

**ACCESS OF FINANCIAL SERVICE IN ETHIOPIA : SUPPLY SIDE CHALLENGES  
IN BANKING INDUSTRY**

**By**

**DAWIT MOHAMMED HUSSEN**

**THESIS**

Submitted to  
KDI School of Public Policy and Management  
in partial fulfillment of the requirements  
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**Professor Youngjae-Lim**

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## ABSTRACT

Financial inclusion becomes one of the priority agenda for developing as well as developed countries, particularly following the recent financial crisis. Improving access of financial service such as saving, credit facilities, insurance, remittance etc to the broad adult population through formal financial institutions is playing most essential role in reducing poverty in developing country. Hence, financial accesses for the broad adult population mainly for rural and poor people help them to invest in productive assets. Besides, it's the source of income for the dependent household at the time the income earner became sick or unable to work. Even though, most of the developing countries use micro-finance institutions enabling poor and rural population use financial service, their accessibility is still limited.

Ethiopia is one of the developing sub-Saharan African countries around 90 percent of the population excluded from financial service from formal financial institutions. The reason behind this broadly divided in to two; supply and demand side barriers. The supply side barriers defined as the transaction cost and the regulatory framework in which the financial systems operate. Whereas the demand sides are restrain the capacity of individuals to access available service. This study focused mainly the supply side challenges in the banking industry of Ethiopia. Accordingly, the study analysis and describe the performance of banking industry in Ethiopia and the main delivery system of banking products. In addition, the study describes the main limitations of using advanced information technologies for delivering banking products.

## ACKNOWLEDGEMENTS

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## Table of Contents

Table of Contents.....	ii
LIST OF ABBREVIATIONS.....	IV
CHAPTER ONE.....	1
1. INTRODUCTION.....	1
1.1. Background of the Study.....	1
1.2. Statement of the Problem.....	2
1.3. Objective of the Study.....	3
1.4. Significance of the Study.....	3
1.5. Research Questions.....	4
1.6. Hypothesis.....	4
1.7. Methodology.....	4
1.8. Scope of the Study.....	5
CHAPTER TWO.....	6
2. RELATED LITERATURE REVIEW.....	6
2.1. Overview of Financial Sector in Ethiopia.....	6
2.2. Banking Industry Performance in Ethiopia.....	7
2.3. The importance of Financial Access.....	8
2.4. Key Financial Access Indictors.....	9
2.5. Usage of Advanced Information Technology in Banking Industry.....	11
2.6. Electronic Banking.....	12
2.7. Importance of Electronic Banking.....	12
2.8. How Mobile Banking works?.....	13
2.9. Regulatory Framework and Stakeholders involving in the Financial Sector.....	13
CHAPTER THREE.....	15

3. DATA ANALYSIS .....	15
3.1. Overview of Financial Access in Africa.....	15
3.2. Financial System in Ethiopia.....	15
3.3. Balance Sheet Structure and Development .....	18
3.4. Market Share of State owned and Private Commercial Banks .....	20
3.5. Usage of Advanced Information Technology and Branch Networks.....	21
3.6. Information Communication Technology infrastructure .....	25
3.7. Regulatory Framework in the Financial Sector.....	26
3.8. Enabling Environment to Use Mobile Banking .....	26
3.9. Regulatory Framework for adopting Mobile Banking.....	27
3.10. Mobile and Internet Banking (E-Banking) Challenge.....	27
3.11. Kenya Banking Industry practice.....	28
3.11.1. Trends of Mobile and Internet Banking in Kenya.....	29
3.11.2. Mobile Banking in Kenya.....	30
3.11.3. Internet Banking Service in Kenya.....	30
3.12. Lessons from Kenya Mobile and Internet Banking for Ethiopian’s banking industry.....	31
3.13. Vital Lessons from Kenyan M-Banking Experience .....	32
CHAPTER FOUR .....	33
4. CNCLUSIONS AND RECOMMENDATIONS .....	33
4.1. Conclusions .....	33
4.2. Recommendations.....	35
5. Reference .....	37
6. ANNEXES AND TABLES .....	39

## LIST OF ABBREVIATIONS

- AB – Abay Bank S.C.
- AdIB– Addis International Bank S.C.
- AIB – Awash International Bank S.C.
- BBI – Berhan International Bank S.C
- BIB – Bunna International Bank S.C.
- BoA – Bank of Abyssinia S.C.
- BSD – Bank Supervision Directorate
- CBB – Construction and Business Bank S.C.
- CBE – Commercial Bank of Ethiopia
- CBO – Cooperative Bank of Oromia S.C.
- DB – Dashen Bank S.C.
- DBE – Development Bank of Ethiopia
- DFI – Development Finance Institution
- DGB – Dehub Global Bank S.C.
- DID- Department for International Development
- DTS – Domestic Trade and Services
- EATS – Ethiopian Automated Transfer System
- EB– Enat Bank S.C
- FAS- Financial Access Survey
- LIB – Lion International Bank S.C.
- NBE – National Bank of Ethiopia
- NIB – Nib International Bank S.C.
- NPLs – Non-performing Loans
- OIB – Oromia International Bank S.C.
- UB – United Bank S.C.
- WB – Wegagen Bank S.C.
- ZB – Zemen Bank S.C.



# CHAPTER ONE

## 1. INTRODUCTION

### 1.1. Background of the Study

Improving access of financial service such as saving, credit facilities, insurance, remittance etc. to the broad adult population through formal financial institutions plays the most essential role in reducing poverty on developing country. Though micro-finance institutions plays most important role to address the rural and poor people financial needs in developing countries, still rural populations in developing countries are excluded from formal financial service. Adequate financial access particularly for the rural and poor people helps them to invest in productive assets. Besides, it's the source of income for the dependent household at the time the income earner became sick or unable to work.

According to Center for Financial Inclusion survey report 2013, currently 2.7 billion working age adult population excluded from formal financial service globally. Certainly in Sub-Saharan African countries, only 24 percent of adult have bank account, though recently financial sector in Africa showed remarkable growth. The reason behind this can be formal financial institutions in Africa have not typically seen much profit in delivering financial service to the majority of the poor and rural adult population due to high transaction cost of delivering the service. Indeed, rural population found in remote area with low level of infrastructure and living beyond the reach of bank branches. Hence, financial institutions are not considered them as feasible customers because of the small transaction sizes. Now a day's some African countries use Mobile banking service in addition to banking branch to reach majority of adult population. However, many financial institutions in Africa

are not yet adopt Mobile banking and other advanced information technology. Therefore, still majority of the population in Africa excluded from formal financial service.

Even though banking service through advanced information technologies such as Automated Teller Machine (ATM) Mobile phones and Internet become the most efficient and cheaper delivery methods to reach the broad adult population, the most common and inefficient ways uses by commercial banks in developing countries are branches.

Among the challenges faced by the financial sector in developing countries that hinder the delivery of financial products using advanced information technologies are: underdeveloped telecommunications infrastructure and lacks of adequate capital and innovations by the financial institutions operating in developing countries.

## **1.2. Statement of the Problem**

Adequate financial access plays important role for poverty reduction and economic growth in developing countries by providing financial service to the poor's and broad adult population to encourage them to build their asset and increase consumption.

To bring full financial access, Center for financial inclusion is launched in 2008. To achieve this objective, many stakeholders involved. Among them, financial institutions are the main players. Hence, financial institutions should build their capacity in order to provide financial service to the broad adult population with affordable cost. Nevertheless, majority of financial institutions in developing countries lack capacity to bring full financial access. (Center for financial inclusion 2008).

Ethiopia is one of the developing African country 85 percent of the population live in the rural area

and their income is mainly depend on agricultural sector. Nonetheless, financial sector in Ethiopia showed remarkable growth after the liberalization of financial sector to private ownership since 1994, financial access still less than 10 percent (Center for financial inclusion report 2013). Financial system in Ethiopia is not addressing the demand of the majority of the population, particularly the rural poor people. According to center for financial inclusion, the reason behind this broadly divided in to two: supply side barriers and demand side barriers. The supply side barriers defined as the transaction cost and the regulatory framework in which the financial system operate. Whereas the demand sides are restrain the capacity of individuals to access available service. Inability of the financial institution (banking industry) adopting advanced information technology to deliver the financial service with least cost and the most efficient ways and the regulatory framework are the main challenges exist in the banking industry of Ethiopia.

### **1.3. Objective of the Study**

Since 1994 financial sector is liberalized by the government of Ethiopia, the sector showed prominent growth. Besides the financial sector has been playing massive role for economic growth of the country. However formal financial service is not yet accessible for the broad adult population, particularly the rural and the poor people. Therefore, this paper identifies the major supply side in the banking industry that hinders the provision of financial products to the broad people.

