and 1.53 standard deviation, and 58.95% with mean of 3.33 and 1.57 standard deviation, 58.95% with 3.37 mean and 1.54 standard deviation stated that trust on



agents/customers and customers, lack of commitment by stakeholder, stiff directive, and lack of marketing effort possess higher percentage of effect on CBE-birr practice respectively. Additionally,

Items	Mean	Sta. deviation	Percentage of responses				
			SD	D	N	A	SA
Commitment by stakeholders	3.14	1.53	22.04	20.66	1.10	<b>32.78</b>	<b>23.42</b>
Trust on agents/ customers/ bank	4.22	1.01	0.00	12.12	6.61	<b>28.93</b>	<b>52.34</b>
Competition pressure	2.85	1.51	21.49	35.26	1.65	19.83	21.76
Marketing effort	3.33	1.57	20.39	18.18	2.48	<b>25.62</b>	<b>33.33</b>
Stiff directive	3.37	1.54	16.25	23.42	1.38	<b>25.07</b>	<b>33.88</b>

Table 14:- commitment and trust level of parties involved Source: - questionnaire results

The results found from the above table is clearly supported by Wondesen and Tsigai (2005), which has shown that environmental factors (such as stiff directives) were the hampering factors in adoption of e-banking. Furthermore, Garadachew (2010) has the same intent of identifying the challenges in e-banking adoption and stated that regulatory frameworks have been the major challenges. Apart from that competition pressure and trust on agents were also claimed to be challenges.

#### 4.5. Correlation of dependent and independent variables

Correlation is a way to show in which two or more variables are related with one another. A correlation result will fall in between -1 and 1. As the value nears to 1 it shows that there is a strong positive relationship between them while when value is closer to 0 it shows that there is a no relationship between variables. Additionally, when the values get closer to -1 it shows that there is a strong negative relationship between variables. (Brooks, 2008). As shown in the following it is tried to show what kind or magnitude of relationship there exists between dependent (usage) and independent variables (Commitment of parties, agency related laws technological, organizational and environmental challenges).

	overimp	c	l	tec	org	env
overimp	1.0000					
c	0.7888 0.0000	1.0000				
l	-0.0596 0.2575	-0.0518 0.3246	1.0000			
tec	0.0477 0.3646	0.2084 0.0001	-0.0576 0.2735	1.0000		
org	0.0552 0.2942	0.0785 0.1354	-0.0209 0.6920	0.5119 0.0000	1.0000	
env	-0.0200 0.7043	-0.0319 0.5448	0.6246 0.0000	-0.0939 0.0739	-0.0609 0.2474	1.0000

Figure 7: correlation of variables Source: - survey results

From the results of the above table, we have observed statistical evidence that CBE-birr practice expectation is positively and significantly correlated with the commitment level of parties involved with coefficient of 0.7888. At the same time CBE-birr practice is weakly and insignificantly correlated with agency related laws, technological, and organizational challenges with coefficients 0.0596, 0.0477, and 0.0552 respectively. At the same time the environmental challenges have weakinsignificant relationship with practice of CBE-birr with -0.0200. Since, correlation done doesn't help the researcher to show the cause-and-effect relationship that exists between the variables, it is intended to show that there is relationship between variables and degree of association. In the same note, agency banking related laws and environmental challenges has negative and significant correlation whereas there is also a positive correlation between technological and organizational challenges with the expectation of CBE-birr practice

#### 4.6. Results of Regression Analysis and Interpretation

This section presents the regression result of ordinal regression model that examines the determinant of agency banking practice that statistically and significantly affecting it in commercial bank of Ethiopia's CBE-birr as follows.

#### 4.6.5. Model I

##### *Hypothesis 1.1: -*

*Other things remaining the same, participation in agency banking is not statistically determined by the characteristics of beneficiaries taken collectively (gender educational level, employment status, marital status, use equb, receive remittance, log of age, Income level, work experience log of family size)*

##### **Discussion and interpretation of coefficients**

The regression on table 4.12 has shown that the level of statistical significance determining level that the characteristics of beneficiaries have over participation in agency banking.

