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Private Sector Development in Ethiopia

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Abstract

The role of the private sector in driving sustainable and inclusive growth, poverty reduction, and creating jobs is indispensable. In order to effectively use the opportunities available for sustainable development and transformation of the Ethiopian economy and to further leverage the private sector, it is important to examine the structure and performance of private sector development, identify important bottlenecks and challenges, and further investigate its contribution to the economy. A time series Autoregressive Distributed Lag (ARDL) model was employed using secondary data collected from various official sources from 1991 to mid-2021. The result shows that in response to successive policies and strategies, an increment trend in private sector investment project was observed from 2003 onwards. However, the majority of the investment has been carried out by domestic investors. The implementation rate of projects in all development plan periods has been very low and showed a decline in agriculture sector investment from 2000 onward. Although promising signals indicate that the industry sector has begun to emerge over the last few years, with less participation of domestic private investors in the manufacturing sub-sector and no or little agriculture sector investment, this indicates a less nascent structural change to the productive sector of the economy. The result further shows domestic private sector investment has not yet been channelled into the productive sector and export market, which has a trickle-down effect towards industrialization and structural transformation of the economy and plays a less satisfactory role in employment generation, export, and economic growth of the country. The ARDL model revealed that the real effective exchange rate and credit have positive and significant effects both in the short and long runs. On the other hand, government expenditure and real interest rate were found to be positive and significant only in the long run. The results suggest that macroeconomic policies should be aligned with country's comparative advantage. To this end, encouraging a high-value export-led

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manufacturing sector and thereby strengthening Ethiopia's overseas purchasing power (improving the negative real effective exchange rate), undertaking government expenditure on capital investment (such as preferably on physical infrastructure and the development of industrial parks), and providing adequate financial services will leverage private sector investment in Ethiopia.

Key words: Privet sector investment, trends, challenges, ARDL model, Ethiopia.

JEL Classification: 0.2 & 1.6

1. Introduction

The role of the private sector in driving sustainable and inclusive growth, poverty reduction, and creating jobs in developing countries is indispensable. For instance, a report by the European Commission (EC) revealed that the private sector provides approximately 90% of jobs in developing countries (EC, 2014). The sector is also important in contributing to the growth of gross domestic investment and allocating resources efficiently (Nwakoby and Bernard, 2016). The private sector is, thus, identified as an essential stakeholder in fighting poverty, creating employment opportunities, ensuring long-term economic growth, and hence providing a pathway towards inclusive economic growth and transformation of the economy.

In Ethiopia, the private sector plays a leading role in the structural transformation process towards industrialization and hence, has been given much emphasis by the Government of Ethiopia (GoE) over the last two decades. This was noticed in several national policy documents, including the Industrial Development Strategy (IDS) (2002); Sustainable Development and Poverty Reduction Program (SDPRP) (2002/2003-2004/2005); Plan for Accelerated and Sustained Development to End Poverty (PASDEP) (2005/2006-2009/2010); Growth and Transformation Plan I (GTP-I) (2010/2011-2014/2015); and Growth and Transformation Plan II (GTP-II) (2015/2016-2019/2020). Particularly, during GTP-I and II periods, the government recognized the key role of private sector development in the process of economic development of the nation and spurred its engagement in the productive sectors of the economy. In response to this, various administrative, institutional, and policy reform measures have been taken to leverage the private sector's involvement in the productive sector of the economy, particularly, in the manufacturing sector (MoFED, 2010; PDC, 2016).

In response to the 2018 political reform in the country, the Ethiopian government introduced some restructuring measures to stimulate the performance of major economic sectors and made changes in institutional arrangements. In connection to with this, the government formulated a three-year Home-Grown Economic Reform (HGER) interim plan that emphasized the role of private sector development in sustaining the economic growth trajectory of the country. HGER serves as a bridge between the GTP–II and the Ten Years’ Development Plan (TYDP) (2021-2030). The TYDP aims to sustain the rapid economic growth achieved during GTP-I and GTP-II by addressing key strategic pillars: ensure quality economic growth and shared prosperity; improve productivity and competitiveness; undertake institutional transformation; strengthen the technological capability and digital economy; ensure private sector leadership in the economy; ensure equitable participation of women and children; enhance access to justice and efficient civil services; build a climate-resilient green economy; and strengthen regional peace building and economic integration. The plan gives due consideration to private sector development, aiming to strengthen their participation in key productive sectors in the years to come. However, the potential role of the private sector in sustainable development and the structural transformation of the economy were not fully optimized until recently.

Despite policy support over the last two decades, the contribution of the private sector to the national economy, as compared to the public sector is less satisfactory. The economic growth that the county registered in the last decade has been largely driven by public investments such as transport, energy, and social services (EEA, 2015; WB, 2016b). Consequently, the share of public investment in GDP increased from 5 percent in the early 1990s to an average of approximately 15 percent in 2018/2019 (Mulu, 2019). According to the World Bank, Ethiopia recorded the third-highest public investment but the sixth-lowest private investment in the world. Such types of huge public investment might complement private sector development or have “crowding in” effects due to the expansion of crucial infrastructure. At the same time, it might also create “crowding out” effects due to the shortage of loanable funds and foreign exchange at the central bank (WBa, 2016). Therefore, to identify the key macroeconomic determinants of private investment in the country, more information is required on these factors.

Ethiopia’s private sector is predominantly characterized by small-scale, informal, and service-oriented businesses mostly operating in domestic markets where returns are high and quick. The sectoral distribution of the domestic private sector shows that investors are not vigorously entering the productive sectors

(manufacturing and agriculture) and the export market, which are critical pathways toward industrialization and structural transformation. Instead, most domestic private investors are increasingly concentrated in the service sector and/or domestic market (Mulu, 2019). For instance, during the GTP-I period, from a total 123 operational domestic private investment projects that received investment licenses from regions, 88 (71%) projects were engaged in the service sectors, 21 (17%) projects in the manufacturing sector, and 14 (11%) projects in the agriculture sector (NPC, 2016). This indicates a need to identify weaknesses and constraints hindering the domestic private sector from robustly entering the productive sectors, improve the country's export trade competitiveness, and build its capacity for resilience to shocks.

According to Ambachew (2010) and Amanu (2020), the main factors influencing Ethiopian private sector development include: domestic market size, return to capital, resource availability, degree of trade openness and liberalization, infrastructural facilities, macroeconomic and political instability, incentive packages, and infrastructural and institutional facilities. Furthermore, studies by Kolli (2010), Mulu (2019), Solomon (2001), and TAK-IRDI (2016) outlined weaknesses of the role of private sector development and its role in economic transformation in Ethiopia in the short run. In contrast, there are virtually no specific nationally representative studies that extensively explored the long-term trends, challenges, and policy options and examined the role of the private sector in the economic development process over the last three decades, thereby directing future needed policy intervention in Ethiopia. In response, this study aims to examine the structure and performance of private sector development from 1991/1992 to 2020/21, identify important bottlenecks and challenges, and further investigate its contribution to the economy over the last three decades, and propose implementable policy recommendations to play a more pronounced role in the national economy.

2. Materials and Methods

In this section, the data sources for the study, data acquisition approaches, methods of data analysis, and model justification and specification are discussed sequentially:

2.1 Data Type and Sources

The main data used for the study were collected from various official sources, such as the National Labor Force Survey, Primary Manufacturing Survey, Enterprise Survey, Phone Survey, World Development Indicators of the World Bank, and Ethiopian Investment Commission (EIC) databases. In addition, annual reports of the Central Statistical Agency (CSA), National Bank of Ethiopia (NBE), Planning and Development Commission (NDC), and Ministry of Finance (MoF) were consulted.

An extensive desk review of existing policies, strategies, programs, and plans for private sector development in Ethiopia was conducted. This review was performed to evaluate the effectiveness of policies, strategies, programs, and plans designed to promote private sector investment over the last three decades. The study also consulted various development plans namely: IDS (2002), PASDEP (2005/2006–2009/2010), GTP I (2010/2011-2014/2015), GTP II (2015/2016-2019/2020), and TDPP (2020/2021-2029/2030). Furthermore, pertinent sources, such as academic journals and books, annual reports, and policy brief papers, relevant to the study were critically reviewed.

