

# **Saving and Investment Dynamics in Oromia Region, Ethiopia**

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**Submitted by  
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**To  
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## EXECUTIVE SUMMARY

Saving and investment are critical aspects of any economy, as they significantly contribute to economic growth and development. In fact, economists argue that without sufficient investment and savings, economic growth and development will undoubtedly be weakened. This study was designed to scrutinize the states of saving and investment as well as their association in Oromia region. To this end, a time series data from 1999/00 to 2021/22 on regional aggregates and other variables were compiled from various sources including government institutions, investors, and employees of investment projects. In addition, primary data was collected from community leaders, and financial institutions through key informant interviews (KII) and focus groups discussions (FGD). For this, Shaggar City administration (the former Oromia Special Zone surrounding Finfinne), East Showa, Jimma, and Bale Zones were selected for acquiring additional micro or zonal level information. The study revealed important findings pertaining to saving and investment dynamics in Oromia and the major ones are highlighted as follows.

The current level of gross domestic saving in Oromia is 22.13% of its GDP which is higher than the national average (15.3%) and the regional gross domestic investment (13.5%) in 2020/21. The regional investment (as % GDP) has been consistently lower than the national average. Using the ARDL-Bounds Cointegration Test, we show that relationship between saving and investment in Oromia is weak, implying that there is capital mobility, following Feldstein and Horioka (1980) hypothesis.

Banks are the main financial intermediaries in the investment ecosystem. Banks' deposit in Oromia increased by near to 9-fold over the last ten years and hit 255 billion in 2021/22. Currently (2021/22), Oromia accounts for 14.6% of banks deposit, 9.4% of the total loan disbursement, and 28.2% of banks' branches. However, Oromia's banks' deposit per capita and loan disbursement per capita are Birr 6,450 and Birr 2,640, respectively, which are lower than that of the national averages. On the other hand, loan-deposit ratio for Oromia is 0.33, which is lower than the national average (0.59), Addis Ababa (0.75), Gambella (0.64), and Dire Dawa (0.49), for instance. This implies that the region has a potential to increase investment even using domestic resources. High lending rate, long processing time and corruption in loan decision process, liquidity crunch, and unprecedented policy changes by NBE among the challenge of investment financing by banks.

Oromia has licensed about 20873 domestic and foreign investors since 1992; of which only 8926 (43%) of them are operational. The operational rate is lower for domestic investors (41.8%) than FDI ones (54.7%). Since all operational projects are not operating at their full capacity, further adjusting for this unutilized capacity yields that capacity utilization-adjusted operation rate of projects in Oromia is about 27%. Macroeconomic instability, political unrest, infrastructural problem like electricity, foreign currency shortage, corruption, atrocious bureaucracy, and lack of entrepreneurial mind set by the investors are among the major reasons behind this. On the other hand, the renewed commitment of the federal and local government to amend restrictive regulations and improve the business environments coupled with investment incentives, locational advantages of the region, and its resourcefulness has a potential to make Oromia an investable region.

Based on these findings, the study also provided policy recommendations specifically addressed to government, investors, and financial institutions. The recommendations include: Ensuring macroeconomic stability, access to finance, capacity building and leadership.

# 1. INTRODUCTION

## 1.1. Background

Savings and investment have been emphasized as precondition for the growth and development of economies. Both economic theorists and practitioners concur that the higher domestic saving, the faster the rate of investment, and rate of capital formation, which ultimately promote growth and development (Ribaj and Mexhuani, 2021). Moreover, savings and investment have been considered as two critical macro-economic variables with micro-economic foundations for achieving price stability and promoting employment opportunities.

Economic theory suggests that investment must be funded either from domestic savings, credit extension or foreign capital inflows. However, inadequate savings and investment are common problem in developing countries. For instance, Ethiopia's average gross domestic savings (GDS) to GDP ratio has been lower than that of the SSA average in real terms (NBE, 2021). The average GDS to GDP ratio in real terms for the Ethiopia had been the highest in 2019 (24%), which is still less than the average of SSA, and this has declined to 18.95% in 2022. Poor performance of the economy, high unemployment level, engagement of a large proportion of the population in the informal sector and low wages are factors responsible for low domestic savings in small developing states.

Saving may be defined as the portion of disposable income not spent on consumption of consumer goods but accumulated or invested directly in capital equipment. It may be referred to or assumed suspend consumption, being income left over for future consumption on capital investment or precautionary and speculative motives (Romer, 2018). In short, saving is disposable income less consumption. In Ethiopia, it is known that both public and private savings are the main sources of capital accumulation for investment purposes. As of theoretical viewpoint, total savings of households, entrepreneurs, and corporate unit in an economy has positive correlation with per capita income. In most of the time, it is known that saving is the main source of capital for investment. Higher level of national saving can lead to higher investment and hence higher growth (Tasar, 2017). This indicates that the level of national saving affects the level of output per capita growth rate which is one of the indicators of macroeconomic situation of the country.

Savings and investment gap is among the major problems constraining optimal utilization of resources to improve welfare of societies in many developing countries. Likewise, limited source of funding to finance various development projects and private sector investment is a peculiar characteristic of Ethiopia in general and Oromia region in particular. Though saving and investment are macroeconomic variables dependent national policies and strategies, regional governments are also entitled to design their own investment policies and strategies. In this sense, investment in the region depends not only the saving within the region but also the quality of these policies and strategies and implementing institutions.

Oromia region is endowed with natural resources and diversified agroecology which is suitable to various forms of investment opportunities. The region consists of 34% of the land in Ethiopia and it is home to over 40 million people (ESS projection, 2022). The region also plays a significant role in the Ethiopian economy. For instance, the region accounts for 51.2% of the crop production, 45.1% of the area cultivated for cereal crop production and 44% of the total livestock population of Ethiopia (ESS 2021). In addition, it is a major contributor to Ethiopia's main exports such as:

gold, coffee, khat and cattle. However, most of the population in the region remain agrarian with several complicated economic and social impediments. With these diversified natural resources and productions potentials, sustainable investment that changes the livelihood of the society at large is scarce. Hence, an empirical investigation of this dilemma is unequivocally important to design appropriate investment policy and make informed decision. This study is therefore instigated to investigate saving and investment dynamics and identifying factors impeding investment in Oromia region. The study mainly focuses on regional level aggregate information and to some extent provides zone level information based on four zones sampled for this study. In most cases, the private investment is given due emphasis.

Quantitative data ranging from 1999/00 to 2021/22 have been utilized to estimate the ARDL model and the bound tests for cointegration from which the long-runs and short-run relationship between saving and investment is gauged. The study also explored the investment financing and saving patterns in the Oromia in comparisons with the national average and other regions. The profile of investment in the region, the challenges and opportunities have been identified using our qualitative information collected from various stakeholders by conducting about 50 KII and FGDs. Finally, the study has forwarded important policy implications for the betterment of saving and investment in Oromia.

## **1.2. Objectives**

The research has the following specific objective.

- Analyze the association of saving and investment in Oromia region;
- Identify the source of investment finance;
- Examine the state of various forms of savings, their trends, and initiatives to promote savings in Oromia as compared to the national average and other regions;
- Investigate trends, peculiarities, and structure of private investment in the region; and
- Analyze strength, weakness, treats and opportunities of investment in Oromia region.

## **1.3. Organization of the report**

The remaining part of the report is organized as follows. The second chapter describes the methodology we followed in this study. The third chapter presents regional and macro level overviews of investment and saving and also reports the econometric model results regarding their association. In the fourth chapter, we present the analysis on the feature of saving and investment financing in Oromia in comparison with the national average and other regions. The fifth chapter deals with the profile and trends of investment in Oromia. In this chapter, we also discuss the success and failures in promoting, hosting, and managing investment from different perspectives. The SWOT analysis regarding private investment in Oromia is addressed in the sixth chapter. The seventh chapters close the report by concluding and forwarding policy implications of the study.

## 2. METHODOLOGY

### 2.1. Data Source and Collection Methods

This study used both qualitative and quantitative research design. Given the nature of the study, we had to collect and utilize macro, meso, and micro level quantitative and qualitative information associated with the saving and investment issues in Oromia. Macro and meso level data were gathered from relevant federal and regional offices information. Our sources of consists of 5 major groups: Government institutions (federal, regional, zonal), investors in Oromia, financial institutions, local community members, and employees of investment projects operating in Oromia.

In order to understand the states of saving and investment at grass root level, we selected four zones of Oromia, namely, East Shoa, Jimma, Bale, and Shaggar City administration (the former Oromia Special Zone surrounding Finfinne)<sup>1</sup>. These administrative zones were purposively selected in consultation with the Oromia planning and development commission as they are believed to host all kinds of investment activities from sector, concentration, accessibility, and other perspectives. Once we determine this, primary and secondary collected starting with the macro or federal level and then to regional and zonal level.

**Secondary data:** a large set of quantitative data related to investment and saving in Oromia was collected from federal, regional, and zonal offices. The sources of data at federal level were National Bank of Ethiopia (NBE), Ethiopian Investment Commission (EIC), Ministry of Trade and regional Integration (MoTRI), and Ministry of planning and development (MPD). Oromia planning and development commission, Oromia investment bureau, and their respective offices at selected zones were also the regional and zonal level sources of data for this study. In addition, selected financial institutions operating at all levels were other sources of the secondary data.

From these sources, time series data on national and regional level aggregates/accounts (GDP, gross domestic saving, and gross capita formation/investment), FDI inflows to the nation as well as to Oromia, overall investment profiles, variables related to saving and project financing (deposits, loan disbursement, external sources of project financing, bank branch networks, etc), and others were gathered. While most of the time series data are available since 1991/92 (establishment of the region), the Oromia aggregate saving and investment data are available since 1999/00, which is a great step in understanding the economic dynamics of the region. This data collection was implemented using a pre-defined secondary data collection book/format.

**Primary data:** Qualitative information was gathered from our primary sources of data which includes MoTRI, EIC, relevant regional bureaus and zone offices of Oromia mentioned below, Ethiopian chamber of commerce, selected investors and their employees, community members, 6 financial institutions DBE, NBE, Oromia Bank, CBO, Awash Bank, and Sinqee Bank<sup>2</sup>, and community leaders of in the selected zones.

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<sup>1</sup> Shaggar City administration replaced the former Oromia Special Zone surrounding Finfinne after the design and early stage data collection of this study.

<sup>2</sup> These institutions were purposively selected on the basis of their level of operation in Oromia. Sinqee bank (the former Oromia credit and saving institution) was selected to be also a good information source for micro financing as well.

The primary data was collected using Key informant interviews (KII) and Focus group discussions (FGD) with higher officials and representatives of the target source. A total about 43 KIIs and 7 FGDs were conducted to collect the required qualitative data at all levels. The detail break downs of the primary data collection are summarized in Table 3.1.

To implement the survey, 5 different KII and FGD guides were prepared for the 5 general target groups, namely, Government institutions, investors, FIs, local community members, and employees of investment projects. Once the preparation of survey instruments and report formats are done a survey team consisted of 10 experts were recruited from universities and research institutes with a minimum of master's degree in economics. A one-day training was provided for the survey team on the tools, report formats, and protocols of the data collection. The data collection was fielded mainly in February and March 2023 with a close supervisions sometimes direct involvement of the researchers. Each qualitative survey was transcribed by the qualitative survey experts and utilized for analysis.

**Table 2. 1.** Summary of target respondents of the KII and FGD

Data collection methods	Target group	Specific respondents	Number of KII/FGD
KIIs	Federal level government	Ethiopian Investment Commission (EIC), Ministry of trade and regional Integration (MoTRI), Chamber of Commerce	3
	Regional bureaus of Oromia	Oromia Investment bureau, Oromia land administration bureau, Oromia trade and market promotion bureau, Oromia revenue authority, Oromia environmental authority	5
	Zone gov't offices	Investment and industry offices and planning and development offices of selected zones	6
	Investors	Domestic and foreign investors in manufacturing, agriculture, mining, service, and related sector in selected zones	22
	Financial institutions	Development Bank of Ethiopia (DBE), National Bank of Ethiopia (NBE), Oromia Bank (OB), Cooperative Bank of Oromia (CBO), Awash Bank, Siinqee Bank	7
	Total numbers of KII		43
FDGs	Community leaders	Community representative of selected zones	3
	Employees	Employees of companies in various sector	3
	Senior staff of Oromia regional office	Senior employees of Oromia Investment and environmental protection bureaus	1
	Total numbers of FGD		7
Grand total of KII and FGD			50

*Source: Own compilation*

## **2.2. Analytical Frameworks and Specification of the Model**

The main purpose of this sub-section is to outline the conceptual framework that is used to establish the link between saving and investment. This relationship can be highlighted by comparing the aggregate demand (AD) and its financing sources (Pavelescu, 2009).

Consider any open economy (could be a country or a region) whose aggregate demand in one hand is represented as

$$Y=C+I+G+X.....(2.1)$$

The finance source of AD, on the other hand, is given as

$$Y=C+S+T+M..... (2.2)$$

Where,

C represents consumer spending, I represents investment spending, G represents government spending, and X and stands for export and imports. Consumer spending (C) is the total amount

spent by households on goods and services. Investment spending (I) is the amount spent by businesses on capital goods such as machinery and equipment. Government spending (G) is the total amount spent by government on goods and services.

The theoretical relationship where saving equals investment is valid in the absence of government and foreign trade deficit. However, when there is a state budget and foreign trade balance disequilibria, the savings are not automatically equal to the investments. Following Pavelescu (2009), the discrepancy between savings and investments (S-I) can be represented as:

$$S - I = (X - M) - (T - G) \dots\dots\dots(2.3)$$

Where, S-I = saving –investment gap; X-M = foreign trade (current account) balance stock or just net export; T-G = state budget stock.

We can rearrange Eq (2.3) and re-written as:

$$S + (T - G) = I + (X - M) \dots\dots\dots(2.4)$$

This expression implies that the sum of private and public savings, equals the sum of private investments and net exports (Akbostank & Tunc, 2002). This underscores in the open economy model, domestic investment does not have a one-to-one relationship with domestic saving.

Savings and investments correlation can be analyzed using the Feldstein and Horioka (1980) model as follows:

$$\left(\frac{I}{Y}\right) = \beta_0 + \beta_1 \left(\frac{S}{Y}\right) + \varepsilon \dots\dots\dots (2.5)$$

Where I/Y= Gross domestic investment to GDP ratio; S/Y = Gross domestic saving to GDP ratio

For a macro level analysis, Eq. (2.5) can be easily estimated using appropriate time series econometric model and the parameter of interest  $\beta_1$  shows degree of capital mobility. However, our interest is to estimate this model for Oromia, a region within Ethiopia, so that the interpretation of the parameter (capital mobility) should be made by intertwining it with the national context. This is because region in Ethiopia cannot be considered as a completely dependent open economy as many things including the international capital mobility is exogenous to the region as it is mainly the federal government's decision.

Therefore, since regional data for 22 years is available for Oromia, we can tackle this empirical problem in by estimating the regional model which is specified as:

$$\left(\frac{I}{Y}\right)_r = \gamma_0 + \gamma_1 \left(\frac{S}{Y}\right)_r + \varepsilon \dots\dots\dots(2.6)$$

where,  $\gamma_1$  is the causal parameter which measures the capital flow from (to) the region.

Once we estimate the national and regional mode specified in Eq. (5) and Eq. (6) using the same period data and model selection, we can make interesting conclusions from the comparison of  $\beta_1$  and  $\gamma_1$ .

- If both  $\beta_1$  and  $\gamma_1$  are individually significant, capital is immobile both at national and regional level.
- If both  $\beta_1$  and  $\gamma_1$  are individually insignificant, capital is mobile both at national and regional level.
- If  $\beta_1 > 0$  while  $\gamma_1 = 0$ , implies the inter-region capital mobility but not cross-country mobility.
- If  $\beta_1 = 0$  while  $\gamma_1 > 0$ , implies the capital is mobile at national level (between the external world) but it is immobility within the country between Oromia and other regions.
- In this hypothesis testing negative and significant coefficients are not interpretable (Mamingi, 1997).

Given our data is time series data, the next question is how we can estimate these coefficients. As noted in Gundlach & Sinn (1992) since the saving-investment nexus is primarily a long-term relationship, the cointegration method is more appropriate approach to estimate our equations. The Autoregressive Distributed Lag (ARDL) model and the Vector Error Correction (VEC) model are widely used in econometric analysis for such empirical issue.

Following Narayan (2005), we used the bounds test for cointegration under ARDL framework to determine the long-run relationship between saving and investment and their short run dynamics. There are several advantages to using the ARDL model over the VEC model. One of the main advantages of the ARDL model is its ability to estimate models with mixed stationary and non-stationary variables. The ARDL model can handle cases where some of the variables are stationary while others are not. In contrast, the VEC model requires that all variables be cointegrated, which can be a limitation when dealing with economic data that may not exhibit cointegration. Another advantage of the ARDL model over the VEC model is its flexibility in terms of lag selection. The ARDL model allows for different lag structures to be used for each variable, while the VEC model assumes that all variables have the same lag structure. Furthermore, the ARDL model does not require pretesting for cointegration before estimation, while the VEC model requires such testing. This means that the ARDL model can be used in situations where it is unclear whether cointegration exists (Narayan, 2005; Pesaran et al., 2001; Kripfganz & Schneider, 2022). The validity of the ARDL model will be weakened if the any of the serial correlation, heteroskedasticity, and normality tests are violated. In addition, ARDL model cannot be applied if any of the variables in the model are integration of order 2. We conducted the necessary tests and our ARDL model satisfies all these assumptions.

Therefore, taking saving as long-run forcing variable and for just simplifying notations let's assume that I and S denote the aggregate saving and investment, respectively, measured as a percent of GDP. The ARDL (p,q) model of can be specified as:

$$I_t = c_0 + c_1 t + \sum_{i=1}^p \phi_i I_{t-i} + \sum_{i=0}^q \beta' S_{t-i} + u_t \dots \dots \dots (2.7)$$

Where model is with an intercept  $c_0$ , linear trend  $c_1 t$ , and lag orders  $p \in [1, p^*]$  and  $q \in [1, q^*]$ ;  $p^*$  and  $q^*$  are maximum admissible lag order.  $u_t$  is the normally distributed error term.

However, the implementation of the bounds cointegration test requires the reparameterization of the ARDL model in conditional error correction form (Hassler & Wolters, 2006), which is:

$$I_t = c_0 + c_1 t - \alpha(I_{t-1} - \theta S_t) + \sum_{i=1}^{p-1} \psi_{I_i} \Delta I_{t-i} + \sum_{i=0}^{q-1} \psi_{S_i} \Delta S_{t-i} + u_t \dots \dots \dots (2.8)$$

As this equation is the reparameterization of Eq. (2.7), the coefficients between the two equations can be mapped in a straightforward algebraic way to as follows.

$\alpha = 1 - \sum_{i=1}^p \phi_i$  is the speed of adjustment parameter.

$\theta = \frac{\sum_{j=0}^q \beta_j}{\alpha}$  is the long-run parameter.

$\psi_{I_i} = -\sum_{j=i+1}^p \phi_j$  and  $\psi_{S_i} = \sum_{j=1+i}^q \beta_j$

Using this framework, the bounds cointegration test of Pesaran et al. (2001) have been made and the long-term and short-term relationship between saving and investment are identified. We can further augment the model by including a set of stationary covariates whenever necessary.

### **3. OVERVIEW OF INVESTMENT AND SAVING IN OROMIA REGION AND THEIR ASSOCIATION: THE MACRO VERSUS MESO PICTURE**

This section presents a macro and meso level aggregate measures of saving and investment to a micro level information pertaining to the issues under investigation. The first two chapters of the findings deal with former part while the remaining three chapters discuss the later one.

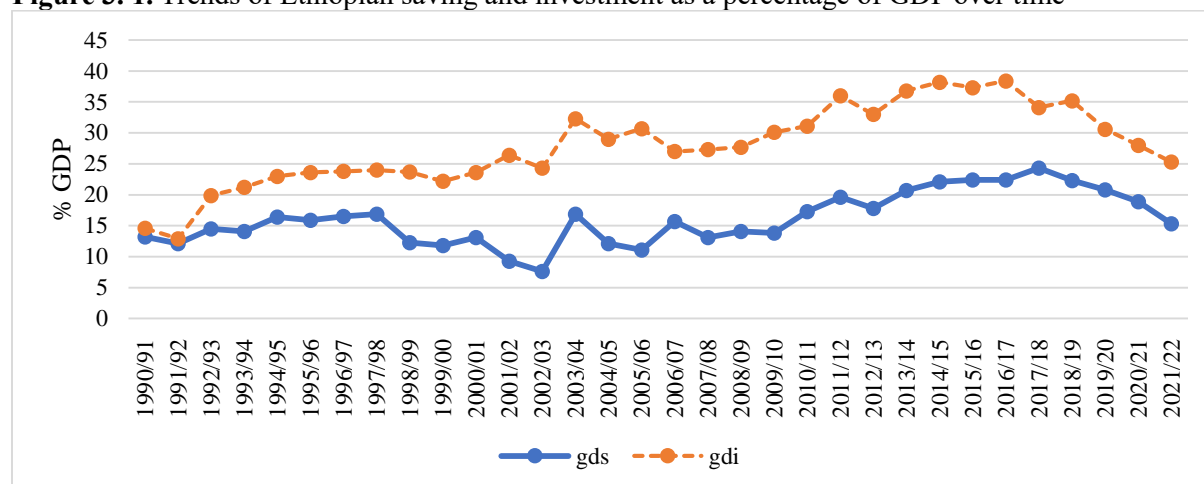
#### **3.1. Level of Aggregate Regional Saving and Investment**

Gross Domestic Investment (GDI) and Gross Domestic Saving (GDS) are used to measure level of saving and investment at national or sub-national level like Oromia. These variables as a percentage of GDP, provide insight into the overall health of an economy's investment and savings behaviors. GDI, also known as gross capital formation, represents the total amount of investment made in an economy during a given period. This includes investments made in fixed assets such as buildings, machinery, and equipment, as well as changes in inventories. On the other hand, GDS refers to the total amount of savings within an economy during a given period which includes the savings made by households, businesses, and governments. Both GDI and GDS are important measures of an economy's level of investment and saving. A high percentage of GDI indicates that an economy is investing heavily in fixed assets, while a high percentage of GDS suggests that an economy is saving a significant amount of its income.

In line with this view, we assessed the trends Gross Domestic Saving and Investment in Oromia (OGDS and OGDI, hereafter) in comparison with the national level averages (denoted as GDS and GDI). Since data on the regional GDP and related aggregates for Oromia is available since 1999/00, our trend analysis for the region starts at this period while the national one extends back to early 1990s.

Figure 3.1 presents the GDS and GDI, both measured as a percentage of GDP, for Ethiopia over the last three decades. The GDS and GDI slowly increased overtime from their level of 13.2% and 14.6% in 1990/91 to 15.3% and 25.3% in 2020/22, respectively. Zooming in the trends of these figures over the past five years indicates a slight decline in both saving and investment, down by 3.5 percentage points for saving and 10 percentage points for investment.

