

DEVELOPMENTS IN THE BANKING SECTOR AND FINANCIAL INCLUSION IN ETHIOPIA

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Abstract *This paper aimed to highlight developments in the banking sector and to assess the status, trends and determinants of financial inclusion in Ethiopia. The study used data from the World Bank Findex Database, Commercial Bank of Ethiopia, Development Bank of Ethiopia and National Bank of Ethiopia annual reports. The Ethiopian banking sector, once dominated by public banks before the reform, showed a new era following the 1994 reform. The reform paved the way for the licensing of some private commercial banks. As a result, the market share of public banks declined significantly after the reform and vice versa for private banks. The level of financial inclusiveness in Ethiopia is extremely low even though the government has given a policy priority since 2016 onwards. Gender, age, education, financial literacy, residence, income, religion, preferring formal financial services, distance, GDP and trust in financial service providers were found to be the main financial inclusion determinants. Given that financial inclusion has been greatly improved after the financial reform, the government has to unlock the banking sector to foreign investors as it will further enhance the level of financial inclusiveness. Banks should also provide innovative financial products to customers.*

Keywords: *Development, Banking Sector, Financial Inclusion, Ethiopia*

INTRODUCTION

The development of the banking sector has an indispensable role in resource mobilisation, technological advancement and accelerating economic growth, particularly in developing countries like Ethiopia. Every financial institution has the primary role of resource mobilisation, particularly in the form of savings, from saver-lenders and channeling of these resources to investors. Financial institutions perform the roles of financial intermediations in different ways depending on the different types of economic policies and financial systems. The history of the financial sector in Ethiopia under the past four government regimes can be a good reference for the validity of the above argument.

The banking sector in Ethiopia before the reform was shallow, inefficient, dominated by state-owned banks and extremely underdeveloped. During this period, regulatory bodies did not have a meaningful role in regulating and supervising the activities of financial institutions, and the main role of banks was to finance national projects. Following the downfall

of the military government in 1991, a financial reform was implemented and a significant change was brought in the structure and activities of the financial sector. As a result, new privately owned banks were licensed and the functions of the National Bank of Ethiopia (NBE), the country's central bank, were restructured.

Financial inclusion can simply be defined as the access to and use of formal financial services. It is the mechanism of drawing the unbanked population into the formal financial system to allow them to access a wide range of financial services (Hannig & Jansen, 2010; Sahay et al., 2015).

Literature showed greater access to financial services by all members of the economy enhances the efficiency of financial transactions, makes people feel secure in making transactions, alleviates poverty by making people invest in education and businesses, reduces income inequality and brings economic growth (Demirguc-Kunt et al., 2015; Sahay et al., 2015). Knowing the role played by financial inclusion, many developing countries across the world develop their financial inclusion strategies from 2010 onwards (Baza & Rao, 2017). Ethiopia also approved the national financial

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inclusion strategy in 2016 (NBE, 2017). Banks in Ethiopia made strong efforts to provide formal financial services and new financial products to bring new clients into the formal financial system. Despite these efforts by the government and banks, the banking industry in Ethiopia remained underdeveloped, mainly confined to urban areas and the degree of financial service penetration remained low compared to the Sub-Saharan region (Dinku, 2019).

Theoretical and empirical shreds of evidence that showed the structure and performances of the Ethiopian banking sector, and the role played by the banks in fostering financial inclusiveness are scant. Therefore, the present study is aimed to highlight the structures and performances of the banking sector in Ethiopia during the different government regimes and assess the status, determinants and trends of financial inclusion. In the first part, an attempt has been made to examine the structure and performance of the Ethiopian banking sector during the pre-reform and post-reform periods with the help of some descriptive statistics. In the second part, the article tried to assess what looks like the trends and status of financial inclusion in Ethiopia by using some internationally recognised financial inclusion measures for example the number of branch networks, ATMs, depositors, borrowers and amount of deposits and loans. Moreover, the article tried to identify the determinants of and barriers to financial inclusion, and the role of financial technologies in financial inclusion in Ethiopia. To address the above-stated objectives, different sources of data, mainly annual reports of the NBE, Commercial Bank of Ethiopia (CBE), Development Bank of Ethiopia (DBE) and the World Bank Findex Data Bases were reviewed.

LITERATURE REVIEW

Historical Background of the Ethiopian Banking Sector

The banking sector serves as a vital component in enhancing the economic development of a country. Banks are vital financial intermediaries in disbursing credit to deficit units. Their ineffective performance hinders the efficient functioning of an economy. Any unfavourable issues related to the banking sector will have considerable repercussions on the whole financial system of a given country (Agarwal et al., 2020).

Even though Ethiopia started to use modern money during the Axumite era (1000 BC to around AD 975), the introduction of modern banking in Ethiopia is dated back

to 1905 following the establishment of Abyssinia Bank (Geda, 2006; National Bank of Ethiopia). Abyssinia Bank was fully managed by the Egyptian National Bank and had rights such as the right to issue legal tender bank notes and to get land free of any charges. It was also agreed that no bank allowed to be established in the country for 50 years and the bank's capital to be Pound Sterling 500,000; one-fifth of which was subscribed and the remaining was to be raised through the issuance of its shares in major cities around the world (National Bank of Ethiopia, nd). During 1908, other banks fully owned by foreigner such as Societe Nationale d'Ethiophe Pour le Development de l'Agriculture et du Commerce, Banque de l'Indochine and the Compagnie de l'Afrique Orientale were also established (Geda, 2006). According to Gedey (1990), Abyssinia Bank was purchased by the Government of Ethiopia and changed its name to the Bank of Ethiopia in 1931, right after Emperor Haile Selassie took power. The bank was proclaimed to be the first homegrown bank in the African continent and was purely an Ethiopian institution.

During the Italian invasion (1936–1941), banking activities in Ethiopia were expanded despite the Italian-based banks being the dominant institutions (Geda, 2006). When the Italians' five years of occupation came to an end, Britain's involvement in Ethiopia became paramount and consequently, Barclays Bank started to provide services in Ethiopia in 1941 and stayed until 1943 (Gedey, 1990). In 1943, the State Bank of Ethiopia came into existence with the dual responsibility of serving as a central and commercial bank. However, the State Bank of Ethiopia got stiff opposition from Britain (Geda, 2006) although few other banking institutions were also established. Look at Tables 1 and 2 concerning the full list of those banks that were in operation during the Italian occupation and before the 1974 revolution in Ethiopia.