2.2 Method of Data Analysis

To address the objectives of the study, a combination of descriptive and econometric analyses was applied. The theoretical framework and econometric model specification are explained and specified in subsequent sections:

Theoretical framework: This study considered two macroeconomic theories, namely: the multiplier and acceleration theories of investment, as a theoretical framework. Multiplier theory considers investment to be a multiplier effect of the growth of the national economy (Nipun, 2018). The theory states that when the national economy of a nation increases, investment is expected to increase. This theory is silent about the effects of induced investment. In reality, the investment might not instantaneously respond to the change in the national economy, or it might also induce growth rather than have the resultant effect. The acceleration principle, on the other hand, explains more about the implications of induced investment. It tells more about how total output or income can bring about additional investment spending. Put simply, this explains why an increase in national income often leads to a disproportionate increase in investment spending. Indeed, it describes why the amount of investment in an economy does not depend on the absolute level

of business activity but on whether the activity level is increasing or decreasing. Subsequently, it clarifies that if there is a change in the national income or output of an economy, then, it tends to induce a change in investment. The acceleration posits that a small change in national income or output in such an economy will lead to a greater (accelerated) change in investment in the economy. It describes the accelerated effect on investment of a small change in the demand for or output, that is, an increase in sales of consumer goods in such an economy (Nipun, 2018). Following Ayeni (2020), for this study, macro variables that determine private investment or the nature of the response of investment are introduced to simple accelerated theory. Based on both theoretical and empirical literature, private sector investment in this particular study is explained as follows:

$$TPI_t = f(LTPI, RGDP, UNEMPT, REER, GOVEX, TOT, CREDIT, INFL, RIR)$$

Where: TPI=Total Private Investment, LTPI = lagged value of TPI, RGDP = Real gross domestic product, UNEMPT = Rate of Unemployment, REER= Real Effective Exchange Rate, GOVEX = Government Expenditure, TOT = Terms of Trade Index, CREDIT = Credit provided to private sector, INFL= Inflation, and RIR = Real Interest Rate.

Autoregressive Distributed Lag (ARDL) Model Justification and Specification: The ARDL model proves to be a suitable method to estimate the influence of time lag effects of explanatory variables in multivariate time series analysis (Pesaran 2001). Unlike the competing VAR models, the ARDL model treats the parsimonious lags of the right-hand variables as an independent variable (Pesaran and Shin, 1999). For this reason, the only cointegration and error-correction method that allows some of the independent variables to be nonstationary (I (1)) and some to be stationary (I (0)) is the ARDL bounds testing approach. In other words, the ARDL approach to cointegration has the advantage of avoiding the classification of variables (the independent variables) of interest into I(0) or I(1), and unlike conventional cointegration tests, there is no need for unit root or stationary pretesting (Pesaran et al., 2001). Therefore, to estimate the long-term relationship between private investment and repressors, the ARDL model is selected for the study. ARDL model involves two stages. In the first stage, it examines whether there is a long-run relationship between the variables under investigation. Second, it estimates the coefficient of the short-run relations and the associated Error Correlated Models 6.

In order to put the dependent and independent variables on the same level and to make the econometric estimation robust, the differencing of all variables

involved has proven to be crucial. Therefore, differenced values imply changes in the variables, and interpretations of coefficient estimates become more logical. Moreover, the tabulated F values (Pesaran and Shin, 2009) have upper and lower bounds, where the upper bound assumes that all the variables are I(1) stationary and the lower bound assumes that all the variables are I(0) stationary. Therefore, examining whether a variable is I(1) or I(0) stationary, which requires differencing, helps to come up with a conclusion in the case where the calculated F-statistics lie within the upper and lower bounds. Based on what has been brought up earlier, the ARDL model for constraints on private sector investment is given as follows:

$$\begin{aligned} \Delta \ln TPI = & \beta_0 + \sum_{i=1}^j \beta_1 \Delta \ln TPI_{t-j} + \sum_{i=1}^k \beta_2 \Delta \ln RGDP_{t-k} + \sum_{i=1}^m \beta_3 \Delta \ln UEMPT_{t-m} \\ & + \sum_{i=1}^q \beta_4 \Delta \ln REER_{t-q} + \sum_{i=1}^z \beta_5 \Delta \ln GOVEX_{t-z} \\ & + \sum_{i=1}^f \beta_6 \Delta \ln TOT_{t-f} + \sum_{i=1}^h \beta_7 \Delta \ln CREDIT_{t-h} \\ & + \sum_{i=1}^l \beta_8 \Delta \ln INFL_{t-l} + \sum_{i=1}^n \beta_9 \Delta \ln RIR_{t-n} + \mu_1 \ln TPI \\ & + \mu_2 \ln RGDP + \mu_3 \ln UEMP + \mu_4 \ln REER + \mu_5 \ln GOVEX \\ & + \mu_6 \ln TOT + \mu_7 \ln CREDIT + \mu_8 \ln INFL + \mu_9 \ln RIR + e_i \end{aligned}$$

Where TPI: Total private investment (the dependent variable) measured in million USD, RGDP: Real Gross Domestic Product (a proxy for demand conditions in the economy); GOVEX: Government Expenditure on investment (a proxy for public investment); UEMPT: Unemployment Rate (proxy for factor availability); CREDIT: Credit to private sector (proxy for liquidity constraints); INFL: Rate of inflation (proxy for macroeconomic uncertainties/instability); REER: Terms of Trade Index (proxy for export competitiveness); TOT: Terms of Trade (proxy for trade balance; RIR; and Real Interest Rate (proxy for demand for saving)

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ and β_7, β_8 and β_9 are short-run coefficients to be estimated, $\mu_0, \mu_1, \mu_2, \mu_3, \mu_4, \mu_5, \mu_6, \mu_7$ and μ_9 are long-run coefficients, and t spans from 1991/1992 to 2020/21 time periods.

To determine whether there is a long-run relationship among the variables in co-integrating equation (1), the null hypothesis of no long-run relationship (i.e. H_0 : the long run coefficients are jointly equal to zero) against the alternative hypothesis of a long-run relationship (i.e., H_1 : the long-run coefficients are jointly different from zero) using the F-statistic (Wald test) test. The decision rule is that if the computed F-statistic is greater than the upper critical bound, and then the null hypothesis can be rejected, suggesting co-integration. On the other hand, if the computed F-statistic is less than the lower critical bound, the test fails to reject the null hypothesis, and it can be concluded that there is no co-integration. Given the case where the test statistic lies within the lower and upper critical bounds, conclusive inference can only be made once the order of the integration of the underlying regressors is known (Pesaran et al., 1999).

3. Results and Discussions

The results of the study are discussed and presented in the following order. First, policies and programs aimed at promoting private sector development and their challenges and effectiveness are thoroughly discussed. Second, factors that hinder private sector participation in different sectors over the last three decades were analyzed. In the third part, the contribution of private investment to the Ethiopian economy over the last three decades was described. Finally, the long- and short-run relationships between key macroeconomic determinants and private investment were estimated, inspected, and interpreted.

3.1 Private-Sector Development in Ethiopia

Over the last three decades, the government of Ethiopia has been implementing various policies and strategies. It started with the Industrial Development Strategy (IDS), which is also in practice to date. Subsequently, a five-year Sustainable Development and Poverty Reduction Program (SDPRP) was implemented from 2002/2003-2004/2005. Then, a Plan for Accelerated and Sustained Development to End Poverty (PASDEP) was implemented from 2005/2006 to 2009/2010, which was sequentially followed by the Growth and Transformation Plan-I (GTP-I) (2010/2011 to 2014/2015) and the Growth and Transformation Plan-II (GTP-II) (2015/2016 to 2019/2020). Currently, based on GTP I and GTP II progress evaluation results and the Home-Grown Economic Reforms (HGER) policy direction, the government designed and implemented the

Ten-Year Development Plan (TYDP) in 2020/2021 to be implemented until 2029/2030.