### **1.4. Significance of the Study**

The study will be vital for the emerging financial institutions as it will provide solutions for the existing supply side challenges for the stakeholders in the Banking industry.

Hence, commercial banks can identifies the efficient ways to deliver the financial service for the broad adult population by the implementation of advanced information technology and the regulatory authority can examine the regulatory framework regarding to financial inclusion policy.

Therefore, it is equally important for commercial banks executives and indeed the policy makers with a view to making strategic decisions.

### **1.5. Research Questions**

This study answers the following questions:

1. Why financial system (banking system) is not inclusive in Ethiopia?
2. What are the major supply side barriers in the banking industry for the general low level of financial access in Ethiopia?
3. What are the factors affecting access of banking service to the broad adult population?
4. What are the impacts of the regulatory framework on the broad supply of financial service in Ethiopia?
5. What are the main challenges for adopting mobile banking, Automated teller machine and internet banking in Ethiopia?

### **1.6. Hypothesis**

Access to financial services for the broad population is directly related with the capacity of financial institution (banking industry) delivering financial services using advanced information technologies (reduction of the transaction cost) and government regulatory frame work on the sector.

### **1.7. Methodology**

Based on the objective of the study, the research will be conducted on descriptive, qualitative and quantitative research data's to evaluate the performance of the banking industry in Ethiopia with regard of financial access.

At the same time, the impact of the regulatory frame work on the industry has been reviewed. Similar African country experience have been assessed, and evaluate the position of Ethiopian banking industry with respect to using of advanced information technologies like Mobile banking, Internet banking and Automated Teller Machine (ATM) applications.

## **1.8. Scope of the Study**

The financial sector in Ethiopia is composed of Banking, Insurance and Micro-finance institutions. The Banking industry has 90 percent share in the sector. Hence, this study only covers the banking industry and the main financial products (saving, credit, and money transfer). Besides, banking business proclamation and directives issued by regulatory authority, since 1994.

## CHAPTER TWO

### 2. RELATED LITERATURE REVIEW

#### 2.1. Overview of Financial Sector in Ethiopia

Federal Democratic Republic of Ethiopia, Proclamation No. 84/1994 is the first major proclamation that brings major changes in the landscape of financial sector performance in Ethiopia. During the previous regime (Dergu)<sup>1</sup> financial institutions ownership is rigorously limited for state due to the command economy policy followed by the regime. After the overthrow of the Dergu regime, in 1991, the new government (EPRDF)<sup>2</sup> adopted free market economy and has been invited private investors in many sectors of the economy. Indeed, financial sector is one of the potential sector attracted many private domestic investors as well as the foreign investors. However, in this newly indorsed proclamation still foreign investors are prohibited for participating. Though, the country perceived a spread of private Commercial banking insurance companies and Micro-finance institutions.

For the last two decade the financial sector in Ethiopia is safe and sound and showed remarkable growth and contribute indispensable role for the economic growth of the country. However, the financial system in Ethiopia is quite underdeveloped. Hence, Stock exchange is not yet established; there is only primary share market.

Currently, there are 19 commercial banks, 3 of them are state owned<sup>3</sup>. These state owned banks are having the lion share interims of capital and asset structure. As a result of foreign financial

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<sup>1</sup> Dergu meaning "committee" or "council" is the short name of the Coordinating Committee of the Armed Forces, Police, and Territorial Army that ruled Ethiopia from 1974 to 1987, after the 1974 revolution.

<sup>2</sup> Ethiopian People's Revolutionary Democratic Front abbreviated as EPRDF is the ruling political coalition in Ethiopia. The front consists of four political parties; the Oromo Peoples' Democratic Organization (OPDO), the Amhara National Democratic Movement (ANDM), the South Ethiopian Peoples' Democratic Front (SEPFD) and the Tigrayan Peoples' Liberation Front (TPLF).

<sup>3</sup> Commercial Bank of Ethiopia (CBE), Development Bank of Ethiopia (DBE) and Construction and Business Bank (CBB).

institutions are not allowed to enter in to the financial system of the country, the financial sector is not explicitly show the positive or negative consequence of financial globalization. The reason behind this isolation could be fear the risk of financial globalization (liberalization) that will lead unable to easily control the economy and the domestic financial sector is not competitive with the foreign financial institutions. Of course, this isolation adversely affects the development of the financial system in the country.

The financial sector in Ethiopia is incorporating financial institutions composed of commercial banks, insurance and Micro-finance.<sup>4</sup> Ideally, a financial institution plays as financial intermediation that stimulates economic growth by mobilizing financial resources from depositors to investors to different investment projects. Hence a financial sectors as the engine of the country economic growth.

Four major roles plays by the financial institutions in economic growth of the country are: increases the selection of funds-seeking investors and then scrutinizes the funds-receiving investor that improves the allocation of recourses, deposit mobilizations, lower cost of transaction through economic of scale by screening and monitoring of costs and finally, provide risk management and liquidity management tools (Biritu, 2011).

## **2.2. Banking Industry Performance in Ethiopia**

Although the financial system in Ethiopia is growing at alarming rate since the liberalization of the sector in 1994, the major share of financial sector is dominated by the banking industry.

Currently, the banking industry shows excess reserve and excess liquidity due to the limited investment opportunities in the country, the main investment area is real state. The reserve

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<sup>4</sup> Micro-finance institutions are financial institutions providing financial services to rural farmers and people engaged in other similar activities as well as micro and small-scale rural and urban Entrepreneurs

requirements by the regulatory authority (NBE) are other challenges of the banking industry. The problem is more severe in state owned commercial banks (CBE) it takes 90 percent and 79 percent respectively. The perseverance of these problems is also implied in the interest rate structure of the banks as both the lending and deposit rates are almost constant and show a very limited or no change unless NBE revised the minimum deposit rates for saving and time deposits.

The financial sector is highly regulated by NBE to ensure the safety and soundness of the financial institutions in the country and contribute for the economic growth. Accordingly, banking industry is regulated for a number of reasons, among these: protecting depositors' fund, ensuring safety and stability of the banking system, protecting safety of banks; to limit credit to a single borrower, and limiting or encouraging a particular kind of lending because of expected impact on the economy.

### **2.3. The importance of Financial Access**

The thought of financial inclusion and developing financial system around the world is one of the main priorities agenda for policy makers and politicians following the financial crises of 2008. Particularly, for the developing countries, improving financial access is one of the main strategies to eradicate poverty on these regions. A number of financial regulators and policy makers around the world are targeting and optimizing promoting access to financial service verses ensuring the stability of financial institutions (IMF, 2010).

Financial Access Survey (FAS) has been conducted annually by IMF to know the status of financial usage and access of financial service among different countries from central banks and/or financial institutions regulators around the world on annual basis. FAS indicators are important:

- To Identify the problems in the financial system and bring policy solutions for the



expansion of financial access;

- Evaluate the effectiveness and efficiency of financial policies;
- Conduct research to strengthen the financial system and measure the financial inclusion.

#### 2.4. Key Financial Access Indicators

Key financial access indicators are developed by IMF and World Bank to appraise the performance of countries in respect of financial inclusion. Accordingly, three key dimensions of financial inclusions are measured:

- Access to financial services;
- Usage of financial services; and
- Quality and delivery of financial service.

Ideally every country collects and monitors its own financial inclusion indicators, with the table listed below shows the appropriate data sources with country-level data. This data source shows particularly on the supply side, the demand side of financial data does not exist.

Among the existing global data sources listed in the table, the IMF's Financial Access Survey (FAS) data is collected directly from participating governments, mainly central banks and financial sector regulatory authority.

The World Bank's Global Findex is a survey of individuals integrated into the Global World Poll (funded by the Bill & Melinda Gates Foundation) and the World Bank's Enterprise Survey.