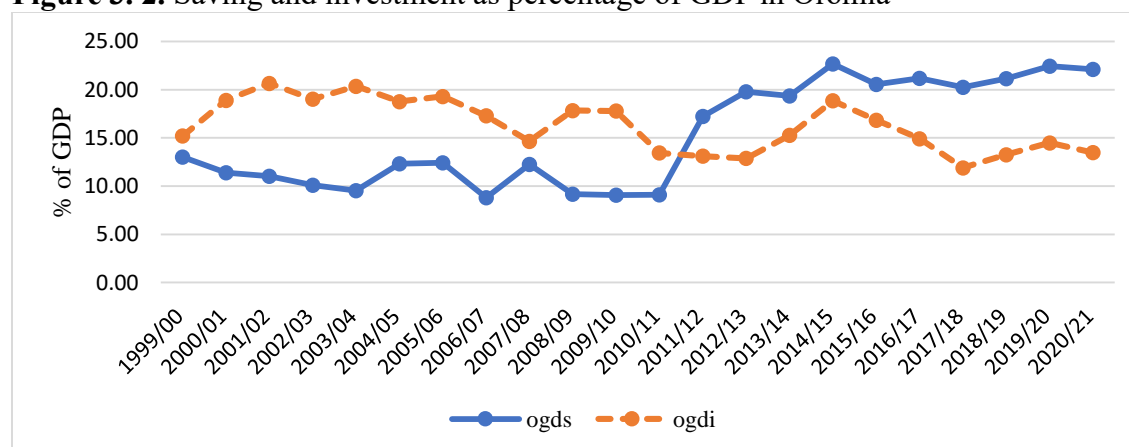
**Figure 3. 1.** Trends of Ethiopian saving and investment as a percentage of GDP over time



Source: Own representation from NBE/MPED data

The trends of regional saving and investment measured as a percentage of regional GDP for Oromia are depicted in Figure 3.2. The current level of aggregate saving in Oromia is 22.13% which is higher than the national average and up by about 9 percentage points since 1999/00. On the other hand, the gross domestic investment of the region has been relatively the same with a small reduction to 13.5% in 2020/21 from its level of 15.2% at the start of the period.

**Figure 3. 2.** Saving and investment as percentage of GDP in Oromia



Source: Own representation from OPDC data

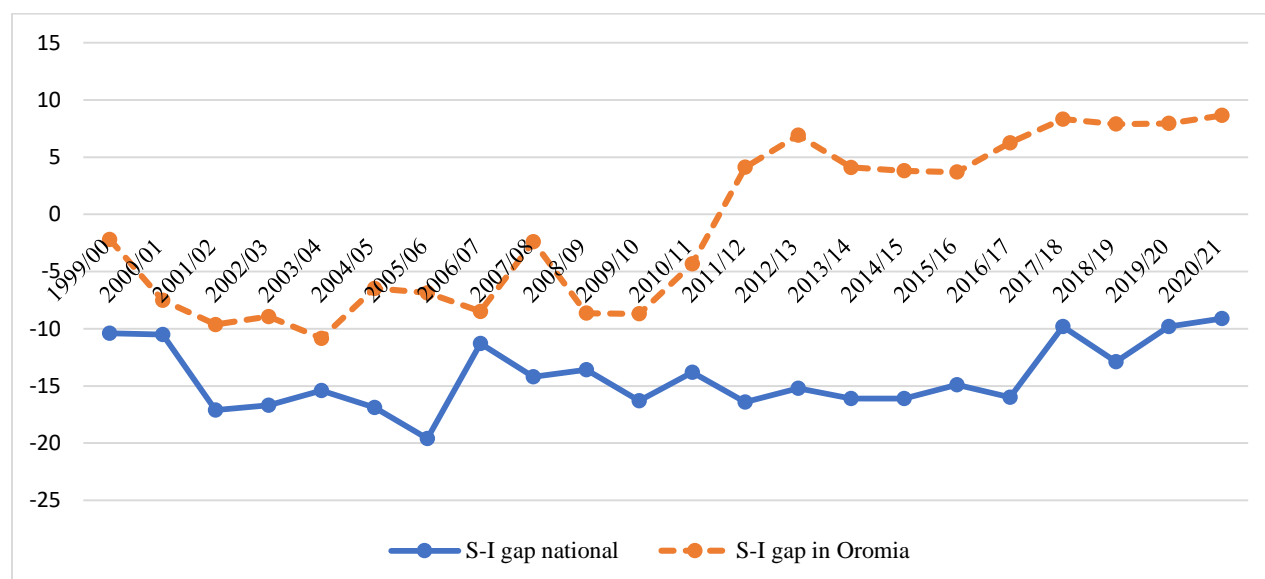
Comparing Oromia's GDS with the national average, the trends of saving in both cases has been comparable with marginally higher rates for the country in most periods until recently (see Figure A.3.1 in appendix 1). Nonetheless, the regional level of investment has been consistently lower than the national average over the entire period (Figure A.3.2 in appendix 1)<sup>3</sup>.

The difference between investment and saving aggregates are called saving-investment gap (S-I gap, after this). This shows the short fall of domestic saving to finance the investment demand in

<sup>3</sup> It is unclear whether it is due to the fact that Oromia has low level of investment as compared to other regions or any potential deviations between the national accounting methods used by the nation and Oromia region.

the economy as whole or in the region. The Ethiopian S-I gap has been always negative, but it is slightly getting narrow in recent periods with -9.1% in 2020/21, which is the lowest gap in 20 years (Figure 3.3). The S-I gap in Oromia has been always narrower than the national average. It had a similar trend with the national figure until 2010/11.

**Figure 3.3.** Trends of saving-investment gap in Oromia in comparison with the national average



*Source: Own representation from OPDC and MPD data*

However, in 2011/12, the saving rate of Oromia has suddenly shot to 17.2% from its level of 9.1% in the previous year. At that point, the region's saving crosses the region's investment curve and since then the S-I gap becomes positive. It is vague as to what causes the dramatic change of Oromia's saving rate in 2011/12 while the national figure remained smooth. The start rise in compulsory saving associated with the introduction of pension for employees of private organizations and high mobilization of and bond saving for the construction of Ethiopian Great Renaissance Dam both started around 2011 could have contributed for the rise in regional saving rate since then.<sup>4</sup> At this moment, the S-I gap of Oromia is at its highest ever positive level (about 8.7%) while its lowest record was observed in 2003/4 (-10.8%).

### ***What does it imply?***

When an economy has a negative saving-investment gap, it means that the country is investing more than it is saving. This results in a shortage of savings to fund investment projects, which can lead to several potential implications for the economy. First, a negative saving-investment gap can lead to slower economic growth in the long run, as there is less money available to invest in projects that would otherwise promote economic development. Second, with insufficient savings, countries must rely on external borrowing to finance investments. This increases the national debt, making it harder for the country to manage its finances and leading to potential future financial

<sup>4</sup> It would be also great to look into the computation of regional accounts for any possible errors or methodological deviation from that of the national income accounting methods, particularly since 2011/12.

instability. In addition, if the government has excessive external debt burden, it could also weaken private investment through high tax expectations by rational investors. Third, the increased borrowing can also cause interest rates to rise, making it more expensive for households and businesses to borrow money and invest, which ultimately stifles growth.

On the other hand, a positive saving-investment gap, like the case of Oromia, can help promote economic growth and stability by reducing debt, interest rate, and capital flight, which in turn increases investment.

However, having a sufficient domestic saving is a necessary but not sufficient condition for investment for an economy or region. Higher saving may not necessarily translate into higher private investment under the following conditions.

- i. The financial sector is inefficient to perform their intermediary roles in allocating saving to productive investment projects.
- ii. Smaller proportion of funds are made available for the private sector and government uses the considerable portion of resources in a way that crowd-out private investment.
- iii. There is capital outflow to other areas or regions.
- iv. When investors lack complimentary resources such as entrepreneurial capital and foreign exchange to effectively convert domestic savings to productive investments.
- v. The business environment is not enabling to effectively run and grow business in that particular environment. For instance, in a situation where there is high political instability and associated business risks, the investors' confidence will be eroded to make either new investment decisions or expand the existing ones.

These factors partly explain the positive S-I gap in Oromia, as supported by data and further analyses in the subsequent chapters of this study.

## **3.2. The association between saving and investment: The ARDL Cointegration method**

### **3.2.1. The Model Description**

One of the objectives of this study is to evaluate the association between saving and investment in Oromia. As described in the methodology section, we employed the ARDL model with its error correction (EC) representation to address this objective. This would also provide additional insights about the capital mobility in the region. The use of the autoregressive distributed lag (ARDL) model to evaluate the cointegration between saving and investment under the Feldstein and Horioka (1980) hypothesis has been a popular research topic in macroeconomics. Numerous studies have employed the ARDL approach to analyze this hypothesis in various countries and time periods. For instance, Ozturk and Acaravci (2011) used the ARDL model to investigate the relationship between saving and investment in Turkey, while Calderon et al. (2004) analyzed this relationship in Latin American countries. Narayan (2005) is also another popular study with a significant contribution in this area. Overall, some of the previous studies utilizing the ARDL model have provided evidence of a positive correlation between saving and investment, which supports the Feldstein and Horioka hypothesis. However, some studies have also found that this relationship varies across countries and time periods, suggesting that there may be other factors influencing the saving-investment link. In conclusion, the use of the ARDL model has provided valuable insights into the cointegration between saving and investment under the Feldstein and

Horioka hypothesis, contributing to a better understanding of the dynamics of national savings and investment behaviors.

In order to gauge the economy level as well as intra-region capital mobility while examining the investment-saving nexus, we estimate our models using both the national and regional level data. Before embarking on the estimation, we plot and visualize the time series behaviors of the four main variables used throughout this section in their log form, depicted in figure A.3.3 in appendix 1. The log of investment and saving for the national data are denoted by lgdi and lgds while logdi and logds are for their Oromia counterparts.<sup>5</sup>

### 3.2.2. Unit Root Test

As time series variable may be trending together and generate spurious regression, checking for stationary is important. However, one of the main advantages of the ARDL model is its ability to estimate models with mixed stationary and non-stationary variables. The ARDL model can handle cases where some of the variables are stationary while others are not. That means ARDL model can handle variables with  $I(0)$  and  $I(1)$ . But, it is still important to check if any of the variables are  $I(2)$  for which the ARDL model will not be valid (Kripfganz & Schneider, 2022). That is what the next sub-section tries to address.

**Table 3. 1.** Stationary test saving and investment variables

Variable	Level		First difference		Order
	With constant	With constant and trend	With constant	With constant and trend	
National					
lrgdp	0.9980	0.3262	0.0000	0.0000	I(1)
lgdi	0.0012	0.1108	0.0000	0.0000	I(1)
lgds	0.1397	0.2171	0.0000	0.0000	I(1)
Oromia					
lorgdp	0.9688	0.4745	0.0000	0.0001	I(1)
logdif	0.1360	0.2786	0.0000	0.0003	I(1)
logdsf	0.7031	0.4843	0.0000	0.0000	I(1)

Using data from 1999/00-2020/21, we conducted the unit root test for both national level and regional level data using Augmented Dickey Fuller (ADF) test. The null hypothesis of the series has a unit root (or non-stationary) is tested against the alternative with and without trend. As shown in Table 3.1, we fail to reject the null hypothesis when we test variables' stationary at their level. This is true for all variables particularly in the second model (with trend). However, we reject the null of non-stationary variables when we conduct the test at their first difference. This implies that all variables are integration of order one. As there is no any variable with  $I(2)$ , we can safely proceed with the ARDL model.

<sup>5</sup> In some cases, we use logdsf and logdif instead to indicate the full period which will be clear later. We also consider the GDP data (lrgdp and lorgdp) as we could use it for robustness checks later.

### 3.2.3. Model Results and the ARDL-Bounds Cointegration Test

The long-run relationship between saving and investment as well as their short-run dynamics are estimated from the EC reparameterization of the ARDL model which has been specified in Eq. (2.8). It is reasonable to assume that saving is a long-run forcing (and weakly exogenous) variable for investment at both country and region level (Narayan, 2005). To facilitate comparison between the national and regional model parameters, we limit both data to the same period, based on maximum availability for Oromia aggregates. Following Kripfganz & Schneider (2022), we recovered the EC representation of the model as a post estimation task of the ARDL model estimates presented in appendix 1 Table A.3.1.

For both national and Oromia case, the model was estimated with and without the time trend variable and the constant term included in both cases. Akaike information criteria (AIC) and Bayesian information criteria (BIC) were used to determine the optimum lag length combination and both of them picked (3, 0) for national data with and without trend as well as Oromia with trend, whereas lag length of (2, 0) was selected for Oromia without trend.

Unlike the VEC model, the ARDL model does not require pretesting for cointegration before estimation. Therefore, we estimated the EC parameterization of the model and presented the results in Table 3.2 for national data and Table 3.3 for Oromia region using log of saving and investment from 1999/00-2021/22. In Columns 1 to 3 are results of each model without time trend while the last three columns (columns 4-6) are estimates with time trend. The three columns are associated with the three parameters of interest in the error correction model: the adjustment parameter (ADJ), the long-run coefficient (LR), and the short-run coefficients (SR).

**Table 3. 2.** Error Correction representation of the ARDL model result for national data since 1999/00

Variables	(1) ADJ	(2) LR	(3) SR	(4) ADJ	(5) LR	(6) SR
LD.lgdi			0.375 (0.248)			0.395 (0.339)
L2D.lgdi			0.649*** (0.212)			0.660** (0.248)
L.lgdi	-0.757*** (0.200)			-0.780** (0.327)		
lgds		0.435*** (0.0710)			0.420** (0.171)	
t						0.000688 (0.00762)
Constant			1.663*** (0.456)			1.731* (0.881)
Observations	22	22	22	22	22	22
R-squared	0.578	0.578	0.578	0.578	0.578	0.578

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

Consistent with the theoretical prediction, the adjustment parameter is negative and significant in all the 4 models presented in Table 3.2 and Table 3.3. However, in the ARDL framework, we cannot take the LR coefficient in its face value as evidence of long-run association without checking for the presence of cointegration between saving and investment. We used the ARDL-

Bounds Cointegration test developed by (Pesaran et al. 2001). This test is conducted in three steps, as noted in Kripfganz & Schneider (2018).

- **Step1:** Conduct F-test for the joint hypothesis that

$$H_0^F: (\alpha = 0) \cap \left( \sum_{j=0}^q \beta_j = 0 \right) \text{ against the alternative hypothesis}$$

$$H_1^F: (\alpha \neq 0) \cup \left( \sum_{j=0}^q \beta_j \neq 0 \right)$$

- **Step 2:** If the null in step 1 is rejected, then conduct t-test for a single hypothesis with a null that  $H_0^t: \alpha = 0$  against the alternative  $H_1^t: \alpha \neq 0$
- **Step3:** If  $H_1^F$  is rejected, use conventional z-tests (or Wald tests) to test whether the elements the long-run coefficients are individually (or jointly) statistically significantly different from zero.

Since the test statistics in step 1 and 2 do not follow the standard distribution, we need to compare them with a critical values of Kripfganz & Schneider (2020).

**Table 3. 3.** Error Correction representation of the ARDL model result for Oromia data since 1999/00

Variables	(1) ADJ	(2) LR	(3) SR	(4) ADJ	(5) LR	(6) SR
L.logdif	-0.708*** (0.240)			-0.754*** (0.215)		
logdsf		-0.234** (0.107)			0.0290 (0.162)	
LD.logdif			0.394* (0.222)			0.405* (0.198)
t						-0.0142** (0.00598)
Constant			2.408** (0.866)			2.326*** (0.773)
Observations	22	22	22	22	22	22
R-squared	0.332	0.332	0.332	0.498	0.498	0.498

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

Table 3.4 for national data and Table 3.5 for Oromia data summarize this bound test results for both models indicated in two panels (Panel A and Panel B). In the national model, the null of step 1 test is rejected at 5 % and 10% but not at 1% for the first model. Therefore, we need to proceed to the next two steps of the test. In both individual test of the adjustment parameter and the long-run coefficient, we reject the nulls. This suggests some evidence that the two variables are cointegrated. In the model estimated without trend, however, we fail to reject the null in the first step implying that there is no long run relationship between saving and investment in Ethiopia.

**Table 3. 4.** Pesaran, Shin, and Smith (2001) bounds test result for national data, since 1999/00

<b>Panel A: without trend</b>								
<i>Ho: No level Relationship</i> $F = 7.167$								
<i>Case: 3</i> $t = -3.779$								
	10%		5%		1%		P-value	
	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
<i>F</i>	4.396	5.338	5.641	6.762	8.859	10.425	0.023	0.041
<i>t</i>	-2.607	-2.976	-2.994	-3.391	-3.821	-4.278	0.011	0.025
<b>Panel B: With trend</b>								
<i>Ho: No level Relationship</i> $F = 5.225$								
<i>Case: 3</i> $t = -3.385$								
	10%		5%		1%		P-value	
	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
<i>F</i>	6.190	7.146	7.753	8.896	11.797	13.412	0.156	0.221
<i>t</i>	-3.206	-3.507	-3.616	-3.946	-4.510	-4.898	0.329	0.421

Similarly, the Pesaran, Shin, and Smith (2001) bounds test have been conducted for Oromia data (Table 3.5). The combination of the three step tests unequivocally indicates that saving and investment in Oromia are not cointegrated. In both national and Oromia data, there is suggestive evidence that correlation between saving and investment is weak. Taking the H-F hypothesis in mind, our finding implies that there is a capital mobility both at cross nationals and cross-regions.<sup>6</sup> This is consistent with the I-S gap we witnessed in the descriptive analysis of the previous sub-section where part of investment has been financed by foreign saving. It should be clear that the weak linkage between saving and investment does not imply that domestic saving is important. It is still important to mobilize more domestic resources to reduce reliance on foreign capital and modernize institutions that channels savings to productive investments.

**Table 3. 5.** Pesaran, Shin, and Smith (2001) bounds test result for Oromia data, since 1999/00

<b>Panel A: without trend</b>								
<i>Ho: No level Relationship</i> $F = 4.423$								
$t = -2.951$								
	10%		5%		1%		P-value	
	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
<i>F</i>	4.411	5.315	5.637	6.706	8.767	10.240	0.099	0.158
<i>t</i>	-2.621	-2.981	-3.000	-3.388	-3.806	-4.251	0.55	0.105
<b>Panel B: With trend</b>								
<i>Ho: No level Relationship</i> $F = 7.905$								
$t = -3.507$								
	10%		5%		1%		P-value	
	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
<i>F</i>	6.215	7.116	7.742	8.812	11.636	13.130	0.047	0.072
<i>t</i>	-3.223	-3.515	-3.624	-3.943	-4.491	-4.865	0.061	0.101

<sup>6</sup> The direction of capital mobility for Oromia is implied by our descriptive analysis in the next section.

### 3.2.4. Robustness Checks

We have conducted a number of robustness tests to ensure reliability of our result regarding the saving-investment nexus. The main tests one should check for in using the ARDL model as suggested by Kripfganz & Schneider (2022) have been conducted for both national and Oromia data. Whenever possible, we try to report the results from Oromia data to keep the readability of the document.

#### 3.2.4.1. Serial Correlation, Heteroskedasticity, and Normality Tests

The following tests we conducted, and the model is proved to be adequate (results are annexed).

**Serial correlation:** we run the Breusch–Godfrey LM test and for autocorrelation and Durbin's alternative test to make sure that the lag length selected in our model is large enough to avoid potential serial correlations. Both test results presented in appendix 1 Table A.3.2 and Table A.3.3 shows that there is no evidence for serial correlation.

**Heteroskedasticity:** Breusch–Pagan/Cook–Weisberg test for heteroskedasticity was also conducted. We fail to reject the null of constant variance with p-value of 0.9886.

**Normality:** The Q-Q plots and P-P plots depicted in appendix 1 Figure A.3.4 and Figure A.3.5 suggest that the error term exhibits a normal distribution.

#### 3.2.4.2. Parameter Stability

Two methods have been employed to ensure the parameter stability: The Recursive cusum plot and using dummy for suspected structural break on the data.

**a) Recursive CUSUM plot:** The recursive custom plots drawn with 95% confidence interval implies that parameter estimates are stable across time (Appendix 1, Figure A.3.6).

**b) Using dummy variables on suspected structural breaks for Oromia data:** As discussed in the previous section and also shown in time series plots of variables in Figure A.3.3 in the appendix, saving rate in Oromia has sharply ramped up in 2011/12. No matter what the reason would be, this huge shift in the data could cause structural breaks. Since our data is too small to apply chow and other test, we use a dummy variable since 2011/12 (post 2011\_12), and re-estimated the Oromia model in EC representation using the dummy variable as exogenous covariate. It is analogous to Pesaran et al. (2001) who used dummy variables for such shifts in the trend following a labour policy changes.

Table 3.6 presents our result with the inclusion of this dummy variables and the follow up bound test for cointegration is conducted. As shown by the test results in appendix 1, Table A.3.3, in both scenarios, there is no long-term relationship between investment and saving in Oromia, which confirms the original result.

**Table 3. 6.** ECM results of Oromia partial data with inclusion of exogenous dummy

Variables	(1) ADJ	(2) LR	(3) SR	(4) ADJ	(5) LR	(6) SR
LD.logdif			0.387*			0.405*
			(0.219)			(0.205)
post2011_12			-0.207			0.00865
			(0.163)			(0.192)
L.logdif	-0.767***			-0.752***		
	(0.240)			(0.225)		
logdsf		0.123			0.0183	
		(0.303)			(0.289)	
t						-0.0144*
						(0.00774)
Constant			1.973**			2.343**
			(0.918)			(0.881)
Observations	22	22	22	22	22	22
R-squared	0.389	0.389	0.389	0.498	0.498	0.498

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

### 3.2.4.3. Expanding the Time Series for the Region

Most time series models need a long-time data for the asymptotic properties of the models to be valid. Though the ARDL is relatively robust in short time series, the fact that data for Oromia is available only for the period between 1999/00-2020/21 and our models estimated so far are based on these limited observations could affect our result. Whenever possible, having a long time series is always desirable. In the absence of the low frequency data how can we achieve a long-term series? We tackle this empirical question using back-casting and nowcasting techniques (Chow & Lin, 1971; de la Fuente, 2014; United Nations, 2018).

The idea is that we have GDP and related data for Ethiopia for a long enough period. But Oromia start estimating regional GDP in 1999/00. That mean Oromia's GDP data is missing before this period while both the national data and Oromia's data are available since from 1999/00 onwards. Using the overlapping period data, we can use a regression technique to estimate the parameters linking the national GDP with Oromia GDP. Using these parameter estimates we back-cast Oromia's GDP from 1998/99 to 1991/92. Since the Oromia region itself was established in 1992 by the transitional government of Ethiopia, it is inconceivable to back-cast beyond this period.

In addition, the 2021/22 data for Oromia was not released at the time of the data collection of this study while the national one was out. Again, we had to nowcast the current period data for Oromia using its one period lag value. Once we had the estimated GDP data for missing periods, we easily estimated the missing gds and gdi data for the region using the same method as above. These data are included in the time series plots of Figure A.3.3 in appendix 1. This data is called the full period data where the suffix 'f' is added in variable for abbreviations of Oromia variables.