In 2002, the government of Ethiopia implemented the first five-year development plan called the Sustainable Development and Poverty Reduction Program (SDPRP) (2002/2003- 2004/2005). During the year, the government designed and implemented a comprehensive separate strategy known as the Industrial Development Strategy (IDS). The strategy recognized the private sector as an engine for fostering industrialization and augmenting structural transformation process of the economy. The strategy clearly stated that the government tasks for promoting private sector development: (i) creating a conducive business environment at all levels for all, ii) providing direct support to strategically selected subsectors of private sector investment such as: textile and apparel, meat, agro-processing industries, construction, and Micro and Small Enterprises (MSEs). In addition, IDS provides a range of support programs (such as economic incentives and capacity building) for cluster development in the above priority areas of private investment in Ethiopia (FDRE, 2002).

The PASDEP (2005/2006 to 2009/2010) builds on policy support initiatives in the SDPRP and IDS aiming for the development of the private sector for the structural transformation and industrial development of the country. The plan envisaged creating a conducive business environment for private sector investment by providing multifaceted support, undertaking various reforms (such as institutional, regulatory, and financial sectors), and strengthening the complementary role of the government with greater domestic and foreign private participation. The plan considers private sector development as a key for realizing the development of the industrial and export sectors of the economy. The plan identified key sectors for private sector investment participation that include (i) agricultural and rural sector, (ii) infrastructure, construction, power generation, and downstream telecommunication services, and (iii) social sectors such as private primary and secondary schools in urban areas, technical and vocational training, and higher education, as well as opportunities in the private provision of health care services. As outlined in the plan, the role of the government is to support and fill the gaps that could not be adequately covered by the private sector and maintain macroeconomic stability, stable exchange rate, and lower inflation rate, which are integral parts of private sector development in Ethiopia (MoFED, 2006).

In GTP-I (2010/2011 to 2014/2015), the government aimed to ensure macroeconomic stability to create a conducive investment environment for the private sector development such as: enabling the manufacturing industry to play an

active role in the economy, revising the investment code to encourage further private sector investment, undertaking privatization of government-owned industries to the private sector, maintaining international competitiveness, and providing support and create enabling environment for private sector engagement on productive subsectors particularly manufacturing subsectors. It also aimed to provide direct support on capacity-building programs such as twinning programs, benchmarking kaizen, industrial input supply, and skill development programs for the private manufacturing industry sector. Moreover, the plan clearly states boosting government investment in the development of industrial parks with the aim of transferring to private investors with utmost transparency and accountability (MoFED, 2010).

Under GTP-II (2015/2016-2016), the plan builds on the GTP-I and recognizes private sector development as a key for creating employment jobs and enhancing income on a sustainable basis. The plan also clearly explains the vision to become a leader in light manufacturing (sub) sector in Africa. The plan gives special attention to utilizing opportunities available for sustainable development and transformation of domestic investors. To this end, the plan envisages redirecting domestic private investors from service and construction subsectors toward manufacturing and providing institutional support for the transition of small manufacturing enterprises to medium and large scales. The development of aggressive industrial parks and agro-processing zones in different parts of the country contributed to addressing the bottlenecks related to production and logistic constraints and thereby, enhance the productivity, quality, and competitiveness of both domestic and foreign investors. In addition, the plan aims to create conducive environment for Foreign Direct Investment (FDI) and attract investment in the key sectors of the economy (manufacturing). To this end, the revision of investment regulation was endorsed and approved by parliament and the council of Ministers in 2012 (PDC, 2016). In contrast to PASDEP, GTP-I and II placed less emphasis on balanced private sector investment in the productive sector of the economy (both agriculture and industry).

The ongoing TYDP (2020/2021 to 2029/2030) took private sector-led economic growth as one of the strategic pillars. It aims to create a conducive investment atmosphere and incentivize domestic investors aiming to strengthen their participation in the key productive sectors of the economy; building strong and market-led public-private partnerships to ensure the establishment of an inclusive and pragmatic market economy; enhancing the provision of quality infrastructure to attract quality FDI inflow to the county; identifying and optimizing new sources of

growth; empowering and stimulating private sector investment in strategic key areas that provide inclusive growth, and emphasizing public-private partnerships on problem-solving innovations and research activities for inclusive growth and assuring sustainable development. Moreover, the plan also aims to strengthen the role of FDI in industrial parks to make Ethiopia's growth momentum more sustainable in the years to come (PDC, 2020).

3.1.1 Structure and Performance of Private Sector Investment across Development Plans

According to Ethiopian Investment Commission (EIC, 2021), a total of 113,127 private sector investment projects⁴ were registered across all regional states and city administrations between 1991/2002 and mid-2021. Among the projects, the majority of the investment is owned by domestic private investors 94.75% (107,189 projects), and the remaining 5.25% (5,938 projects) is owned by foreigners. Out of the total investment projects registered, 7.87% or 8,901 projects are in the implementation (construction) stage, 43,363 projects or 38.33% have launched operations, while the remaining 59,400 projects or 52.5% are pre-implementation (licensed investment) projects by mid-2021. This means that less than half (46%) of the total registered private investment projects are converted into actual investments, indicating the slow pace of implementation of private sector investment projects over the past three decades.

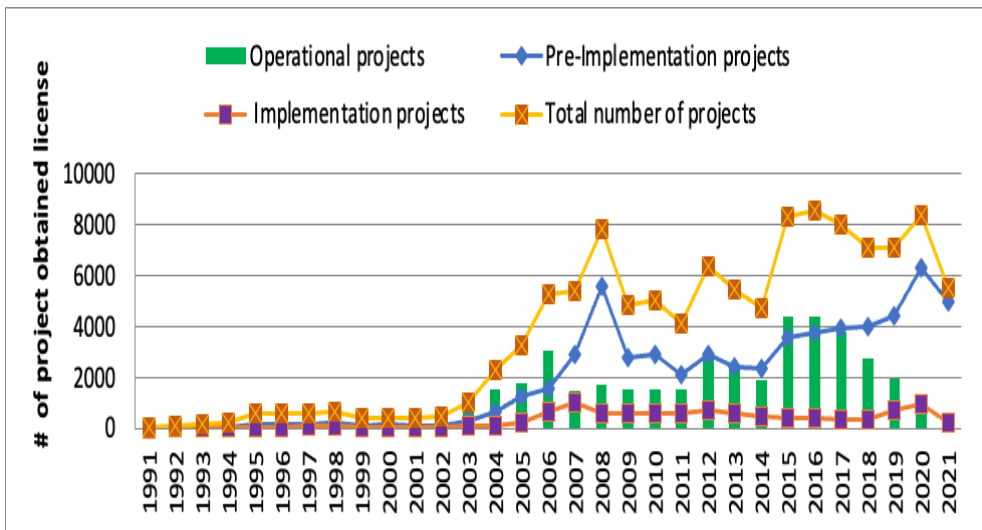
Figure 1 below shows the trends in total private sector investment projects under four different project stages over the last three decades. In response to the IDS in 2002, which clearly states the government's commitment to encouraging private sector investment in Ethiopia, a large number of investment projects (both domestic and foreign investment) have been increasing from 2003 onwards. However, the number of operational projects has been very low and has declined over recent years (from 2015 onwards).

According to the official figures from the EIC (2021), private sector investment registered a total capital inflow of 617.3 billion birr from 1991/2002 to mid-2021, of which 238-billion-birr capital (38.57%) invested during GTP-II periods, which is the leading of all development plan periods, followed by the capital invested 159.2 billion birr (25.79%) during GTP-I and 115.8 billion birr (18.76%)

⁴ According to project stage of development, private sector investment projects are classified into different status; pre-implementation (licensed projects), implementation (under-construction), and operational projects (EIC, 2021)

during PASDEP periods respectively. However, the capital invested in private sector investment decreased to 51.9 billion birr (8.41%) at the beginning of the TYDP period. This implies that the total capital invested by private sector investment is leading during the GTP-II period in response to the policy direction that placed much emphasis on directing private sector investment toward manufacturing sector of the economy.