**Table 1: Key Financial Access Indicators**

<b>Categories</b>	<b>Indicators</b>	<b>Existing global/multi country source</b>	<b>Dimension of financial inclusion measured</b>
Formally banked adults (adult	% of adults with an account at a formal financial	Global index	Usage

population having bank account)	institution		
	Number of depositors per 1,000 adults Or number of deposit accounts per 1,000 adults	IMF FAS	
Adults with credit by regulated institutions	% of adults with at least one loan outstanding from a regulated financial institution	Global index	Usage
	Number of borrowers per 1,000 adults or number of outstanding loans per 1,000 adults	IMF FAS	
Formally banked enterprises	% of SMEs with an account at a formal financial institution	World bank global enterprise surveys	Usage
	Number of SMEs with deposit accounts/number of Usage deposit accounts or number of SME depositors/number of depositors	IMF FAS	
Enterprises with outstanding loan or line of credit by regulated institutions	% of SMEs with an outstanding loan or line of credit	World bank global enterprise surveys	Usage
	Number of SMEs with outstanding loans/number of Usage outstanding loans or number of outstanding loans to SMEs/number of outstanding loans	IMF FAS	
Points of service	Number of branches per 100,000 adults	IMF FAS	Usage
	Number of ATM service per 100,000 adult or per 1000sq.km	IMF FAS	
	Number of e-money account for mobile payment	IMF FAS	
	% of adults that use their mobile device to make a payment		

Source: IMF Financial Access Indictors

According to the financial access survey data of IMF, majority of adult population living in the advanced economies has relatively adequate access to basic financial services. However, adult population living in developing and emerging economies have excluded from this service. Particularly, majority of African countries, where majority of the population are living in the rural remote area affected much to access this service (FAS, 2013).

Currently, we have observed many changes in the financial service accessibility across the globe. Hence an African country shows some progress. Financial inclusion can be measured by the accessibility of bank branches and the service quality provided by the branches. The service quality can also be determined by the adaptation of advanced information technologies like, Mobile banking, Automated teller machine (ATM) and internet banking. Financial survey report of IMF for the period 2004-2012, noted that, across the world, commercial bank services have been deepened. Accordingly, Africa continuing to registered in highest growth.

One of the factors reducing progressively the need for physical access to commercial banks in higher income economies is increased internet connectivity and the move toward online financial services.

## **2.5. Usage of Advanced Information Technology in Banking Industry**

According to the study conducted by Department for International Development (DFID) in 2006, usage of advanced information technology enables the banking industry in Africa to deliver the financial service for the broad adult population with least cost. However, most African countries have limited telecommunication infrastructure to use these advanced technologies. For instance, Mobile banking (efficient ways of delivering the financial service to the rural area) internet and ATM holds out the view of increasing access to suitable formal financial services by those who currently lack. It could also make banking service more well-situated and efficient possibly cheaper, for those who already have financial services, especially the urban population.

According to the study of DFID, There are two major approaches to deliver the financial service:

**Additive Approach**, which primarily targeting existing, banked customers, and offer the service through Internet, ATM and mobile channels as an additional channel, along with the bank branches. This approach is greater convenient for the existing clients (urban populations who have access to financial service but having limited access due to limited access of advanced information technology).

**Transformational Approach**, which intentionally reach out to markets beyond the existing banked groups, through a service offering which meets the known needs of the unbanked groups.

In this approach the target customer are majority of rural adult population who haven't financial access due to the high transaction cost of delivering the service through banking branches.

## **2.6. Electronic Banking**

The expansion of Telecommunication infrastructure is critical for usage of information technology in the banking industry. Hence the development of telecom infrastructure is vital for implementing electronic banking in developing country. The use of electronic banking is vital for reaching the unbanked clients in urban area as well as the broad rural population. However, this convenience cannot be achieved if the users' area does not have adequate telecommunication infrastructure.

## **2.7. Importance of Electronic Banking**

According to C.S.V Murthy study in 2004, electronic banking provides a number of benefits for the clients as well as the commercial banks. These are:

- Reduce administrative and operating cost of delivering the service.

- Minimize the risk of theft or loss by enhancing adequate security.
- Minimize the risk of undeliverable payments via electronic delivery to the card account.
- Maximize customer satisfaction by making the service delivery efficient and effective.
- Enhancing the profitability and the continuity of the operation

## **2.8. How Mobile Banking works?**

Financial service delivery through mobile phones uses to transfer payment which is charging mobile account with cash so called by experts “mobile wallet”. By using this service customers enable payment and receive payment through their phone. Normally this service makes banks offer their customers, account actively reports and account balance via SMS text, making payments on the loan. These examples are not exhaustive but so far seem to be the main services categories in Africa. There is much more mobile banking can do for the unbanked in Africa and other developing countries.

Recently, banking service via mobile phone spreading across various parts of Africa, especially Kenya banking industry become the pioneer to start mobile banking in rural areas which lacks formal financial service before.

Banking service delivery through mobile phone can be affected by the quality of mobile phone infrastructure, the cost to get the service, the regulatory environment, and the last but not the least the political stability of the country (Kennedy, 2013).

## **2.9. Regulatory Framework and Stakeholders involving in the Financial Sector**

After the recent G20 global leaders submit in 2010 hosted by south Korea, Seoul Financial inclusion policy become one of the main priority policy agenda for developed as well as developing countries to eradicate poverty through enhancing financial access to the poor and unbanked

population. The primary infrastructure for bringing full financial access for the developing countries is mainly the regulatory frameworks and the capacity of financial institutions.

All of these plays indispensable role to bring financial access to the broad population. Therefore, conducive business environment that enhance competition in the private sector enable the smooth performance of financial sectors and ensure the safety and soundness of the financial sector.

Competition is one of the main driving forces for the expansion of financial service to maximize profit. To bring perfect competition in the financial sector, entry barriers should be minimized. For instance, during the 1990's, Kenyans financial system is relatively underdeveloped and the cell phone penetration rates is very low. This was primarily because of entry barriers in the telecom sector by the Kenyans government. Through time this barriers is eradicated by the government policy, which is making the financial and the telecom sector liberalized. As a result it brings competitive supply of mobile phone and many private foreign and domestic financial institutions provide financial products to the public. The legislation, "the Kenya Communication Act" implemented by the Communication Commission of Kenya (CCK) brings massive change in the landscape of the telecom sector. Hence, mobile phone penetration rate is expanded exponentially and the mobile banking service started as one product line in the banking industry. In 1999, there were 15,000 mobile phone subscribers these numbers increased to 3.4 million in 2004 and 16 million in 2008. Now a days, more than 17 million adult population use mobile banking in Kenya. With the rapid growth in ownership of mobile phones, suppliers have exploited the opportunity to compete on various margins (Kimenyi and Ndung'u 2009).

Other aspects of Kenya's private sector environment that has helped in the expansion of the mobile phone market and mobile banking include an increasingly efficient tax system and a stable legal structure governing both domestic and foreign investments.

In addition, the policy of the government is to promote and support innovation and the country's

current development planning emphasizes the fact that its economic development has been driven by innovation (Adrian, 2011).

## **CHAPTER THREE**

### **3. DATA ANALYSIS**

#### **3.1. Overview of Financial Access in Africa**

According to African Development Bank report 2013, 76 percent of adult populations in African countries are not having bank account. Indeed account penetration particularly in East African countries, i.e. Ethiopia, Uganda and Tanzania each have less than one bank branch per every 100,000 people, compared to 100 in Spain. However, in southern Africa region, i.e. Namibia relatively has high banking access, four bank branches for each 100,000 people, Zimbabwe more than three and Botswana nearly four bank branches per 100,000 people. These figure shows that, eastern African countries have relatively low level of formal financial access. Moreover, Sub-Saharan African countries have the lowest deposit penetration in the world standing at an average of 16.6 percent compared to 63.5 percent in other developing countries.

Currently, commercial banks and other financial service providers are aware of reaching million potential prospective customers by innovating efficient and cost effective delivery methods. Thus, mobile banking enables more than 60 percent of rural African population benefit from this delivery method.

#### **3.2. Financial System in Ethiopia**

Since the liberalization of financial sector in 1994, a number of domestic commercial banks, others financial institutions like Micro-finance institutions, insurance companies, government owed

Pension Fund and saving and credit cooperatives established in Ethiopia.

Although, saving and credit cooperatives are relatively larger in number than formal financial institutions, their capacity and accessibility to provide financial product for the broad adult population is still very low.

The government owned Pension Fund provides long term compulsory contractual saving product providing financial service for only for public sector employees. While, in 2011 Ethiopian government established the private employees pension fund agency to serve private sector employees. Other than these, there are no other financial institutions that specialize in provision of contractual savings products to the general public.

Financial markets in Ethiopia are underdeveloped (infant stage); the only source of liquidity for commercial banks in the country is from deposit mobilizing from the public. Indeed the inter-bank money market is none existed as little or no local currency is traded among banks. According to the National Bank directive, foreign exchange trade between commercial banks is restricted and only National Bank of Ethiopia stands to be the only bank that sells foreign exchange to all other commercial banks.

Commercial Banks in Ethiopia commonly provide traditional financial products (saving and credit). Saving products includes demand saving and time deposit. While, a credit product includes: short, medium and long-term loans. All of these products are not trade in the secondary market<sup>5</sup> because; there is no secondary market that enable securitization of loans<sup>6</sup>.