**Table 3. 7.** EC representation of the national data with full data with and without trend, since 1991/92

<b>Variables</b>	<b>(1) ADJ</b>	<b>(2) LR</b>	<b>(3) SR</b>	<b>(4) ADJ</b>	<b>(5) LR</b>	<b>(6) SR</b>
LD.lgdi			-0.237 (0.201)			-0.0293 (0.304)
L2D.lgdi			0.362** (0.167)			0.495** (0.222)
D.lgds			0.235** (0.0829)			0.242*** (0.0837)
LD.lgds			0.165* (0.0824)			0.169* (0.0829)
L.lgdi	-0.144 (0.128)			-0.351 (0.260)		
lgds		-0.292 (0.836)			-0.102 (0.299)	
t						0.00504 (0.00551)
Constant			0.601* (0.294)			1.181 (0.699)
Observations	27	27	27	27	27	27
R-squared	0.563	0.563	0.563	0.581	0.581	0.581

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

By doing so, we are able to extend the data for 31 years and used this relatively longer period data to re-estimate the models for Oromia as well as the entire national economy. This is one of the serious robustness checks we did in this study. We estimated all the models again and examine the existence of cointegration in which Oromia model includes the dummy for structural breaks. At this time the optimum lag length of the model is (3, 2) for the national data and (1, 0) for Oromia data. Table 3.7 presents the estimates of the EC parameterization of the model for the national data while Table 3.8 depicts the results of Oromia EC model with the full data. Based on these new estimates, the bound tests for cointegration have been conducted. As can be seen in appendix 1, Table A.3.4 and Table A.3.5, in all specifications for both national and Oromia, saving and investment are not cointegrated. This implies that our model result is less likely to be affected by the short time span we have.

**Table 3. 8.** EC representation of model estimates for Oromia full data with and without trend

<b>VARIABLES</b>	<b>(1) ADJ</b>	<b>(2) LR</b>	<b>(3) SR</b>	<b>(4) ADJ</b>	<b>(5) LR</b>	<b>(6) SR</b>
L.logdif	-0.483** (0.193)			-0.454** (0.201)		
logdsf		0.152 (0.450)			0.0737 (0.494)	
post2011_12			-0.127 (0.144)			-0.0429 (0.197)
t						-0.00391 (0.00619)
Constant			1.192 (0.801)			1.258 (0.818)
Observations	27	27	27	27	27	27
R-squared	0.229	0.229	0.229	0.243	0.243	0.243

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

### 3.2.5. The ARDL Model and Short-Run Dynamics

In all the efforts made so far, it is evident that saving and investment do not have a strong connection in the long run. In this situation, we need to end-up on estimating the ARDL model to learn about their correlation in the short-run (Kripfganz & Schneider, 2022). As a result, our final estimations boil down to the usual single equation ARDL model. We estimated this model using the full data with lag length of (3,2) and (1,0) for national data and Oromia, respectively.

In both cases and all specifications, the lag of investment is positive and significant. As far as saving, our variable of interest, is concerned, it has a transitory positive and significant effect on investment in the national data while its association with investment in Oromia is negligible. This poor correlation between saving and investment in Oromia are also demonstrated by simple scatter plots of the two variables in appendix 1 Figure A.3.7 for the available data and in Figure A.3.8 since the existence of the region by including back-casted data for the period before 1999/00.

This result implies that capital is generally mobile both in Ethiopia in general and in Oromia region though the result does not tell us the direction of the capital flow. That would be explore in the next section using qualitative information. As a last remark, readers should aware that the absence of long-term correlation between saving and investment does not mean that saving is not important for boosting investment. Needless to say, promoting saving has a multidimensional effect besides financing investment. Reducing fiscal deficit, lessening external debt burden, ensuring sustainability are among the benefits of increasing aggregate saving.

**Table 3. 9.** ARDL model result for national and Oromia full data

Variables	National		Oromia	
	without trend (1)	with trend (2)	without trend (3)	with trend (4)
L.lgdi	0.6191*** (0.1914)	0.6197*** (0.1922)		
L2.lgdi	0.5988** (0.2163)	0.5241** (0.2320)		
L3.lgdi	-0.3620** (0.1666)	-0.4949** (0.2216)		
lgds	0.1928** (0.0786)	0.2065** (0.0804)		
L.lgds	-0.0704 (0.0883)	-0.0736 (0.0887)		
L2.lgds	-0.1645* (0.0824)	-0.1686* (0.0829)		
t		0.0050 (0.0055)		-0.0039 (0.0062)
L.logdif			0.5168** (0.1933)	0.5457** (0.2012)
logdsf			0.0733 (0.2110)	0.0335 (0.2229)
post2011_12			-0.1267 (0.1435)	-0.0429 (0.1969)
Constant	0.6011* (0.2938)	1.1808 (0.6993)	1.1918 (0.8008)	1.2576 (0.8181)
Observations	27	27	27	27
R-squared	0.860	0.866	0.476	0.486
Adjusted R-squared	0.818	0.817	0.408	0.392

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

## 4. SAVING AND INVESTMENT FINANCING

This section explores the investment finance and the key sources of loanable fund, mainly domestic saving, in Oromia in comparison with other regions and the national average. The section start by highlighting the some of the investment financing mechanism at macro level.

### 4.1. The Investment Financing Mechanisms at National Level

In the previous section, we underline that there has been a considerable S-I gap at national level. It is clear that the economy needs to inject additional resources to fill the domestic S-I gap. This resource is a foreign saving which is challenged to investment on different ways. It had been argued that the investment financing in Ethiopia has been gradually shifted towards foreign direct investment (FDI), net income transfers, and external borrowings (World Bank, 2013).

Figure 4.1 shows the relative importance of these sources of finance in comparison with the domestic annual loan total disbursement at national level.<sup>7</sup> Accordingly, the net income transfer such as remittance takes the lion's share over the past ten years, with 9.2% of GDP in 2021/22, for instance.<sup>8</sup> The net income transfer could be either private or public transfer. This source has been increasing since the last decade with a huge jump of the private transfer in 2021/22 due to the increased in formal and informal remittance and huge volume of food aid inflows associated with the war in Northern Ethiopia and Covid-19 pandemic (Figure 4.2)<sup>9</sup>.

FDI capital inflow is also considerable with a decade's maximum value of 5.6% of GDP that Ethiopia attracted in 2015/16. Further, the domestic loan disbursement has been smooth over time with 6%-7% of GDP. This finding reaffirms the view that the inflow of foreign capital is imperative to finance the domestic investment in Ethiopia.

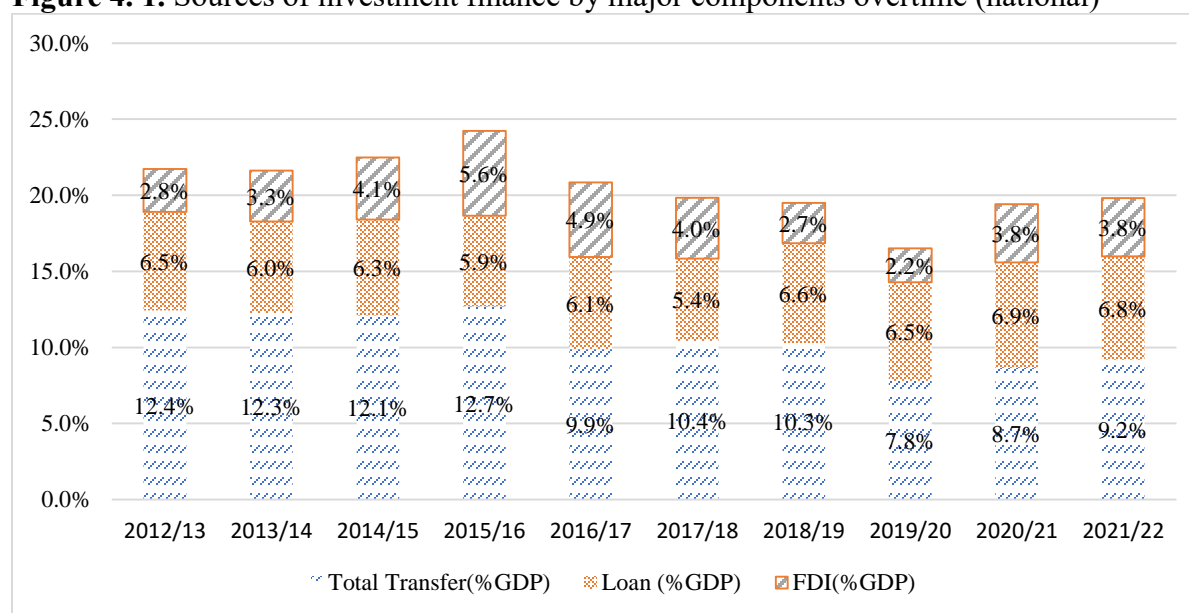
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<sup>7</sup> We would like to highlight this issue at the national level since data disaggregated by regions is missing in most cases.

<sup>8</sup> In fact, the category of private transfers', as employed by the NBE, incorporates three sub-categories: 'cash (official)', 'in kind' and 'underground private transfers (estimated)'.

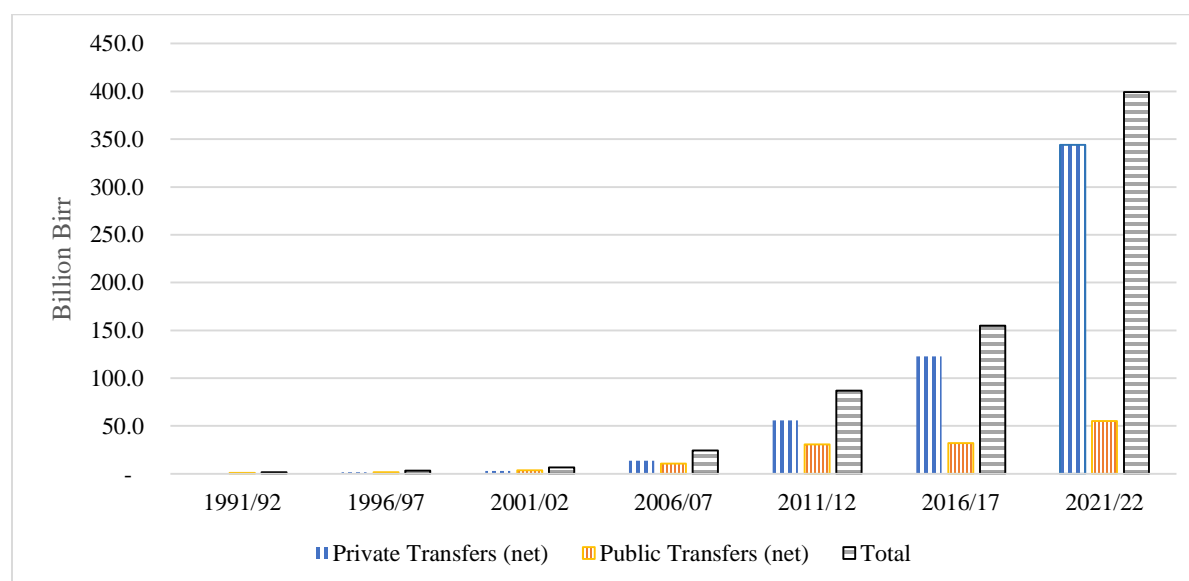
<sup>9</sup> In-kind food aids provided by international aid organizations and donors are registered under private transfers, as confirmed by experts in NBE during our data collection.

**Figure 4. 1. Sources of investment finance by major components overtime (national)**



Source: Own computation from NBE data

**Figure 4. 2. Net transfers in billions of Birr (National)**



Source: Own computation from NBE data

## 4.2. The state of Saving and Banks' Deposit Mobilization

### 4.3.1. Banks' Deposit as Main Source of Formal Saving

Savings fuel investments which in turn drive economic growth. Higher savings rates increase the amount of funds available for investment, which leads to increased business activity and job creation. However, insufficient investment can lead to lower productivity and slow economic

growth. Financial intermediaries are the key actors to facilitate the demand and supply of investment finance.

The financial sectors play key role in lubricating the real sector of the economy. It is instrumental in the process of economic transformation. It is with finance that investment can be accelerated, production can be boosted and thus employment is generated. Financial sectors contribute to the efficient allocation of resources in the economy by channeling funds from less productive sector to productive investment. Finance is considered as blood cell to the real sector of the economy. In economies like Ethiopia where supply for financial low and the market is imperfect, the role of financial sectors to the economy is crucial.

Banks provide deposit, credit, international banking, international trade service, money transfer and foreign exchange service, electronic payment services, and interest free banking services. Data from the national bank of Ethiopia shows that as of June 30, 2022, there were 23 commercial banks (22 private and 1 public; leaving DBE aside) that mobilize deposits. These banks collectively managed to mobilize a total deposit of about 1.75 trillion birr to as of the end of last fiscal year, increased from 235.9 billion birr in 2012/13 (Table 4.1). About 48% of banks' deposit in 2021/22 was collected by the private banks while the remaining 52% was collected by public banks (Figure 4.3).

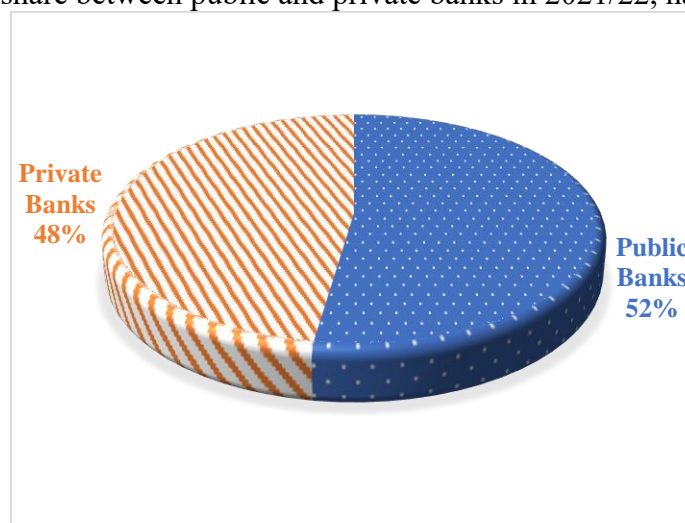
Looking into the regional distribution of this deposit, in the year 2021/22, banks' deposit in Oromia region raised near to 255 billion birr from 26.6 billion birr in 2012/13. This mean banks' deposit in Oromia has increased by 858.6% over the last ten years. Currently, the share of banks' deposit in Oromia accounts about 14.6% of the same deposit in the country. This share has shown a modest increment over time, 3.3 percentage points up in a decade (Table 4.1).

**Table 4. 1.** Deposit mobilized by the banking sector in billions of Birr and Oromia's Share in %, 2012/13-2021/22

S.no	Year	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
1	<i>Oromia</i>	26.61	34.58	45.51	53.62	70.91	92.33	120.83	148.86	212.82	254.95 1026.8
2	<i>Addis Ababa</i>	155.01	189.11	232.97	266.98	348.55	455.85	556.59	655.69	823.08	6
3	<i>Afar</i>	1.23	1.55	1.60	2.67	3.54	4.27	4.84	6.09	8.20	9.68
4	<i>Amhara</i>	20.16	26.95	35.37	45.97	57.72	71.79	87.02	109.11	160.18	221.26
5	<i>Benshangul</i>	0.97	1.32	1.90	2.38	2.41	2.88	3.26	3.92	6.16	7.07
6	<i>Dire Dawa</i>	2.85	3.78	4.39	5.55	6.31	8.05	10.39	13.02	18.86	21.40
7	<i>Gambela</i>	1.08	0.65	0.98	1.09	1.37	1.69	2.44	3.04	3.78	5.29
8	<i>Harar</i>	0.73	1.78	2.30	2.65	2.96	3.68	5.22	6.36	8.22	9.22
9	<i>SNNP</i>	12.59	14.71	18.56	23.55	30.07	37.96	44.82	55.45	79.35	56.59
10	<i>Somali</i>	2.03	2.47	3.32	4.81	7.89	8.81	10.16	14.24	19.66	17.88
11	<i>Tigray</i>	12.68	14.53	19.40	26.11	34.83	42.75	54.40	67.31	76.88	78.34
12	<i>Sidama</i>	0.00	0.00	0	0	0	0	0	0	0	26.37
13	<i>SWERS</i>	0.00	0.00	0	0	0	0	0	0	0	10.53
<b>Total</b>		235.93	291.42	366.28	435.36	566.57	730.06	899.97	1083.08	1417.18	1745.43
<b>Oromia's Share (%)</b>		11.28	11.87	12.42	12.32	12.52	12.65	13.43	13.74	15.02	14.61

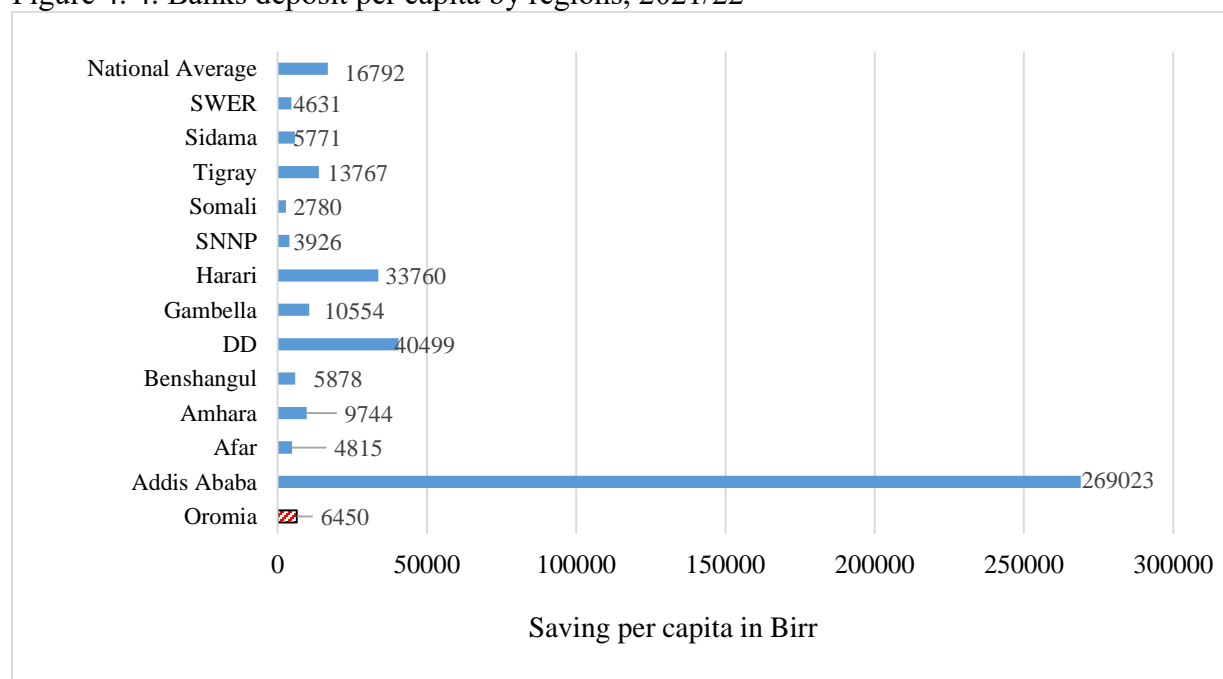
Source: Own computation from NBE data

**Figure 4. 3.** Deposit share between public and private banks in 2021/22, national



Nonetheless, this absolute figure is not a good measure of saving performance comparison among regions as region vary by their scale. Therefore, we have computed the per capita deposit of Oromia as compared to other regions and the national average using mid-years population data calculated from (CSA, 2013). As depicted in Figure 4.4, the bank deposit per capita of Oromia in 2021/22 was just Birr 6450 which is much lower than the national average (16,792), and many regions like Tigray (13767) and Amhara (9744), for instance. As expected, the highest deposit per capita is observed for Addis Ababa (269,023) since deposits from various types of organizations, businesses, government, and wealthy individuals are concentrated in the capital. This implies that there is still a potential to further improve saving in Oromia.

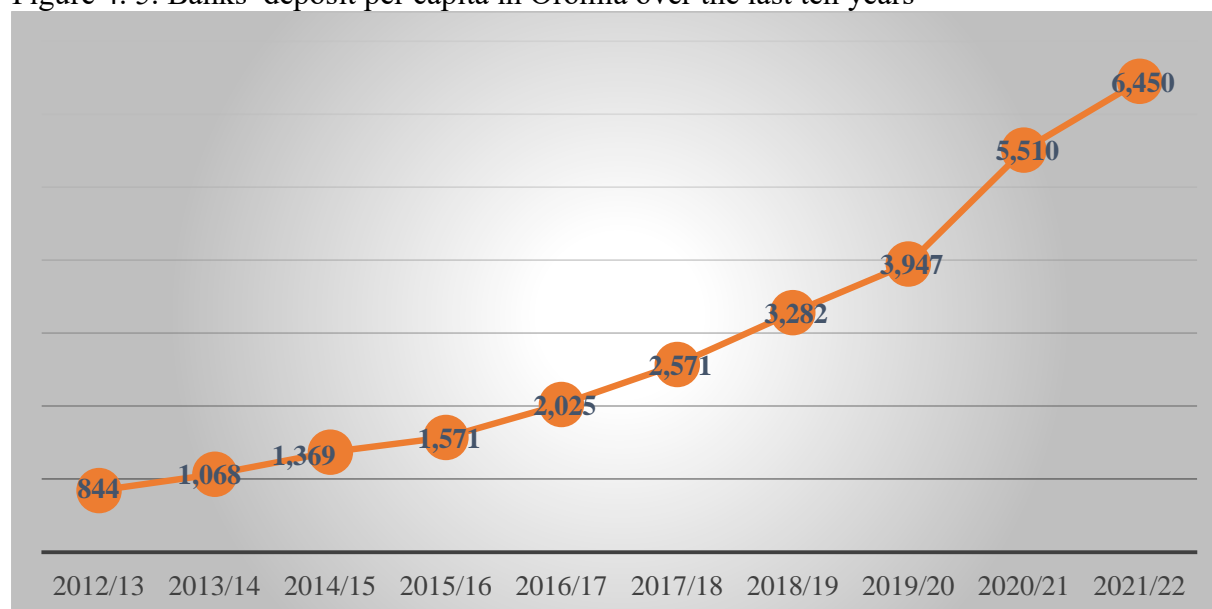
**Figure 4. 4.** Banks deposit per capita by regions, 2021/22



Source: Own computation from NBE and CSA data

When we see the trends of banks' deposit per capita in Oromia over the last decade, however, it has been increasing impressively. It has increased by more than 6 folds within ten years, from Birr 844 in 2012/13 to 6450 in 2021/22 (Figure 4.5).