Table 1: List of Banks Operating during the Italian Occupation Period (1936–1941)

Bank Name	Establishment Year (GC)	Number of Branches
Banco di Italy	1914	9
Banco di Roma	1914	18
Banco di Napoli	1939	4
Banco Nazionale (De's Voro)	1939	4
Casa de Creito	1939	1
Society Nazionale di Ethiopia	1939	1
Total		37

Source: Gedey (1990).

Table 2: List of Banks Operating before the 1974 Revolution in Ethiopia

Name of the Bank	Establishment Year (GC)	Number of Branches	Total Capital at Establishment Date (ETB in Million)
Banco di Napol	ND	1	2.0
Imperial Saving and Home Ownership Public Association	1963	1	0.6
National Bank of Ethiopia, NBE	1963	4	10.0
Commercial Bank of Ethiopia, CBE	1963	65	35.0
Addis Bank S.C.	1963	26	5.0
Ethiopian Saving and Mortgage S.C.	1964	2	3.0
Ethiopian Investment Corporation S.C.	1964	1	20.0
Banco di Roma (Ethiopia) S.C.	1966	8	4.0
Agricultural and Industrial Dev. Bank	1969	5	100.0
Total		113	

Source: Gedey (1990).

After the overthrow of the imperial era in 1974, Ethiopia became a socialist state and the government took control of the whole economy, big corporations were nationalised and made some organisational restructuring through mergers to create bigger and stronger institutions (www. National Bank of Ethiopia). Accordingly, the three privately owned banks—Banco di Roma, Banco di Napoli and Addis Ababa Bank were nationalised in 1975 before they underwent a merger in 1976 to form one large bank called Addis Bank (Geda, 2006; NBE, nd). Again, CBE S.C. and Addis Bank were merged in 1980 to form another bank called CBE—the only commercial bank in Ethiopia until the liberalisation policy was issued in 1994 (NBE, nd). Following this, the NBE (the country's central bank) was reshaped in 1976; the then Agricultural and Industrial Bank changed its name to the DBE, the Housing and Saving Bank renamed as Construction and Business Bank (CBB) until it was taken over by CBE in April 2016 (Geda, 2006). After the downfall of the Dergue regime in 1991, financial institutions were restructured to fit into the market-oriented economy declared by the Ethiopian People's Revolutionary Democratic Front and other new private financial institutions flourished following the liberalisation policy (Geda, 2006).

The Concept of Financial Inclusion

Despite the global community's wider perspectives on the meaning and scope of financial inclusion, it can simply be defined as the access to and use of formal financial services. In other words, it is the mechanism of drawing the unbanked population into the formal financial system to allow them to access various types of financial services including savings, credit payments, transfers to credit and insurance at an affordable cost. See for example (Hannig & Jansen, 2010; Sahay et al., 2015). According to Bhagwan (2019), financial inclusion is defined as the process of providing suitable

financial services and products to the unbanked sections of the society at a reasonable cost in a fair and apparent approach by various formal financial institutions.

Financial inclusion plays a significant role in promoting economic growth by reducing poverty, and income inequality and fostering business development by reducing financial constraints for startups of new businesses and helping the existing ones survive (Demirguc-Kunt et al., 2017; Anarfo, Abor & Ose, 2020 cited in Bekele (2022), Ajide, 2020). Cognizant of this, most governments across the world made financial inclusion a major policy priority. In 2008, members of the G-20 countries agreed to give the agenda of financial inclusion a top priority and consequently, in 2010, they formed Global Partnership for Financial Inclusion to take the agenda forward. A peer exchange body of regulators from developing countries called the Alliance for Financial Inclusion (AFI) was also established in 2008. Later in 2011, the Maya Declaration- whereby governments declare their specific national financial inclusion strategies- was created by the AFI. These major global movements, coupled with many other local factors made most governments across the world develop their financial inclusion strategies (Arun & Kamath, 2015). Many developing countries have also acknowledged using financial inclusion strategies from 2010 onwards (Baza & Rao, 2017). Considering the paramount positive impact of financial inclusion, Ethiopia also launched a financial inclusion strategy in 2017 at the national level (Lakew & Azadi, 2020).

Account ownership is one of the most commonly used proxies for measuring the level of financial inclusion as it is the first step to entering into formal financial services such as saving, getting a loan, money transfer, receiving wages and so on (Beck et al., 2005; Achew et al., 2021). According to the World Bank Findex Database, the number of adults having an account at regulated financial institutions

and providers of mobile money services has increased from 51% in 2011 to 76% in 2021 across the world. In developing countries, account ownership showed, on average, an 8% increment from 63% in the year 2017 to 71% in 2021. The proportion of adults in Sub-Saharan Africa (SSA) who owned accounts at regulated financial institutions reached 55%. This surge in account ownership is largely attributed to mobile money adoptions—33% of adults had mobile money accounts. Therefore, SSA has the largest share of mobile money accounts compared to other regions in the world. The ratio of adults having mobile money accounts is also much higher than the world's average of 10%. In developing countries, the proportion of adults who receive money or make payments digitally rose from 35% in 2014 to 57% in 2021 while almost all (95%) of adults in high-income nations make digital transactions (Demirgüç-Kunt et al., 2021).

DISCUSSION

Performance and Structure of the Ethiopian Banking Sector during the Pre-Reform Period

During the Dergue regime (1974–1991), hereafter referred to as the pre-reform period, all privately owned banks and other financial institutions were nationalised. After being

reshaped in 1976, the NBE became the apex institution that can carry out all the functions of a modern central bank. During this era, after different restructurings in the form of mergers, nationalising and changing names of corporations were made by the Ethiopian government, only three fully state-owned banks namely the CBE, the DBE and the CBB, were operating in the banking system in Ethiopia. However, the CBE and DBE were the dominant banks in Ethiopia and still, they are the leading banks in the country (Geda, 2006). Given their dominant positions in the banking industry, the major performances and activities of these two major banks during the pre-reform period are discussed below:

CBE, in its current form, was established through the merger of Addis Bank (a privately owned bank) with CBE S.C. (a publicly owned bank) in 1980. Later in 2016, the CBE also absorbed another state-owned bank called CBB.