In general, financial sector in Ethiopia, like many others developing African countries,

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<sup>5</sup> A market where investors purchase securities or assets from other investors, rather than from issuing companies themselves.

<sup>6</sup> The process through which an issuer creates a financial instrument by combining other financial assets and then marketing different tiers of the repackaged instruments to investors.



dominated by commercial banks. Though, the number of Micro-finance institutions is greater in number. Generally the financial system in the country is underdeveloped. This underdevelopment adversely affects the adequacy and the level of financial access. The recent study of World Bank concerning the accessibility of financial system depicts that, only around 10 percent of the population in Ethiopia have accounts in formal financial institutions (Nana, 2008).

The distribution of accounts in financial institutions, commercial banks contribute large proportion (60%) of total accounts followed by Micro-finance institutions (32%) the rest, 2% is others financial institutions (government owned pension fund, credit and saving cooperatives etc). The accessibility of these financial services for rural and poor people is limited due to the fact that:

- **Low Geographic and Demographic Penetration:** Although the growth and expansion of financial sector are remarkable since 1994, still majority of rural adult population are excluded from formal financial services. Those rural people who want to use financial services must travel very long distance by foot. Since, most commercial banks branches are usually found in the main cities of the region. In addition, all commercial banks headquarters are found in Addis Ababa (the capital city). Their branches are highly concentrated in this city (33%).

Indeed branch expansion is the main activity used by commercial banks to address the need for the majority of rural population and to mobilize savings from the general public. Accordingly, during the quarter ended December 2013, 172 additional commercial bank branches were opened. Thus, total number of branches grew to 2,015 at the end of December 2013. Among these, state owned commercial banks had 957 (47.49%), while private banks owned 1058 (52.51%).

The total number of population to bank branches (penetration) reached to 42,680 against 52,805 of last year same period. Region<sup>7</sup>wise, in the capital city (Addis Ababa) accounted for 33.00% of total branches, followed by Oromia region (27.74%) and the remaining regions together (39.24%) (NBE, 2013).

- **Affordability:** the minimum amount needed to open account in the commercial banks is 50 Ethiopian Birr<sup>8</sup>. This amount is mostly might not be affordable for a small farm landholder living on the rural area of the country. Indeed most small farmers living in rural region are excluded in the eyes of mainstream banks even for deposit products. Moreover, commercial banks are unable to extending credit facility to such farmers due to high requirement of collateral. The most common financial service affordable for the rural and poor people is remittance and payment service. In fact, commercial banks provide credit facility only to urban rich who have capacity to offer collateral with estimated value at a minimum adequate to cover the risk of default.

### 3.3. Balance Sheet Structure and Development

Ethiopia registered on average 11 percents GDP for the last seven consecutive years. This favorable economic growth enables the banking industry expanding interims of capital structure, loan and advance and deposit mobilization.

The balance sheet of the banking industry at the end of the second quarter of 2013, assets, loans & bonds, deposit liabilities and capital, of commercial banking totaled reached Birr 316,176 million, Birr 249,428 million, Birr 242,372 million and Birr 22,813 million, respectively. As compared to last year same period, total assets grew by 22.83%, loans & bonds by 29.67%, total

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<sup>7</sup> There are 9 regional states and 2 city administration in Ethiopia. The total number of population live on these regions are 90 million, the highest population lives in two regions; Oromia (34%) Amhara (24%).

<sup>8</sup> 1USD equal to 20.50 Ethiopian Birr

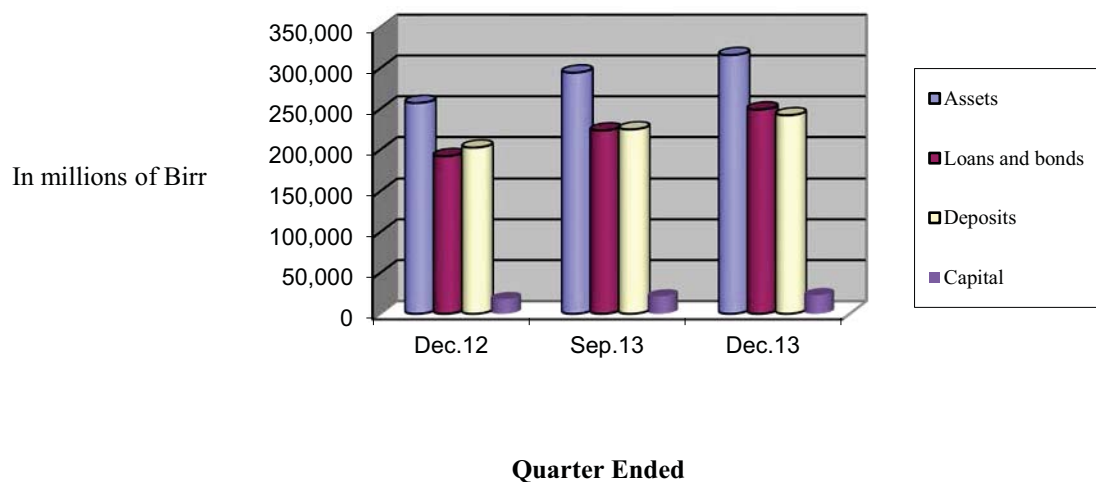
deposit liabilities by 19.55% and total capital by 26.81%. Major uses of funds of commercial banks were loans and advances (41.02%), followed by investments (38.52%). Treasury bills constituted only 0.54% of total assets. The share of bonds in total loans & bonds was 48.01%. Corporate bonds constituted 79.40% which was reported by CBE, while the rest were government bonds. Large share of outstanding loans was held by manufacturing (32.33%) followed by international trade (24.15%), whereas DTS, building & construction, agriculture, and other sectors held 19.70%, 13.89%, 8.45% and 1.49 %, respectively. Over last year same period, the share of loans to building & construction, manufacturing and international trade increased by 31.04%, 17.65% and 0.04 %, respectively; while that of agriculture, DTS, and other sectors are decreased by 28.70%, 9.26%, and 64.69%; respectively. The largest sources of funds were deposit liabilities (76.66%). Saving deposits contributed 49.23% of total deposit liabilities, followed by demand deposits (44.00%) and time deposit (6.78%). (For details, see annex tables 1, 2 and 4).

Deposits to nominal GDP stood at 28.42%, against 27.44% of last year same period. Loans & bonds to nominal GDP was 29.25%, against 26.04% a year ago. The share of public and private banks in loans & bonds to nominal GDP stood at 20.89% and 8.36%, respectively.

(For details, see chart below and annex table 3).

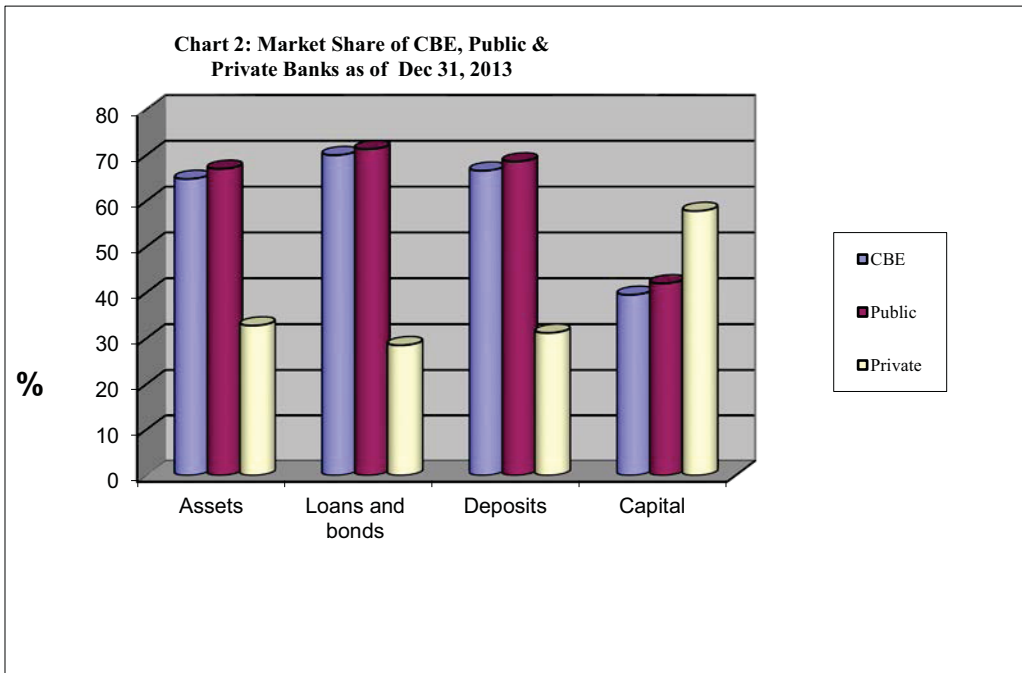
Source:  
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**Chart 1: Development of Major Balance Sheet Items**



### 3.4. Market Share of State owned and Private Commercial Banks

The market share of commercial banks can be explained in terms of asset, loan and capital structure. In 2013 state owned banks remained constant in their share of asset, and gained marginal market share in total loans & bonds, and deposit liabilities, while recorded marginal loss in capital. The two public banks (CBE & CBB) accounted for 67.1% of total assets, 71.4% of total loans & bonds, 68.7% of total deposit liabilities and 42.1% of total capital in the sector as compared to last year same period of 67.1%, 70.8%, 67.5% and 44.8%, respectively. CBE alone accounted for 64.9% of total assets, 70.1% of total loans & bonds, 66.7% of deposit liabilities and 39.6% of capital in the sector. DB, a private bank, continued to follow distantly CBE in terms of assets, loans and deposit liabilities. (See Chart 2 below and annex table 5).