Figure 4. 5. Banks' deposit per capita in Oromia over the last ten years

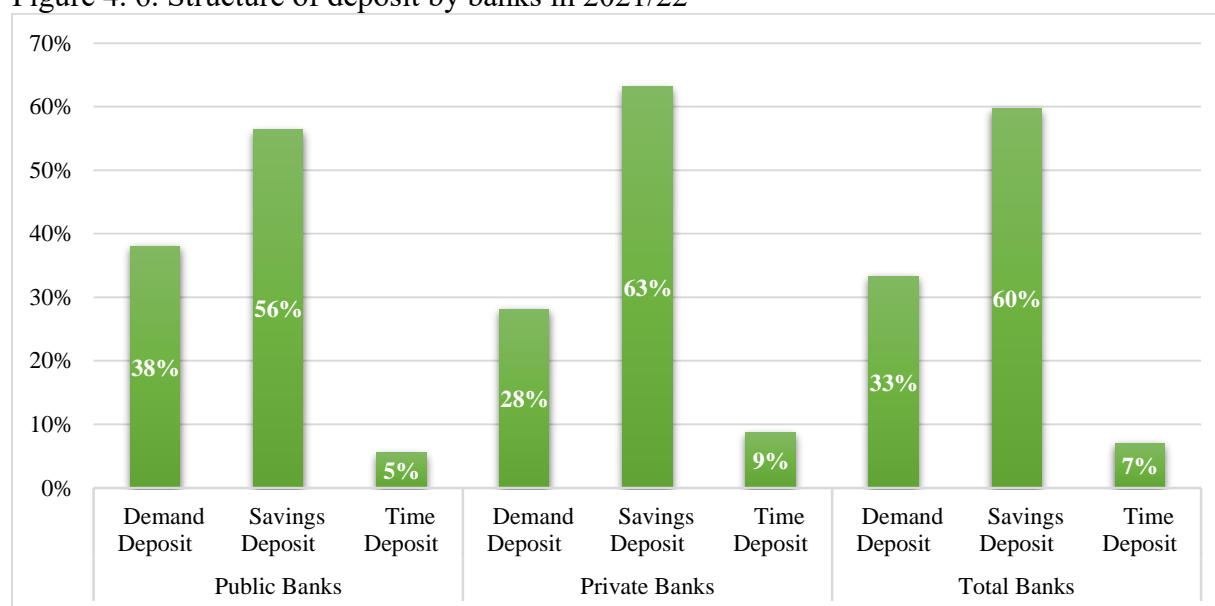


Source: Own computation from NBE data

#### 4.3.2. Structure of Banks' Deposit

Saving in Ethiopia is generated from different economic agents. Major actors of the bank's deposit mobilization are households (rural and urban), individual savers, government, state owned enterprises, local companies, FDI firms, and NGOs. Micro, Small and Medium enterprises, corporate customers, formal and informal associations, borrowers, foreign and local investors, and large business (wholesale and corporate customers).

Figure 4. 6. Structure of deposit by banks in 2021/22



Source: Own representation from NBE data

The distribution of deposit by demand deposit, saving deposit and time deposit disaggregated by bank ownership are depicted in Figure 4.6. Accordingly, saving deposit are the major types of banks' deposit liability (60%) followed by demand deposit (33%). These types of deposit structure shows that banks in Ethiopia need to remain liquid enough to fulfill the cash requirements of depositors.

#### 4.3.3. Saving Promotion Strategies

A number of strategies have been devised and implemented by the financial sector to promote saving in Ethiopia in general and Oromia in particular. One of the major actions being taken to enhance financial inclusion and saving is expanding the banks' physical accessibility by opening more branches.

As of June 30, 2022, there were 8605 bank branches in the country of which 2428 (28.2%) were operating in Oromia region (Table A.4.1). The significant expansion of branches has contributed for the increased level of saving collected. Introducing new and innovative financial product is also another important strategy to promote saving.

In this study, we have conducted qualitative surveys with 6 major banks which are widely operating in Oromia region. The saving products targeting different groups of people available in these banks include:

- Ordinary saving
- Women saving
- Youth saving
- Teen youth saving
- Education saving
- Junior saving
- Special saving,
- Farmers saving
- Retirement saving
- Elders saving
- SME saving
- Wadiah Saving

Some banks claim that ordinary saving and farmers saving are the most effective means of deposit mobilization in the region. This due to that fact that the former has a large scale to mobilize more resource while the latter one is designed to fit for the specific demand for farmers. In addition, banks introduced some types of saving products aimed at gaining more foreign currency, which becomes a critical challenge for expanding investment in the country. Foreign currency account and diaspora account are the main ones in this respect.

The bank applies different incentive mechanisms to encourage people to save. These are:

- Prizing (“save, receive and win”)
- Pricing (better interest payment to women saving, wedding savings, education, youth, teen savings, elders, and children savings),
- Increasing accessibility: digitalization, mobile banking, opening new branches, installing ATM, CBE agents, interest free banking service, etc.
- Advertisement/promotion
- Campaigning/events/sponsorship
- Opening digital account
- Providing sector specific saving
- On-counter selling
- Referral –marketing
- Waiving transaction fees,

According to our key informant, pricing, advertisement/promotion, and Campaigning/events/sponsorships are the most effective strategies that the financial sectors follow to promote saving/deposit. To this contrary, inflation is a major disincentive for saving at this moment which leaves the real interest rate negative.

According to the community members perception about saving culture, rural areas lack the same level of savings culture development as urban areas, where it is generally strong. In the region, there are two ways to save: the cultural method and bank savings. The two typical methods of saving that individual used as a grant were "equb and edir" in their culture. One of the team leaders claimed that the municipality had 20 distinct varieties of edir for use in various social functions (death, marriage, shocks, etc.). Sometimes individuals gather "equip" by putting it in the bank. There are places where farmers can save money for social security and other purchases of fertilizer in rural areas. People often try to save as much money as they can in banks. The community also values saving at various institutions. An FGD participant explained this as “Saving is crucial to enhancing our community's standard of living. No one succeeds without saving.”

#### **4.3.4. Challenges and Opportunities to Promote Saving**

Using information collected from the KII with selected banks operating in Oromia, the challenges and opportunities of promoting saving are summarized as follows.

##### **Challenges:**

- Infrastructure such as network problem in rural areas;
- low level of financial literacy/ traditional saving practices;
- Security issues;
- Macroeconomic instability (i.e., inflation);

- Lack of collaboration from the government during saving campaigns;
- Weak saving culture;
- Weak business environment; and
- Stringent policies by the National Bank of Ethiopia (such as provisional suspension of collateral-based loan disbursements and 70% foreign exchange surrender requirements).

**Opportunities:**

- Improved government support
- Well established promotion strategies in some banks
- Huge customer base/unbanked society
- Wide geographical coverage
- Liberalization
- Better technology/digitalization
- Availability of huge number of youth population
- Introduction of capital market

## **4.4. Investment Financing: Loan Disbursement**

### **4.4.1. Trends of Loan Disbursement by Banks**

According to our interview with investors', bank loan is the second largest source of finance at initial stage of the projects next to personal saving and the first source for their financial demand for expansion followed by personal saving and retained earning. In general, internal investment financing policy in the form of retained earnings is poor in some projects (30%), while others reported 70-100% percent of investment profit could be used to expand investment. This implies that bank finance is a key for investment.

Access to loan is considered as the backbone of investment in any country either through directly financing the investment expenditure (investment loan) and enhancing consumption demand (consumer loan). In Ethiopia, the financial sector provides working capital loans and lease financing (machineries, tools, and combiners, tractors, etc.) to help borrowers expand existing business or facilitate both local and international trade activities. Saving deposit, and loan collections from customers, retained earnings, capital, and government transfers are main source of loanable funds, according to our survey.

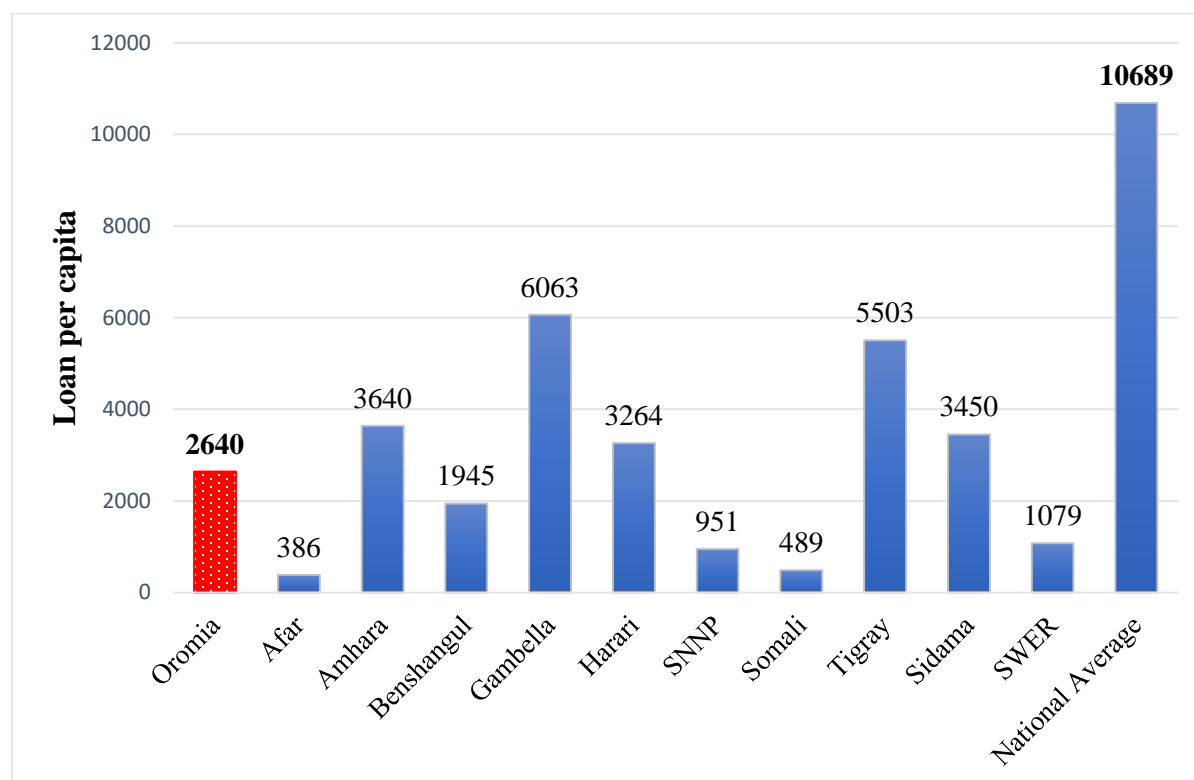
**Table 4. 2.** Loan disbursement by banks in billions of birr overtime by regions and share of Oromia

<i>Year</i>	<i>2012/13</i>	<i>2013/14</i>	<i>2014/15</i>	<i>2015/16</i>	<i>2016/17</i>	<i>1017/18</i>	<i>2018/19</i>	<i>2019/20</i>	<i>2020/21</i>	<i>2021/22</i>
<i>Oromia</i>	7.3	10.2	15.7	17.7	22.6	28.4	39.8	49.4	71.8	104.4
<i>Addis Ababa</i>	104.1	135.9	173.0	213.3	258.3	326.1	411.9	507.5	660.4	834.9
<i>Afar</i>	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.8	0.8
<i>Amhara</i>	7.8	8.5	9.5	10.3	11.4	14.0	19.0	27.0	40.0	82.7
<i>Benishangul</i>	0.1	0.1	0.2	0.3	0.5	0.9	1.0	1.4	1.4	2.3
<i>Dire Dawa</i>	0.9	1.3	1.8	2.5	3.2	3.4	5.0	6.9	13.8	15.7
<i>Gambela</i>	0.1	0.1	0.1	0.1	1.9	2.2	2.6	2.8	2.8	3.0
<i>Harar</i>	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.8	0.9
<i>SNNP</i>	6.2	7.0	9.7	10.6	13.4	14.5	18.3	19.2	30.6	13.7
<i>Somali</i>	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.5	1.0	3.1
<i>Tigray</i>	4.3	5.1	6.7	7.9	10.4	12.0	17.2	25.0	32.5	31.3
<i>Sidama</i>	-	-	-	-	-	-	-	-	-	15.8
<i>SWERS</i>	-	-	-	-	-	-	-	-	-	2.5
<i>Total</i>	131.0	168.4	217.2	263.3	322.3	402.4	515.9	640.5	856	1,111.1
<i>Oromia's share</i>	5.6%	6.0%	7.2%	6.7%	7.0%	7.1%	7.7%	8.4%	8.4%	9.4%
<i>AA Share</i>	79.4%	80.0%	79.7%	81.0%	80.1%	81.0	79.8%	77.2%	77.2%	75.1%

Banks' loan disbursement in Ethiopia over the last ten years disaggregated by regions are presented in Table 4.2. In the last fiscal years, banks in Ethiopia disbursed about 1.1 trillion birr, increased by 750% since 2012/13. The loan disbursed to Oromia region in 2021/22 was 104.4 billion birr which accounts 9.4% of the total loan disbursement of the year. The amount of loan disbursed to the region has been increasing over time. More than 3/4<sup>th</sup> of the banks' loan has been given to borrowers in Addis Ababa. Alike Oromia, other regions of the country take a small fraction of banks' loan. This could be due to the fact that most investment projects of the country are concentrated in and around Addis Ababa.

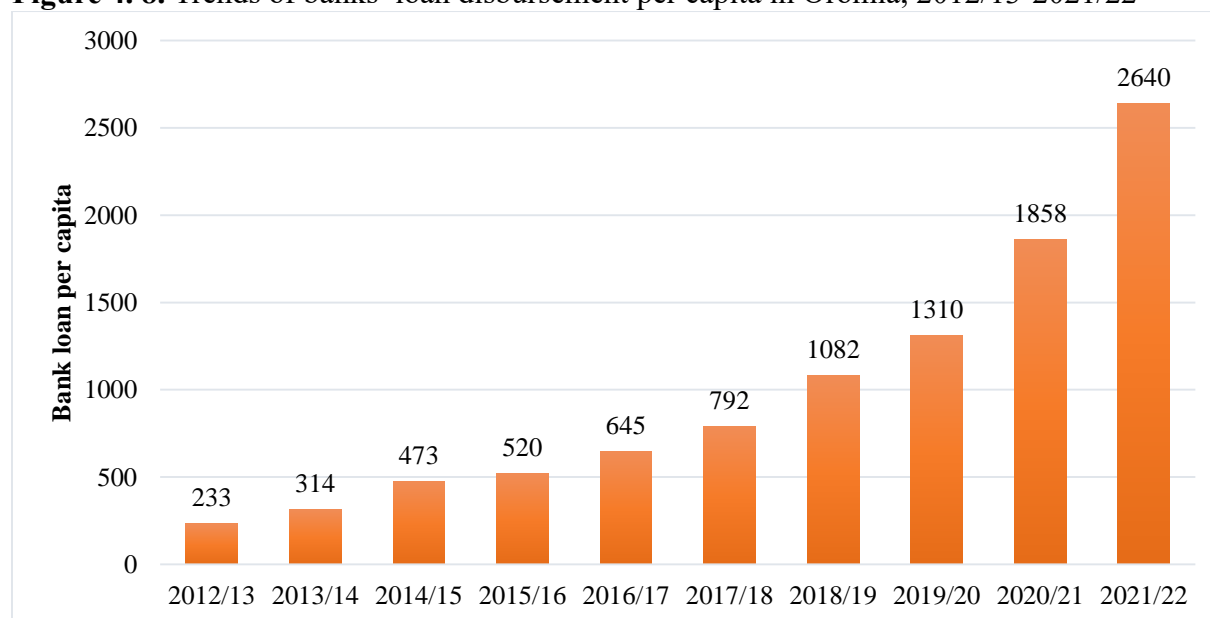
As a more precise measure of loan penetration in Oromia in comparison with other regions, Figure 4.7 presents the loan disbursement per capita in most recent period. Accordingly, the loan disbursement per capita in 2021/22 was nationally averaged at Birr 10,689 while it was about Birr 2,640 for Oromia. Like that of the deposit case, Oromia is behind many of the major regions in loan disbursement per capita at this time though it has been improving overtime (Figure 4.7 and Figure 4.8).

**Figure 4. 7.** Loan disbursement per capita for Oromia and other regions in 2021/22.



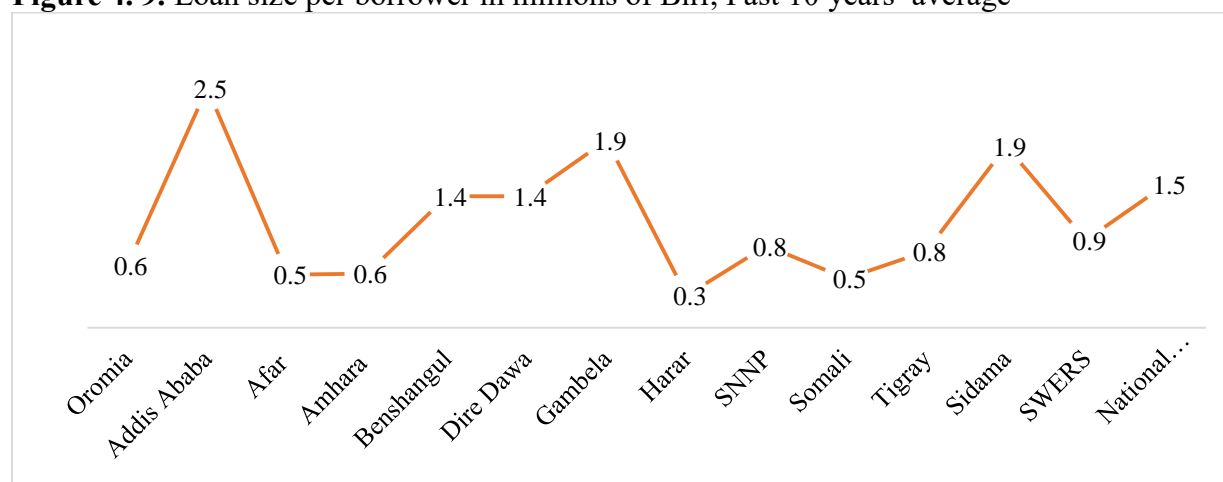
*Notes: The loan disbursement per capita for Addis Ababa (218,727) and Dire Dawa (29,799) are excluded from the graph since these are outside of the graph's scale and not typical regions to compare with Oromia.*

**Figure 4. 8.** Trends of banks' loan disbursement per capita in Oromia, 2012/13-2021/22



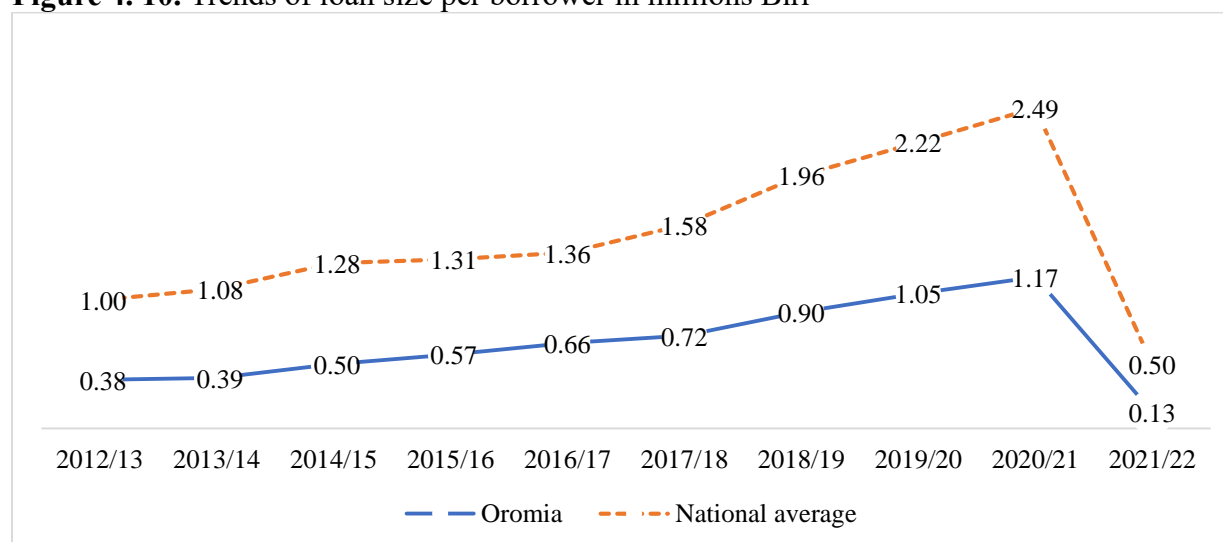
One of the challenges for investors to expand investment is insufficient funds which is partly due to the small size of loan they get from formal financial institutions. In this regard, we have examined the average size of loan in Birr lent to a borrower over the past ten years. On average the loan size for a borrower from the banking sector has been 1.5 million birr as a country and 600,000 Birr for Oromia, which generally low (Figure 4.9). Addis Ababa, Gambella, and Sidama have had a relatively larger loan size. When we see the trends of loan size in Oromia in comparison with the national average overtime, it was modestly increasing until 2020/21. Despite the rise in total amount of loan disbursed in Oromia, the average loan size sharply declined in 2021/22 due to a dramatic increase in the number of borrowers (Figure 4.10).

**Figure 4. 9.** Loan size per borrower in millions of Birr, Past 10 years' average



*Note: Sidama and SWERS regions data is only for 2021/22*

**Figure 4. 10.** Trends of loan size per borrower in millions Birr



In conclusion, there is a regional disparity in both deposits mobilized and loan disbursed by the banking sector. Table 4.3 summarizes the gap between Oromia and other regions as well as the national average in terms of both deposit per capita and loan disbursement per capita in 2021/22. Accordingly, the national average deposit per capita and loan per capita exceeds from that of Oromia by Birr 10342 and 8049, respectively. Another example on how to interpret numbers in Table 4.3, for instance, as compared to Oromia, deposit per capita in Sidama region was less by Birr 679 in 2021/22 while its loan per capita was higher by Birr 810.

**Table 4. 3** Summary of regional gaps in deposit and loan per capita (Oromia Vs Others), 2021/22

Region	Gaps in deposit per capita	Gaps in loan per capita
Addis Ababa	262574	216087
Afar	-1635	-2254
Amhara	3294	1000
Benshangul	-572	-695
Dire Dawa	34050	27159
Gambella	4104	3423
Harari	27310	624
SNNP	-2524	-1689
SWER	-1819	-1561
Sidama	-679	810
Somali	-3670	-2151
Tigray	7318	2863
National Average	10342	8049

*Note: Oromia is the base category in this gap analysis.*

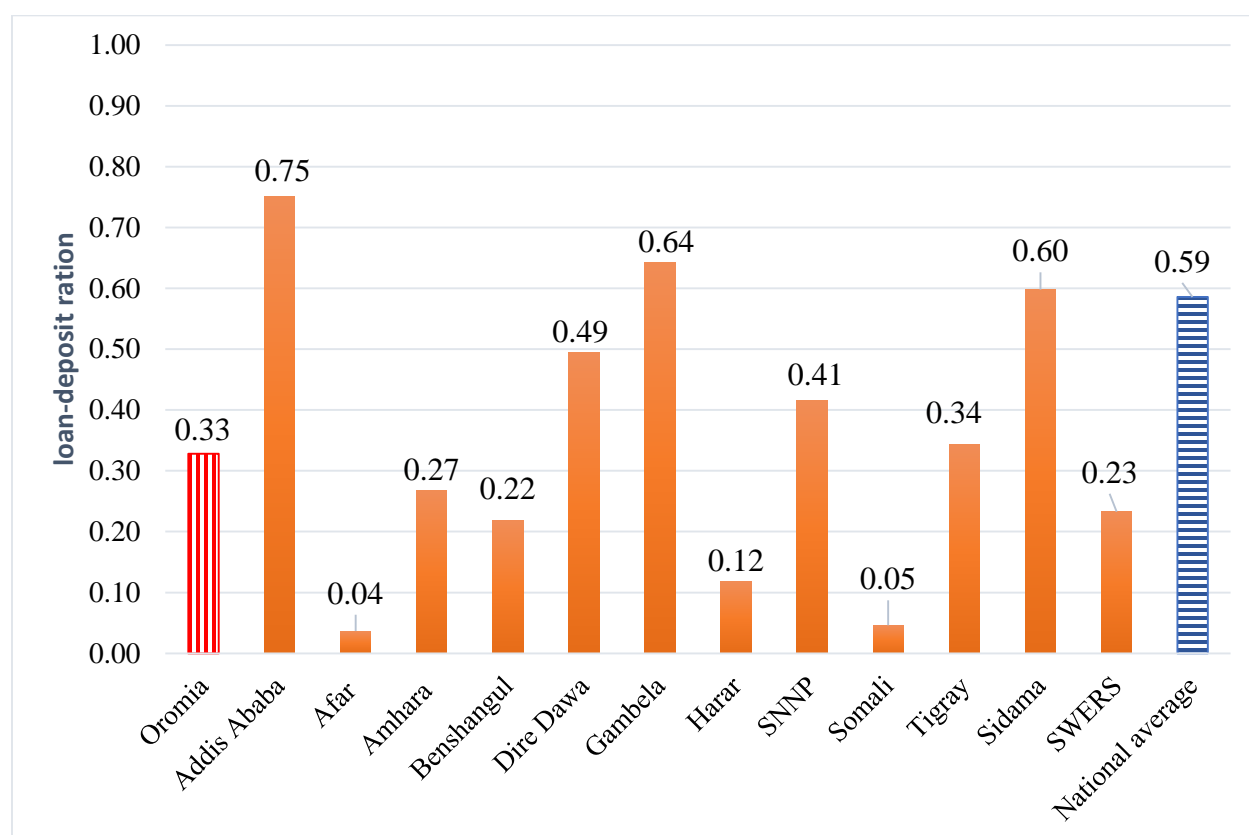
#### **4.4.2. The propensity to Invest locally Mobilized Resource: The banks' Experience.**

One of the types of research questions we intend to answer is that how much of the savings of a regions is channeled to investment within the region. This gives some insights about the inter-region capital mobility in the country<sup>10</sup>. This question could be relevant from the distributional perspective though it contradicts with the principle of efficient allocation of resource that financial intermediaries are supposed to improve it.