As shown in Table 3 below, CBE had the lion's share in the total amount of deposits mobilised in the country accounting for an average of 89.3% share of the national total during the pre-reform period although its share slightly dropped at the end times of the Dergue era and the beginning of the reform period. Given its dominant position, Geda (2006), said studying the CBE was almost equivalent to studying the entire banking sector. CBE, on average, had a share of 89.3% of the total deposits mobilised in the country during the pre-reform period.

Table 3: Deposit Mobilization by CBE (ETB in Millions) and its Share to the National Total

Years (E.C.)	Saving Deposit	Demand Deposit	Time Deposit	Total Deposit	Share to the National Total (%)
1979/80	442.2	692.8	186.0	1,321.0	87.6
1980/81	47.8	199.3	42.4	289.5	90.1
1981/82	58.3	91.9	20.3	170.5	94.5
1982/83	108.6	169.4	14.5	292.5	92.9
1983/84	761.1	1,258.2	292.1	2,311.4	89.6
1984/85	812.8	1,531.3	340.1	2,684.2	90.8
1985/86	939.2	1,784.7	324.8	3,048.7	91.5
1986/87	1,053.2	2,029.3	182.3	3,264.8	87.8
1987/88	1,208.0	2,251.1	111.8	3,570.9	87.5
1988/89	1,367.1	2,255.8	155.3	3,778.2	86.8
1989/90	1,574.5	2,496.0	130.8	4,201.3	86.5
1990/91	1,676.7	2,602.9	134.8	4,414.4	86.2
Average	837.5	1,446.9	161.3	2,445.6	89.3

Source: Various Years Annual Reports of National Bank of Ethiopia (NBE).

Table 4 below shows loan disbursements by CBE to different sectors stated in percentage terms and millions of Ethiopian Birr. As per the data in the table, loans made to the central government took the highest share, accounting for 62%

of the total loans and advances followed by international trade, loans to housing and construction, domestic trade and industry with 15%, 6.1%, 6% and 5.5%, respectively. In a nutshell, the total amount of loans made by CBE,

including inter-bank lending, has shown increments in the specified years during the pre-reform period with the highest

interbank lending made in 1989/90 which accounted for 26 million Birr.

Table 4: Sector Wise Loans and Advances by Commercial Bank of Ethiopia (in %)

Sector	Years (E.C.)						Average
	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	
Central government	61.7	58.1	53.5	59.7	65.7	70.7	61.6
Agriculture	1.9	2.7	2.6	1.9	1.5	1.3	2.0
Industry	4.4	5.0	5.9	6.7	5.6	5.3	5.5
Domestic Trade	5.7	7.2	8.8	5.5	5.6	3.7	5.9
Foreign Trade	14.5	15.9	17.4	16.4	13.8	10.6	14.8
Housing & Construction	8.9	6.3	6.4	6.0	5.7	5.5	6.1
Transport & Communication	5.6	3.0	4.2	2.7	2.0	1.8	2.8
Hotel and Tourism	7.0	0.5	0.4	0.3	0.3	0.4	0.4
Personal Loans	0.4	0.4	0.4	0.3	0.3	0.4	0.4
Others	0.7	0.7	0.5	0.4	0.4	0.4	0.5
Total (ETB in millions)	2,352.7	2,500.0	2,800.0	3,130.4	3,406.2	3,721.1	
Inter-bank Lending (ETB in millions)	19.4	18.6	17.7	24.2	25.9	25.1	
Grand Total	2,372.1	2,518.6	2,817.7	3,154.6	3,432.1	3,746.2	

Source: Various Years Annual Reports of CBE.

Deposit mobilisation by the DBE was almost stagnant during the years before the reform. However, in the last two years immediately before the reform and the next two years immediately after the reform, deposit mobilisation by the DBE markedly declined. Later on, the DBE registered an increment in the level of deposit mobilisation and was restored to the level where it was during the pre-reform period.

Concerning loan disbursement by DBE dissected by sectors, the agricultural sector received the highest share of loans even though it showed a significant decline during the years 1987/88 to 1990/91. Next to agriculture, the highest amount of loans were made to the industry sector followed by the mining, power and water resource sectors.

Table 5: Sectorial Loan Disbursement by the Development Bank of Ethiopia (DBE) (in Millions of ETB)

Sector	Years (E.C.)					
	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91
Agriculture	267.1	132.3	305.1	238.8	214.2	81
Industry	25.9	38	35.9	110.9	78.9	43.3
Trade (domestic and foreign)	0	0	0	0	0	0
Housing & Construction	2.5	0.4	1.4	1.6	1	2.2
Transport & Communication	0.4	0	0	2.9	0.7	0
Hotel and Tourism	0.5	0	1	1.7	4.7	12.7
Mining, Power & Water Resource	3.9	18	19.8	18.1	19.9	0
Others	0.2	0.2	0	0	0	0
Total	300.5	188.9	363.2	374	319.4	139.2

Source: Annual Reports of DBE, Various Years.

Structure and Performance of the Banking Sector in the Post-Reform Period

The Ethiopian financial sector showed a new era after the 1994 financial reform. The reform allowed private investors,

though Ethiopian nationals only, to engage in the financial sector (Geda, 2006). Shortly after the economic reform, new private commercial banks with a total of 115 branch networks were established within a span of six years (1994–1999). The newly established private banks had a share of one-fourth of the total capital owned by the banking institutions in the country.

Table 6: Private Commercial Banks Established Shortly after the Reform (1994-1999)

Name of the Bank	Year of Establishment (G.C.)	Number of Branches	Total Capital (in ETB Million) and Their Share of the Total Capital (%)
Awash International Bank	1994	26	132 (4.9%)
Dashen Bank S.C.	1995	28	122 (4.6%)
Bank of Abyssinia	1996	14	141 (5.3%)
Wegagen Bank	1997	23	83 (3.1%)
United Bank S.C.	1998	13	91(3.4%)
Nib International	1999	11	111 (4.2%)

Source: Various Years Annual Reports of NBE.