Figure 1: Operational status of private sector investment projects, 1991/1992-2021

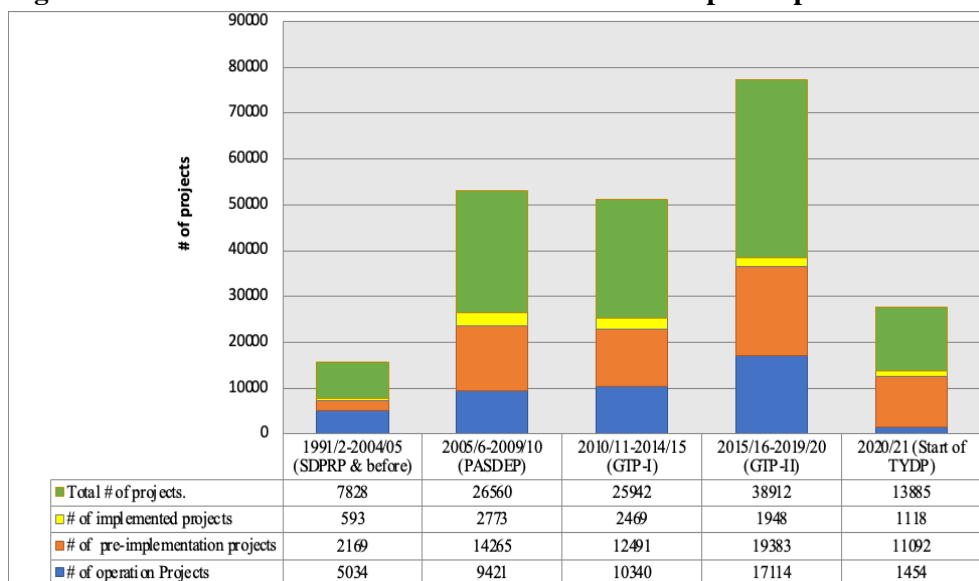


Source: EIC, data accessed on September 2021

Figure 2 shows private sector investment flow by the status of projects across development plans. The first period spanning 1991/2002 to 2004/2005, which constituted both the SDPRP and IDS, was a period of the beginning of private sector investment inflow in which from a total of 7,828 projects, 7.61% (5,034 projects) were operational during the periods. Subsequently, during the PASDEP periods (2005/2006 to 2009/10), from a total of 26,560 projects, 9,421 or 10.48% of the projects were operational. In the third period, GTP-I (2010/2011 to 2014/2015) registered 25,942 projects, of which only 9.76% (10,340) were operational projects. The fourth period, during GTP-II (2015/2016 to 2019/2020), registered a total of 17,114 projects, of which only 5.07% of the projects were operational during the period, which is the maximum compared to all five-year development plans. Finally, the last period is the beginning of the current TYDP (2020/2021 to 2029/2030), registering a total of 13,885 projects, of which 8.05% (1454 projects) are operational.

This shows that the implementation rate of the projects is higher during GTP-II and has shown improvement across all plans over time but is still very low compared to the number of licensed projects in all plan periods.

Figure 2: Private sector investment inflow across development plans



Source: EIC, data accessed on September 2021

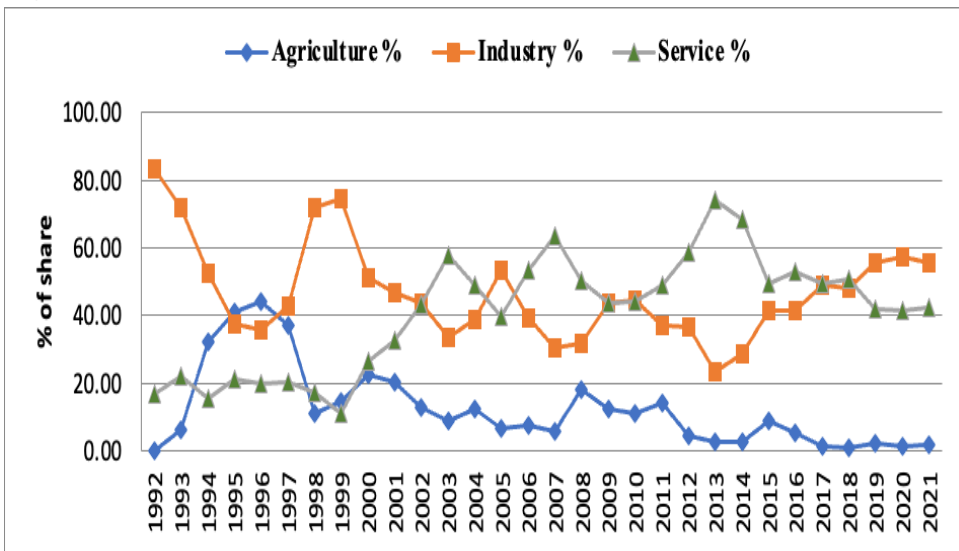
3.1.2 Performance of Private Investment across the Main Sector and Subsectors

Private sector investment inflow contributes to the development endeavor of the country peroxide by the amount of capital invested among the main subsector of the economy over the last thirty-one years (1991/1992 to mid-2021). Out of 43,363 operational investment projects, 21,984 projects (50.70.04%) are service sector investments, 18,556 projects (42.79%) are industry projects, and the remaining 2,823 projects (6.51%) are agriculture sector investment projects (EIC, 2021). This shows that the majority of private sector investment has been made mainly in the non-productive sector of the economy over the last three decades.

Figure 3 shows the trends of the operational number of project shares across the main sector of the economy from 1991/1992 to mid-2021. The total number of operational projects of the service subsector led from 2005/2006 to 2017/2018 and subsequently declined from 2018 to 2021. The industry subsector took the lead starting in 2018 and showed incremental trends from 2013 onwards. However, the agricultural subsector share depicts declining trends over time that span from 1996

to mid-2021. This shows that the majority of operational private investment projects are from service or industry sector with lower investment projects in the agriculture sector over the last years. This might be policy support starting GTP-I and GTP-II plans, which have placed much emphasis on the manufacturing industry and hence resulted in good progress in shifting private investment inflow from the service sector to the industry. However, balanced policy support for the productive sector between manufacturing and agriculture sectors is crucial in the years to come.

Figure 3: Private sector investment inflow subsectors

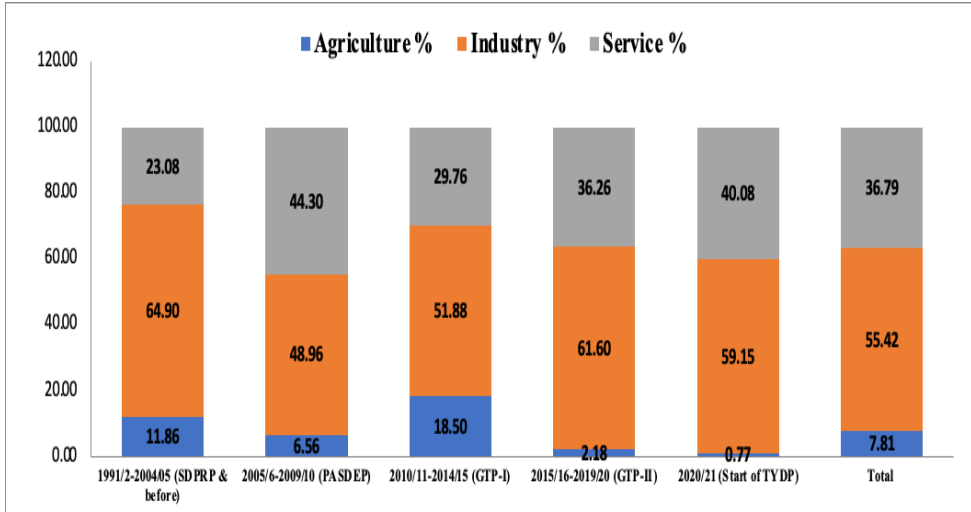


Source: EIC, data accessed on September 2021

Figure 4 below shows the sectoral distribution of the invested capital share of investment projects across the successive development plans. Out of a total of 617.3-billion-birr capital investment made over the last three decades, the industry sector took the leading share with 342.1-billion-birr capital (55.42%), followed by service with 227.1 billion birr (36.79%) and agriculture sector with 38.2 billion birr (7.81%), with a leading similar sector rank in all development plans showing lower investment inflow to the agriculture sector over the three decades. This partly depicts the effectiveness of GTP-I and GTP-II policy support to redirect private sector investment toward productive sector (industry). As a result, most private sector investment seems to channel towards the industry sector over the ten years. Although the performance of the industry has been impressive during the GTP-II, the figure suggests substantial declining trends of agricultural investment with increment trends

of an operational project in the service sector during the periods. The result suggests that there are some promising signals which the industry sector might have begun to emerge with no or little agriculture sector investment which indicates the less nascent structural change in the productive sector of the economy.