Source: NBE quarter report 2013

### 3.5. Usage of Advanced Information Technology and Branch Networks

Indeed, the financial sector in Ethiopia is on infant stage, though the sector registering highest growth since 1994. Currently, the service accessibility is limited on the majority of urban population and having the limitation on the adaptation of information technologies which is applicable any where in the world. Ethiopian economy is growing with double digit for the last seven consecutive years. Consequently, international trade is growing. To fulfill the requirement for the import export business besides, international relation and in order to provide efficient and effective service for importer and exporter business, modern banking system should be exist in the country (Worku, 2012).

Commercial Bank of Ethiopia (CBE), the largest state owned bank, is the pioneer in introducing electronic banking service which is ATM. This service is in the beginning with 8 ATM machine found in different location of the capital city and followed by another big private

commercial bank (Dashen Bank). Even though the electronic banking is started by these commercial banks in the first time, there was the challenge for the smooth performance of the banks with respect to electronic banking system. One of the main challenges exists in the system is interruption of service due to the network problem existing in the country due to low quality of the network system by Ethio telecom.

At the end of June 2012, ATM service is provided by most of the commercial banks and it is increasingly growing. For instance, Dashen bank has installed more than 80 ATMs in its area branches, university compounds, shopping malls, restaurants and hotels

In the 21<sup>st</sup> century, Information technology plays a vital role in different sector particularly in the banking industry. It enables the industry providing financial service efficiently with affordable cost to the broad adult population. Thus, banking industry require advanced information technology to deliver the service to the broad adult population. However, huge investment requires acquiring this technology.

Indeed the banking system of Ethiopia is one of the most underdeveloped systems relative to others, cash is still the most dominant medium of exchange and electronic-banking is not well known, let alone used for transacting banking business, most commercial banks are too late to move with technological advancement. This technology is important for the banking industry in Ethiopia to address low level of financial access. Hence it has become essential to effectively implement the appropriate technology to have faster decision support and effective data integration in the financial intermediary process and also to look for other avenue to enhance income and increase productivity.

According to the financial access survey conducted by the IMF from the year 2004 up to 2013, the financial access is measured by variables, geographical outreach, uses of financial service and volumes of account. Accordingly, regarding geographical outreach, micro-finance institutions in Ethiopia are many in number than the commercial banks, reached to 32 and 19 as of 2013 respectively. However, the total number of commercial banks branch is fare grater than micro-

finance institutions, 2015 and 1224 respectively as of 2013. Commercial bank branches per 1000 Km.sq reached to 2.05 in 2013, grown on average by 78 percent. While the bank branch per 100 000 adult populations is reached to 3.80 in 2013 grown on average by 71 percent (see annex table 6).

Another measurement variable used by the financial access survey is use of financial service. Thus, number of depositors in commercial banks and microfinance institutions were taken into consideration. The total numbers of depositors in commercial banks and micro finance institutions are 9,287,300 and 3,033,560 respectively. Whereas, the number of borrowers in commercial banks are less than microfinance institutions, 112,650 and 3,485,520 respectively. Therefore in Ethiopia, commonly, microfinance institutions give credit facility for the majority of the public than the commercial banks. Besides, most of the adult population in Ethiopia use banking service for the purpose of deposit rather than borrowing (depositors of commercial bank per 1000 adults reached to 160.25, whereas borrows from commercial banks reached to 2.8 in the same year with the same measurement).

Volume of accounts, which is outstanding deposit and loan in commercial banks reached to 28.80 percent and 15.25 percent of GDP respectively in 2013 (See annex table 6).

Recently, the state owned bank particularly, Commercial Bank of Ethiopia (CBE) aggressively expanded its branch in most parts of the country as a result of financial inclusion policy stated on the growth and transformation plan by the central government.

The bank launched full fledged internet and Mobile banking through 74 branches of CBE that have been connected with the Integrated banking solutions called Core Banking. This new system works on any tool that can support an Internet browser and has been emulating experiences from European and Asian banks that have an anti-hacking and anti E-theft system, a rigorous authentication method for customers as well as building a formidable Information Technology Architecture. According to the bank, this service will serve around 100,000 clients in urban areas of

Ethiopia (Capital, 2013). However, the connivance of the service is still not fulfilling the needs of majority of rural population. Branch based banking service is not cost effective to deliver banking service to rural population due to high transaction cost. Therefore private commercial banks focused opening branches only in urban and relatively rich population areas. Advanced information technology enable to deliver the banking service for rural population with least cost where telecom infrastructure is adequate on rural areas. However, commercial banks in Ethiopia that use these technologies is very few in number, Only four banks uses Internet and Mobile banking<sup>9</sup> on a pilot based and seven commercial banks<sup>10</sup> uses Automated Teller Machine (ATM). Now a total of 400 ATM service has been installed throughout the country. Majority (200) of this service is found in the capital city (NBE 2012).

Generally, rural adult population excluded from banking service. In fact, with limited advanced technology it can not possible to expand the service in many parts of the country especially in the rural area due to high transaction cost to deliver the service through bank branch. Therefore, retail banking business requires heavy investments in advanced technology. One of the major challenges to adopt information technology in the banking industry is low level of telecommunication infrastructure in the country makes the level of internet penetration low this hinder internet and mobile banking service and adversely affect the smooth and efficient online payment. Thus, most rural parts of the country, where the majority of small and medium businesses are concentrated, have no Internet facilities. As a result, banks unable to provide financial service through advanced technology. Therefore, developing telecommunication infrastructure and huge investment on advanced technology enable the banking industry to deliver the service efficiently to the broad population.

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<sup>9</sup> Commercial Bank of Ethiopia (CBE),Dashin Bank (DB),United Bank (UB) and Wagagen Bank(WB)

<sup>10</sup> Commercial bank of Ethiopia (CBE), Dashin bank (DB),United bank (UB),Awash bank (AB),Wagagen bank (WB), Absinya bank (BOA) and Nib bank (NB)



Although Private Commercial banks in Ethiopia have limited investment and lack adequate skilled manpower on the implementation of advanced information technology on the banking service, they are being exerting their efforts at the forefront in effectively implementing modern banking technology and value-added service provision continuing the prevailing long attachment of branch-based service channel, which is perceived to lead the society to only value human interaction, they are succeeding in effectively implementing both the branch-based and impersonal banking service channels. Though they have gone through various challenges in popularizing and penetrating the market through electronic delivery channels, they are now at the level of encouraging recognition and flexibility to adopt the new habits as alternate service channels (Biritu, 2012).

### **3.6. Information Communication Technology infrastructure**

Ethiopia has Africa's largest big telecoms monopoly. Since 2002, Ethiopian Telecommunication Corporation widens the service from the existing fixed telephone line in to mobile phone service and internet service for majority of the urban region of the country by investing huge telecom infrastructure. However, the telecom access is limited to the urban population and some of the semi rural region of the country. In addition, the poor service quality not yet resolved.

Ethiopian Telecommunication Corporation took many steps to upgrade the poor service quality by outsourcing the management division to foreign telecom company<sup>11</sup>. Due to absences of competition in telecom sector, the service is not expand in to majority of the region and also the

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<sup>11</sup> The management part of Ethio Telecom was given to France telecom for 4 years from 2007 up to 2010 to acquire management skill transfer from abroad and enable efficient telecom business management.

service charge is relatively high compared to eastern African countries. Consequently, the service penetration is relatively very low compared to others African countries. For instance, Mobile-phone penetration in the country which averages 70% of the population anywhere in Africa is closer to 25% in Ethiopia. A paltry 2.5% of Ethiopians have access to the internet, compared with 40% in neighboring Kenya (Economist, 2013).