Despite the licensing of the above new privately owned banks, the relative market share (in terms of deposit mobilisation and loan advancements) of public banks remained high, especially in the first six years after the reform. However, the share of public banks in deposit mobilisation slightly declined from 95.8% in 1996/97 to 83.4% in 2001/02 while private banks’ share slightly rose from 4.2% in 1996/97 to 16.6% in 2001/02. In terms of loan disbursement, private banks’ share increased significantly from 6.8% to 46.1% over the years 1996/97–2001/02, whereas the share of public banks decreased significantly from 93.2% in the year 1996/97 to 53.7% in the year 2001/02.

share of deposits and loan disbursements in the years between 2002 and 2022. Therefore, as per the data below the period after the reform showed a marked decline in the market share (in terms of deposit mobilisation and loan disbursement) of public banks and a rise for private banks, compared to the pre-reform period. In terms of deposit mobilisation, public banks outperform private banks from 2008/9 to 2018/19. The performance of public banks, in terms of loan disbursement, also outweighed private banks from 2010/11 to 2016/17. In turn, private banks started to outperform public banks in both parameters during the last three years. All in all, the average share of private and public banks for deposit mobilisation accounted for 43.5 and 56.7%, respectively; whereas their respective share of loan disbursement stood at 48.8 and 51.2% in the past 20 years.

Fig. 1 below indicates the share of private and public banks’

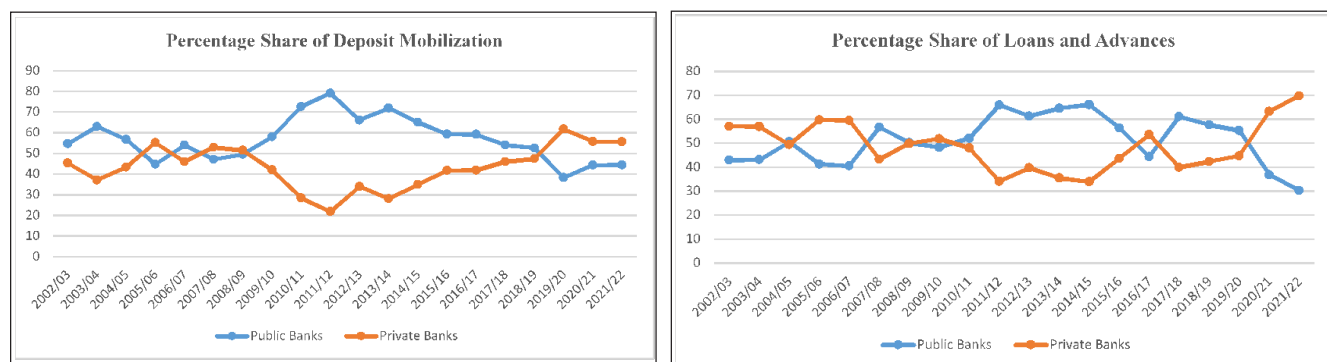


Fig. 1: Percentage Share of Public and Private Banks in Deposit Mobilization and Loan Disbursement (2002/03 – 2021/22)

Financial Inclusion in Ethiopia

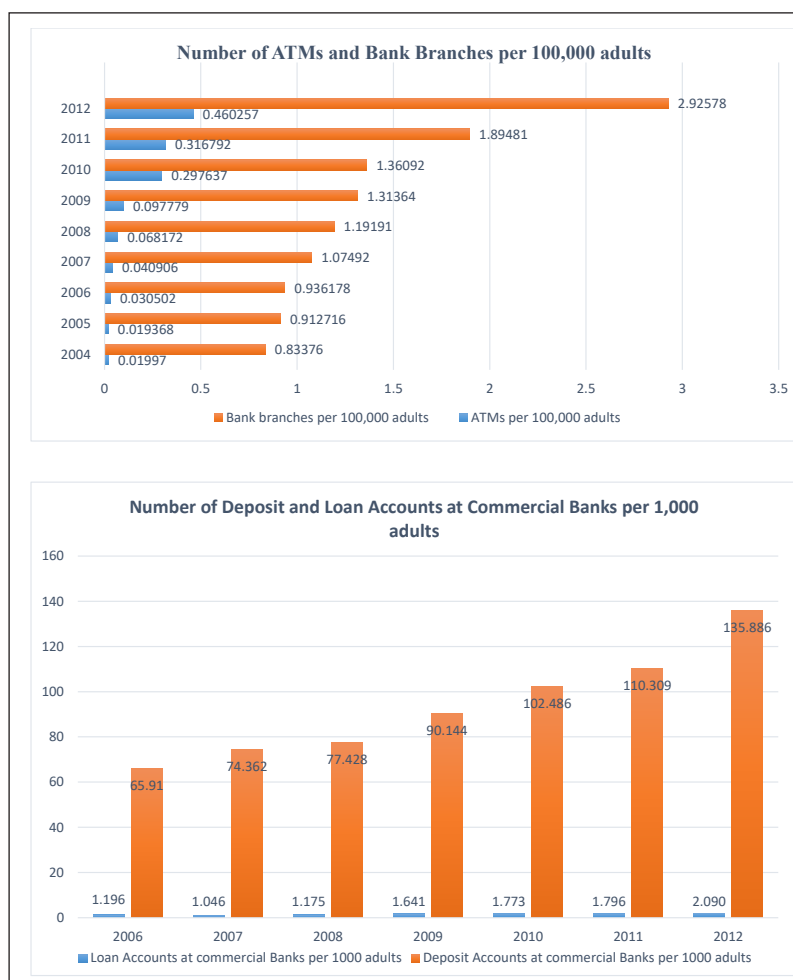
Trends and Status of Financial Inclusion in Ethiopia (2004–2012)

Financial institutions, especially banks, after the financial reform in particular, have strived a lot to provide formal financial services to clients and offer new financial products. Despite these efforts, the financial sector in Ethiopia remained extremely underdeveloped compared to other Sub-Saharan Africa (SSA), and the level of financial

inclusion—measured in many financial inclusion metrics—is one of the lowest, though it has shown significant progress in recent times. For instance, in neighboring Kenya, adults who owned accounts at formal financial institutions accounted for 82% and it is 50% in Rwanda, in the year 2017. However, in Ethiopia, the proportion of adults who owned accounts at formal financial institutions was below one-quarter of the total adults (Evans & Adeoye, 2017), accounting for only 35%. As can be seen from the chart below, the level of financial inclusion in terms of main financial inclusion indicators, such as- the number of

bank branches and number of ATMs per 100,000 adults and the number of bank deposit accounts and loan accounts per 1,000 adults—was significantly below other Sub-Saharan

(SSA) economies, which accounted for 2.9, 0.46, 136 and 2.09, respectively in the year 2012 (Demirgüç-Kunt et al., 2015).