Figure 4: Sectoral breakdown of investment projects (capital invested share) across development plans



Source: EIC, data accessed on September 2021

The creation of employment opportunities by private sector investment projects has increased for temporary or casual works. However, permanent employment opportunities have declined in recent years. Private sector investment projects, which started operation, created a total of 941,496 (23.9%) permanent employment and 2,997,196 (76.1%) temporary job opportunities from 1991/1992 to mid-2021. Looking at the share of employment in the major sector of the economy (i.e. agriculture, industry, and service), out of the total employment opportunities, 57.27% (225,576 jobs) was created by the service sector, 24% (945,671 jobs) by industry, while the remaining 737,261 employment jobs or 18.72% was created by the agriculture sector (EIC, 2021). This shows that the majority of employment opportunities are created by the service sector, while the industry and agriculture are contributed less over the last three decades which shows the infancy stage of the productive sector of the country.

According to the EIC secondary data, the trends of the share of permanent and temporary employment opportunities created by private sector investment

projects over the three decades. The results show a declining pattern in the share of permanent employees from 1994 to mid-2021, except for an increase in 2013, while temporary employees show increasing trends (the highest in 1992 and lowest in 2013), which is contrary to the government plan. The most relevant type of employment is permanent, since human capital skills and technological know-how are provided by permanent rather than temporary workers, and therefore due attention and incentive schemes should be given to private sector investors to opt for permanent forms of employment rather than temporary employment in the years to come.

Based on the EIC data from the past three decades, the largest agriculture sub-sector investment is found in the agriculture, hunting, and forestry subsector (95.91%) and distantly followed by the fishing subsector for both domestic and foreign investments over 1991/2 to mid-2021. The result suggests that less or no private sector investment (domestic and foreign) in the fishing sub-sector, which is one of the comparative advantages of exploitable fish potential in response to the development of various dams including the Great Renaissance Dam (GERD) of Ethiopia. On the other hand, the private sector investment sectoral share of capital invested within the industry sector from 1991/1992 to mid-2021. The total capital invested by foreign investors in the manufacturing subsector took the leading share (85.57%), followed by the construction subsector (11.09%), whereas the remaining few foreign investors engaged in electricity, mining, and quarrying subsectors. However, the total capital invested by domestic investors took the leading in mining and quarrying (84.51%), followed by the construction subsector, while the remaining few domestic investors engaged in electricity and manufacturing subsectors. This suggests that domestic private investors' engagement in the manufacturing subsector remained less satisfactory despite GTP I and GTP II policy attention and incentives given to redirect the private sector toward manufacturing sector since the sub-sector would spearhead and transform other industry sectors of the economy. This might be because domestic private investors lack industrial knowledge, technical and managerial skills and experience in operating large manufacturing industries. Therefore, the participation of domestic private investors in the manufacturing subsector has been limited in recent years.

The EIC data on the sectoral share of capital invested by private sector investment within the service sector from 1991/1992 to mid-2021. The leading two service subsectors in terms of invested capital in operational projects by both foreign and domestic investors are real estate, which includes machinery and equipment, rental and consultancy services (61.36%), hotels, and restaurants (25.53%). The

other three subsectors have a share of 0.7 to 5.3 percentage points. This indicates that private sector investment (both domestic and foreign) has been lopsided more towards a few service subsectors, which might be due to the lower level of start-up capital requirement, technical and managerial capability, the lower payback period of capital return, and associated risks compared to those in the service sector. In addition, the concentration of the private sector on a few service subsectors might be due to the short-term profit maximization motives of firms.

3.2 Sectoral Composition of Private Sector Investment

The data obtained from the EIC cover private capital investment in major economic activities over the last three decades (1991/1992-mid-2021) in Ethiopia. For this study, the data were organized considering three major sub-sectors, namely: the agricultural, industry (manufacturing) and service main sectors of the economy. The data were further examined for each subcomponent of the sectors to unpack and characterize and evaluate the overtime performance of private sector investment in the country.

3.2.1 Capital Investment by Private Sector on the Subsector of the Economy

The service sector was the most important sub-sector to attract capital investment over the last three decades (1991/1992-mid-2021), followed by the manufacturing sector. Among the various major service sector investments, capital invested in real estate, machinery and equipment, rental and consultancy services stand first, followed by hotels and restaurants. The average capital invested in mining and quarrying is the leading from industry sub-sector due to huge investment requirement compared to other investment in the industrial sector. While the agricultural sector has been considered the leading sector toward economic growth and development and backed by all the development policies thus far, the average capital investment in the sector is by far smaller than investment in subcomponents of the service sector such as Hotels and rent. Although it is not possible to draw any implication at this level, it clearly shows a divergence of the policy directives and what has exactly been happening on the ground (Table 1).

The results in Table 1 above and Figure 5 below also provide a glimpse of the resource allocation of the country over the last three decades. Even in the service sector, the most important sector from the societal perspective, such as education and health, had been given less priority to invest in. Generally, private sector investment

in Ethiopia seems more focused on less risky and high-turn of return investment sectors than high impact and long-term societal welfare.

Table 1: Average capital investment by subsector in billion birr (1991/1992-mid-2021)

Subsectors Sectors	Capital (in billion birr)		
	Domestic	Foreign	Total
Agriculture, hunting & forestry	35.1	11.1	46.2
Fishing	0.0	2.0	2
Agriculture total	35.1	13.1	48.2
Manufacturing	0.2	110.6	110.8
Construction	32.9	13.8	46.7
Mining and quarrying	183.6	0.5	184.1
Electricity	0.6	0.0	0.6
<i>Industry total</i>	217.2	124.9	342.1
Education	9.4	0.4	9.8
Health and social work	11.1	1.0	12.1
Hotels and restaurants	55.6	2.4	58
Other community, social and personal service activities	1.8		1.8
Real estate, machinery & equipment, rental & consultancy services	133.6	5.7	139.3
Tour Operation, Transport and Communications services	3.8	0.7	4.5
Wholesale, retail trade and repair service	1.6		1.6
<i>Service total</i>	216.9	10.2	227.1
Total	469.2	148.2	617.4