Source	SS	df	MS			
Model	38.9413748	10	3.89413748	Number of obs =	359	
Residual	152.577926	348	.438442315	F( 10, 348) =	8.88	
				Prob > F	= 0.0000	
				R-squared	= 0.2033	
				Adj R-squared	= 0.1804	
Total	191.5193	358	.534970113	Root MSE	= .66215	

lc	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
gender	.1198007	.0737542	1.62	0.105	-.0252593	.2648608
educ	-.0085207	.0250702	-0.34	0.734	-.0578288	.0407874
employ	-.3062161	.1552279	-1.97	0.049	-.6115189	-.0009133
maritalstat	-.1904446	.0729039	-2.61	0.009	-.3338323	-.0470569
equb	-.0643425	.0826175	-0.78	0.437	-.226835	.09815
remittance	.124731	.1311542	0.95	0.342	-.1332237	.3826857
la	-.4427278	.2223674	-1.99	0.047	-.8800809	-.0053747
Income	.0000594	.0000138	4.31	0.000	.0000323	.0000865
workexp	.0440035	.0196651	2.24	0.026	.0053261	.0826808
lf	-.278928	.1170218	-2.38	0.018	-.509087	-.0487689
_cons	3.196509	.8919381	3.58	0.000	1.442241	4.950777

Figure 8: - regression testing of hypothesis 1 Source: - Own computation

Accordingly, the researcher has identified CBE-birr usage frequency per month as dependent variable and the demographic and other characteristics as independent variables. Independent variables are gender, educational level, employment status, marital status, use of equb, receiving remittance, log of age, income level, work experience and log of family size of beneficiaries using CBE-birr.

As depicted in the above regression result we can see that the overall model of hypothesis I is

statistically significant with the model covering 0.2033 of the variation. In the result it is clear that employment status, marital status, age, income level, work experience and family size of beneficiaries have significance effect on participation in agency banking. From these results we can see that as beneficiaries get employed, as work experience increases it is logical that they get improvement on their income level in which directly affects their level of participation in CBE-birr practice. The findings of this hypothesis were more supported by (Rogers, 1995) who have clearly stated such technological innovation in the banking industry is more accepted by younger age, high

salary, and those better with social status. As clarified by Williams and Thorma (2007) they have stated that accessibility to banking services would present a statement of improvement in way of living and those with higher level of income are capable of doing so. The results shown also confirm to the statement that income level of beneficiaries have significance effect on participation of agency banking. Furthermore, according to the research result Hannen A. (2014) focusing on the determinants of Internet Banking Adoption in Jordan, the results have shown that demographic characteristics of individuals have effect on their ability to use e-banking services of banks. As agency banking is one part of e-banking systems, this study's results also show the same effect.

Tests of VIF value in appendix (a) shows value 1.36 which is less than 10.00 which is acceptable. We can conclude that there is no problem of multicollinearity and also homoskedasticity exists and the p value has to be greater than 0.05 and it shows 0.2748 which is acceptable.

#### **Interpretation of R-squared**

As shown in Table 4.6, an R-squared coefficient of 0.2033 obtained from the estimated model; revealing that 20.33 percent of variation in CBE-birr agency banking participation is explained by the selected variables (employment status, marital status, age, income level, work experience and family size).

#### **Interpretation of Adjusted R-squared**

An adjusted R-square with a value of 0.1804 shows that 18.04 percent of dependent variable is explained by the independent variables included in the model.

## Decision

The hypothesis test has fulfilled all the post estimation test requirements and we reject the null hypothesis which states that the participation in agency banking is not statistically determined by the combined effect of the characteristics of beneficiaries. And in contrast we can accept the alternative hypothesis that demographic characteristics of beneficiaries have significant effect on participation in agent banking (CBE-birr).

### 4.6.6. Model II

*Hypothesis 2: - Other things remaining the same, agency banking usage is not statistically affected by the commitment level of beneficiaries, agency related laws, technological, organizational, environmental challenges taken collectively.*

The results of the ordinal regression have been presented as follows. The results have shown

Case Processing Summary			
		N	Marginal Percentage
<b>Overall usage</b>	Strongly disagree	115	31.68%
	Disagree	107	29.48%
	Neutral	4	1.10%
	Agree	103	28.37%
	Strongly agree	34	9.37%
Valid		363	100.00%
Missing		28	
Total		391	

Table 15: - case processing summary Source: - Own computation

The table of the case processing summary tells the proportion of response on each case summary and the summary has clarified the number of observations that have stated their response on each category of the categorical variable practice expectation. Response of the respondents' has shown on the point that the usage of CBE-birr is as expected or not. Accordingly 31.40% stated that they strongly disagree and 29.20% stated they disagree with a total of 60.80%.

### Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	Df	Sig.
Intercept Only	982.380			
Final	690.840	291.539	5	.000

Link function: Logit.

Table 16: - Model fitting

Source: - Own computation

The model fitting information provided above go with the question of “Does our model improve our ability to predict the outcome?” From the above table we can note that log likelihood states the measured error in the model and the significant level needs to be below  $p(<0.05)$  as it is shown to go further. So the result states that our model fits very well.

### Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	1457.349	1443	.390
Deviance	690.840	1443	1.000

Link function: Logit.