### **3.7. Regulatory Framework in the Financial Sector**

Financial sector in Ethiopia is highly regulated by the National Bank of Ethiopia (NBE) under the proclamation No.84/1994 for the last 19 years. Since the liberalization of financial sector, National Bank of Ethiopia (NBE) has made numerous reforms in the banking industry. The key objective of this reform is to ensure the safety and soundness of financial sector and stimulating economic growth of the country. Though, this reform sometimes adversely affects the expansion and the competition of banking industry. Thus, this proclamation limits the participation of foreign investors, according to the licensing directive of NBE, only Ethiopian nationalities participate in the financial sector. Hence, the market is dominated by state owned banks and limited domestic investors. The asset share of state owned banks reached 88 percent which are the highest in East Africa which adversely affect competition in the sector (NBE 2012).

### **3.8. Enabling Environment to Use Mobile Banking**

Although, the application of advanced information technology like Mobile, ATM and internet banking is limited and infant stage in Ethiopian banking industry, recently it shows remarkable progress. For instance; mobile phone penetration in 2012 was reached to 24 percent which was 17 percent before one year ago (Freedom House, 2012). Meanwhile the use of internet service in mobile phone device is increasingly particularly in semi-urban areas. This infrastructure enables

possible to expand mobile and internet banking service to the existing mobile and internet service access areas.

### **3.9. Regulatory Framework for adopting Mobile Banking**

Regulatory authority, National Bank of Ethiopia (NBE) recently issued directive No. FIS.01/2012. This directive creates a conducive business environment in the banking industry by setting minimum standard for risk management and customer protection on the delivery of mobile banking service. This directive has positive influence in the banking business to promote mobile banking business in the country.

### **3.10. Mobile and Internet Banking (E-Banking) Challenge**

Currently, the challenges faced to fully adaptation of electronic banking system in Ethiopia are:

- Low level of internet penetration and poorly developed telecommunication infrastructure. Hence telecom infrastructure in most of the rural areas of the country has underdeveloped. Indeed, small businesses are highly concentrated on this region.
- Low literacy rate is another serious obstacle. E-banking system requires easily reading and writing text messages and understanding of basic ICT languages.
- The cost of Internet access relative to per capita income in Ethiopia is relatively high compared to other east African countries. Low cost of internet and mobile air time are the critical factor for smoothly doing internet and mobile business.
- Continuous power interruption: Lack of reliable power supply is a key challenge for smoothly running e-banking in Ethiopia.

- Resistance to changes in technology among customers and staff due to:
  - ✓ Lack of awareness on the use and benefits of advanced information technologies
  - ✓ risk averse mentality by the customers and staff
  - ✓ Lack of trained personnel in the banking industry

### **3.11. Kenya Banking Industry practice**

Banking industry in Kenya is relatively developed. Hence, the practice would be importance lesson for Ethiopians banking industry as well as others developing countries. The financial sector in Kenya is fully liberalized. The central bank of Kenya regulates the banking industry by the banking Act. The Banking Act of Kenya defines banking, collecting deposit from the public and repay on demand or at the expiry of a fixed period or after notice, accepting from members of the public of money on current account and payment and acceptance of checks and the employing of money held on deposit or on current account or any part of it by lending, investment or in any other manner for the account and the risk of the person so employing the money.

Currently, Kenya has 43 licensed commercial banks. Among these, 31 are locally owned and 12 are foreign owned. Citibank, Habib bank, standard chartered and Barclays Bank are the major foreign-owned financial institutions. Kenyan government has a significant stake in three commercial banks<sup>12</sup>. The remaining local commercial banks are largely family owned. All financial institutions including commercial banks are highly regulated by Central Bank of Kenya. The financial sector particularly the banking industry is highly innovative due to high competition in the sector. In fact competition is one of the driving forces for innovation of financial products that fit for each customer and find the right and efficient delivery channels to deliver these products as well as to maximize profit.

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<sup>12</sup> Kenya Commercial bank, Development bank of Kenya and Cooperative bank of Kenya

### **3.11.1. Trends of Mobile and Internet Banking in Kenya**

With the emerging wave of information driven economy, the banking industry in the world has inevitably found itself unable to resist technological indulgence. Due to the emerging of information technology business, Kenyan banking industry has led to a boom in development of mobile banking laying down a strong base for low cost banking, and growth of mobile phone use in rural Kenya.

In 2009, Standard Chartered launched its mobile banking in seven African markets, among these, Kenyan market it offers a number of services on a unique, user-friendly platform called Unstructured Supplementary Services Data (USSD) and is only available on GSM carrier networks which enable customers to access banking in real time, anywhere in the world, through their mobile phones. The platform is a convenient menu-driven application that is not dependent on specific customer handsets and does not need to be downloaded. Another foreign bank, Barclays bank's m-banking platform is known as 'hello money' it allows customers to carry their bank in their mobile and access banking services anytime/anywhere on the move. Unlike other players in the sector this is all for free.

Co-operative bank pioneered mobile banking way back in 2004 by enabling customers to access their accounts and transact using their mobile phones. It offers services such as balance enquiries, mini-statements, SMS alerts on credit and debit transactions to an account, pay utility bills and funds transfer.

A couple of study shows that the general macroeconomic impacts of the mobile phone penetration in the developing countries are having a critical mass effect than developed countries. One well-known study found that while mobile phones in less developed countries are playing the same crucial role that fixed telephony played in richer countries in the 1970s and 1980s, and that a rise of ten mobile phones per 100 people boosts GDP growth by 0.6% (Waverman, Meschi & Fuss 2005). Another reported that the impact of mobile phone penetration is positively linked to Foreign Direct Investment

(FDI). This impact has grown more significant in recent years, with a 1% increase in mobile penetration rates associated with 0.5-0.6% higher rates of FDI and GDP (Williams 2005).

The main challenge for the mobile banking are its application and security issues like slow speed in customers' adaptation, data quality and lack of interoperability. The last but not the least is the regulatory barriers.

### **3.11.2. Mobile Banking in Kenya**

Kenya banking industry uses one of the cheapest and efficient financial product delivery system through automated information technology. Mobile banking refers to provision and availability of banking products through the help of mobile devices. The scope of services offered may include: facilities to conduct bank and stock market transactions, administer accounts and to access customized information. Mobile networks in Kenya offer m-money services by big telecomm private companies as well as private banks.

Among the private telecom companies providing M-banking are Safaricom by The name of M-pesa, Orange money by Orange, Yu-cash by Essar, and Airtel money by Airtel. Currently the mobile banking has 17 million users transferring Kshs 2 billion<sup>13</sup> daily. Safaricom has lion share on this market. Private telecom companies provide mobile banking service with collaboration of commercial banks such as Equity Bank, I&M Bank, and Kenya Commercial Bank, Barclays bank. The ultimate objective mobile banking is reaching the unbanked as well as maximizing revenue by expanding the service (Kennedy, 2012).

### **3.11.3. Internet Banking Service in Kenya**

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<sup>13</sup> 1USD equal to 88.50 Kenyan shelling

Unlike many sub-Saharan African countries as well as Ethiopian banking industry, the Kenya banking industry provide internet banking service better. Internet banking (e-banking) mean, the use of internet and telecommunication networks to deliver a wide range of value added products and services to bank customers (Steven, 2002) through the use of a system that allows individuals to perform banking activities at home or from their offices or over the internet. Some online banks are traditional banks which also offer online banking, while others are online only and have no physical presence. Online banking through traditional banks enables customers to perform all routine transactions, such as account transfers, balance inquiries, bill payments, and stop-payment requests, and some even offer online loan applications without visiting the bank branch. Customers can access account information at any time, day or night, and this can be done from anywhere. Internet banking has improved banking efficiency in rendering services to customers. Financial institutions in Kenya doing very well in innovating financial products to reach the unbanked population as well as add these services to attract customers from highly competitive business environment in the sector. Therefore, the banking industry in Kenya cannot ignore the advantage of information systems and its role enabling the service providing efficient and affordable for the majority of adult population (Kennedy, 2012).