Source: EIC data accessed on September, 2021

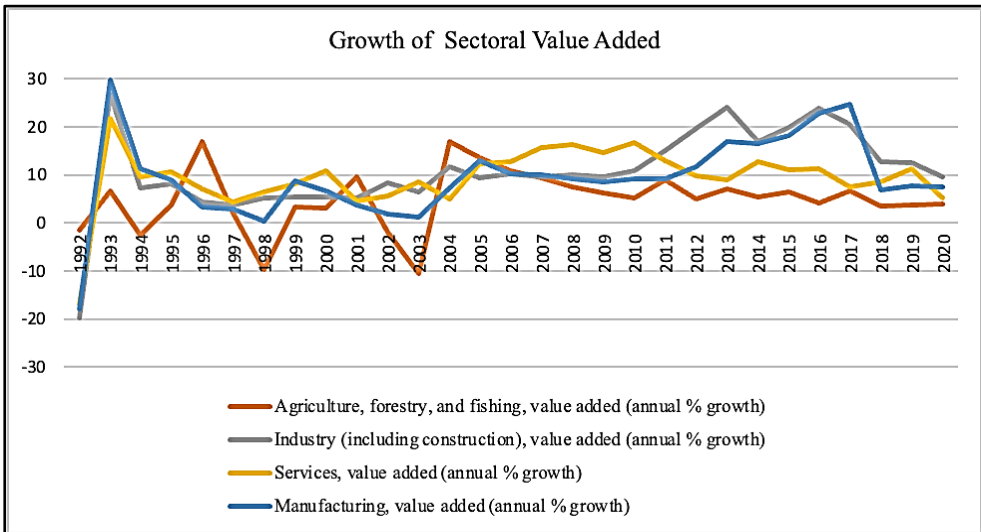
3.2.2 Evolution of Sectoral Value Added

The overtime trend of annual growth of sectoral value added is mixed. Immediately after the regime change (1992), all the sectors showed a boom except the agricultural sector. Of course, the economic recovery effort by the current government could be the major push factor for the sharp rise. Although there was a consistent and almost identical change in value added growth during the 1994-2004 period, for the industrial service and manufacturing sector, the agricultural sector exhibited larger swings. The unhealthy fluctuation in the agricultural sector value added could be linked to policies such as agricultural development-led

industrialization, which were resource shifts and extensive but sporadic interventions in the sector because of market liberalization and privatization.

Figure 4 above shows that after 2005, the change in agricultural sector value added declined gradually, and the pattern depicted trends similar to those of the service sector. However, the industrial sector overtook the service sector starting 2011 onward. The pictorial view depicted in Figure 5 is consistent with policy directives such as GTP I and GTP II, where much focus is given to enhance value-added activities in the manufacturing sector. Nonetheless, the value-added growth in the agricultural sector remained stagnant, while it still contributed to the lion's share of GDP of the country. Moreover, in recent years (starting in 2017), the value-added growth of all sectors exhibited declining and mixed patterns.

Figure 5: Percentage growth of sectoral value added



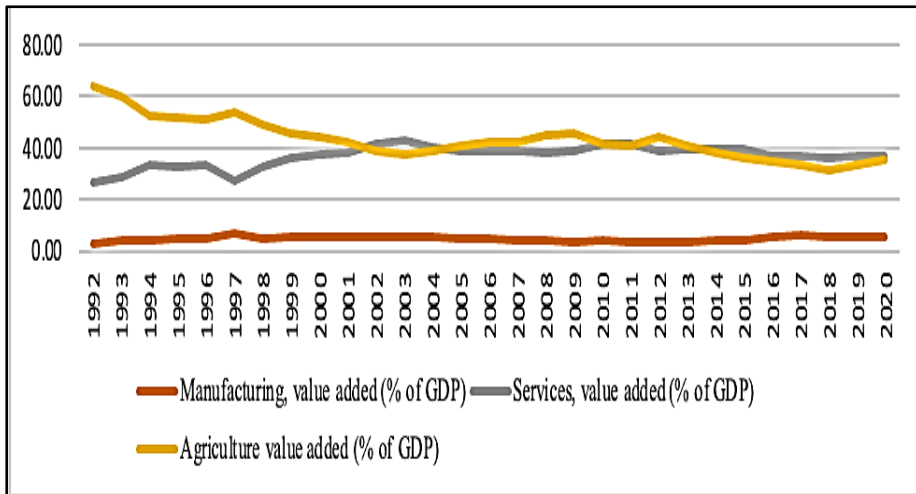
Source: Own computation (NBE and WB data 2020)

3.2.3 Evolution of GDP Composition

In this subsection, the manufacturing sector is given due attention, as the relative development of this section is sluggish, in contrast to the government plan. The sectoral distribution of growth of each sector in percentage shows heterogeneity over time (Figure 5). However, the percentage contribution of the main sector's value addition tells a very different story (Figure 6). The manufacturing sector's contribution to the overall value added (% GDP) is stagnant throughout the period covered. On the other hand, the service sector has been competent with the agricultural sector, which is against the structural pathways of the economy, in which the share of the agricultural sector was expected to decline while the manufacturing sector competed with the service sector.

The converging pattern of the agricultural and service sector over the last three decades clearly shows that the economy is burdened with pure consumption. Unless the consumption demand from the service sector (demand) is backed by equivalent output (supply), it becomes distortionary and consequently economically unstable.

Figure 6: Sectoral Value Added



Source: Own computation (NBE and WB data 2020)

3.3 Long-Run and Short-Run Deriving Forces of Private Investment

The advantage of the ARDL approach over other multivariate time series techniques is that estimation of the short and long-run coefficients does not require any form of prior stationarity of the right-hand side variables (Pesaran et al., 2001).

However, there are a series of steps to be followed before determining the final model specification. Accordingly, prior to running the ARDL model specified, parsimonious lag for each series was determined using Akaike Selection Criterion (AIC) optimum lag length determination criteria. Accordingly, ARDL (3 1 1 1 0 0 11 0) was found to be the appropriate specification. Furthermore, the robustness of the model was tested using the Ramsay Regression Specification Error Test (RSET) for variables, and the model was found to be the most robust.

Given that the data are short, the ARDL model fitted using the AIC to capture the long-run effect of the selected regressors. In addition, consistency of the long-run relationship was tested using the Pesaran/Shin/Smith (2001) ARDL Bounds Test approach, and the result was found to be significant (F 7.494), which is much higher than the critical values at the 5% significance level (I-1 critical value = 3.12). This test result implies that we can confidently reject the null hypothesis, meaning that there is a significant long-run relationship between private investment and the regressors.

The estimated ARDL model revealed that out of eight explanatory variables, four variables have a significant long-run relationship with private investment. In the long run, Real Effective Exchange Rate (REER), Government Expenditure (GOVEX), Credit provided to the private sector (CREDIT) and Real Interest Rate (RIR) have a positive significant effect on private investment in Ethiopia (Table 2).

Real effective exchange rate is found to be significant at 10% significance level. Real effective exchange rate is a measure of competitiveness of domestic products in the international market a one percent increase in competitiveness index of the country results in a 0.25 increase in private sector investment and hence it is important to look at the change (improvement) in real effective exchange while dealing with exchange rate policies

Theoretically, government expenditure crowds out private investment in the short term but crowds in the effect of private investment in the long-run (Laopodis, 2001). Consistently, the long-run coefficient estimates of government expenditure revealed that there is a positive and significant causal relationship between government expenditure and private investment. This implies that government expenditures on infrastructure developments (such as transport, energy and social services) will not have instantaneously stimulated effects and will not create a shortage of loadable funds for private sector investment (Ayeni, 2020; WBa, 2016). Therefore, the long-run result is theoretically, empirically, and practically consistent.

Credit is proved to be a source of capital to boost private investment in an economy. In line with the result reported by Solomon (2021), the long run estimates

of credit offered to private investment revealed that there is a positive and significant effect. A one percent increase in credit increases private investment by about 0.12 percent. This result shows more attention should be given to the provision of credit service in order to realize the potential of private sector investment contribution to the country's economy.