Table 17: - Goodness-of-fitSource: - Own computation

### Pseudo R-Square

Cox and Snell	.572
Nagelkerke	.592
McFadden	.297

Table 18: - Pseudo R-squareSource: - Own computation

The goodness of fit table tries to show whether or not our observed data fits to the model that we have set up already. Since our data need to be fit and needed to have Pearson and deviance significance results more than ( $p<0.05$ ), the result also satisfies the requirement of the null hypothesis that the observed data fits the model. We have found no statistical evidence to reject the null hypothesis. So we can say that the data observed fits well the model set.

The pseudo r-square table shows the version of R-square in logistic regression when we are not using continuous variable. The Nagelkerke in the above table has shown a result of 0.592 which

states that 59.20% of the variation in our outcome is explained by the explanatory variables. With this result we can say the R-square is good.

**Test of Parallel Lines<sup>a</sup>**

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	690.840			
General	686.415 <sup>b</sup>	4.425 <sup>c</sup>	15	.996

The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.

Table 19: - Test of parallel lines Source: - Own computation

**Parameter Estimates**

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Practice_exp = 1]	2.902	.932	9.689	1	.002	1.075	4.729
	[Practice_exp = 2]	5.253	.971	29.272	1	.000	3.350	7.155
	[Practice_exp = 3]	5.383	.973	30.583	1	.000	3.475	7.290
	[Practice_exp = 4]	8.572	1.052	66.445	1	.000	6.511	10.633
Location	Commitment	2.287	.169	183.989	1	.000	1.956	2.617
	Agency_laws	-.302	.190	2.545	1	.111	-.674	.069
	Technological	-.520	.147	12.525	1	.000	-.809	-.232
	Organizational	.432	.214	4.088	1	.043	.013	.852
	Environmental	.006	.234	.001	1	.979	-.452	.464

Table 20: - parallel estimates Source: - Own computation

The test of parallel lines in the above table is based on the assumption of proportion of odds (odds ratio) used when logistic regression is applied. And the results of the test of parallel lines need to be greater than 0.05. If not it will state that we have statistical evidence that the location parameters are not the same across response categories. And the assumption of proportion of odds is one rule don't need to be violated. As per to our result we have found no statistical evidence to reject the

null hypothesis, so we accept our null hypothesis.

On the parameter estimates sections we have found different sections of threshold with the five explanatory variables. The above regression was run to assess and analyze whether challenges listed as commitment wise, technological, agency related laws, organizational and environmental challenges have statistically significant effect on the implementation of agency banking in Commercial bank of Ethiopia. As listed and shown above it is seen that we have an overall statistically significant result. The results of the study have also clearly shown that the challenges of commitment of parties involved, technological, and organizational challenges are statistically significant with 0.000, 0.000 and 0.043 significance respectively, while agent related laws and environmental challenges are not significant.

This result has agreed with the outcome of Fred Gichana (2013) who have tried to find out about the challenges in agency banking in Kenya, the researcher has found that all of the respondents outlined technological aspects, as this research have resulted and specifically poor mobile network, has been found as major challenges. He further explained that fear of using agency banking has also minimized their participation.

**Decision:** - Since the result obtained has proved that the test for commitment level, agency banking related laws, technological, organizational and environmental challenges as a whole is statistically significant, the null hypothesis is rejected. And in contrast we can accept the alternative hypothesis that demographic significant commitment level, agency banking related laws, technological, organizational and environmental challenges as a whole has effect on practice of agent banking (CBE-birr)

#### **4.4. Survey results**

The following relates to the findings that have been gathered from focus group discussions. The focus group discussion consisted the opinions of 12 people. It also includes the opinions of 6 CBE-birr users, 3 agents, and 2 branch operators or employees of CBE.

7(58 %) have identified that they started using this agency banking through friends suggestion with and word of mouth from relatives, 4(42%) by asking the bank around their territory, while trying to open another account in branches, and advertisement that I had from the branches that I



get to save and withdraw. According to all the group members' responses, the implementation is in the footsteps which face obstacles that need to be taken into huge consideration. The system failure for deposits and other factors account for the shortfall. And with the same kind of service being delivered by other private commercial banks and it makes it hard for CBE.

As per to the remarks of employees, It's not fair to say that the implementation is as expected, because the people or the society hardly knows about the service. Additionally, the bank can't get to reach the intended society due to limitations that was imposed by NBE which stated that any bank with pilot test shall only implement its projects to a limited extent and it also prohibits marketing efforts.

More to what has been said, almost all of them 28(96.55%) have agreed that awareness made to the internal and external customers (employees) was weak as it becomes the challenges for the usage not to be as it expected.

72.41% stated that inconvenience in banks has created time wastage, deposit limit has limited our capacity to deposit than that of normal banking service, limited number of operating windows has been the main challenges, system failure. 86.20% have agreed on mobile network issues being the biggest challenge. Even though, it has the resources lack of training for users, agents and even the branch operators is so weak. Even 80% agents have outlined that branches that has made them as an agent didn't provide sufficient amount of training and awareness. Rather they stated that bank employees came and asked for trade license and ID (identification cards) only for the purpose of registration. And not having the proper training has made their own business customers to complain more and more.