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<sup>10</sup> This question was motivated by the interest of the client reflected during the inception workshop.

**Figure 4. 11.** Loan-deposit ratio by regions, Average 2012/13-2021/22



Source: Own computation

To this end, we have developed index called loan-deposit ratio using the 10-years average deposit and loan data of each region. This ratio enables us to measure how much money is pumped back to the region for a one-birr deposit the region makes in commercial banks of the country. The propensity to invest locally mobilized resources in the same regional state is analyzed using this index. As shown in Figure 4.11, on average, banks in Ethiopia disburse 59 cents in the form of various types of loan for each Birr they collect as deposit. In this regard, Oromia gets 33 cents for each Birr it deposits in the banks operated in the region. That mean 1/3<sup>rd</sup> of the banks deposit in Oromia pumped back to the regional economy in the form of loan. Regions with loan-deposit ratio above the national average are Addis Ababa (0.75), Gambella (0.64), and Sidama (0.6). When we restrict the period to 2021/22, Oromia's loan-deposit ration raises to 0.41 while the national average is about 0.64.

However, it should also be noted that bank's annual loan disbursement is not solely dependent on the loan mobilized in the same period. Collection of previous loans and other income sources of the bank are also imperative in the loan disbursement capacity of banks at a given year.

Overall, the result implies that regional disparity in loan disbursement in comparison with the savings mobilized in the same area is prevalent. Our key informants argue that one major reasons for this disparity is the fact that loan decisions of banks are mainly done at central level. This

leaves a minimal role for districts and branches in investment decisions. There are some initiatives by banks to decentralize the loan decision to districts, but it's too restrictive with a maximum limit of 30-40 Million birr.

In addition, a national average of 0.59 deposit-loan ratio also partly indicates that there have been various requirements for banks to keep more reserve than the legal reserve requirement which usually varies 5 to 15 percent, depending on the period. Our qualitative survey confirmed that banks required to purchase government bonds for the proportion of each loan they disburse (about 20% at this time). This unfavorable requirement coupled with the liquidity needs to bank and other factors weakens the banks' lending capacity to the private sector.

#### **4.4.3. Loan Products and Beneficiaries**

Based on the discussions held with the selected commercial banks, the major loan products provided to their customers are the following.

- Overdraft Credit Facility
- Merchandise Loan Facility
- Warehouse Receipt Financing
- Pre-shipment Export Credit Facility
- Agricultural Output Financing for Cooperatives/Unions Against a Forward Delivery Contract with World Food Program (WFP)
- Import Letter of Credit Financing and Back-to-Back Letters of Credit Financing
- Letter of Guarantee Facility
- Collateralized commodity financing (CCF)
- Term loan (short –up to 2 years, medium term -2 to 5 years, long term loan- mature for more than 5 years)
- Agricultural machinery loan
- Diaspora/Mortgage loan

The sector also extends term loans that mature in three years, seven years, and more than seven years. Loans could be extended for investment or consumption purposes. Some other products available on most banks also include:

- Motor Vehicle Loan
- Construction Machinery Loan, and special Construction Machinery and Dump Truck Loan
- Infrastructure construction term Loan
- Investment Financing for Enterprises Operating in Industrial Parks
- Partial Financing Term Loan
- Agricultural term loan
- Idea financing

Information obtained from the bank's KII revealed that, sector wise, agriculture, manufacturing and foreign trade services, domestic trade service, exports, and construction/building projects were main financed sectors over the past 3 years. Large firms, priority sectors (manufacturing, agriculture, hotel, and tourism) and exporters mostly succeed in accessing bank loans. Lack of

collateral, project non-feasibility and incomplete application documents has been identified as main reasons for rejection of loan applications.

#### 4.4.4. Challenges and Opportunities of Investment Financing

##### Challenges

- **Lending rate:** investors claim that banks' lending rate is too high to make them competitive or profitable. Currently, banks' lending rate ranges from 11.5% to 20% for the industry depending on the type of sector/project financed and customer. The banks do not agree over the fairness of the lending rate to the customers. While some of them argue that the rate is fair due to higher inflation rate prevailing in the economy, others perceive the lending is expensive due to business uncertainty.
- **Long processing time:** On average, a typical loan application takes 2 weeks to 3 months to process. The long processing time is associated with large number of loan applicants and loan application documents require much time to verify its authenticity.
- **Nepotism in loan decision process:** There has been a claim from the borrower s' side that the loan approval process is getting corrupted since recently. Decision makers in the banks tend to ask for commissions from the loan they approve. We explicitly raised this issue during our interview with the banks representatives and most of them perceived that nepotism is not a severe problem in project financing. However, they didn't hide the problem exists to some extent and it has been reported as severe in financing mega projects. Unfair competition by the banks is reported as the main reason for nepotism. They provide loans beyond the limit, prioritize applicants, or extend loans with insufficient reasons to retain customers. Generally, nepotism is being considered as manifestation of poor corporate governance. It also discourages saving and investment thus the regulatory body and bank representatives/directors/boards have established a strong supervisory board to maintain accountability in the sector. Some banks follow 4 eye principle, 2 makers and 2 checkers committee, in loan financing decision to combat such problem which seems a good experience for others too.
- **Default in loan repayment:** In our banks KII, banks reported that default rate ranges from 1.67 % to 8 % depending on banks and types of borrowers. Accordingly, domestic trade services, construction, export sectors, import trades, are the most defaulters. The major reasons for default as perceived by banks include: Foreign exchange shortage, erratic regulations (construction materials shortage/unintended expenses due to regulations), political instability, high level of tax payment, macroeconomic fluctuation (trend based marketing by coffee exporters, inflation), inadequate bank follow-up (resource diversion towards unintended consumption purpose), world market price volatility (gold, coffee, flowers price), and shocks like draught for farmers for instance.
- **Foreign currency shortage:** this is a national problem caused the closure or delay of many factories and other projects in Oromia and other regions.
- **Lack of well-established infrastructure** (electricity, road, and telecom), which hinders digitalization and increase transaction cost.

- Liquidity crunch
- Unprecedented policy changes by NBE and lack of policy compliance among banks
- Low level of credit awareness/lack of knowledge about loan repayment,
- Government policy (investment policy, land policy)
- Poor governance, bureaucracy, and government policies (lack of collaboration in document authentication and loan reinforcement, corruption, and instability, investment policy, land policy)
- Instability

### **Opportunities**

- Increased deposit mobilization,
- The presence of huge demand and unbanked population,
- Advance in technology,
- Abundance in natural resources such as gold, economic growth/high investment demand

## **5. TRENDS, PECULIARITIES, AND STRUCTURE OF PRIVATE INVESTMENT IN OROMIA REGION**

### **5.1. Profile of Investment Projects in Oromia**

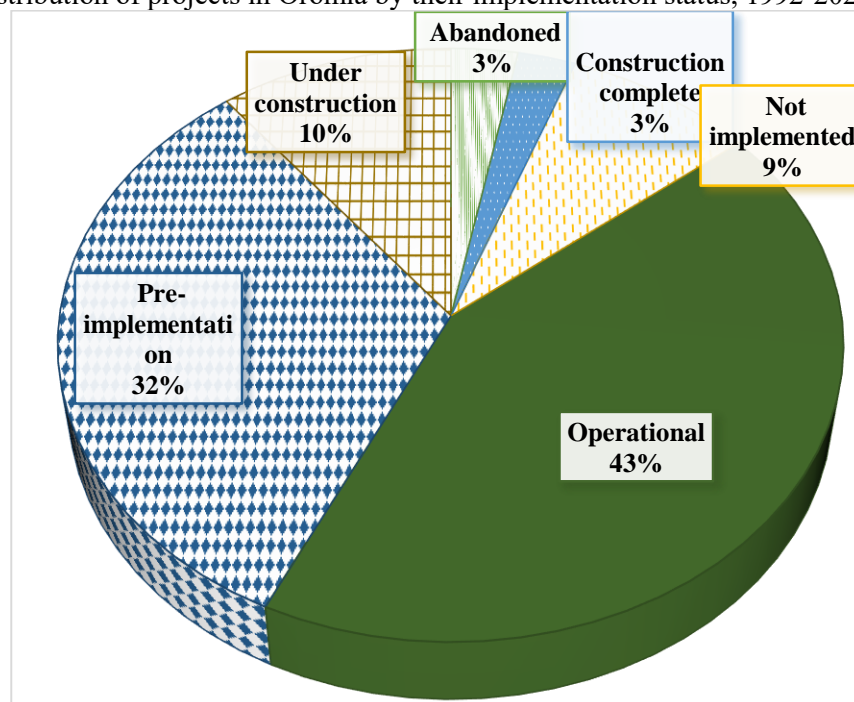
#### **5.1.1. Overall Projects and their Status**

According to information obtained from Oromia investment bureau, about 20873 projects have been licensed for domestic and foreign investors since the establishment of the region in 1992. Of these projects, only 8926 are operational which implies that conversion rate of proposed projects into operational businesses (operational rate) is near to 43% (Figure 5.1). About 12% of the projects are either abandoned or not implemented at all. The remaining are in pre-implementation (32%), under construction (10.5%), and construction complete (3%) status for which their final fate is unknown. Accordingly, from the operational projects in the region, about 93% of them are owned by domestic investors and about 46% are in service sector.

By compiling Oromia's investment data from the region's investment bureau and the Ethiopian investment commission (EIC), we are able to disaggregate the project operational rate by domestic versus FDI. According to our estimation from the data, operational rate for domestic investors is 41.8% while it is 54.7% for FDI. What makes worse is that all operational projects are not operating at their full capacity for various reasons. For instance, data from the CSA shows that the capacity utilization rate of large and medium manufacturing firms in Oromia in the year 2015/16, latest available data, was about 63.6%. Assuming this capacity utilization rate for all sectors, the full capacity equivalent operation rate of projects in Oromia is about 27%. We can call it the capacity utilization-adjusted operational rates of projects in the region, which is a little bit higher than a quarter of the planned economic gains for which various incentives are provided. This implies that considerably large numbers of approved projects in Oromia have not been operational to bring about the intended economic benefits.

From the total projects licensed by the region, about 46% of them were licensed since 2019/20 (47% since the reform, 2017/18) showing that there is a growing investment demands in the region. Data from Oromia investment bureau shows that service (39%), agriculture (20%), agro-processing (20%), and manufacturing (15%) are the sectorial composition of the entire project licensed in the region. Further disaggregating implementation status by sector shows that operational rate is relatively higher for service sector with about 51% conversion rate, followed by agro-processing (44%) and manufacturing (38%), while the least in this respect is agriculture (33%). Since the recent reform, Oromia region pays due attention for domestic investors, mainly to promote farmer to investors. As a result, a-third of the licensed projects in the region are farmer-owned and almost all of them have been licensed over the last three years. So far, about 17% of the farmer-owned projects are operational while the majority (65%) of them are on pre-implementation stage.

**Figure 5. 1.** Distribution of projects in Oromia by their implementation status, 1992-2022



Source: Own computation using data from Oromia investment bureau

**Table 5. 1.** Sectorial distribution of investment projects in Oromia by implementation status (%)

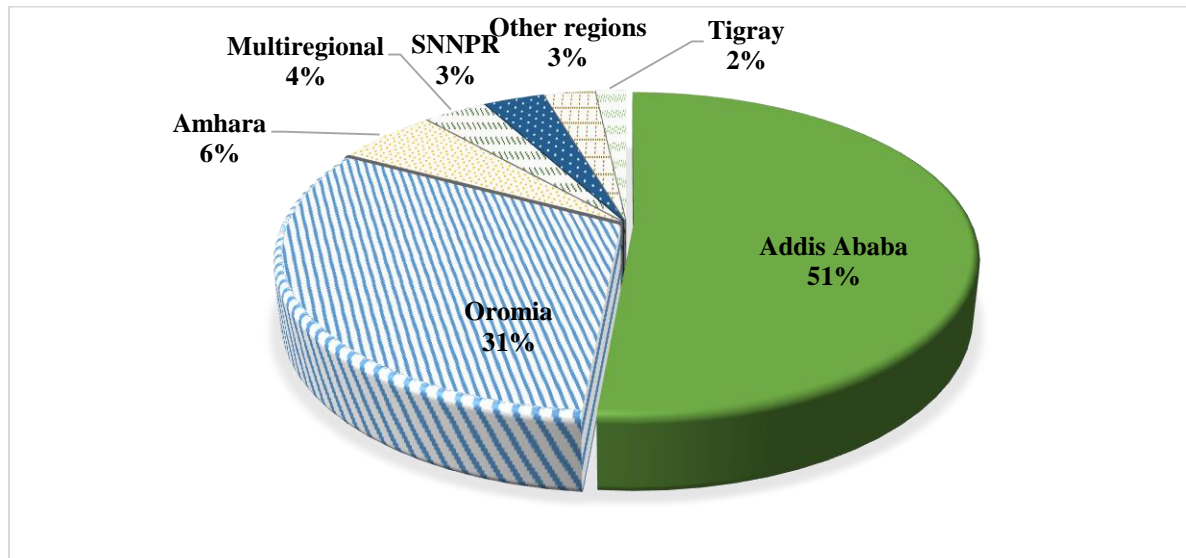
Main sector	Project status		Total				
	Abandoned	Construction complete	Not Implemented	Operational	Pre implementation	Under Construction	
Agriculture	3.0	0.3	8.3	32.7	53.9	1.8	100
Agro-Processing	3.0	3.7	11.1	43.8	32.1	6.4	100
Manufacturing	3.7	8.7	6.8	38.2	31.1	11.5	100
Service	2.8	1.8	8.2	50.9	18.0	18.4	100
Total	3.0	2.8	8.6	42.8	32.2	10.6	100

Source: Own computation using data from Oromia investment bureau

## 5.2. FDI projects in Oromia

Data from the EIC shows that from 22 August 1992 to 11 January 2023, nationally, about 6141 FDI projects have been licensed; of which 3568 are operational. As expected, Oromia hosts the second largest number (31%) of FDI projects next to Addis Ababa (51%) (Figure 5.2).

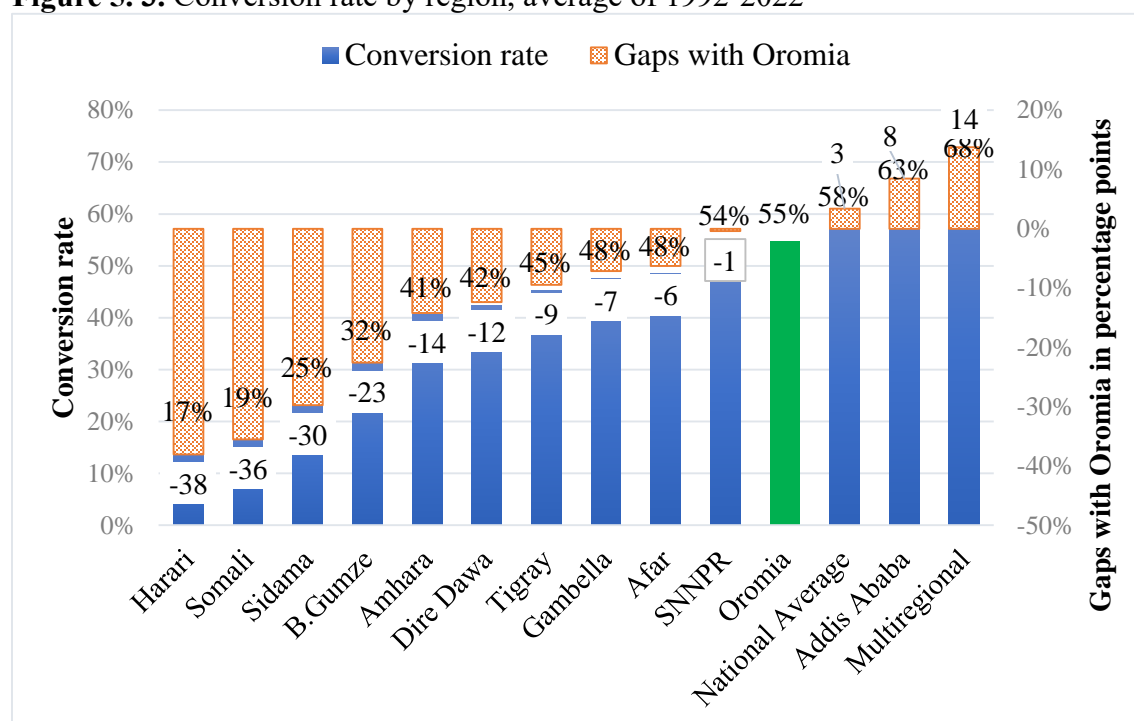
**Figure 5. 2.** Distribution of FDI projects by regions in Ethiopia and Oromia's share



*Source: Own computation using data from EIC*

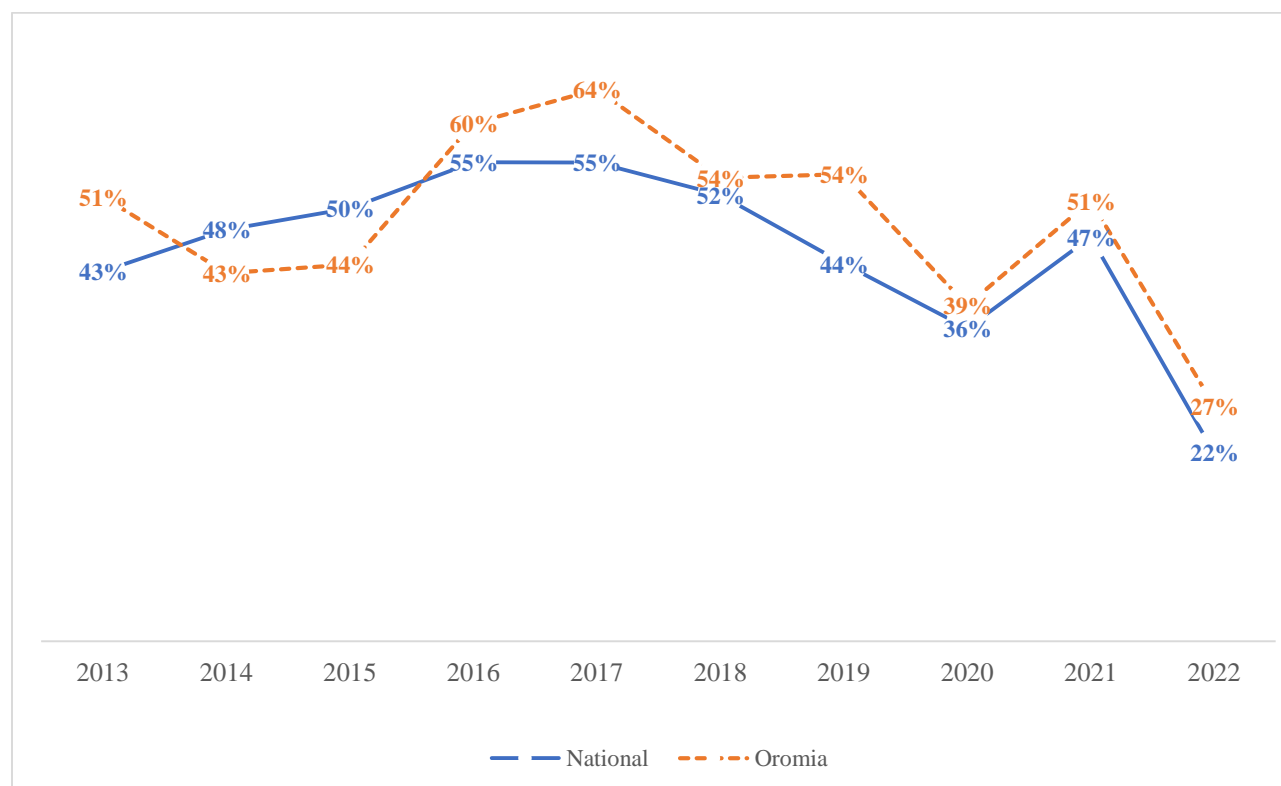
Figure 5.3 presents the conversion rate of FDI projects into operational firms for all regions (the primary axis) and the gaps of Oromia with other regions as well as the national average (secondary axis). As can be seen in the figure, operational rate of FDI projects in Ethiopia over the last three decades has been 58.1% while it is at 54.7% for Oromia, with a gap of 3 percentage points (Figure 5.3). FDI projects operating in multiple regions (multiregional) and Addis Ababa have higher success rate than that of Oromia with 68.5% and 63.2% operational rates, respectively. All other regions are weaker than Oromia as implied by the negative gaps in percentage points. Data from EIC indicated that operational FDI projects have been engaged in various sectors mainly in manufacturing (51%), real estate, machinery and equipment rental and consultancy service (19.8%), and agriculture (9.6%)

**Figure 5. 3.** Conversion rate by region, average of 1992-2022



Source: Own computation using data from EIC

**Figure 5. 4.** Trends of FDI conversion rate over the last 10 years (National Vs Oromia)



Source: Own computation from EIC data

To further understand the macroeconomic picture in comparison with Oromia in this regard, we analyzed the proportion of operational FDI projects focusing on the last 10 years (Figure 5.4). The performance of the economy as a whole as well as the region in converting the licensed FDI projects into operational firms has declined over the past five years with a record low rate of about 22% for the country and 27% for Oromia in 2022. The last year's very low performance could be associated with the revoking of the country from AGOA initiative and deteriorations in local peace and security conditions.