Source: World Bank Findex Data Base (2014).

Fig. 2: Financial Inclusion in Ethiopia (2004 - 2012)

Status of Financial Inclusion in Ethiopia (2012 Onwards)

The financial service sector in Ethiopia is shallow and the level of financial service penetration is still low compared to the rest of SSA (Zins & Weill, 2016). However, the financial service infrastructure is developing fast in Ethiopia and the status of financial system inclusiveness has also shown improvements in recent years. For instance, the number of banks has risen from 19 in 2012/13 to 30 in 2022, and the number of bank branches rose from 1,724 in 2012/13 to 8,944 in 2022. According to the 2022 annual report of the NBE, due to the surge in the number of bank branch networks, the proportion of bank branches to population size significantly declined to (1:11, 516) from 1:49,826 in 2012/13. According to the World Bank Global Findex Data

Base, the number of bank branches per 100,000 adults was reported to be 2.9 in 2012. However, it grew up to 6.72 in 2019 (Bekele, 2022), which is well above the average (4.1) of the Sub-Saharan region but considerably lower than the world’s average (11) in the year 2019. The proportion of adults who owned bank accounts accounted for only 8% in 2012 and it grew up to 22% in 2014 and 35% in 2017. ATM services which were first introduced in 2001 by the CBE with eight ATMs (Taye & Chandrasekar, 2017), now reached 6,903. The total amount of deposits mobilised by banks has significantly increased from Birr 237.15 billion in 2012/13 to Birr 1.36 trillion in 2022 and the total amount of outstanding credit reached 1.6 trillion.

In a comparative study on the determinants of financial inclusion in Ethiopia and Kenya, Bekele (2022), revealed that Ethiopia witnessed significant progress in financial

inclusion measured in the number of bank branches and ATMs per 100,000 adults and the number of bank deposit accounts and loan accounts per 1,000 adults. The number of bank account owners per 1,000 adults rose to 505.6 in 2019 from 136 in 2012, and the number of ATMs per 100,000 adults increased to 4.37 in the year 2019 from 0.46 in 2012. The concept of mobile money networks was relatively new; there were around 13,000 agents in 2019, which was much lower than the number in Ghana, Kenya and Rwanda, which stood at 400,000, 206,000 and 110,000, respectively. Outstanding deposits and loans calculated as a percent of GDP have also grown up to 15.03% and 26.13% in the year 2019 from 12.13% and 17.94% in the year 2012, respectively. However, compared to Kenya, these values are significantly low, accounting for 27.79% and 36.95%, respectively, in the year 2019 (Bekele, 2022). In a nutshell, despite these improvements, Ethiopia is still lagging behind other Sub-Saharan African countries in all indicators of financial inclusion.

Determinants of and Barriers to Financial Inclusion in Ethiopia

Literature on the determinants of financial inclusion and its barriers is deficient in Ethiopia. Although there are few empirical studies that have tried to examine the determinants of and barriers to financial inclusion, almost all of these studies have focused on the socio-demographic factors affecting financial inclusion (See e.g., Desalegn & Yemataw, 2017; Baza & Rao, 2017; Hundie & Tulu, 2021; Timbula et al, 2019; Mossie, 2022; Bekele, 2022; Lakew & Azadi, 2020, Mucho, Nahusenay & Asmare, 2020; Haftu, 2023).

Using three financial inclusion dimensions—account ownership, usage of account for saving and usage of financial products and services- Desalegn and Yemataw (2017) found that better education, financial literacy, gender, age, living in an urban area and in capital city and preferring formal financial services are associated with a higher level of financial inclusion in Ethiopia. They explained that while the probability of possessing accounts is lower for older age people and those who reside in rural areas, it is higher for people who is, younger age, married, financially literate, having tertiary education, living in Addis Ababa/Amhara/Tigray regions and for those who prefer to formal financial institutions. Tertiary level education, dwelling in rural areas and individuals' preference for formal financial institutions have a similar effect on using formal financial accounts to save as they impact the likelihood of possessing an account. According to their findings, except for education, individuals' socioeconomic factors which include; disparity

among regions, being female, religion, financial capacity, being a rural area dweller, financial literacy and preference for formal financial institutions are the major barriers to an inclusive financial system in Ethiopia.

In a study made by Timbula et al. (2019) in the Jimma Zone of the Oromia regional state of Ethiopia, it is reported that age, financial literacy, education, distance from the nearest service point, trust in financial service providers and income are the main determinants of financial inclusion. It is explained that all the above factors exert a positive significant influence on financial inclusion except for the distance of financial service providers from their customers.

Hundie and Tulu (2021), applying the Fairlie Decomposition technique, found that a significant gender gap exists in every financial inclusion indicator used in their study given the highest gender gap is reported in formal savings followed by formal account ownership.

Using the 2017 World Bank Findex database and applying the logit estimation technique, Mossie (2022) revealed that financial inclusion has a greater level of association with people being educated, richer, man and older, given income and education brought strong influence on financial inclusion. He explained that the prevailing gender gaps in financial inclusion are primarily because women are excluded from the non-financial sector. While the poor and younger adults are restrained from accessing formal accounts by involuntary exclusions such as distance financial service providers, affordability and lack of documentation, the richer and older ones are constrained by involuntary barriers such as lack of money and since other family members have accounts. Likewise, lack of documentation, shortage of money, fixed costs and distance were found to be the main barriers to financial inclusion in Ethiopia (Baza & Rao, 2017).