Apart from this, one participant even has noted that the name itself "CBE-birr" doesn't dignify whether the bank is using the service for mobile banking or agency banking. It need to have clear image and awareness across branches about it so as to avoid confusion.

The legal framework is tough and hard to understand and monitoring and assessment being made by the management of managers at branch is low. All of the participants have revealed that one of the primary things is the proper delivery of training and awareness

According to the responses of 90%, they have stated that providing sufficient number of branch

operators, and also awareness creation has been noted as challenges and for such problem solutions must be put in place. Ethio-telecom mobile network problems must be solved

Branches and even CBE at large must evaluate and assess the performance of customer service delivery apart from document based evaluation. CBE needs to upgrade its system to a system that is universal and up-to-date. And further, directives of agent banking must be communicated well to the concerned bodies.

So far CBE-birr is a new product that needs to be informed to the people, but as part of the society and as the major user or benefiting stakeholder they have stated their commitment and trust on the product. They have made the assurance that they will use it in the future.

The group members have outlined on the fact that CBE as the primary organ of service delivery, it needs to make available of personnel who are committed to work and who believe in the product. Beyond all that all the CBE branch operators have identified that the basic use of CBE-birr is for creating a “cashless society”, which aims at minimizing the amount of cash to be handled on hand by the society and make available of mobile system to access their financial information with accessibility for conducting transactions with phone.

#### **4.4. Findings of the interview**

- The findings of this interview is collected from NBE branch supervision expert who conducts routine check on commercial banks on the operations of e-payment and also from Ethio-telecom network provision and controlling section expert. They have outlined their responses as follows

##### **NBE**

The following has presented interview results of NBE bank supervision expert

The expert has clearly outlined that as a central bank of the country, NBE is more obliged to make the appropriate requirements for the commercial banks to act up on. NBE have already made a mobile and agent banking directive for commercial banks to abide by. He has clarified that NBE has been and will be committed enough to make the banking industry as technologically elevated as possible. The other action NBE takes is supervising the commercial banks to identify whether

things are done accordingly.

Due to lack of sufficient amount of personnel, it's impossible to check on every little detail and every branch of each bank. But the bank is doing in its absolute power to make sure agency banking usage are based on the interests of the society through timely check-ups and monitorings done

As possible challenges in ensuring financial inclusion a reality in Ethiopia, he stated that the saving habits of the society being low counts the highest. But beyond that commercial banks interest rates might not seem attractive enough. And products and services delivered by commercial banks like ATM, POS and Mobile banking and even the normal banking service delivery is weak that have limitations and they push people away from banks. Some may raise aquestions over the directive that NBE sets out but the directive has been successfully a guiding principle for most of the banks and its has not been found as a problem.

To overcome these obstacles banks have to create awareness about each service delivery and also people have to be more active towards saving. And agency banking implementations undertaken by the commercial banks must have to be applied with little problems as possible. At the same note he added that proper monitoring of the status of the implementation supported by opinions ofthe beneficiaries must be done regularly.

The findings of this interview is collected from CBE-birr department expert of the commercial bankof Ethiopia who is focused on the operations of CBE-birr

### **CBE-birr office**

The following narration indicates the response of CBE-birr office for the interview questions raised

- The officer at CBE working under the directorate, has clearly explained that the objective of CBE-birr initially is to create a cashless society that is supported by mobile banking butwith the presence of agents operating the functions of the bank. The officer has explainedsince CBE-birr is a current action taken by most banks in our country it was passed through stages of need assessment, project development, authentication, pilot testing, and final product launch and CBE has done intensively to understand what things the bank have to come against.

- He stated that the services being provided are buying airtime, cash deposit, cash withdrawal, account to account transfer using phones, mini statement, and the utility payments like (Water, electric bills) will be made through it.
- He further explained that the aim of CBE-birr is to create cashless society that embraces the new technology to a better use by making accessibility and convenience so as to make financial inclusion. As to this he said that the usage is as expected because CBE is utilizing its every resource to make sure that CBE-birr service becomes a huge success. And in the future it is intended to lighten up the burdens of the society as they usually hold lines at branches to get banking services. With the introduction of such technology it will help the bank to have accessibility to very large portion of the market.
- As per to the response, since CBE-birr requires consistent mobile networks, the problem of mobile network has been the major talking point. Customers are reserved to use this service with the expectation that they have fear of losing their money, level of assistance given by the NBE has been low. At the start dealing with the requirements of NBE was hard and other confidential but legal issues have also been the dragging points.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1. Introduction**

In the previous chapter the researcher has presented the findings from both descriptive and inferential statistics about the practice of agency banking in commercial bank of Ethiopia/ CBE-birr. This chapter presents the summary where the major findings are pointed out as related to the research objective, while general conclusion from the results of the research will be shown in the conclusion part and recommendations of the research study will give insights how to resolve the challenges seen in this project.