The status of the FDI projects in Oromia is presented in Table 5.2. As can be seen in the Table, about 1922 FDI projects have been registered in Oromia. As indicated earlier, 1052, 397, and 473 of them are in operational (54.7%), while 20.6% and 24.6% of them at implementation and pre-implementation phases<sup>11</sup>, respectively. The operational FDI projects in Oromia has registered about 67-billion-birr capital and created more than 231,000 permanent and temporary employment opportunities. On average, each operational FDI project in the region creates more than 116 permanent jobs in the region (Table 5.2)<sup>12</sup>.

**Table 5. 2.** Status of FDI projects in Oromia region

<b>Indicator</b>	<b>Freq.</b>
Total Projects approved since 1992	1,922
Pre-Implementation	473
Implementation	397
Operational	1,052
Capital in million Birr	66,923
Permanent Employment	122,323
Temporary Employment	109,322
Permanent Employment per Operational FDI	116.3

Source: Own compilation from EIC data

As far as the origin of investors are concerned, the records of the EIC indicates that Ethiopia has hosted investors coming from more than 100 countries around the globe. Based on the level of capital invested, China, India, USA, Sudan, and Turkey are the top five countries of origin for FDI in the country (See appendix 3 Table A.5.1 for more information).

### 5.3. Reasons for Failures and Delays of Investment Projects in Oromia

It is evident that more than half of the licensed projects in Oromia have not been operationalized. We further explore the reasons behind this by triangulating the view of different stakeholders obtained from our qualitative survey. In the KII, investors were asked to rate different factors inhibiting success of investment in Oromia using 5-level Likert scale (0=No obstacle; 1=minor obstacle; 2=moderate obstacle; 3= major obstacle; 4= very serious obstacle) for a predetermined factors. The top impeding factors that scored above 2 are summarized in Table 5.3. Accordingly, macro-economic instability, political unrest, and shortage of electricity were identified as top three

<sup>11</sup> It is not clear whether the EIC and the region's investment bureau update their database when firms cease operation and exit the market.

<sup>12</sup> See appendix 3, Figure A.5.1 for employments created by FDI project at national level.

constraint followed by corruption and other factors. This is more or less the qualitative information collected from other stakeholders including government officials and chamber of commerce.

Table 5. 3. Mean scores of investment obstacles as rated by investors.

<b>Factors</b>	<b>Mean scores</b>
Macroeconomic instability (Inflation)	3.55
Political instability	3.32
Electricity shortage	3.18
Corruption	2.77
Lack of Skilled labor	2.73
FOREX shortage	2.55
Government policies and regulations	2.5
Transport and logistics	2.41
Lack of raw materials	2.41
Input disruption	2.27
High interest rate to borrow	2.09
Tax rate	2

There are also other important factors that were not included in the ratings but stood out during the qualitative survey as key determinant of investment failure and success. By pooling triangulating information from all sources, the main issues that weaken effectiveness of investment projects in Oromia region are discussed as follows.

### ***Economic instability***

Economic instability, mainly inflation is a major problem creating market instability. Our key informants including investors, banks, and communities also reflected that inflation and unprecedented policy changes by the national bank of Ethiopia and the Ministry of trade and regional integration such as regulations on cement delay construction (create construction materials shortage) and increased investment costs due to sabotage in the market chain. Related to this, an increase in the price of inputs has been playing a role for the failure or delay to implement licensed projects.

### ***Political unrest***

Sustainable development of the region requires attracting talents and capital from any corner of the world. Peace and security are a prerequisite for any country or region to utilize own and others' resources via productive investment for one's development. However, political instability of the region has been a very critical problem that hinders new investment inflows to the region as well as retention of existing investors. An investor explained this as "the government plays a role in delaying investment by ignoring the issue of peace and security." Thus, political unrest in the region is among the major factors inducing companies' decision to withdraw from the region.

### ***Infrastructure problem and high transaction costs***

Low level of infrastructural problem coupled with its uneven distribution plays a role in the poor private investment performance of the region. Infrastructure problems including roads, water, electricity, and the internet are still a problem in many parts of the region. According to community leaders, shortage of water, and lack of electricity and power outages are prohibiting investment activities in the region. Unequivocally, poor infrastructure development and a reluctance, if not outright refusal, to address the issue by the government when it arises has been deterring investment.

The other factor that inhibits investment in the region is the poor logistic system. The inefficient, costly, unreliable transport and logistic system of the country increases the cost of doing business and negatively impact competitiveness of businesses and shrinks private investment. Some investors in Oromia also report that there are some unproductive activities of the youth in the investment sites that escalates the operational costs of investors in the region. For instance, in the warehouses, loading, and discharge points of freight transport conducted in some parts of the region, there are organized youths called supporters or ‘Agazh’ who virtually do not have jobs but they ask considerable amount of money from the investors. This kind of practice could have been being implemented to minimize the youth unemployment problem of the region, but it appears to be unique for the region and unnecessarily escalates investors’ cost. This kind of activities could potentially discourage investment in the region and drives investors away from the region.

### ***Lack of feasible and clear business idea and investment implementation strategy***

Lack of clear investment plans and implementation strategies by investors when proposing and executing an investment project is another major reason for the failure. Being an investor is beyond having a financial resource. It needs entrepreneurial and managerial skills with a good discipline. Most investors in our study area enter into investments without being aware of the detail activities of their investments and then fail to accommodate exposures to new expenses and management. Alongside this, investors’ project management is usually weak that results in default. Some ventures have been halted due to ineffective management systems and inadequate business planning. The problem is aggravated when investors rely on family labor rather than hiring competent professionals. The investment bureau of Oromia underlined the severity of this problem.

The fact that some investors use resources for unintended purposes is another major reason for the failure of authorized investment projects (for example, resources are taken for real estate but used for hotels). Similarly, in our discussion with the financial sectors, they have mentioned that most projects do not seem feasible. Stakeholders are also skeptical about the project implementation follow up by the regional and federal investment regulatory agencies. The lack of effective government regulation and the seizing of property of investment without a clear strategy is to blame for the decline in investment. Failure or delay is also occurred if investment proposals fail to consider the interests of society.

### ***Corruption***

Most investment projects fail to be implemented for a variety of reasons. Most of the stakeholders considered in the qualitative survey agree that rent seeking behavior of the major actors is a serious problem in the investment landscape of the region. Accordingly, investors, government officials, and financial institutions all engage in various forms of sabotage. Many of investors apply for investment licenses solely to benefit from investment incentives (duty-free imports), land grabs, and sales, and then flee with the investment funds borrowed from financial institutions. Similarly, many government officials are more interested in personal gains in the process. The problem of corruption is more prevalent when licenses are granted to investors. Businesses rely on relationships to grant licenses and facilitate any government services.

### ***Inefficient administration and atrocious government bureaucracy***

According to the key informants, personal savings are being increased, shares are being sold, and more resources are being made available for investment, but the government system's bureaucracy is atrocious. This problem has a significant contribution for the delay or failure of projects in the region. On the other hand, unprecedented change in government regulations and policies and lack of policy stability in the region reduces investors' confidence and discourage further investment. The recent price ceiling and dictating the marketing channels for wheat producers is an example in this aspect. The government's monitoring and support of investors who are properly licensed but do not operate as per the agreement is not also strong enough. Lack of experiences by the government regulatory agencies to manage investment inflows and properly support, monitor, and regulate them has been a challenge. Language barrier also make investment officers difficult to communicate effectively particularly with foreign investors, which results in slow delivery of government services and inadequate support.

Tax is also another reason for investment failures in the region. According to investors' response, huge production tax is being imposed by the government though this is not unique for Oromia. Some investors argue that local administrators levy various types of taxes and fees which could have legal grounds but were not clearly communicated for the investors during the contract period. For example, it is common for some city administrators to impose a 3% one shot tax on items investors imported duty free for city cleaning and beautification. To avoid misunderstandings between investors and administrators, it is important to communicate duties and responsibilities of investors beforehand.

### ***Foreign exchange shortage***

This macroeconomic problem is cited as the primary reason for the halt or delay of many investment projects in the country in general and in the region in particular. Importing inputs, spare parts, and other key resources becomes extremely difficult especially over the past few years. It has been argued that inefficient and short-sighted government policies such as surrendering 70% of foreign currency exports earned from their export activities which are not aimed at addressing the basic structural problems of the financial sector adds fuel to the fire in the supply foreign currency.

### ***Shortage of Finance***

Shortage of finance is the major obstacle to investment projects in the region. Respondents of selected banks reported that financing projects is becoming difficult because of shortage of loanable fund and poor governance in the region (lack of collaboration in document authentication and loan reinforcement, corruption, and instability). Banks also do not immediately provide credit to investors due to bureaucracy and corruption.

The banks' credit policy like lending rate and huge collateral requirements to access finance are among the reasons for projects to fail or delay. The banking sector provide loan to investors at a high interest rate nominally and investors tend to fail to repay the money they borrowed from the bank, and the operation go out of business. It should be noted that charging high interest has a risk since more risky projects tend to self-select to the credit pool. The lack of financial capital to complete the project on time is further exacerbated by the galloping inflation of construction materials.

Another view forwarded by investors related to failure of projects in the region is a faulty connection between banks and the regional investment office to devise appropriate solutions to rescue poor performing projects.

### ***Poor engagement of the local community***

The influence of the local community on the licensed projects is crucial in the failure and success of projects. Investors highlighted that community engagement in investment decision-making is almost non-existent and the community perceives that the investor's goal is to confiscate them from their land and this drives people to attack the investment projects. The fact that some investors do not also effectively communicate with the local community adds up to the problem. Community leaders also argue that investment must be legal, healthy, and accommodating. Accordingly, the local communities have positive interest to investment activities if their interests are taken into account. The weak attempt of the government to ensure the full participation the community in the investment related decisions is another issue worth mentioning related for administrative inefficiency. A community leaders reported this situation as "the local community is not involved in project approval; it is only done through government agencies".

### ***Access to Land***

Investment projects are also being delayed/failed due to the bureaucratic system in receiving land from the government. Even if the lease and any necessary payments are completed, the regional government delays in transferring the land to the investors. It is partly due to the fact that land approval has to go through a long process including the region's investment board in many cases as part of the effort to screen relevant projects with capacity of investors. According to investors, provision of additional lands for expansion and other opportunities such as access to finance/foreign exchange arrangements are promised initially, then these things remain simple promise. Due to this, projects are not operating in their full capacity. Some investors who purchased the land under a specific investment title may wish to change it before beginning actual operations. It has been also argued that the current land policy of the government is not favorable for expansion of private investment as it cast a lot of uncertainties.

Investors also believe that there is cheating by obtaining a land license with false documents and then changing the title. The Oromia land bureau also shared the presence of investors cheating. Some investors take land and do not work according to their proposal, they demand land above standard. The regional government also lack law enforcement as well as delay the implementation of land use plans. The land bureau also mentioned that land use plans are not widely used in the region. Since the reform period, the region is using the plan in six zones. However, its functioning is not at its full capacity due to setbacks such as budget, logistics and lack of skilled manpower. Unfortunately, the regional land bureau did not provide us data related to land utilization in the region including the amount of land that was revoked from investors who failed to function after they received land.

To curve these unfavorable situations and improve the effectiveness of projects, different types of supports have been given by government and other stakeholders which includes:

- Project consulting service mainly by banks
- Monitoring and follow up
- Loan payment rescheduling, change credit nature (i.e., from short to medium or to long term loan)
- Providing grace period
- Provide technical support, and business development support
- Some banks provide package services (professionalizing, technical/skill trainings,
- Create market linkages.

## **5.4. Governance of the Investment Sector in Oromia**

### **5.4.1. Internal Capacity and Readiness of the Responsible Offices**

Regional and zonal offices responsible of governing the investment sector are characterized by various human and institutional problems. From the KII and FGD conducted, the following key issues came out loud:

- High employee turnover due to low incentives, frequent change of political appointees in the sector,
- Skill mismatches of employees,
- Lack of experience of the government and its structure in managing and understanding nature of various projects,
- Lack of language skills for employees to properly handle foreign investors, an officer in the FGD explained this situation as *“in many cases, investors who come for support in office give advice for officers instead of getting advice from them. As a result, most project are investor driven.”* As a result, projects have been implemented without considering the impact on the community and the environment.

It is also clearly pointed out that, the Oromia Investment Bureau, the main government organ supporting investment, is unable to efficiently function due to insufficient human resources, poor project management, technology utilization, logistics, coordination, and limited finances.

Despite having a clear mandate and structure of investment offices from the region down to woreda level, the internal capacities are not well-built to govern investments and provide efficient services. The offices' resources (budget, logistics, and human resources) are insufficient. With these limitations the offices have been tirelessly working to identify investment potentials of their respective localities and attract investments in various sectors. Of course, to fill the gap and provide standardized services to their customers, the investment offices are currently collaborating with the zonal investment committee, as well as the land administration office and the forest and environmental agency offices, to solve investment issues.

#### **5.4.2. Promotion Strategies to Promote Investment**

The region has been promoting investment through different strategies. Various investment promotion strategies have been implemented to attract both domestic and FDI into the region. For instance, over the last four years, promotion events were organized in Turkey, India, the United States, and United Arab Emirates. Moreover, mainstream, and social media platforms have been extensively patronized to create awareness about the resource potential and comparative advantage of the region. In this regard, Oromia Broadcasting Network (OBN), events such as, exhibitions and bazaars were extensively used.

The current initiation to transforming and promoting model farmers and MSEs to investor level based on their request and level of capital is also expected to boost investment in the region. In fact, this is in line with the national government directives of promoting import-substitution using domestic potential. For example, 45 of the total 721 investors in coffee, including model farmers, are involved in exporting their coffee to various parts of the world.

The qualitative data obtained from both KII and FGD implicated that issue of saving and investment promotion is a multi-stakeholder activity that the financial institutions, regional and federal governments, and the private sector should work closely to realize intended outcome. However, there is still poor networking, collaboration, and duplication of efforts among these stakeholders. Given the resource potential of Oromia region the flow of investment in general is not satisfactory.

Despite the unreserved promotion of effort, substantial number of investors decline on the first day of their preliminary visit due to poor telecommunications, frequent blackouts/limited access to electricity, poor infrastructure. Therefore, infrastructure development specially in high investment potential areas should be given a priority.

#### **5.4.3. Major Regulatory Functions in Investment and Investor Compliance**

Regulating investment is one of the main tasks of the government. Investigations to ascertain whether the investors use the leased land as specified in the agreement and under the project proposal and two-year investment consent renewals and on-time tax payments agreements are the major regulatory actions in the sector. According to the key informants, this function is prone to rent seeking. In this regard, there is inconsistency in treating investors and the regulation has been hardly implemented. Therefore, standard, and technology supported transparent system and accountability should be insured to encourage the existing investment and attract new once into the region is mandatory.

Monitoring and regulation are carried out at the Woreda level. However, community representatives hardly participate in this process. The follow up to ensure if the investors used the leased resource for the intended purpose is very crucial for the safety of the community and the environment. In this regard, participatory project appraisal, monitoring and regulation should be implemented. To this end, involving the community during project design and implementation mandatory and helpful to resolve any conflict of interest between different stakeholders.

#### **5.4.4. Major Actions Taken to Boost Investment Since the Reform**

Encouraging locals to become investors and restructuring (for instance, the investment and industry bureau itself has been changed from investment commission to bureau). Obtaining a trade license is simple (the applicants are only expected to have a TIN number, ID, and competency). In addition, the regional government approved a new investment proclamation during the data collection of this study, a regional investment bureau claimed. Revoking investment land left unutilized for a long period is also another major step being taken by the government since the reform.

Following the 2016 "Keros" movement detonated by the Finfinnee Zuria Master Plan and land grabbing, the government's investment policy orientation focused on promoting local farmers to investors. For instance, at the beginning of the reform over 200 farmers had been promoted to investor status in Bale zone only. Moreover, emphasis was given to MSEs and model farmers in terms of access to capital and technology. Such kind of initiatives should be sustained in order to stimulate domestic investment and optimize on the available potential.

### **5.5. Investment and the Community**

#### **5.5.1. Community Participation in the Project Approval Process**

It is unquestionable that local communities are the major stakeholder in designing and implementing investment projects. It is essential to ensure that projects reinforce the development of the local community and to this effect participation of local community on the very early stage of the project is crucial.

Investment decisions usually are not participatory. For instance, *in East Shoa, Investment projects of sugarcane production (Wonji sugar factory) have now turned to irrigation wheat production. Farmers were told the sugarcane doesn't have sufficient sugar and rejected their products. The farmers then grabbed back their respective land and went for wheat production instead, according to community members participated in the FGD. That mean, ten years back government grabbed a significant amount of land for sugarcane production, meanwhile, the community was not convinced at that time, and the reform the farmers had to reclaim their land and took it back.*

The relevance of the investment projects is mixed, there are places where the project destroys the community due to poor planning and communication with the community; while there are cases where the project owners are very much intact and synergized for the development of the investment projects and the community safeguards the project during hard times.

Any investment endeavor has an its own pros and cons. From the standpoint of positive impact, project investments provide various social services in many directions. This happen when the

community/ their representatives are directly involved in important investment choices. For instance, *most investment projects in Jimma zone are reported to be relevant to the communities. Most investors in the zone do improve the quality of life for the nearby populations. Investors in this zone have been assisting coffee production and processing there by actively contributing to the local community's improvement.* On the other hand, society may be impacted by health issues, environmental damage, air pollution, etc.

Albeit the representatives of the government institutions reported there is community engagement in the project approval process, key informants of the community leaders do not agree with it. The community leaders stated that when investors come for investments, they simply contact the local administrators, and the administrators act as agents or brokers to deal with the landowners where investors want to invest. Nothing beats community involvement in the opportunities that the projects bring to the communities. They observe that only one company that manufactures aluminum sulfate (in East Shewa, for instance) has consulted the community about the company's mission and the opportunities it may create. The recommendation sought by the key informants and FGD participants is that without the consent of the community projects will not sustain. Therefore, participatory project appraisal should be given due consideration.

### **5.5.2. Investors-Community Relationship**

According to the KII's, some investors have positive community relationships, while others do not. Those with positive relationships donate aid (in cash and kind) to those in need during the holidays. Some have constructed elementary schools, the town mayor's office, drinking water for those closest to the company, shared the costs allocated to citizens by the government, and provided logistics. Investors offer various incentives to the local community to facilitate his or her task. The advantages and contributions of investments to the local community, it may create jobs for the local community.

From the investors' point of view, the local community is pleased with the investment projects that have the positive spillover effects and thus have strong relationship with each other. The company and the community are in complete agreement. They have a good relationship with the local community because they provide schools, water, electricity, and irrigation. Some of them built offices and provide health insurance to the local community, particularly the elderly. They provide chairs and machine copies to schools. They provide communities with drinking water, assist communities and governments with logistics, and sponsor and support sporting events. Assist those in need of food (displaced and drought-affected people). Above all, they created job opportunities for locals and provide services to the surrounding communities.

It is difficult to say that all communities have a positive perception of any investment, but most of the community views investment projects positively. They consider investment projects as a source of income for their children, a source of services, and a role model for the next generation of investors. Because of this perception, many of them welcomed projects in their community and safeguard the project. Others claim that the community has a negative perception of the company because it does not provide any services to the community.

### 5.5.3. Benefits and costs of investments to the local community

#### *The Benefits*

From the community leader's perspective, employee members of the local community, particularly casual workers and the locals receive supports in different ways. Projects in the community provides schools, offices, water, food, logistical support, and improved seeds to the community when a need arises. *For example, the sulfate company in East Shoa zone contributed significantly to irrigation equipment during canal construction and heavily invested in the cobblestone extension in Awash Melka town.* In addition, some investors helped to keep the communities together by constructing schools, roads, job opportunities, and houses for the community, as well as assisting the community during the holidays. Communities are also benefited through agriculture-industry linkage by supplying inputs and consuming final products. Still, the community does not believe all the supports/gains from the investment projects are sufficient.

#### *The Costs*

Pollution is a primary concern of hosting investment for a community. A FGD participant explained it as *"The leather factories discharges waste into the river, causing health issues for humans and livestock. Five dead cows were discovered in our neighborhood. In general, pollution is caused by solids, but air and liquids also have an impact on their community."* Another participant said for a related problem as *".... These cement and stone investments are shortening the length of roads, which was built by Italy. They are distracting us rather than building roads. After extracting resources such as stone from the area, they leave it as is with no rehabilitation."*

To reduce the negative impacts of projects to the local community, the environmental protection authority has been trying to regulate projects. However, the current regulation that gives limited mandate for the regional EA office becomes a challenge to take a legal action by the region, the key informants of the EA office claim. There is also a tendency for investors not to follow the agreed and recommended safety measures and for the regional authorities to tolerate such incompliance.

The land compensation was very low, and those farmers who sold their land informally and receive compensation to investors became destitute very quickly because they were not taught or trained on how to manage the money they received as land compensation. The very elder community leaders emphasize this issue, *claiming that the government would not have left the farmers with the money because it is known that they will run out of money and have nowhere to go. The wages paid by the companies are insufficient to feed a family.* Keep in mind that the members of the community are employed as casual workers and are paid birr 40-65 per day. They also stated that they do not see companies hiring university graduates. They believe that professional workers should be prioritized in local communities. In general, most of the time, local communities lose their farmland as investment projects expand. This is one of the drawbacks of an investment project.

## **5.6. Strategies to Improve the Benefit of the Local Community**

First and foremost, the communities must be informed about the purpose of the investment projects. Before the projects is operational, the communities must own them. Moreover, the compensation money for giving up their resources should be sufficient to allow people to leave their jobs and sustain their livelihood. The money should not be given directly to farmers because they may misuse it and go hungry after a year or less; instead, the government should re-settle the displaced people by establishing a type of business and monitoring them until they get used to the new ways of life. Taxes paid by investors to governments should be re-invested in areas of investment or paid to local governments.

The firms should absorb local unemployment, particularly the youth and women. Social assistance and collaboration with local communities is determinantal for sustainability of the project and insure mutual prosperity. In addition, the society should be compensated for both land and environmental pollution. Agriculture as a sector or as an investment project provides a variety of social services to the local community. The government should also prioritize investment projects based on the community's interests based on the comparative advantage of the locality.

## **5.7. Investment Projects and Employees Working Environment**

From the employee's point of view, professionals are hired through a competitive process that includes nationwide job postings as well as personal recommendations. Casual workers are typically drawn from the local community. Companies lay off workers most often, and most unemployed workers stay away for two or more months. The employment profile also varies from sector to sector. For example, in the hotel industry, agency employment is typically available for unskilled females. In the manufacturing sector, both male and female skilled workers are employed. Most businesses have an open hiring process and provide equal opportunities to job applicants. Moreover, some community members claim that some firms bring in labor from elsewhere, even from abroad rather than creating job opportunities for the local youth. In nutshell, there is no explicit employment guarantee for the local community.

In terms of the wage rate and incentive packages, investors' have a differentiated scheme. The community informants perceived that resident are paid a low wage, whereas visitors from other places are paid a high wage. The informants reported that the salary is not good but bonuses at the end of every year, and workplace injuries insurance are covered by some companies. Moreover, in all the focus group discussions conducted with the people, their responses indicated that they are not happy with the benefit and salaries of their company. This discourages the local community and affect the trust between the two parties.