### **3.12. Lessons from Kenya Mobile and Internet Banking for Ethiopian's banking industry**

Kenyan financial sector is relatively developed and better in the sub-Saharan African countries. There are a lot of private local and foreign commercial banks in the sector. As a result the market is highly competitive. As a result of tough competition in the industry commercial banks are highly innovative efficient and effective delivery channels. Thus application of advanced information technology is a must to maximize revenue. For adapting this, adequate and well developed telecom infrastructure plays massive role. Telecom industry is not monopolized by the Kenya government; there are a number of telecomm companies providing telecom service with low

cost for their customers. As a result the mobile phone and internet penetration rate is high. Therefore, one of the driving forces for increasing financial access to the broad population is enabling the telecom and the financial sector competitive. Hence, mobile phone banking and internet banking are testimony to how technological Innovations coupled with a supportive policy environment and appropriate oversight can expand the financial services frontier.

### **3.13. Vital Lessons from Kenyan M-Banking Experience**

The financial sector in Ethiopia especially the banking industry can learn very important experience how the banking industry of Kenya innovate the financial products to the broad adult population and maximize their profit.

Kenyan Banking Industry financial products consumption is characterized by multiple strategies, implying that mobile banking service has been utilized for any need depending on the ability to pay at a given instance. To realize the full benefits afforded by mobile banking it's imperative to move beyond the traditional and limited approaches and instead explore innovative and value oriented application. Focus should be on patterns that play a role towards economic advancement of users.

Mobile banking provides a ray of hope especially the unbanked adult population. The rapid uptake has systematically ensured that the critical mass required as a threshold for sustainable expansion is reached. With the potential outburst of mobile banking showing signs of reaching the wider population segment, the mobile banking divide (gap between those with access and those without enhanced banking services) can be expected to gradually diminish. Sustained introduction of new mobile based banking services, tend to complement existing services those without access to the original services are actually thrust into a further distance from access. Cost of phones and services also remains a significant drawback. The fact that a vast proportion of the population still relies on pay phones is an indicator of the financial challenges faced by many potential users of the



## CHAPTER FOUR

### 4. CNCLUSIONS AND RECOMMENDATIONS

#### 4.1. Conclusions

Information technology is considered as the key driver for the changes taking place around the world in many fields. Particularly, it plays indispensable role in the financial sector. Consequently, it has significant contribution for a steadily growth for banking industry around the world. It has been changing the delivery mechanisms of financial products to the broad population. Accordingly, banking industry in developing countries is being entering into new phenomena of unprecedented form of competition supported by modern information technology.

Ethiopian financial sector in general and banking industry in particular registering remarkable growth since 1994, the sector is liberalized. However, the sector is not fully liberalized as result foreign financial institutions are not yet allowed to enter the sector. Currently, there are 19 commercial banks; among these 3 of them are state owned banks. When we compare the penetration rate of banking branch to the total population, it is very low. Bank branch is the main delivery system; which is the most expensive ways to reach majority of population. Now a day's new ways of delivery system, which is the most efficient and the cheapest way to reach majority of adult population invented through information technology, like Mobile Banking, internet banking and Automated Teller Machine (ATM). However, to use those efficient advanced technology system for delivering financial product is very limited.

Ethiopian banking system is still lag behind compared to other African countries. Hence adaptation of advanced information technology that enables expanding the service to the broad adult population is still a problem due to poor telecom infrastructure and underdeveloped banking system

in the country as a result usage of information technology like ATM, Mobile and Internet banking are not well developed. Thus, access of financial service to the broad adult population is limited only in urban and semi urban areas which are the current customer of the banking industry through bank branches. Indeed large number of rural adult population doesn't have banking service.

Expansion of branches in rural area is very expensive for banks because of high transaction cost. Consequently banks have to find other delivery channels to minimize their transaction cost. Appropriate ways to reach those unreached population is mobile banking system which is most efficient delivery channels in many African countries. In addition to this, internet and ATM service is the most efficient ways of providing banking service to urban adult population efficiently.

There are many challenges for hindering the expansion of banking industry through advanced information technology like ATM, Mobile and internet banking in Ethiopia. Among these: lack of suitable legal and regulatory framework in the financial and telecom sector, lack of well developed telecommunication infrastructure, inadequate skilled manpower in the banking system, lack of competition in telecom industry which discourage innovation , limited liberalization of financial sector, high rates of illiteracy, resistance to change among customers and staff, frequent power interruption and security issues.

Competition is one of the main driving forces for the expansion service. To bring perfect competition in the financial sector, entry barriers should be minimized. For instance, during the 1990's, Kenya lagged behind some African countries, such as Tanzania, in mobile Phone penetration rates.

This was primarily because of artificial barriers to entry placed by the Kenyans government. However, this changed with the government taking a more liberalized stance and making it possible for competitive supply of mobile telephony, especially regarding the dismantling of the state monopoly. Currently, Mobile banking in Kenya has been added value on the services offered to existing customers by a number of retail banks and contribute significant role to reach the majority

of the rural population.

If mobile banking is to realize the potential of massively extending access to safe, convenient and affordable financial services to those who today lack it, then enablement is likely to be required. In its absence, mobile banking may simply amount to adding another convenient channel for already banked customers. The consequence will be a market trajectory with much lower ultimate levels of usage and access.

#### **4.2. Recommendations**

On this study, I explained and analysis the main challenge in the banking industry in respect of its access to the broad adult population in Ethiopia and reviewed the experience of expanding financial access in other African countries particularly Kenyans banking industry. Thus the following recommendations forwarded to tackle the existing challenge in the banking industry of Ethiopia.

- Banks should invest in automating their banking system and it is crucial to devise strategies that involve alliances and collaborations between and amongst private and public banks. Such alliances and collaborations would enhance mobile and internet banking initiatives in Ethiopia.
- Policymaker in the financial sector which is National Bank of Ethiopia should understand creating conducive business environments for financial innovation to take place, and efforts to ensure consumer protection and financial capability. Adopting comprehensive policies at the country level that respond the supply-side barriers and most effective in fostering financial inclusion.

- Public awareness should be created by the stakeholders in the banking industry on the use of Information Communication Technology (ICT), on the application of mobile and internet banking
- Provide tax and other relevant incentives from government for financial institutions to invest rigorously on advanced information technologies
- Ongoing efforts on the expansion of mobile phone infrastructure and expansion of ICT by Ethiopian Telecom should be encouraged and continues.
- In the long run, Ethiopian government should consider the liberalization of the telecom industry to enhance efficiency and competition within the sector.
- Ethiopian government should consider the liberalization of the financial sector for foreign bank entry to enhance the introduction of modern technology as well as the transfer of skill and knowledge in the banking industry.
- The current telecom infrastructure quality should be drastically improved.

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## 6. ANNEXES AND TABLES

Annex Table 1

**Commercial Banks'**  
**Key Balance Sheet Items**  
**(In millions of Birr)**

**As at End:**

Particulars	Dec.12	Sep.13	Dec.13	% Share of deposit	% Change	
	A	B	C		D	E=(C-B)/B
Total Assets	257,413	294,626	316,176		7.31	22.83
Total loans and advances	104,156	115,288	129,681		12.48	24.51
Investment	90,066	110,431	121,793		10.29	35.23
Bonds	88,199	108,417	119,747		10.45	35.77
Loans & Bonds	192,355	223,705	249,428		11.50	29.67
Total Deposits	202,729	225,043	242,372		7.70	19.55
Saving deposits	91,037	110,039	119,309	49.23	8.42	31.06
Demand deposits	98,598	99,148	106,642	44.00	7.56	8.16
Time deposits	13,094	15,855	16,421	6.78	3.57	25.41
Paid up capital and reserves	17,989	21,276	22,813			

Annex table 2

**Commercial Banks**  
**Percent of Nominal GDP**  
**(In Millions of Birr)**

**As at Ended:**

Description	Dec.2011/12	Dec. 2012/13	% Share of GDP as of	
	A	B	Dec.12	Dec.13
Nominal GDP	738,605	852,740	-	-
Deposits	202,729	24,2372	27.44	28.42
Loans & Bond	192,355	249,428	26.04	29.25
public banks	136,137	178,139	18.43	20.89
private banks	56,218	71,290	7.61	8.36