Table 2: Estimated long and short-run coefficients using the ARDL (3 1 1 1 0 0 11 0 1)

Variables	Coefficient	Std. Err.
Long run dynamics		
Lagged value of Total Privat Investment, TPI (L1)	-1.967***	0.404
Real GDP (RGDP)	0.001	0.004
Unemployment Rate (UEMPT)	-2.086	2.903
Real Effective Exchange Rate (REER)	0.246**	0.083
Government Expenditure (GOVEXP)	0.945*	0.437
Terms of Trade (TOT)	0.019	0.049
Credit provided for private sector (CREDIT)	0.121**	0.039
Inflation rate (INFL)	-0.162	0.108
Real Interest Rate (RIR)	0.276*	0.134
Short run Coefficients		
TPI		
L1.	0.491	0.298
L2.	0.493*	0.264
lnRGDP (L1)	0.049	0.002
ln UNEMP(L1)	-9.099	10.16
lnREER (L1)	0.484*	0.264
lnCREDIT (L1)	1.127**	0.360
lnINFL (L1)	0.193	1.617
_cons	0.670	0.425

Note: ***, ** and * are significant at the 1%, 5% and 10% levels, respectively

Source: Model Result

Real exchange rate is found to have a positive and significant effect on private investment. Since real interest rate is the difference between inflation and the

bank interest rate, its value is negatively worsening overtime due to the fact that inflation is usually higher than the bank interest rate. Therefore, the result of the study is in line with the reality on the ground. The implication is that the higher the real exchange rate in its absolute value, improves private investment. Meaning that investors prefer to reinvest the profit they make as well as their savings rather than depositing it in the bank. However, it is very crucial to cut a balance between the savings from most of the society where the marginal propensity to consume is too high. For this parcel of the society, an increase in real interest rate will discourage saving, thereby investment.

Once the long-run cointegrating model has been estimated, the third step is to model the short-run dynamic parameters within the ARDL framework. Thus, the lagged values of all level variables (a linear combination is denoted by the error-correction term, $ECMt-1$) are retained in the ARDL model. Table 2 presents the results of the estimated Error-Correction Model (ECM) of the private sector investment model using the ARDL technique. The result shows lagged value of total investment (L2), real effective exchange rate (REER), and credit has positive effect on private investment.

The autoregressive short-run effect of private investment was found to be significant, implying that there is a positive spillover effect of last-year's investment on the present. This result is in line with rational expectation theory, where investors are rational and do have information about the industry. Hence, the more vibrant industry in the last period stimulates investment in the current period.

Consistent with Ayeni (2020), real effective exchange rate is found to have positive and significant effect on private investment in the short run. This result is consistent with economic theory, which implies the real effective exchange rate increases the overall competitiveness and hence stimulates private investment (Romer, 1996). Exchange rate policies are important to bring instantaneous changes in private investment, as well as sustain and stimuli economic activity in the long run. Similarly, the short run result shows credit has positive and significant effect on private investment in the short run and suggesting rectifying financial services boost private investment in the upcoming years.

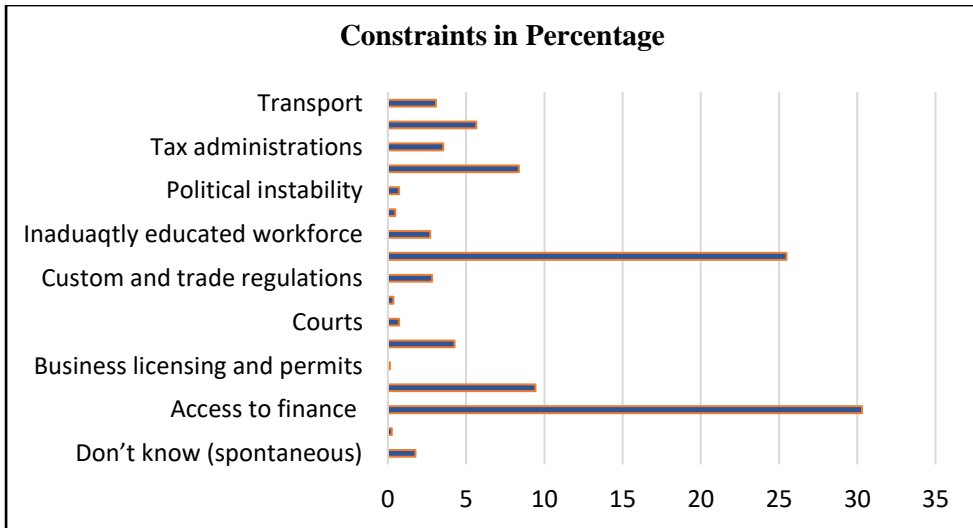
3.4 Challenges and Constraints of Private Sector Investment in Ethiopia

This section examines the main challenges and constraints of private sector development in Ethiopia. A series of economic reforms have burnished and promoted the country's profile among the international private sector keen to tap

Ethiopia's competitive labor force, emerging domestic market, and regional trade access (FDRE, 2020). The government aims to expand the role of private sector investment by providing various policies and strategies to support the development of industrial parks to encourage FDI inflow to the country. In response, the country's exports, job opportunities, and transfer of knowledge and technology have been improving over time (WB, 2021). However, the government made much investment in industrial parks to be transferred to private sector investors and attempted to rectify various constraints and challenges, which would limit both competitiveness and capacity of resilience to various shocks in private sector investment.

The result of various empirical studies shows that the private sector faces key challenges which prevent it from playing a much greater role in driving economic growth and job creation (Kifle and Atilaw, 2018). In addition, the ongoing COVID-19 pandemic and political unrest, which are causing instability in different parts of the country, are adversely affecting private sector investment, with direct impacts on consumer demand decline, contracted product markets, the blocking of foreign Revenue and importing valuable inputs have access to finance and are vital to private sector development (FDRE, 2020). Therefore, in exploring the contemporary challenges and constraints of private sector investment in Ethiopia, this study explored different datasets namely: the Enterprise Survey (2015), Primary Manufacturing Survey (2020), and Phone Survey Data (2020/2021). Based on these survey results and from the critical empirical reviews of previous studies, the main constraints and challenges of private sector development in Ethiopia identified by the present study are indicated as follows:

Limited access to finance services: As shown in Figure 7, the enterprise survey of WB (2015) showed that from the 848-enterprise survey interviewed, 30.31% of the respondents reported that access to finance was the main constraint encountered during the establishment of private sector investment in Ethiopia. Similarly, access to finance was also found to be a leading constraint of private sector investment in a more recent primary manufacturing survey of the WB (2020). Inefficient financial markets increase the reliance on internal funds or informal sources by connecting firms that are creditworthy to a broad range of lenders and investors. A firm's ability to access financial markets to undertake investments and other operational requirements appears to be a prominent obstacle. The sources of a firm's financing and the features of their financial transactions by excessive dependence on internal funds may indicate potentially inefficient financial intermediation. Ethiopia's government exerts a variety of control mechanisms over the banking sector that constrains firms' access to finance.

Figure 7: Constraints of private sector investment during the establishment of businesses

Source: Author's estimate from Enterprise survey (2015).

As shown in Figure 7, the main problem related among Ethiopian enterprises to access finance was related to the loan problem. Based on the estimated result obtained using primary manufacturing survey (2020) data, approximately 51.13 respondents reported that they faced loan problems during the establishment of the manufacturing industry. The loan related problems include insufficient permitted loans, inability to fulfill loan requirements, high interest rates, short loan durations, bureaucracies, and long loan procedures. This finding identified low percentage of firms financed by banks in Ethiopia. Since commercial banks generally serve Ethiopia's largest firms and regionally focused microfinance institutions tend to micro-scale enterprises, the needs of the "missing middle" of small and medium-sized enterprises largely go unmet. This was also reported by Dalberg (2019) and FDRE (2020). For instance, starting in 2014, Ethiopia shows that mixed signals of constrained access to finance characterized by a rise in the saving rate, increasing the supply of funds for lending, and as a result, private bank lending to private sector investment has risen by 22 percent annually. However, survey results revealed that the bulk of investments continue to be self-financed or served by the black market. Although improvement in the financial landscape has made significant progress for the development of private sector investment, finance remains a notable weakness and has been characterized by low domestic savings mobilization, underdevelopment of capital markets and insufficient credit to key sectors (Tyson, 2021).

Lack of Physical Infrastructure: This includes electricity, transport, and water supply, which are prerequisites for competitiveness and growth in the private sector investment. The quality of physical infrastructure efficiently connects private businesses to markets for inputs, products, and technologies, reduces the cost of production, and enhances the competitiveness of business in local and international markets. As shown in Figure 7, according to the enterprise survey of the WB (2015), approximately 25.4% of interviewed private sector investors replied that electricity is the second constraint that hinders the establishment of private sector investments.