Training opportunities are key for knowledge transfer and increase employability and pay rate of employees. However, the practice is not common in most firms. Infarct, a few companies offer a variety of training options, including short-term training when new equipment is installed. Therefore, training and capacity building should be considered as one requirement during project approval and appropriate control mechanism should be in place.

## 6. SWOT ANALYSIS ABOUT SAVING AND INVESTMENT IN OROMIA

### 6.1 The SWOT Matrix

**Table 6. 1** The SWOT analysis

<b>Strengths</b> <ul style="list-style-type: none"> <li>• Natural resource endowment of the region</li> <li>• Good commitment of the regional government to promote investment, office reform</li> <li>• The government's willingness to resettle displaced people and support investors</li> <li>• Increased attention to agriculture (Wheat)</li> <li>• Changing Investment Policy Goals (promotion of local investors)</li> <li>• Sector reforms and restructuring</li> <li>• Establishment of investment board, investment committees</li> <li>• Accumulated experience in managing investment flows.</li> <li>• The synchronization of priority sectors with local resource and existing potentials.</li> <li>• Construction of excellent infrastructure in some areas</li> </ul>	<b>Weaknesses</b> <ul style="list-style-type: none"> <li>• Serious and pervasive corruption</li> <li>• Disgraceful bureaucracy</li> <li>• Weak law enforcement (eg. in loan repayment)</li> <li>• Lack of long-term support and control by the state</li> <li>• Limited capacity of human resource to support investors</li> <li>• Poor infrastructural provision (credit, water, road, and electricity)</li> <li>• Slow or no administrative measures for investors who fail to develop investment land</li> <li>• Lack of timely implementation of land use plans</li> <li>• The approval of investment land is fraught with bureaucracy.</li> <li>• Unpredictable investment and other policies (uncertainties are prominent)</li> <li>• Inadequate promotion strategies</li> <li>• Inefficient policy execution</li> <li>• Lack of clarity on the revenue calculation and the tax levied</li> <li>• Unstable administration (frequent change of officials)</li> <li>• Data problem for promotion (unable to tell demand &amp; supply while promoting certain sectors)</li> <li>• Inefficient logistics system</li> <li>• Due to poor coordination among sectors/ Zones', investment board could reject investment decision made by investment office</li> <li>• Poor handling of investors' complaints about tax estimation and collection</li> <li>• Shortage of productive human resources</li> <li>• Land administrators rarely planned ahead of time to prepare land for investment projects</li> <li>• Limited financial capacity to pay a compensation fee for the community</li> </ul>
<b>Opportunities</b> <ul style="list-style-type: none"> <li>• Good climate conditions</li> <li>• Abundant and trainable labor force</li> <li>• Land availability and productivity</li> <li>• Geographical location/proximity to the markets</li> <li>• Large population as source of big market</li> <li>• Duty-free imports</li> </ul>	<b>Threats</b> <ul style="list-style-type: none"> <li>• Foreign currency shortage</li> <li>• Lack of adequate finance</li> <li>• Lengthy loan application process and corrupted loan decisions</li> <li>• Pollution and manufacturing discharges (unpleasant odors in Mojo kills hotel business)</li> <li>• Disputes between the investor and the communities in some cases</li> <li>• Lack of peace and security/ input disruptions</li> <li>• Unchecked government interference in the economy</li> <li>• Rent seeking behavior of investors and officials (demanding land above standard, taking land with brokers, etc)</li> <li>• Poor working culture of the locals</li> </ul>

<ul style="list-style-type: none"> <li>• Tax holidays</li> <li>• Cheap land lease price</li> <li>• Home of cash crops (coffee, Chat)</li> <li>• Suitable investment policies and plans/ government policy of ease of doing business;</li> <li>• Construction of industrial parks,</li> <li>• Railways to Djibouti for the foreign market</li> <li>• Untapped mining potential</li> </ul>	<ul style="list-style-type: none"> <li>• Poor market integration and delisting from AGOA</li> <li>• Fluctuations in input prices</li> <li>• International economic crises</li> <li>• Limited purchasing power among the citizens\\\\\\</li> <li>• Shortage of productive human resources</li> <li>• Insufficient evidence to make necessary decisions (limited ability to conduct scientific evidence via research)</li> <li>• Absence of marketing ethics and rules of law</li> <li>• Failure of investors to comply with rules and regulations/ like failure to pay taxes, refusal to accept payment for leased land/</li> </ul>
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## 6.2. Detail Descriptions of the SWOT

### 6.2.1. Strengths

The government and investment offices are strongly committed to supporting regional investments, and the government ensures the security of investors and their property. Investment committees are well-established from regional to woreda level. In line with this, investment policy goals have been geared to promote local investors. There has been extensive reform to ensure ease of doing business, deployment of human resources, budgeting, and improving logistics. Construction of industrial parks, railways to Djibouti for the foreign market are some of the good initiatives to promote investment. Moreover, the resource mobilization system implemented in the region for instance, the well-structured taxes collection system and differentiation of the taxes from tariffs are the good move to encourage investment.

The government offers investors a quick course on how to increase their investments and boost employment. For upcoming investments, the government encourages investors to ask for additional land and borrow more money from banks. The investors are inspired to continue their good job by frequent inspections and supervision of taxation, as well as the monitoring and regulation of investment activity. There is some government support for investors, which is a strength in the investment sector. For those who are engaged in agricultural investments, the federal government pays close attention to agriculture, particularly wheat production.

### 6.2.3. Weaknesses

The government require a long way to go to resolve the problems with water and energy in some areas and sectors like hotels. Failing to take corrective actions on investors who signed investment contracts with the government, obtained land and investment licenses, but never started any investments is a challenge to make use readily available resources timely.

Unpredictable and frequently changing investment policies causes investment projects to be suspended, terminated, or canceled. Policy in terms of land acquisition, loan provision, and investment incentives for various sectors of investment projects is difficult to predict because of frequent reforms.

Institutions are failing to regulate general trading and marketing systems. The market is dominated by illegal brokers and the market system is guided by these actors. Therefore, the existing weak market performance is a serious concern for investment in the region. Recently, state intervention in the wheat market, such as setting the farm gate price (Birr 3200/Qt), has been disrupting the operations of food complex companies. Because the companies couldn't get grains by this point, they stopped their normal duty of waiting for things to be fixed as soon as possible. Failure to control traders who tamper with the input supply would increase the impurity of raw materials in manufacturing firms.

Corruption and needless long bureaucracy are pervasive to affect investment flow. There is a lack of long-term support and control and inefficient policy execution. In other words, Synergy and collaboration among various sectoral authorities is missing. This costs investors and the government time, energy, and money in service provision. The zone-level investment board, for example, led by the zone administrator, could reject investment decisions made through investment offices. Land administrators rarely plan and prepare land for investment projects.

### **6.2.3. Opportunities**

There are several prospects for different investment initiatives in Oromia region. One of the biggest opportunities, for instance, is that most investment sites have good weather and a supply of factors of production. Government-provided land and assistance with other investment materials, Specific materials are duty-free when imported and exported. Moreover, The Oromia has advantage over accessibility of human resources, market infrastructure and proximity.

### **6.2.4. Threats**

The demand for industrial goods and food items was greatly impacted by economic instability or high inflation rates. The failure of the economic functioning due to unchecked government interference in the fundamentals of the nation's economy. For instance, the food complex enterprises had to cease operations because of the recently started irrigation wheat production project due to the fixation of market pricing and altered distribution channels. To control the soaring market, the government formerly controlled the price of wheat flour. The price floor established at the end-user stage, however, was significantly lower than the price that businesses offered to traders.

Traders are subject to instability, a shortage of foreign money to enable commerce, very poor financial institutions, little purchasing power among the citizens, and an absence of marketing ethics and rules of law. False investors plunder land without investing, after receiving investment approval, using it for other purposes or renting it out, depleting the supply of inputs for investments, fleeing with the borrowed funds, or investing in other areas after gathering land and funds for a specific investment plan. Corruption, failure to pay taxes, refusal to accept payment for leased land, failure to keep receipts, concealment of payroll, disclosure of low wages or salaries, and information concealment. Furthermore, fluctuations in input prices, cause market volatility; international economic crises; and competition from other exporters are some of the major teats that worth mentioning.

Tedious bureaucracy among various stakeholders and sectors that investors must endure to launch, manage, and expand their investment projects. Both the amount of money required and the

extensive paperwork that the banking institutions want to make getting loans exceedingly risky. Conflicts inside and between regions, as well as the issue with collateral with banks, particularly development banks. The investors may be let down if there is a decline in foreign investment as a result of security issues or political unrest and a very slow response time regarding investment authorization. Rent seeking is prevalent; an inability to make choices once a low-performing investor is recognized; and a communication gap between concerned parties. Synergy is not shown in decision-making; the planning office instead gathers feedback and pinpoints issues rather than making administrative judgments.

In general, these SWOT analyses are indicative evidence for various issue pertaining investment as perceived by investors and regulatory agencies. Some of the issues identified here needs further investigation future research. In sum, Oromia has ample opportunities and strengthens to capitalize on to ensure the expansion, effectiveness, and relevance of investment.

## 7. CONCLUSIONS AND RECOMMENDATIONS

### 7.1. Conclusions

This study was designed to examine the feature of saving and investment particularly the nexus between saving and investment, trends and structures of saving and private investment, investment financing, challenges, and opportunities of investment in Oromia. Both qualitative and quantitative data at macro, meso, and micro levels have been collected and used to address these objectives.

Aggregate saving in Oromia (measured by gross domestic saving as a percent of GDP) exceeds gross domestic investment particularly since 2011/12 and it has been rising overtime. In 2021/22, the regional aggregates saving, and investment measured as a percentage of GDP were 13.5% and 22.1%, respectively. This implies that there is a potential to further increase investment in the region even using domestic resources. However, in a situation that lacks enabling business environment, efficient financial intermediaries, and complementary capital such as entrepreneurial capital and foreign currency for importing parts and raw material lacks, higher saving may not be accompanied by higher investments. Therefore, having a good source of loanable fund (saving) is a necessary but not sufficient condition for investment to boom.

The appropriate econometrics model (and even a simple scatter plot) results show that there is no strong relationship between saving and investment in Oromia which just implies the existence of capital mobility within and outside of the country following the Feldstein and Horioka (1980) hypothesis. We employed a back-casting technique to estimate the regional accounts (like GDP) of Oromia before 1999/00, which is missing, from the relationship with the national account from the overlapping periods and extended the time span of our analysis. We again confirmed our original finding about the saving-investment nexus, suggesting that our conclusion is not driven by short time data. However, weak correlation between saving and investment does not mean that domestic saving is not important for investment; rather it is still important to mobilize domestic resources and reduce reliance of foreign resources to ensure sustainability of investment.

Both personal saving and banks' credit has been considered as important sources of investment for the private sector. About 14.6% of the banks' deposit mobilization and 9.4% of loan disbursement goes to Oromia at this moment (last fiscal year, 2021/22) and the shares have been increasing overtime. However, when scales of the region are taken into account, Oromia has a lower banks' deposit per capita (Birr 6,450) and loan disbursement per capita (Birr 2,640) than that of the national averages (which are 16,792 Birr for deposit and 10,689 for loan per capita). Both nationally and as a region, considerable amount of resources mobilized locally are not made available for the private investment. Regional disparity is also prevalent in reinvesting savings mobilized in a given region partly due to centralized loan decisions of commercial banks. For instance, over the past ten years, on average, Oromia was able to get a banks' loan of Birr 0.33 for every 1 Birr it deposited in banks, which is lower than the national average (0.59). While many regional states are in a similar situation, there is some capital inflow to Addis Ababa and financing government projects. High nominal lending rate, long processing time and corruption in loan decision process, liquidity crunch, and unprecedented policy changes by the NBE are among the challenge of investment financing by banks.

With this business environment, Oromia have licensed near to 21,000 domestic and FDI projects since its existence and majority (39%) of them are in service sector while manufacturing has the

smallest share (15%). That does not seem to be in line with the ambition of structural transformation the region aims to achieve. More importantly, it is about 43% of the licensed projects in Oromia that are operational, with a slightly higher operational rate for FDI projects (54.7%) than their domestic counterparts (41.8%). Operational rate also varies by sector. Even all operational projects do not operate at their full capacity. The Capacity-adjusted operational rate of projects in Oromia is estimated to be about 27%. This is a serious problem in the region's investment landscape. Macro-economic instability (foreign currency shortage and inflation), political unrest, infrastructural problem notably electricity, corruption, atrocious bureaucracy in government systems, lack of clarity on business ideas and implementation strategies by the investors and rent seeking behavior by investors and other actors are among the major reasons behind this failure. Limited participation of local community in project appraisal and the risk of environmental pollutions in some projects are also among the issues worth mentioning.

Over the past few years (since the reform), there has been a number of steps taken by the government to relax regulatory bottlenecks and improve the business environment, with a tendency for the regional government to focus on domestic investors and promote farmers to engage in investment activities. With a good commitment of the regional government, capitalizing on the existing opportunities Oromia has as region including its geographical location/proximity to the markets, good climate conditions, abundant labor force and land, large population as source of big market, a relatively good infrastructure, and clear investment incentives will help tackle the challenges and make it an investable region.

## **7.2. Recommendations**

Based on the finding of this study, we forward some recommendations specific to the key stakeholders: federal or regional government, investors, and financial institutions.

### ***For the Government***

- **Ensure macroeconomic stability:** Government should implement appropriate fiscal and monetary policies to ensure macroeconomic stability including controlling inflation and improve foreign exchange availability. Refraining from short-sighted policies like requiring exporters to surrender 70% of foreign exchange earnings from exporter and rather working to solve the structural problems could be helpful. It is advisable to diversify export and apply preferential rate and other incentives for foreign private money transfers to use legal channels. Speeding up the liberalization of the financial market could be one potential solution to solve the root causes of foreign exchange problem.
- **Ensure the supply of adequate finance for private investment:** It is essential to ensure the supply of adequate finance for private investment by promoting saving at all levels and introducing innovating saving instruments. It is evident that considerable amount of domestic and foreign resources is channeled to the government via compulsory bond purchase by banks and other means while investors are complaining about poor infrastructure. It is advisable for the government to invest the limited resources on building of infrastructure like electricity, road, water, and other pro-poor sectors that will help crowd in private investments in the region so that more resources would be left for the private sector. Given the galloping inflation in the economy, setting a minimum deposit rate to be higher than the prevailing one could be important step. The cooperation of the local

government with financial institutions in their saving campaign and loan repayment could be another area of intervention.

- **Build investors' confidence and ensure sustainability of investment:** investors' confidence on the business environment to recover their investment and make profit is important for them to make investment decisions. Related to this, three actions are suggested. First, maintaining peace and order by consolidating the peaceful negotiations with different parties should be the first and foremost task of the government for the proper functioning of the market in general and boosting investment in particular. Restoring political stability is crucial to safeguard people and investment project in the region, build investors' confidence for further expansion, and external images. Second, investor blame that the local administrators ask money formally or informally from investors for various reasons, apart from the formal tax. It could be through an attempt to raise funds for social activity, some events of the local government or the political party or just for officials' personal reasons or use. It is necessary to avoid such kind of practices as it escalates transaction costs and poses uncertainty from the investors' perspective. Clear communication with investors beforehand is crucial for local charges and fees that has legal ground. Third, it is advisable to find out productive employment opportunities for the youth rather than allowing them to engage in unproductive employment that escalate the transaction cost of investors. Such malpractices could potentially drive investors away from the region.
- **Capacity building and stable leadership:** The regional government should reconsider mechanisms to capacitate offices that are mandated to govern investments (like investment bureau) so that they can promote, support, and regulate investment effectively. Recruit, incubate, incentivize, and empower long-serving leaders for the sector, revising the structure to have a competitive benefit package, and providing skill enhancing training opportunities for the staff, assigning the right person with relevant education are some of the suggested actions to be considered. It is also essential to assign staff with good foreign language skills like English, Arabic, and Chinese so that they can properly support foreign investors.
- **Fight corruption, ensure accountability, and bolster reforms to ease up the lengthy bureaucracies:** Fight corruption at all levels and ensure accountability is a key to improve competitiveness of the region in investment and other sectors. Commitment of the federal and regional government to leverage the existing legal framework to ensure accountability could be a good start to tackle the problem. Ensuring transparency in tax revenue calculations and other administrative procedures is imperative. Digitalize major services and reduce human-interaction, digital-based customer rating for service providers, and consolidate one-stop shops are important steps to reduce corruption. Further, the government should strengthen its organizational reforms at all levels to ease up its lengthy bureaucracies and expedite important decisions like construction permit, provision of land, and properly handing of tax and other complaints.
- **Monitoring the implementation of incentives:** The government at all levels should ensure that the investment incentives are implemented in such a way that it benefits the genuine investors, and these are not abused by corrupted investors. Ensuring the effectiveness of the investment incentive and its timeliness, designing and implementing targeted incentives for some sectors and areas within the region are desirable. The investment incentive packages

should also be attractive enough for investors to engage in priority sectors like manufacturing to meet regional and national objectives.

- **Ensure the safety of local community and the environment:** The regulatory agencies should ensure the participation of local community before approving projects so that the locals can own and benefit from the project. In addition, in a situation where land is transferred from individuals to investors, the compensation paid for the landowners should be sufficient enough to be offered with resettlement plans that ensures sustainable livelihood of the community. Compensation could be paid in terms of shares of businesses operating on the land in question or any other safe investments from which displaced people could earn a stream of stable income. The government should monitor and enforce the safety measures that firms should follow to ensure the safety of the environment and their workers. Revising the laws for the regional environmental authority to have mandates to monitor all projects operating in the regions is also important.

### ***For the Investors***

- Investors are advised to have a feasible business idea from proper research with a clear implementation strategy.
- They are advised to try to base on the available domestic resources and less dependent on imported raw materials while proposing businesses.
- Investors should have an entrepreneurial mind set who are committed to walk the talk in realizing their project idea and engage in value addition. They should refrain from rent seeking behaviors like selling of land, abuse the incentives, diverting resources, and exploiting the local community and employees.
- Discharging corporate social responsibility to contribute for the development of the hosting community is crucial for investors to be welcomed by the locals and run sustainable businesses. Having a clear discussion and engagement of the local community since the very stage of the project is vital for the community to own and protect it.
- It is also necessary for the domestic and foreign investors to comply with local and national rules and regulations as well as community standards while running businesses.

### ***For Financial Institutions (FIs):***

- Should come up with more innovative saving and loan products.
- Should leverage technologies to screen loan applicants as well as appraise, support and monitor projects so that they can reduce cost which will, in turn, to reduce lending rates.
- Should ensure transparency in the approval process of loan and foreign exchange requests.
- Should develop a policy that promotes the loan disbursement to regions which is linked, if not proportional, to the saving mobilized. Decentralizing loan decisions to districts and

branches would be helpful to reinvest resources where it is raised. That would be helpful close gaps in the sector and geographical distribution of loan disbursements and then investments.

- Keep their saving promotion strategies in domestic resource mobilization.

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## Appendix

### Appendix 1: Additional results of chapter 3.

Figure A.3.1. Comparison of saving in Oromia and national average

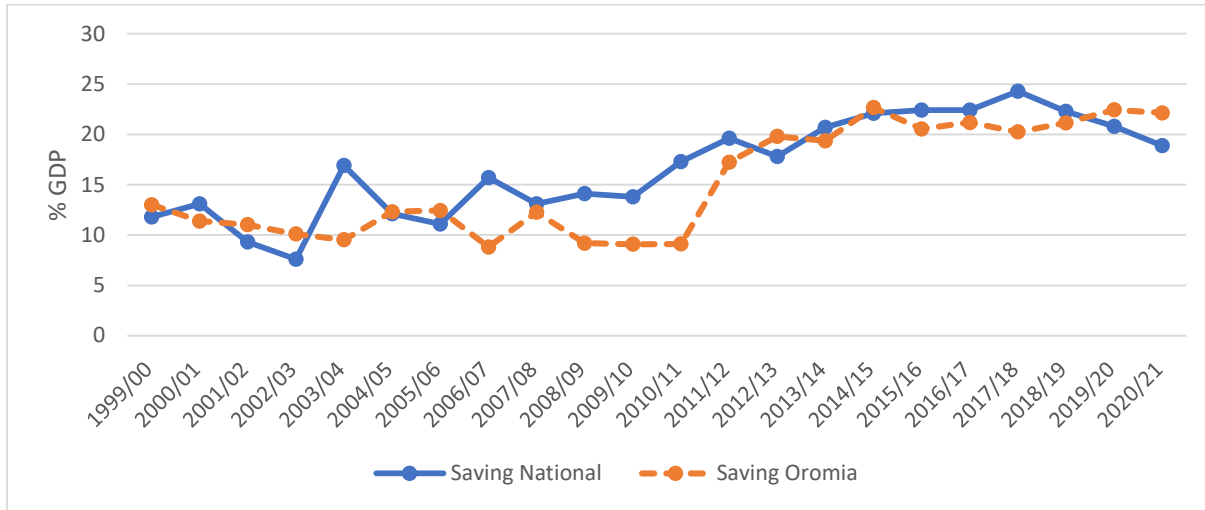


Figure A.3.1. Comparison of investment in Oromia and national average

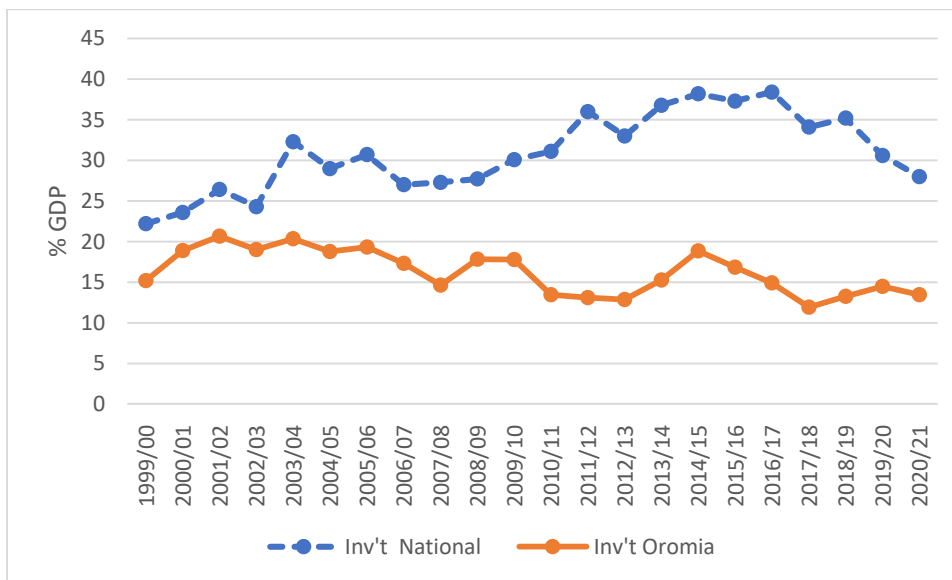


Figure A.3.3. Time series plots of main variables used in the model

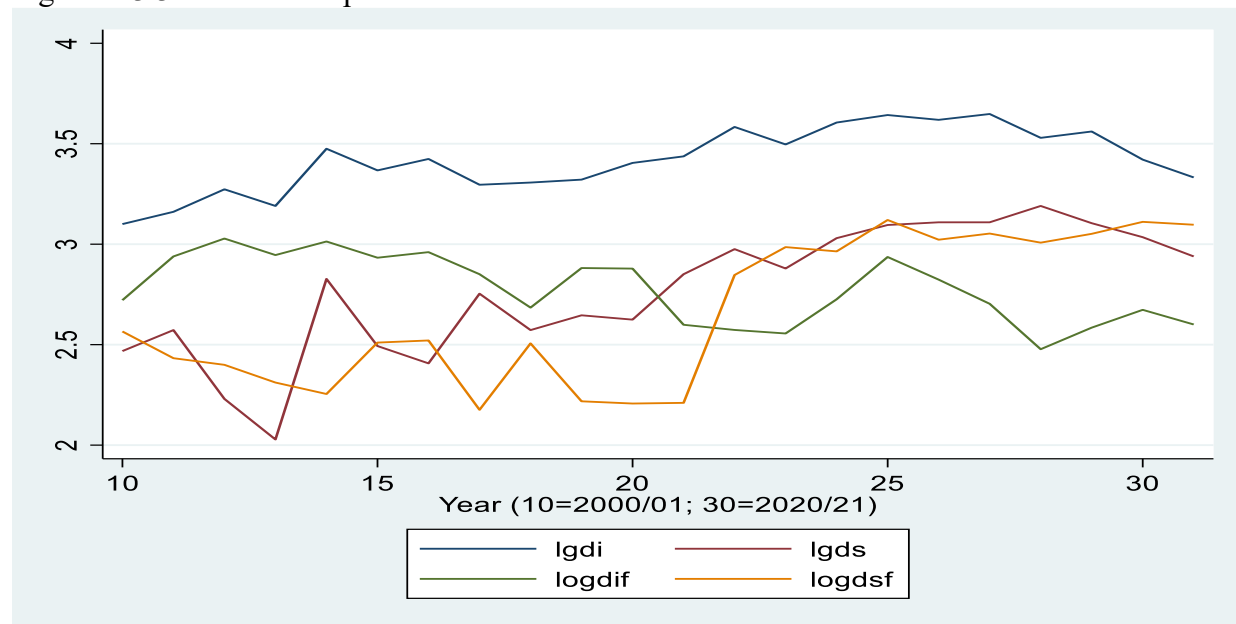


Table A.3.1: ARDL model result for national and Oromia data, since 1999/00

VARIABLES	National		Oromia	
	without trend	with trend	without trend	with trend
	(1)	(2)	(3)	(4)
L.lgdi	0.6172*** (0.1915)	0.6144*** (0.1999)		
L2.lgdi	0.2744 (0.2090)	0.2650 (0.2394)		
L3.lgdi	-0.6491*** (0.2123)	-0.6597** (0.2484)		
lgds	0.3292*** (0.1051)	0.3279*** (0.1093)		
t		0.0007 (0.0076)		-0.0142** (0.0060)
L.logdif			0.6864*** (0.2296)	0.6509*** (0.2054)
L2.logdif			-0.3944* (0.2223)	-0.4046* (0.1984)
logdsf			-0.1657 (0.0997)	0.0218 (0.1191)
Constant	1.6632*** (0.4555)	1.7306* (0.8814)	2.4083** (0.8660)	2.3264*** (0.7733)
Observations	22	22	22	22
R-squared	0.816	0.816	0.539	0.6538
Adjusted R-squared	0.773	0.759	0.463	0.572