#### **5.2. Summary of findings**

The study was intended to analyze the determinants of the usage of agency banking/ CBE-birr of commercial bank of Ethiopia. The specific objectives were assessing the perception level of beneficiaries on stakeholder analysis made by CBE towards implementing CBE-birr, assessing demographic characteristics that are determinants of participating in CBE-birr, examine the commitment level of parties involved and analyze the challenges associated with CBE-birr practice.

##### **5.2.1. Demographic information of respondents**

From the findings of the study, 65.01% of the respondents happened to be female. Most of the age group that the respondents were in have suggested that 94.49% were below the age of 40. From these findings we have observed that also 78.79% of the overall respondents have B.A degree educational level. The finding also has shown that 68.44% lie in the income level below 5000 and higher variation exists in male than female. Most of the respondents with 56.20% of the respondents were single. Above all it's found that the mean usage level of the respondents in CBE-birr have resulted 5 per month.

### **5.2.2. Perception on stakeholder analysis**

Regarding beneficiary's perception level on stakeholder analysis made by CBE, it was found out that 84.30% agree to a low extent that CBE has identified the needs of the stakeholders, 91.74% of them have stated to the fact that they haven't been involved in prior to pilot testing. And in addition, most of them asserted that the stakeholder analysis made by CBE is not satisfactory and as an effect of the project they didn't believe it was meant to create convenience and accessibility for them.

### **5.2.3. Commitment level of parties (stakeholder) involved**

With regard to the commitment level of parties beneficiaries have shown that they have less commitment level as depicted by 78.24.% and such result of expectation was further explained by low willingness to invest time and money, lack of believe that CBE-birr secures their financial information which was shown by 64.74% and 67.77% respectively. The regression results have shown with additional support from correlation that commitment of stakeholders has statistical significance.

### **5.2.4. Agency related laws**

In related terms with agency related laws the research intended to find out what kind of effect agency related laws and directives by observing respondents responses. And the research findings indicate that they (54.85%) are not aware of the agency related laws and the legal actions to be taken in to consideration and in the same note it is noted that 53.99% haven't received proper training about the directives set by NBE regarding agency banking. And most of them stayed neutral to agency related law questions raised to them.

### **5.2.5. Challenges in practice of agency banking**

As clearly stated the objective of this research study was to assess and examine the current determinants of agency banking being implemented by commercial bank of Ethiopia and also explore and give insights on the challenges that have resulted along the way. In prior studies it has been noted that implementation of agent banking has so many benefits for the society by for which it brings the services of banks closer and easily accessible to them with the appropriate time, money and effort saving. The challenges in the adoption of agent banking from commitment level of parties

involved, agency related laws, technological, organizational, environmental by further explaining the beneficiaries perception on stakeholder analysis CBE has made.

The research findings have revealed that technologically 61.43% stated that poor mobile network has been the main challenge in agency banking implementation, lack of inconvenience amount for 70.52%, willingness and trust to accept CBE-birr has been explained by 71.08% as challenges. Incompatibility of systems between the agency banking and the core-banking systems account for 64.19% response. In addition, the research also revealed that fear of using CBE-birr and CBE-birr system incompatibility with the core banking system has proven to be main challenges. The regression result have proven that technological challenges have significant effect.

As of organizational challenges it has been found that lack of trained manpower, lack of enough branch operators, lack of awareness on agency banking directive and lack of monitoring and controlling has been the major challenges as supported by 68.87%, 61.43%, 69.97% and 61.71% respectively. These results were further supported by the regression result that shows that organizational factors being statistically significant.

And in relation to environmental challenges the study has found that the environmental challenges facing CBE-birr practice is locked on to lack of trust on agents/CBE/customers as shown by 81.27% , commitment level of stakeholders 56.20% and marketing effort and stiff directives with each 58.95%.

### **5.3 Conclusion**

The objective of the study was to examine and assess determinants where the level of beneficiaries' perception on stakeholder analysis, commitment level of stakeholders, and to identify the challenges in the usage of the agency banking by commercial bank. It needs to be noted that the implementation of agency banking by commercial banks is with the aim of delivering a means for accessibility on financial activities to the society. In previous years of operation banks use expansion of branches as a method of reaching the society more intensively, but the introduction of technological innovation helps banks redirecting their objective toward

delivery of modernized

banking services and making sure the society is well galvanized with the system so that financial inclusion as well as accessibility and convenience of financial activities become a reality.