The findings of the comparative study on the factors affecting the level of financial inclusion in Ethiopia and Kenya, Bekele (2022), showed that employment status, age, gender and owning a mobile phone have positive significant correlations with financial inclusion in both countries. Whereas, lack of money, lack of trust in financial service providers and lack of documentation are the main barriers to financial inclusion. According to her findings, variations in the level of financial inclusion in the two neighbouring countries are mainly due to macro-level factors such as differences in the degree of financial liberalisation, GDP, the proportion of the rural population and mobile money services and micro-level factors such as level of literacy rates and payment mechanisms to receive money such as government transfers are some of the micro-level variations between the two countries.

Using the 2018/19 socio-economic survey data by the World Bank, Haftu (2023), revealed that age, gender, religion, marital status, income, education, knowledge of how to open bank accounts and using mobile are the main financial inclusion determinants.

Muche, Nahusenay and Asmare (2020) also found that type of residence, level of financial literacy, documentation, trust in financial service providers, awareness, accessibility, availability and income significantly influenced the extent of financial inclusion in the East Gojjam zone of Amhara regional state.

Lakew and Azadi (2020), identified physical, bureaucratic and financial factors are the main barriers to financial inclusion in Ethiopia.

Financial Technology (FinTech) and Financial Inclusion in Ethiopia

The banking sector has changed radically recently. In the past five decades, bank customers were regularly obliged to visit their nearby branches to withdraw cash, for fund transfers and get information about banking services. However, today, a great majority of bank customers make their main financial transactions online, and hence digital banking is gaining popularity across the world. The advent of the internet, coupled with the invention of ATMs, debit and credit cards significantly contributed to the introduction of digital banking. Today, banks are able to provide their products and services to customers with different distribution channels due to the expansion of mobile devices and the Internet. In general, digital banking provides convenience to customers and to the banks themselves. For example, customers can make hassle-free financial transactions everywhere so that they can save their time and money. Banks can also save their money that they could have spent for physical infrastructure and recruitment costs by digitising their services. Banks are also able to overcome location barriers through online banking systems (Subrahmanyam et al., 2021).

According to Mhlanga (2022), the term FinTech, which stands for “financial technology” refers to any type of technologies that are being applied by businesses to convert or enhance conventional financial services into an automated or digitised form. The term “FinTech” is a combination of two terms, finance and technology (Goldstein, Jiang & Karolyi, 2019; Mhlanga, 2022). Financial businesses have always been affected by technologies through innovations in the way they run (Goldstein, Jiang & Karolyi, 2019). It

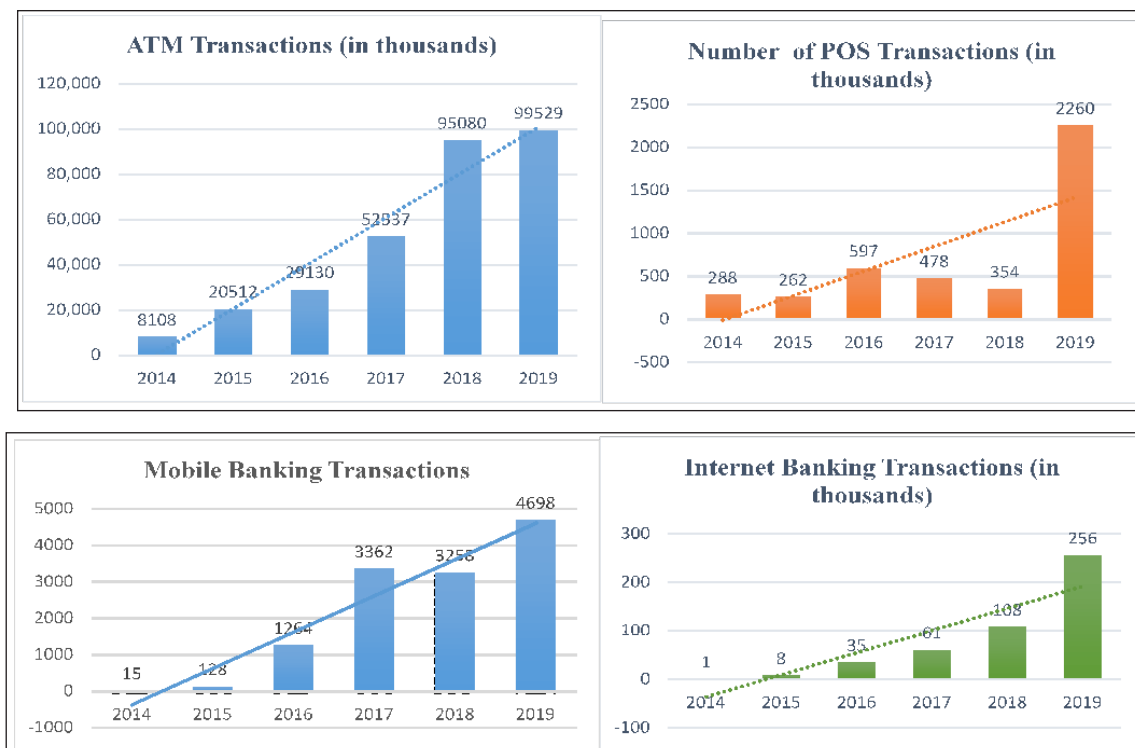
is also revealed that financial technologies can bring greater convenience to financial transactions, reduce transaction costs and increase the level of financial inclusion by increasing formal account users.

Ethiopia is the second most populous country in Africa, and 38.7% of adults own mobile phones. This is a huge potential and creates a unique opportunity for financial service providers to shift toward the digitisation of financial products (Achev et al., 2021). However, the penetration level of digital financial services in Ethiopia is low mainly due to the low level of mobile money performance, which is considered the main digital financial service driver in Africa (UNCDF, 2020).

The Ethiopian government has strived a lot to improve FinTech inclusion. For example, the National Financial Inclusion Strategy (NFIS), which indicates the government’s firm commitment towards greater financial inclusion for all, was approved in 2016 (NBE, 2017). In addition, the NBE has amended the national payments system, foreign nationals were allowed to provide digital financial services (NBE, 2020). This amendment is part of the government’s broader economic development strategy to create Digital Ethiopia by 2025. To this end, financial service providers, especially banks, have been adopting different financial technologies such as mobile and internet banking, and hence, there is a significant increment in using such technologies by their customers. As part of the strategy of national digital payments, Ethio telecom, which is the state-owned telecom service provider in Ethiopia, launched the first telecom mobile money service (telebirr) in May 2021 and a transaction value of ETB 77.9 billion has been made and its total customers reached 24.9 million until October 2022.