Annex Table 3

**Commercial Banks'**  
Gross Loans by Sector  
(In millions of Birr)

Bank	Agri.	B & C	Manf.	Import	Export	DTS	S & C	Other Business	Total Loans & Advance
CBE	10,135	7,950	35,602	12,346	5,594	5,684	728	1	78,040
CBB		2,275					1		2,276
AIB	92	1,824	852	1,435	1,160	2,591	118	220	8,292
DB	203	1,751	1,905	905	663	3,936			9,363
BOA	7.64	746	230	871	610	2,647	36		5,148
WB	29	428	483	321	903	1,951	27	137	4,279
UB	20	686	693	1,075	766	1,496	202		4,938
NIB	126	734	1,237	505	956	1,292	92		4,942
CBO	36	19	57		286	1,933	700	163	3,194
LJB	49	146	44	548	176	453	15		1,431
OIB	76	291	122	130	280	1,183	50		949
ZB	20	203	145	247	404	277	122		1,141
BIB	1	272	119	164	114	500	17		687
BBI	2	232	91	83	107	546	12		1,073
AB	72	162	60	23	153	603	10		1,083
AdIB		130	40	80	102	63	1		1,598
DGB	16	40	5	3	13	204			781
EB	5	15		65	57	36	2		181
<b>TOTAL</b>	10,890	17,905	41,686	18,801	12,343	25,397	1404	521	128,946
Share (%)	Dec .12*								
	Dec .12*	11.85	10.60	27.48	14.63	9.51	2.83	1.39	100.00
	Sep.13**	8.59	8.93	32.63	14.58	6.84	3.17	5.93	100.00
Dec 13	8.45	13.89	32.33	14.58	9.57	19.70	1.09	0.40	100.00

Note: Agri-agriculture; B&C-building and construction; Manf-manufacturing; DTS-domestic trade and services; S&C-staff and consumers  
 \*\*\*The total loan and advance as at Sep.30, 2013 was 117,183 million  
 \*\*The total loan and advance as at Dec. 30, 2012 was 104126million



Annex Table 4

**Commercial Banks’  
Market Share  
(In percent)**

**As at End: of December 31, 2013**

Particular	CBE	CBB	AIB	DB	BOA	WB	UB	NIB	CBO	LIB	ZB	OIB	BUIB	BIB	AB	AdIB	DGB	EB	Public	Private	Total
<b>Assets</b>																					
Dec.12	64.5	2.6	5.1	6.9	3.4	3.6	3.7	3.5	1.5	1.0	1.3	1.2	0.6	0.7	0.6	0.2	0.00		67.1	32.9	100.0
Jun.12	64.2	2.2	5.4	6.7	3.3	3.3	3.4	3.1	2.1	0.9	1.2	1.3	0.7	0.7	0.7	0.3	0.17	0.1	66.5	33.5	100.0
Dec.13	64.9	2.2	5.2	6.3	3.2	3.3	3.2	3.1	2.2	0.9	1.1	1.4	0.7	0.8	0.8	0.3	0.18	0.2	67.1	32.9	100.0
<b>Loans &amp; bonds</b>																					
Dec.12	69.6	1.1	4.7	5.9	3.3	3.3	3.2	3.2	1.1	0.8	0.9	1.0	0.6	0.5	0.5	0.16	0.00		70.8	29.2	100.0
Jun.12	69.4	1.1	5.0	5.3	3.3	3.0	3.2	3.0	1.3	0.9	1.0	1.2	0.7	0.6	0.6	0.2	0.0	0.0	70.5	29.5	100.0
Dec.13	70.1	1.3	4.8	5.2	3.0	2.8	3.0	2.9	1.6	0.8	0.9	1.2	0.7	0.6	0.7	0.2	0.0	0.0	71.4	28.6	100.0
<b>Deposits</b>																					
Dec.12	65.9	1.9	5.0	7.2	3.6	3.2	3.7	3.1	1.4	0.9	1.2	1.1	0.6	0.6	0.5	0.17	0.00		67.5	32.5	100.0
Jun.12	65.1	2.2	5.4	6.8	3.5	3.0	3.4	2.8	1.9	0.9	1.2	1.4	0.7	0.7	0.7	0.2	0.0	0.0	67.3	32.7	100.0
Dec.13	66.7	1.9	5.1	6.3	3.3	2.9	3.2	2.8	1.9	0.9	1.1	1.4	0.6	0.7	0.7	0.2	0.0	0.0	68.7	31.3	100.0
<b>Capital</b>																					
Dec.12	42.2	2.7	8.0	7.5	4.7	8.2	4.9	7.6	2.3	2.2	1.1	2.5	1.6	1.4	1.5	0.9	0.01		44.8	55.2	100.0
Jun.12	42.5	2.6	7.7	7.1	4.3	7.4	5.0	6.8	2.7	2.1	2.0	2.4	1.6	1.7	1.5	1.0	0.01	0.0	45.1	54.9	100.0
Dec.13	39.6	2.4	8.5	8.0	4.2	7.5	5.4	7.2	2.7	2.1	2.2	2.5	1.6	1.6	1.6	1.0	0.01	0.0	42.1	57.9	100.0

Annex table 5

**Banking Industry  
Bank Branch Distribution**

No	Region	No of branches		% share as of		No	Region	No of branches		% share	
		Dec.2012	Dec.2013	Dec.2012	Dec.2013			Dec.2012	Dec.2013	Dec.2012	Dec.2013
1	Addis	167	192	32.83	33.00	7	Dire Dawa	9	10	1.39	1.29
	Ababa	330	473				Private	12	16		
2	Oromia	254	309	27.61	27.74	8	Harari	5	7	0.79	0.84
		164	250				Private	7	10		
3	Amhara	143	167	15.26	14.04	9	Benshangul Gumuz	8	10	0.73	0.79
		88	116				Private	3	6		
4	SNNP	119	148	10.70	11.51	10	Afar	9	12	0.73	0.84
		43	84				Private	2	5		
5	Tigray	62	77	7.33	7.49	11	Gambella	4	5	0.53	0.45
		49	74				Private	4	4		
6	Somali	18	20	2.11	1.99		<b>Sub-total</b>	<b>798</b>	<b>957</b>	<b>52.71</b>	<b>47.49</b>
							Private	<b>716</b>	<b>1058</b>	<b>47.29</b>	<b>52.51</b>
		14	20				<b>Grand-total</b>	<b>1514</b>	<b>2015</b>	<b>100.00</b>	<b>100</b>

Annex Table 6 Ethiopia Financial Access Dates from FAS

1. Geographical Outreach	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Commercial Banks</b>	8	9	10	10	12	14	15	16	17	19
<b>Other deposit takers (micro finance institutions )</b>	24	26	27	28	29	30	30	30	32	32
<b>Number of Commercial Banks Branches, Excluding Headquarters</b>	326	368	389	463	530	604	648	941	1515	2015
<b>Other financial intermediaries (Micro finance institutions)</b>	--	695	724	827	815	987	1033	1191	1224	1224
<b>Number of Automated Teller Machines (ATMs) country wide</b>	8	8	13	18	31	46	145	160	241	400
<b>Commercial Bank branches per 1,000 km2</b>	0.33	0.38	0.40	0.47	0.54	0.62	0.66	0.96	1.53	2.05
<b>Commercial Bank branches per 100,000 adults</b>	0.84	0.92	0.94	1.08	1.20	1.32	1.37	1.91	2.95	3.80
<b>ATMs per 1,000 km2</b>	0.01	0.01	0.01	0.02	0.03	0.05	0.15	0.16	0.24	0.34
<b>ATMs per 100,000 adults</b>	0.02	0.02	0.02	0.04	0.07	0.10	0.30	0.32	0.46	0.58
<b>2. Use of Financial Services</b>										
<b>Number of depositors in Commercial Banks</b>	No data	No data	2,809,085	3,272,169	3,520,921	4,240,844	4,992,835	5,571,323	7,115,271	9,287,300
<b>Number of Depositors in Other deposit takers( Micro finance institutions</b>	No data	No data	No data	1,712,081	2,162,819	2,192,365	2,434,679	2,650,517	2,887,043	3,033,560
<b>Number of Borrowers in Commercial Banks</b>	No data	No data	50,982	46,023	53,413	77,184	86,357	90,736	109,461	112,650

<b>Number of borrowers in other institutions(Micro finance institutions)</b>	1,001,565	1,277,939	1,535,093	1,814,617	2,201,489	2,283,681	2,536,807	2,650,517	2,887,043	3,485,520
<b>Depositors with commercial banks per 1,000 adults</b>	No data	No data	66.42	74.89	77.9	90.74	103.16	111.06	136.78	160.25
<b>Borrowers from Commercial Banks per 1,000 adults</b>	No data	No data	1.21	1.05	1.18	1.65	1.78	1.81	2.10	2.80
<b>3. Volume of Accounts</b>										
<b>Outstanding deposits with Commercial Banks (% of GDP)</b>	35.08	34.08	32.09	29.80	24.71	22.45	24.95	26.91	24.15	28.80
<b>Outstanding loans from Commercial Banks (% of GDP)</b>	16.81	16.81	16.46	14.88	14.29	11.99	12.31	12.49	13.32	15.25