- The research has concluded from the findings that the characteristics of gender, educational level, employment status, marital status, use of bank, receive remittance, log of age, Income level, work experience, family size in combination has significance effect on CBE-birr practice.
- This research has concluded that the stakeholder analysis made by commercial bank of Ethiopia towards the practice of agency banking (CBE-birr) is not satisfactory and didn't keep the interest of the stakeholders. At the same time the agent banking practice does not provide accessibility and convenience, stakeholders were not involved in prior stages of the agency banking, stakeholder analysis made by CBE is not enough to know the requirements of the stakeholders. Seemingly unreal from CBE points of view the awareness creation level both to the implementers and the society is not satisfactory and almost all of the beneficiaries would prefer to have received training on CBE- birr. In the above conclusion we can see that the stakeholder analysis made by CBE lacks intensity and detailed understanding of stakeholders needs even though it was stated to be enough and detail done by CBE CBE-birr operation office.
- As shown by the findings of the research earlier, it was clearly stated that the level of commitment that beneficiaries have is low and those of participants in focus group discussion have revealed a different result stating that they believe it could make their future more easier than now. Here we can see that since there are different types of stakeholders majority of the respondent's response have shown lack of commitment and even trust to accept CBE-birr with the current situations in the CBE-birr practice. While, other supportive organization's commitment level has been noted as strong.
- The study has also identified separately how the agency related laws and directives were taken by the respondents and participants of focus group entailing CBE-users, agents, and



branch implementers. It is found that most of the respondents and informers were not aware of the agency related laws and directives even though nearly half of them stated its

- adequacy and fairness to understand the stakeholders. Additionally, it's concluded that the agency banking directive was not totally understood by the stakeholders.
- It also has been identified that challenges of technology, organizational, and environmental exist. The findings revealed that the factors identified as independent variable have influence on practice of agent banking (dependent variable). It has been also identified that challenges of poor mobile network, inconvenience, willingness to trust and accept CBE-birr along with the system incompatibility are main technological challenges. In the same term organizational challenges have resulted from lack trained manpower, awareness on related directives and monitoring and controlling has made the practice of CBE-birr to be low.
- Additionally, as per to the environmental challenges, effects of trust on agents/CBE/customers and commitment of stakeholders along with the marketing effort made by CBE has made the practice to below the expectation. And it is also concluded that these stated challenges have affected the CBE-birr practice. Statistical tests also show that commitment of parties involved, technological, and organizational challenges have the significant effect.

## **5.4 Recommendations**

In the following section, the recommendations or implication on the areas needing attention for future are forwarded

- In relation to the demographic characteristics of CBE need to employ segmented implementation of CBE-birr and system modification based on thier age, Level of Education, income level, marital status, employment statusof respondents. Since these factors affect the usage of agency banking.\

- The government should assist the banking industry by encouraging the construction of enough ICT infrastructure to enable the successful usage and development of mobile money (agency banking) services.
- As explained by the findings in the previous sections, this finding has resulted that beneficiaries have stated they don't have strong feeling that commercial bank of Ethiopia understands and analyzed well about what their needs are and who the primal users of agency banking are. Since agency banking primary objective is to make sure that the society, unbanked, interests are kept, commercial bank of Ethiopia and banks in general have to make the extra effort to engage in understanding what the stakeholders need. And for that to happen, commercial bank of Ethiopia has to engage and involve the stakeholder more often through their level of power.
- On commitment level of parties involved, the study has shown that stakeholders have low commitment level. Commitment level has huge impact on the decision that customers make what they wanted to do. Commitment on staff members, beneficiaries and agents must be strengthened by providing sufficient level of awareness, training and proper level of involvement. Whereas the commitment level of NBE and Ethio – telecom must be sufficient enough since NBE as regulative body it needs to be timely and supportive for every needed help and further assistance. As to Ethio-telecom, the primary objective of agency banking as said is ensuring that the unbanked society is exploited to the interest of all. In doing so, agency banking requires heavy load of mobile network to make it presumably faultless. In a country like ours, where the mobile network provider is just only one, with hundreds of millions of people urging for better financial accessibility to banking service, is supported by delivery of sufficient level of mobile network.
- As per to agency related laws and directives, since agency banking requires awareness about the agency related laws and directives, CBE has to aware all the stakeholders about the directives associated with the agency banking, about what legal actions would be taken in to consideration and so forth.
- Organizational challenges have been related to awareness level on CBE-birr usage and

on agency related laws and directives matter highly. In doing so the commercial bank of Ethiopia, as a commercial bank working for the benefit of the society need to aware the staff members of the bank, agents and different stakeholders involved so that they can speak up about the product delivered proudly and even so have high level of confidence.

- Environmental challenges resulted were trust on agents; banks and customers, marketing effort being low, and stiff agency directive exist. On such matters the level of trust on agents would be established by the organizational framework that CBE makes under CBE-birr practice. How can a customer be loyal and committed if he/she sees that the product delivered are not well understood by agents, customers and even branch operators? So to make sure that environmental challenges are solved commercial bank of Ethiopia need to make the necessary awareness creation and marketing effort to reach out to the unbanked society. Besides that the bank needs to be aware of the competition pressure arising in the banking industry.