Despite these efforts, according to the 2018/19 socioeconomic survey, a vast majority of individuals accounted for 93%, received payments (e.g., wages), and made other transfers in cash. Usage of digital payment methods such as account-to-account transfers was reported to be only 16.7% among urban dwellers while it was only 1.2% for the rural population. Of the number of adults who owned bank accounts, only 28.8% of them had debit cards/ATMs and 11.1% of them had used mobile money services (Achev et al., 2021).

According to the NBE’s digital payments strategy (NBE, 2020), four main types of digital transactions are widely practiced in the Ethiopian market today. These include ATM transactions, POS transactions, mobile banking transactions and Internet banking transactions.



Source: National Bank of Ethiopia Digital Payments Strategy (2020).

Fig. 3: Digital Payments by Type

As shown in Fig. 3 above, even though the number of digital transactions has shown recent growth in Ethiopia, there is still a huge opportunity for further development. The above figure indicates the largest share of digital transactions were made by ATMs, albeit those transactions made through ATMs were done for cash withdrawal, which accounted for 64%. Despite POS transactions have also shown growth, it is estimated that around 40% of those POS machines were used for cash withdrawal purposes in bank branches instead of transactions with merchants (NBE, 2021).

CONCLUSIONS AND RECOMMENDATIONS

Ethiopia started using modern money 2000 years ago during the Axumite era (1000 BC to around AD 975). However, modern banking activities were introduced in 1905 following the establishment of Abyssinia Bank. During the period of the Italian occupation (1936–1941), the banking sector in Ethiopia was dominated by Italian banks. After the 1974 revolution, Ethiopia was proclaimed a socialist country whereby the government took control of the whole economy, nationalised big corporations and made some organisational restructurings. For instance, the three privately owned banks—Banco di Roma, Addis Ababa Bank and Banco di

Napoli were nationalised immediately after the revolution in 1975. Immediately after they were nationalised, the three banks were merged in 1976 and one large bank called Addis Bank was formed. Again, Addis Bank was merged with CBE S.C. in 1980 to create the present-day CBE, which was the only commercial bank in Ethiopia until the liberalisation policy in 1994. After this, the CBE and the DBE were, and still remain, the leading banks in the Ethiopian banking sector.

After the Dergue regime was overthrown in 1991, financial reform was made in Ethiopia in 1994 that made the financial sector open to domestic private investors. Accordingly, few privately owned commercial banks and insurance companies were established. Despite the establishment of these new privately owned commercial banks, the relative market share (in terms of mobilisation of deposits and loan advancements) for public banks remained extremely high. However, in the later stages of the financial reform, the relative market share for public banks, particularly in loan disbursement activities, declined and the share for private banks was markedly increased.

Financial inclusion has become a major policy priority for most governments across the world over the past couple of decades. Some major global movements like Global Partnership for Financial Inclusion (GPII), Alliance for

Financial Inclusion (AFI) and the Maya Declaration, coupled with other domestic factors, made most countries develop their financial inclusion strategies. Ethiopia also launched its financial inclusion strategy in 2016 with the motto of offering formal financial services for all. Despite these efforts, the financial sector in Ethiopia remained extremely underdeveloped compared to SSA economies, and the level of financial inclusion—measured in many financial inclusion metrics such as account ownership, account usage, ATM services, branch networks, loan accounts, mobile banking services and so on—is the lowest, though it shows significant progress over the years.

Prior empirical pieces of evidence showed that education, financial literacy, gender, age, type of residence, preference for formal financial services, distance from the nearest service point, GDP, income, religion, owning a mobile and trust in financial service providers, are the main financial inclusion determinants. Physical factors such as distance, bureaucratic factors like lack of documentation and financial factors which include lack of money and high fixed costs are considered as the main barriers to financial inclusion in Ethiopia.

Evidence confirms that FinTechs, in addition to their capability to bring greater convenience and reduction of transaction costs, also increase the level of financial inclusion by increasing formal account users. The FinTech landscape in Ethiopia has a huge potential and presents a unique opportunity given Ethiopia is the second most populous country in Africa. However, due to country-wide infrastructure challenges such as unavailability of reliable and pervasive network coverage, limited access to electricity and absence of a centralised national identification system, the penetration level of financial services in general and digital financial products in particular, is one of the lowest among SSA countries.

This study has shown that the financial reform brought improvements in the performance of banks and the commitment of banks towards achieving a higher level of financial inclusion in the country. This signals that financial liberalisation is essential for the well-functioning of the financial sector. Therefore, the government has to unlock the financial sector to foreign investors too, as it will further enhance the level of financial inclusiveness. Although the Ethiopian government sanctioned the entry of foreign investors into the banking sector in September 2022, it was not implemented until now. Theoretical as well as empirical works of literature on financial inclusion are scarce in Ethiopia even though few attempts have been made to empirically investigate the socio-economic factors affecting financial inclusion. However, studies on the macroeconomic factors affecting financial inclusion are deficient. Thus, other

researchers are suggested to research the macroeconomic determinants of financial inclusion in Ethiopia in the future.