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

Table A.3.2. Breusch–Godfrey LM test for autocorrelation

lags( $p$ )	chi2	df	Prob > chi2
1	0.187	1	0.6657
2	0.193	2	0.9080
3	0.659	3	0.8829
4	2.470	4	0.6499

Table A.3.3. Durbin's alternative test for autocorrelation

lags( $p$ )	chi2	df	Prob > chi2
1	0.145	1	0.7029
2	0.142	2	0.9317
3	0.463	3	0.9269
4	1.771	4	0.7778

Figure A.3.4. Normality test (Q-Q plot)

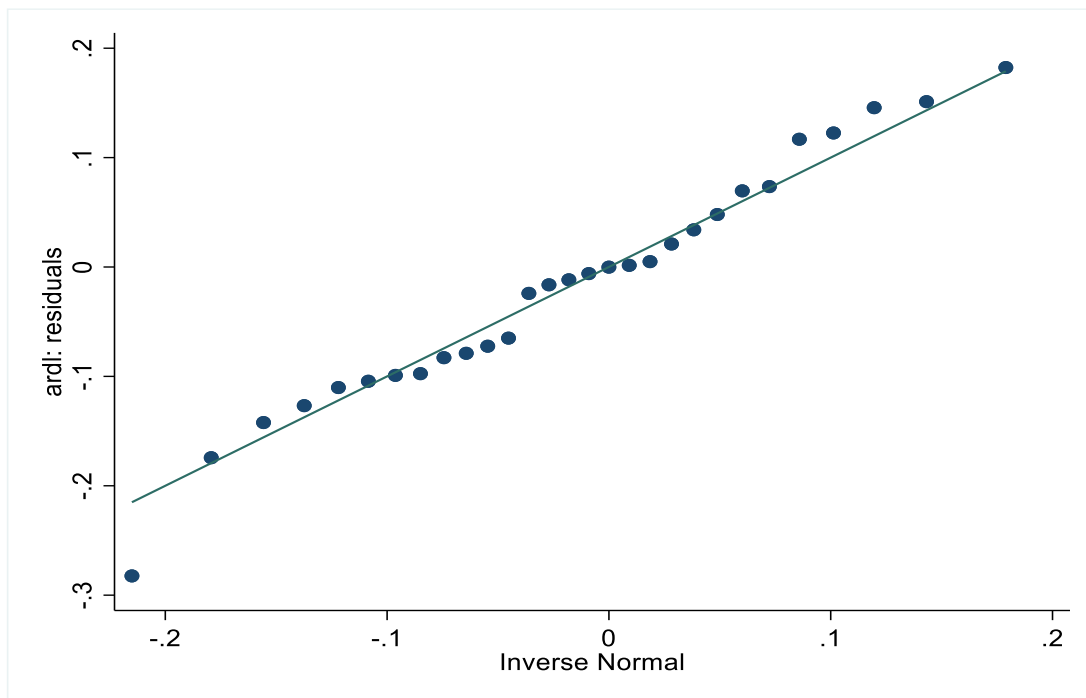


Figure A.3.5. Normality test (P-P plot)

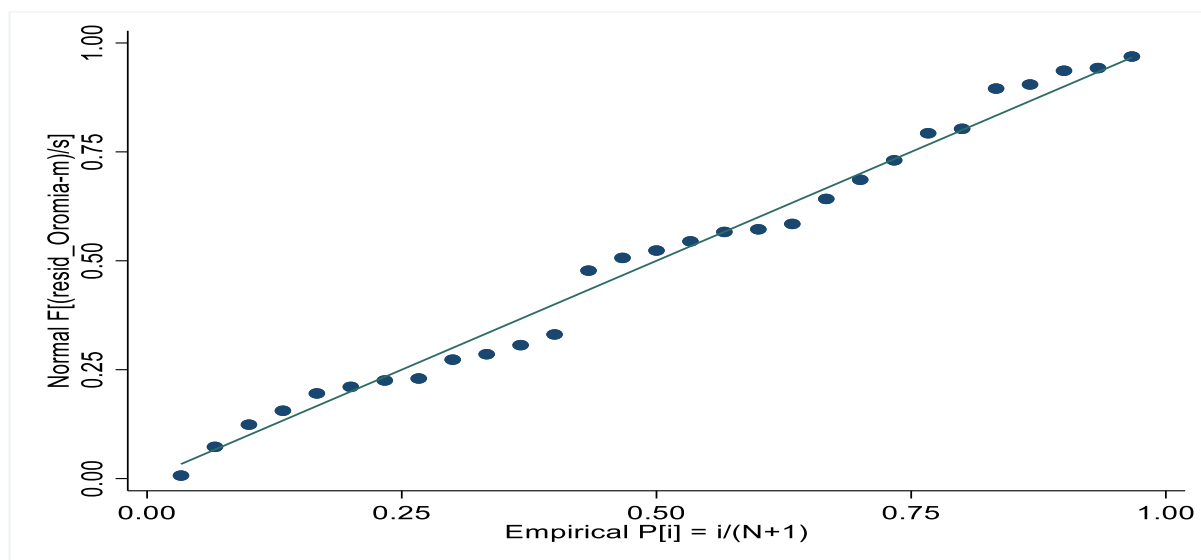
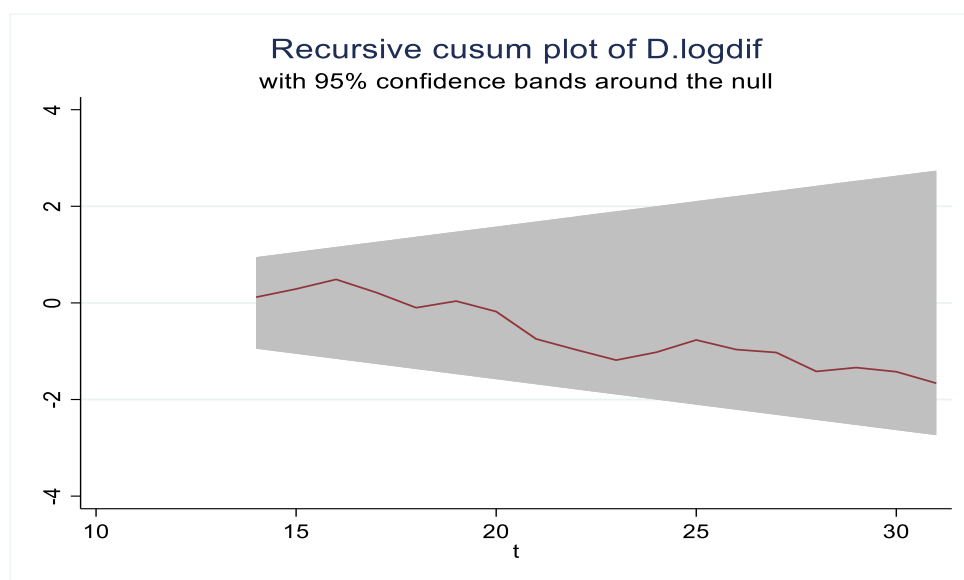


Figure A.3.6: Recursive cusum plot of the dependent variable



*Notes: t stands for Year; 10=2000/01, 30=2020/21*

Table A.3.3. Pesaran, Shin, and Smith (2001) bounds test result for Oromia data with dummy

Panel A: Without trend

Pesaran, Shin, and Smith (2001) bounds test

H0: no level relationship F = 5.367  
Case 3 t = -3.188

Finite sample (1 variables, 22 observations, 2 short-run coefficients)

Kripfganz and Schneider (2020) critical values and approximate p-values

	10% I(0)	I(1)	5% I(0)	I(1)	1% I(0)	I(1)	p-value I(0)	I(1)
F	4.396	5.338	5.641	6.762	8.859	10.425	0.058	0.099
t	-2.607	-2.976	-2.994	-3.391	-3.821	-4.278	0.035	0.071

Panel B: With trend

Pesaran, Shin, and Smith (2001) bounds test

H0: no level relationship F = 5.662  
Case 5 t = -3.343

Finite sample (1 variables, 22 observations, 2 short-run coefficients)

Kripfganz and Schneider (2020) critical values and approximate p-values

	10% I(0)	I(1)	5% I(0)	I(1)	1% I(0)	I(1)	p-value I(0)	I(1)
F	6.190	7.146	7.753	8.896	11.797	13.412	0.127	0.184
t	-3.206	-3.507	-3.616	-3.946	-4.510	-4.898	0.080	0.128

Table A.3.4. Pesaran, Shin, and Smith (2001) bounds test result for national full data

Panel A: Model 1 (without trend)

Pesaran, Shin, and Smith (2001) bounds test

H0: no level relationship F = 2.627  
Case 3 t = -1.128

Finite sample (1 variables, 27 observations, 4 short-run coefficients)

Kripfganz and Schneider (2020) critical values and approximate p-values

	10% I(0)	I(1)	5% I(0)	I(1)	1% I(0)	I(1)	p-value I(0)	I(1)
F	4.250	5.201	5.410	6.531	8.336	9.865	0.272	0.389
t	-2.569	-2.944	-2.942	-3.343	-3.726	-4.176	0.622	0.707

### Panel B: Model 2 (with trend)

Pesaran, Shin, and Smith (2001) bounds test

H0: no level relationship F = 1.508  
Case 5 t = -1.349

Finite sample (1 variables, 27 observations, 4 short-run coefficients)

Kripfganz and Schneider (2020) critical values and approximate p-values

	10% I(0)	I(1)	5% I(0)	I(1)	1% I(0)	I(1)	p-value I(0)	I(1)
F	5.946	6.923	7.380	8.535	10.986	12.577	0.764	0.831
t	-3.147	-3.458	-3.538	-3.873	-4.372	-4.756	0.765	0.804

Table A.3.5. Pesaran, Shin, and Smith (2001) bounds test result for Oromia full data

### Panel A: without trend

Pesaran, Shin, and Smith (2001) bounds test

H0: no level relationship F = 3.396  
Case 3 t = -2.499

Finite sample (1 variables, 27 observations, 1 short-run coefficients)

Kripfganz and Schneider (2020) critical values and approximate p-values

	10% I(0)	I(1)	5% I(0)	I(1)	1% I(0)	I(1)	p-value I(0)	I(1)
F	4.308	5.171	5.442	6.441	8.234	9.549	0.176	0.265
t	-2.606	-2.965	-2.964	-3.347	-3.707	-4.133	0.121	0.209

### Panel B: with trend

H0: no level relationship F = 2.604  
Case 5 t = -2.258

Finite sample (1 variables, 27 observations, 1 short-run coefficients)

Kripfganz and Schneider (2020) critical values and approximate p-values

	10% I(0)	I(1)	5% I(0)	I(1)	1% I(0)	I(1)	p-value I(0)	I(1)
F	6.044	6.894	7.424	8.413	10.802	12.119	0.535	0.632
t	-3.198	-3.488	-3.569	-3.882	-4.350	-4.706	0.410	0.505

Figure A.3.7. Scatter plots of Oromia aggregate saving and investment data, 1999/00-2020/21

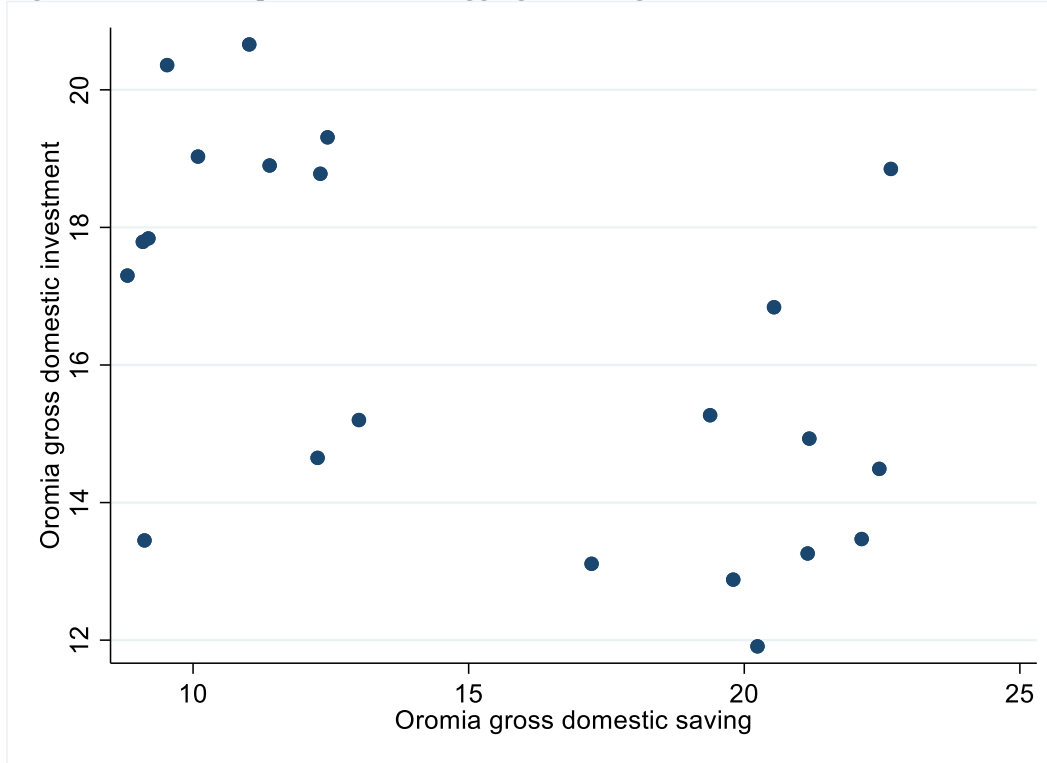
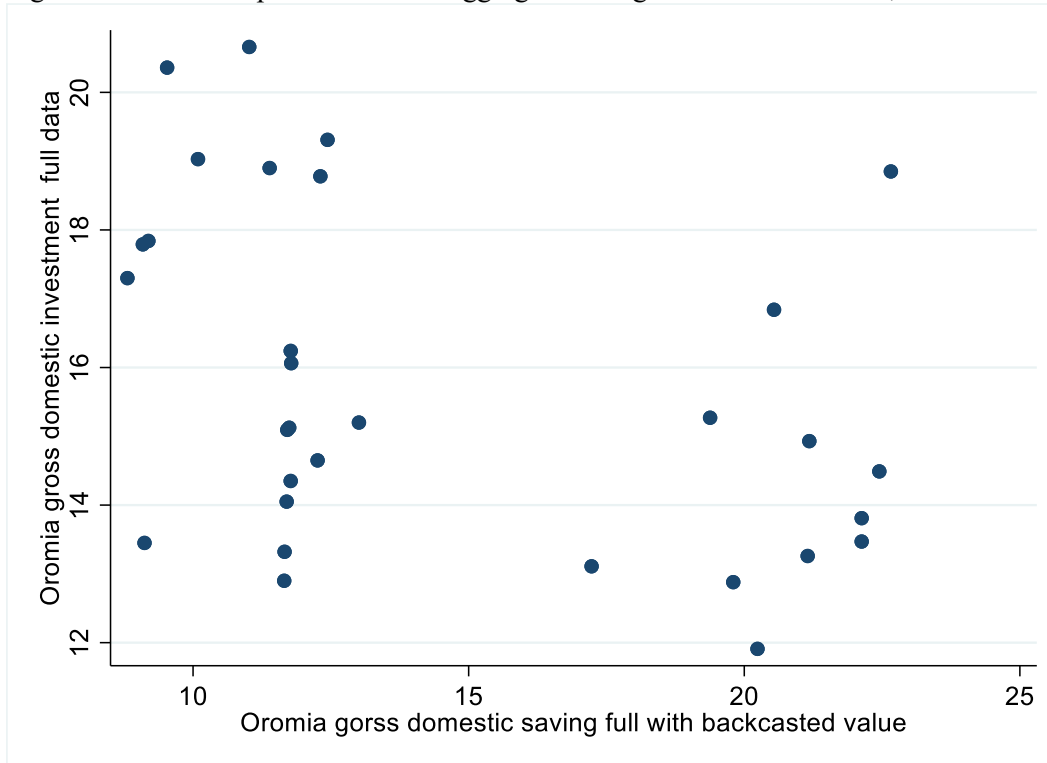


Figure A.3.8. Scatter plots of Oromia aggregate saving and investment data, 1991/92-2021/22



## Appendix 2: Additional results of Chapter 4

Table A.4.1. Bank branches and share of region's as of June 30, 2022

Types of Bank	Region														Bank's Share
	Gambela	Ben Shangul	Harari	Afar	Somali	Dire Dawa	Tigray	South N/ N	Amhara	AA	<b>Oromia</b>	Sidama	S/W/R/S	Total	
Public banks															
CBE	8	13	8	19	45	21	121	259	370	429	<b>622</b>	6	2	1923	22.35
DBE	1	1	1		2	1	9	17	18	6	<b>27</b>			83	0.96
Sub Total	9	14	9	19	47	22	130	276	388	435	<b>649</b>	6	2	2006	23.31
Private banks(22)	46	27	49	46	72	88	480	568	972	2416	<b>1779</b>	50	6	6599	76.69
Grand Total	55	41	58	65	119	110	610	844	1360	2851	<b>2428</b>	56	8	8605	100.00
Region's Share	0.64	0.48	0.67	0.76	1.38	1.28	7.09	9.81	15.80	33.13	<b>28.22</b>	0.65	0.09	100.00	

Source: NBE

### Appendix 3: Additional results of Chapter 5

Figure A.5.1. Level of employment by FDI Projects overtime (National)

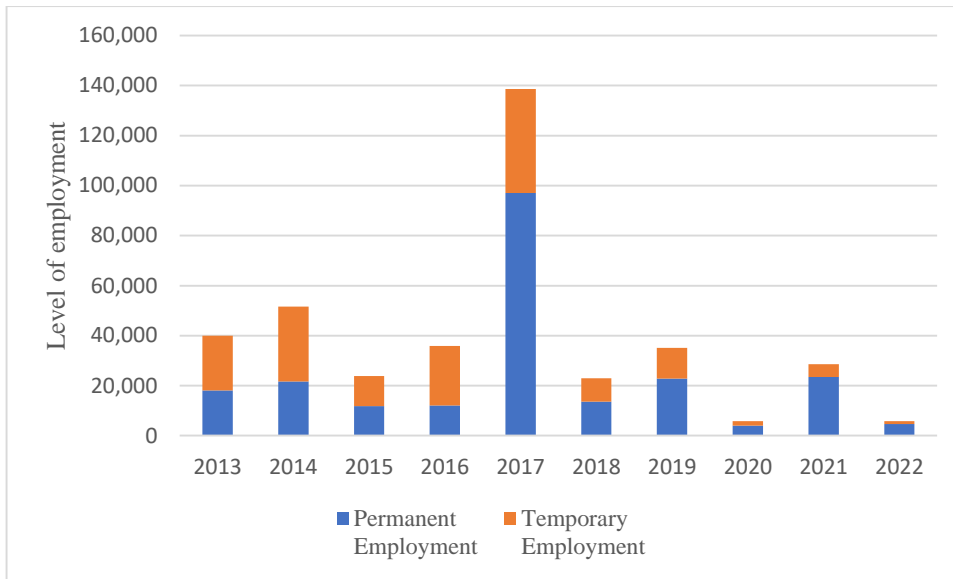


Table A.5.1. Top 10 countries invested in Ethiopia based on their capital invested

Rank	Country of Origin	Total	Pre-Implement ation	Implementati on	Operation			
		No of Projs	No of Projs	No of Projs	No of Projs	Capital in '000' Birr	Perm Empl.	Temp Empl.
1	China	1,489	334	172	983	54,148,158	173,589	101,485
2	India	364	75	65	224	4,955,694	25,637	32,315
3	USA	227	39	49	139	2,204,811	4,201	5,106
4	Sudan	288	115	66	107	9,013,837	3,802	3,753
5	Turkey	165	26	36	103	9,499,286	15,176	6,747
6	Britain	120	27	24	69	635,628	2,571	1,865
7	Netherlan ds	103	15	23	65	2,660,543	13,218	6,120
8	Italy	77	14	14	49	617,586	12,949	14,053
9	Saudi Arabia	87	21	18	48	14,912,887	14,069	21,452
10	South Korea	62	7	10	45	675,696	3,712	6,328