## **5.5 Suggestions for Further Research**

This study has explained the beneficiaries determining characteristics that have statistical significance to agent banking practice in commercial bank of Ethiopia. Additionally, the researcher has analyzed that stakeholder involvement is crucial to the success of agency banking implementation since the beneficiaries have the power and interest to have an impact on the effectiveness of the practice. However, it did not establish the detailed impact analysis of agent banking on the society and especially on the un-banked. Therefore, future research studies have to be conducted to determine the impact that agency banking could have on the level of financial inclusion in the country and also to see the difference that it brings to the society by analyzing impact evaluation between users and non-users of agency banking.

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## Appendix 1 QUESTIONNAIRE - Beneficiaries

### Dear Respondents

The main purpose of this questionnaire is to gather information about the “*determinants of Agency banking (CBE-birr)/mobile money solution in commercial bank of ethiopa*” for the partial fulfillment of the requirements for Masters of Project management at St. Mary University. The outcome of this study will be used for academic purpose only. Therefore, your genuine response to the questions is vital for the quality and successful completion of the study.

***Thank you in advance for your absolute cooperation!***

**Part I: Demographical Information** - Please fill in the required information and put ‘’ in the box

1.1. Gender: \_\_\_\_\_

1.2. Age: \_\_\_\_\_

1.3. Do you read and write?      Yes                  No   

1.4. If your answer for question 1.3. is “Yes” please state your education level \_\_\_\_\_

1.5. What’s the source of your income? \_\_\_\_\_

1.6. Are you employed?              Yes                  No   

1.7. If your response is “Yes” to question 1.6. Your type of employment is

            Permanent                  Part-time                  Contract   

1.8. If your response is “Yes” to question 1.6. Your gross income is \_\_\_\_\_

1.9. If your response is “Yes” to question 1.6. Your service year is \_\_\_\_\_

1.10. Do you receive remittance?      Yes                  No   

1.11. If your response is “Yes” to question 1.10. How often per month do you receive remittance?

\_\_\_\_\_

1.12. Do you save through EQUB?    Yes                  No   

1.13. How much do you save per month? \_\_\_\_\_

1.14. Marital Status: \_\_\_\_\_

1.15. How many family members exist in your household including you? \_\_\_\_\_

1.16. How many of the family members earn their own income? \_\_\_\_\_

1.17. Do you have a saving bank account in CBE?      Yes                  No

1.18. If your answer is “Yes” to question 1.19. How much do you save per month? \_\_\_\_\_

1.19. How often per month do you use CBE-birr to perform transactions? \_\_\_\_\_

1.20. So far, the practice of CBE-birr has been successful

1. Strongly Disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly Agree
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Part II: Issues Related with the study area

Please mark the alternative of your choice, the numbers below has been defined with their respective meaning to ease up your response. Hence; 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree.

(NB: - Stakeholders refer to customers, bank, staff, Ethio-telecom and NBE)

### A. Perception of beneficiaries on stakeholder analysis done by CBE

No	Factor of rating	1	2	3	4	5
2.1.	CBE has identified well about who the beneficiaries of CBE-birr are					
2.2.	CBE clearly understands the stakeholders needs					
2.3.	Stakeholder analysis made regarding agent banking by CBE is enough					
2.4.	Stakeholders are enabled to get involved prior to CBE-birr Pilot testing					
2.5.	I have been trained successfully about the usage of agent banking					
2.6.	The level of awareness creation that has been done by CBE for branch implementers is above satisfactory					
2.7.	The level of awareness given to the society on the implementation of the agency banking is above satisfactory					
2.8.	I would like to get additional training on CBE-birr					
2.9.	The agency banking is being implemented with the interest of the stakeholders					
2.10.	CBE’s agent banking is used to provide accessibility to the unbanked society					



2.12.	Starting objective of Agency banking implemented by CBE is to increase convenience to its customers					
2.13.	CBE-birr has reduced the number of customers in branches halls					

**B. Commitment level of the parties involved in agency banking**

	<b>Factor of rating</b>	1	2	3	4	5
3.1.	I believe that CBE-birr secures my financial information					
3.2.	I am willing to invest my money, time and other resources to use CBE-birr					
3.3.	I believe that CBE-birr can make my life much easier than normal banking system applied by the bank					
3.4.	So far, the implementation of CBE-birr has been as expected					
3.5.	I have my full trust in CBE-birr and I am committed to use it in the future					