REFERENCES

- Achew, M. B., Ambel, A. A., Gradstein, H. L., Tsegay, A. H., Haq, I. U., Varghese, M. M., & Yonis, M. B. (2021). *Financial Inclusion in Ethiopia: Key Findings from the Ethiopia Socioeconomic Survey 2018/19* (vol. 2019).
- Agarwal, P., Arora, D., Kashiramka Smita, & Jain, P. K. (2021). The impact of non-performing assets on bank performance under Basel regime - Empirical evidence from India. *Journal of Commerce and Accounting Research*, 10(3), 36-45 Retrieved from <http://publishingindia.com/jcar/>
- Ajide, K. B. (2017). Determinants of financial inclusion in Sub-Saharan Africa countries: Does institutional infrastructure matter? *CBN Journal of Applied Statistics*, 8(2), 69-89. Retrieved from <https://www.cbn.gov.ng/Out/2018/SD/DeterminantsofFinancialInclusioninSub-SaharanAfricaCountries.pdf>
- Arun, T., & Kamath, R. (2015). Financial inclusion: Policies and practices. *IIMB Management Review*, 27(4), 267-287. doi:<https://doi.org/10.1016/j.iimb.2015.09.004>
- Baza, A. U., & Rao, K. S. (2017). Financial inclusion in Ethiopia. *International Journal of Economics and Finance*, 9(4), 191. doi:<https://doi.org/10.5539/ijef.v9n4p191>
- Bekele, W. D. (2022). Determinants of financial inclusion: A comparative study of Kenya and Ethiopia. *Journal of African Business*. Routledge. doi:<https://doi.org/10.1080/15228916.2022.2078938>
- Bhagwan, P. (2019). Empirical study on relationship between financial inclusion and financial literacy and its impact on consumer financial behavior: A theoretical framework of unbanked people. *Journal of Commerce and Accounting Research*, 8(1), 61-67.
- Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. Washington, DC: World Bank. doi:10.1596/978-1-4648-1897-4. License: Creative Commons Attribution CC BY 3.0 IGO. Retrieved from <https://www.worldbank.org/en/publication/globalindex>
- Desalegn, G., & Yemataw, G. (2017). Financial inclusion in Ethiopia: Using LSMS (Ethiopia Socioeconomic Survey) data. *Ethiopian Journal of Economics*, 26(2).
- Dinku, T. (2019). Business & financial affairs financial inclusion: Access and extent of getting financial services. *Journal of Business & Financial Affairs*, 8(1), 8-11. doi:<https://doi.org/10.4172/2167-0234.1000369>

- Evans, O., & Adeoye, B. (2016). Determinants of financial inclusion in Africa: A dynamic panel data approach. *University of Mauritius Research Journal*, 22(81326).
- Geda, A. (2006). The structure and performance of Ethiopia's financial sector in the pre- and post-reform periods, with a special focus on banking. *United Nations University; World Institute for Development Economics Research*, 7(2006/112), 163-202. doi:https://doi.org/10.1057/9780230594012_8
- Gedey, B. (1990). *Money, banking and insurance in Ethiopia*. Addis Ababa, Ethiopia: Berhanena Selam Printing Press.
- Goldstein, I., Jiang, W., & Karolyi, G. A. (2019). To FinTech and beyond. *Review of Financial Studies*, 32(5), 1647-1661. doi:<https://doi.org/10.1093/rfs/hhz025>
- Haftu, G. G. (2023). Financial inclusion and its demand-side determinants: Evidence from Ethiopia financial inclusion and its demand-side determinants: Evidence from Ethiopia. *Cogent Economics & Finance*, 11(1). doi:<https://doi.org/10.1080/23322039.2023.2186031>
- Hannig, A., & Jansen, S. (2011). Financial inclusion and financial stability: Current policy issues. *Financial Market Regulation and Reforms in Emerging Markets*, 259, 284-318. doi:<https://doi.org/10.2139/ssrn.1729122>
- Hundie, S. K., & Tulu, D. T. (2021). Financial inclusion gender gap in Ethiopia: Evidence from decomposition analysis. *Research Square*, March, 1-26. Retrieved from <https://www.researchgate.net/publication/349728508%0AFinancial>
- Lakew, T. B., & Azadi, H. (2020). Financial inclusion in Ethiopia: Is it on the right track? *International Journal of Financial Studies*, 8(2), 1-13. doi:<https://doi.org/10.3390/ijfs8020028>
- Mhlanga, D. (2022). The role of financial inclusion and FinTech in addressing climate-related challenges in the industry 4.0: Lessons for sustainable development goals. *Frontiers in Climate*, 4. doi:<https://doi.org/10.3389/fclim.2022.949178>
- Mossie, W. A. (2022). Understanding financial inclusion in Ethiopia. *Cogent Economics and Finance*, 10(1). doi:<https://doi.org/10.1080/23322039.2022.2071385>
- Muche Teka, B., Nahusenay, S., & Asmare, T. (2020). Determinants of financial inclusion in East Gojjam, Ethiopia. *Journal of Applied Finance & Banking*, 10(4), 1792-6599.
- National Bank of Ethiopia. (nd). *History of Banking*. Retrieved from <https://nbe.gov.et/>
- National Bank of Ethiopia. (2017). *Ethiopian National Financial Inclusion Strategy*.
- National Bank of Ethiopia. (2021). *National Digital Payments Strategy 2021-2024*. Retrieved from <https://nbebank.com/wp-content/uploads/pdf/news/National-Digital-Payment-Strategy.pdf>
- Sahay, R., Cihak, M., N'Diaye, P., Barajas, A., Mitra, S., Kyobe, A., Mooi, Y., & Yousefi, R. (2015). Financial inclusion: Can it meet multiple macroeconomic goals? In *Financial Inclusion: Can it Meet Multiple Macroeconomic Goals? IMF Staff Discussion Note* (vol. 15, no. 17). doi:<https://doi.org/10.5089/9781513585154.006>
- Subrahmanyam, N., Bhayani, S., Rao, P. V., & Rajan, G. (2021). Digital aspects of banking progress and way forward with special reference to rural areas in Andhra Pradesh. *Journal of Commerce and Accounting Research*, 10(3), 72-78. Retrieved from <http://publishingindia.com/jcar/>
- Taye, E., & Chandrasekar, K. S. (2017). The adoption of automatic teller machines in commercial bank of Ethiopia. *International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTEMAS)*, 6(10), 4-9. Retrieved from <https://www.researchgate.net/publication/320830247>
- Timbula, M. A., Mengesha, T. Mekonnen, Y., & Kebede, M. (2019). Financial inclusion and its determinants among households in Jimma Zone of Oromia Regional State, Ethiopia. *International Journal of Commerce and Finance*, 5(2), 106-119.
- United Nations Capital Development Fund. (2020). *Ethiopia remittance review: Assessment of payment and financial markets*.
- Zins, A., & Weill, L. (2016). The determinants of financial inclusion in Africa. *Review of Development Finance*, 11(1), 123-136. doi:<https://doi.org/10.5430/ijfr.v11n1p123>