**C. Stakeholder's Awareness level on Agency related laws, procedure and directive**

	<b>Factor of rating</b>	1	2	3	4	5
4.1.	I have received training on the directive of agent banking					
4.2.	I am aware of the legal actions to be taken into account in agent banking					
4.3.	Agency related laws and directives set are friendly to work with					
4.4.	The laws authorized by NBE limited the activities of agency banking					
4.5.	Legal requirements needed are fair and adequate for knowing stakeholders					
4.6.	I believe that agency related laws, regulations and procedures have restricted the implementation of the agency banking/CBE-birr activities in general					

**D. Challenges faced in CBE-birr implementation**

	<b>Factor of rating</b>	1	2	3	4	5
<b>Technological factors</b>						
5.1.	Devices I use for agency banking are not reliable and easy to function					
5.2.	Poor mobile network is a challenge that currently affects CBE-birr practice					
5.3.	Lack of convenience in-terms of the CBE-birr system being available 24 hrs a day 7 days a week is a challenge					
5.4.	Fear of using CBE-birr					
5.5.	Customers lack of willingness & trust to accept CBE-birr is a major challenge					
5.6.	Lack of information security considered as a challenge					
5.7.	CBE-birr system incompatibility with the normal core-banking system is a challenge					
<b>Organizational factors</b>						
5.6.	Lack of enough branch operators at branches					
5.7.	Lack of trained and skilled manpower on CBE-birr					
5.8.	Lack of awareness and training on CBE-birr usage					
5.9.	Lack of awareness and training on agency banking directive					
5.10.	Relative to other banks cost in agency banking/CBE-birr is expensive					
5.11.	Lack of technical support					
5.12.	Lack of monitoring and controlling on CBE-birr activities					
<b>Environmental factors</b>						
5.12.	Lack of commitment by stakeholders					
5.13.	Lack of trust on customers/agents/bank					
5.14.	Competition pressure is a challenge for successful implementation of CBE-birr					
5.15.	Lack of marketing effort is a challenge					

5.16.	Stiff and hard agency banking directive is a challenge at the moment					
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Please state any points you would like to say and forward

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***Thank you again!***

## Appendix 2 INTERVIEW QUESTIONS

### To National bank of Ethiopia

The main purpose of this questionnaire is to gather information about the “*determinants of Agency banking (CBE-birr)/mobile money solution in commercial bank of ethiopa*” for the partial fulfillment of the requirements for Masters of Project management at St. Mary University. The outcome of this study will be used for academic purpose only. Therefore, your genuine response to the questions is vital for the quality and successful completion of the study.

*Thank you in advance for your absolute cooperation!*

1. As a government organ, what strategies your office is following towards making financial inclusion a reality in Ethiopia specifically in the operations of the commercial banks?
2. There are major stakeholders in the provision of financial inclusion through Agent Banking. As being one major stakeholder in the process what roles is your office playing towards maintaining synchronization of the activities of respective institutions in agency banking implementation for the benefit of all?
3. In your opinion what are the challenges of financial inclusion in commercial banks in Ethiopia and what do you suggest to overcome the problems and exploit the opportunity from current implementation of agency banking?
4. What are the major limitations of the existing directive on the regulation of Mobile and Agent Banking (Directive No.FIS/01/2012)?
5. What is the level of commitment that NBE has in the provision of agency banking offered by the commercial banks in Ethiopia?
6. What kind of readiness and preparation was done for awareness creation on the laws enacted on agency banking?

## Appendix 3 INTERVIEW QUESTIONS

### To CBE-Birr operators

The main purpose of this questionnaire is to gather information about the “*determinants of Agency banking (CBE-birr)/mobile money solution in commercial bank of ethiopa*” for the partial fulfillment of the requirements for Masters of Project management at St. Mary University. The outcome of this study will be used for academic purpose only. Therefore, your genuine response to the questions is vital for the quality and successful completion of the study.

***Thank you in advance for your absolute cooperation!***

1. What is the primary objective of launching agent banking CBE-birr?
2. Can we say that the project (CBE-birr) is productive so far? If not why not?
3. What are the major challenges and factors that have already been seen as barriers for the successful implementation/usage of agency banking in your bank?
4. There are major stakeholders in the provision of financial inclusion through Agent Banking. To what extent does the bank have analyzed the needs of the stakeholders taking part in the implementation of the project?
5. Agency banking requires regular and consistent mobile network, as it has proven to be dominant success factor for Agent Banking service in other countries. As the sole network provider in Ethiopia, Ethio-telecom is responsible to build efficient and reliable mobile network. What kind of ground status is expected and what is expected to be done as such factors prevail and proven to be bigger problems?
6. What benefits has the project provided to the society? Or what makes this project different from the other agency banking services provided by other commercial banks in the country?
7. In what extent do stakeholder analysis, commitment of parties involved, regulations and laws regarding agency banking have influenced the banks operation in implementation of agency banking?