Furthermore, according to a primary manufacturing survey of WB (2020), approximately 7.15% of interviewees reported that they faced a shortage of electricity and water supply in the manufacturing industries and hence, hindered the full capacity operation of the businesses. An inadequate electricity supply can increase costs, disrupt production, and reduce the profitability of businesses. A variety of indicators shows unreliable access to electricity as a constraint on economic activity. According to Abdisa (2018), frequent and prolonged electricity power outages harm employment, productivity, and export earnings in all private sector developments. Specifically, electric power distribution and generation are the binding constraints on private sector investments in Ethiopia. The distribution of electric power either remains incomplete or has been degraded due to poor maintenance and results in low availability and frequent outages, which interrupts production and raise costs for firms that rely on a steady, predictable power supply. Ethiopia has embarked on an expansion of power generation capacity with projects scheduled for completion in the next few years, but the obsolescence of transmission and distribution infrastructure continues to compromise reliable supply.

Transport is another physical infrastructure that hinders the development of private sector investment. Based on the enterprise survey of the WB (2015), approximately 3.07% of Ethiopian firms report that transportation is one of the constraints for private sector investors. Ethiopia's current state of transport and logistics performance imposes an additional layer of costs to firms seeking to export and generate foreign exchange rates. The inefficiency of transport services imposes additional costs on firms and may act as barriers to private sector investment. Moreover, based on the World Bank's Logistics Performance Index, which considered infrastructure, timeliness, customs, and logistics quality, Ethiopia is ranked last compared to Kenya, Rwanda, and Uganda. Much of this index shows poor road quality and connectivity (WB, 2021). Ethiopia's road network also lags far behind its comparators, with the average rail density of its comparators exceeding Ethiopia by more than twelve times. According to Nakamura et al. (2019) and Iimi

et al. (2019), Ethiopia's export transit has taken 42 days, far exceeds Rwanda and Uganda, and is twice as long as Kenya. Underlying this delay, the long inland distance to the Djibouti port delays the document preparation of port handling and customs clearance processes, which are also longer and costlier. Consequently, these notable constraints are due to the long bureaucratic process involved and the existing legal arrangement among constraints that hinder the private sector.

Ethiopia has abundant water and sanitation resources; nevertheless, much of Ethiopia's private sector investments face challenges in terms of water supply and access to safe drinking water. For many manufacturing industries, water is also an important input in the manufacturing process. Interruptions in the water supply can have serious adverse effects on firms' operations. In the absence of absolute scarcity in much of the country, the technical cost of withdrawals primarily drives the price of provision (WB, 2021). In surveys of the manufacturing sector, water insufficiency does not appear to be a significant constraint when compared to other potential issues in terms of percentage reports.

Access to land: According to the enterprise survey data of WB (2015) in Figure 7, the private sector investors interviewed, approximately 9.4% of the respondents replied that access to land discouraged private sector investment. Access to land was challenged by inadequate support from the government side, followed by poor implementation and enforcement of the policy at all levels and inadequate access to land. In Ethiopia, reforms to land policies are related to land certification campaigns that introduced land use rights through long-term leases, as well as permission to rent, transfer of usage rights, and bequests.

Land continues to account for the bulk of the government's dispute resolution activities and processes taking a long time and has more cost of transferring land between parties and the reliability and transparency of its administrative processes. The government should pay compensation if the land is given for private sector investment as a form of leases but often complain that the compensation paid has been reported to be unfair and inadequate, as a result, would be a source of conflict and instability (Stebek, 2015). Specifically, the Ethiopian government's development of industrial parks throughout the nation has recently solved land for large, foreign-owned factories and other manufacturing industries to improve land constraints facing private investors in the country (FDRE, 2020). However, it is not sufficient for domestic private sector investors and those who engaged in micro and medium enterprises. The study identified challenges of enhancing tenure security to facilitate the emergence and coalescence of a strong private sector investment. In connection to this, Stebek (2015) notes that Ethiopian

land governance faces challenges in the availability, transferability and affordability of land access for business activities.

The practice of informal market: Formal private business exists and operates inside the bounds of government regulations. The effect upon practices in the informal market influenced the competitiveness of formal firm. According to the estimated result of the enterprise survey data of WB (2015) (Figure 7), approximately 8.37 percent of respondents reported that informal market practice adversely affects formal private business. The practice of informal marketing activities and inadequate regulatory tax systems may affect the development of formal private businesses. Thus, these adversely influence market opportunities for formal businesses. Formal firms can impose additional costs of production compared with a business engaged informally and could not compete in the market. Moreover, financial inefficiencies of the labor force from formal firms may affect the growth of business. Consequently, it creates more opportunities for informal business. According to Amha (2019), firms from the formal sector do not develop faster than firms from the informal sector.

Tax-related issues: Tax rates and poor administration system are the main obstacles hindering development of private sector investment in Ethiopia. According to World Enterprise Survey of WB (2015) result findings, the main reasons were high tax rates (5.66%) and poor tax administration (3.54%) (Figure 7). The result attested those investors were challenged by inadequate support from the government side related to tax rates and tax administration. Moreover, poor implementation and enforcement of the policy at all levels were also found to be a challenge negatively influencing private sector investment. Thus, good governance in areas of taxation is a fundamental issue to create a conducive business environment. Formal businesses pay taxes and are supposed to comply with regulations, and tax administration and regulations safeguard the general public's interest while remaining transparent and not imposing the administration process on private sector investment. Gizachew et al. (2021) and Nikus (2021) also confirmed that the reformation of tax administration and regulations should be undertaken to improve private sector investment in the productive sector of the economy.

Corruption: The finding showed that corruption is also the main challenge and constraint in private sector investments in Ethiopia. Corruption in response to lack of transparency and regulations ensuring accountability of the regulatory environment is critical to the success of private-sector investor operations. When these rules are obscured or bent due to corruption, firms may limit their full capacity operation. The result of the enterprise survey of the WB (2015) shows

only approximately 4.25% of the respondents replied that corruption is an obstacle for the establishment of the private sector. Private investments' investors are requested to pay a bribe to obtain selected services when they request a construction permit while trying to secure a government contract or during meetings with tax officials. This act creates an unfavorable business environment by undermining operational efficiency and raising the costs of production. Corruption and bribes are common and quite high and add to the bureaucratic costs of obtaining the required permits and licenses. This can be an obstacle to the development of private sector investments. This is due to lack of institutional capacity and poor system. Based on this finding, the present analysis flags corruption as problematic but not a binding constraint on private sector investment in Ethiopia.

Inadequately educated workforce: Despite improvement in the overall educational coverage over the last years, results pointed out that lack of adequate qualified educational professionals in the labor market affects private sector investment in Ethiopia. There has been a significant improvement in formal education in Ethiopia. Accordingly, secondary education has risen steadily to reach approximately 40 percent (WB, 2020). Meanwhile, the young workforce accounts for a growing portion of human capital. The World Bank Enterprise survey (2015) result shows 2.71% of the responses was related to the problem of quality of educated workforce (see in detail Figure 7). The respondents reported that the supply of labor from college and university graduates lacks the required technical knowledge and skills. Therefore, private sector investors remain dissatisfied with the availability of quality-educated workers in the labor market. According to MoE (2019), most graduates lack soft skills such as teamwork, creativity, and initiative. These problems discourage private businesses' ability to innovate and grow, which is basically due to weak linkages between industry and universities.

Custom and trade regulations: Customs and trade regulations include issues related to policies and conditions, profit taxation, protection of property rights, and business regulation. They are also the main challenges and constraints in private sector investments in Ethiopia. Involvement in international trade permits private sector investment to expand, raise standards for efficiency, import materials at lower cost, and acquire updated and better technologies. However, trading requires firms to deal with customs and trade regulations and is necessary to obtain export and import authorizations. Customs and trade-related constraints can often delay the timely delivery of goods and services to the international market. According to the World Bank (2021), compliance costs for imports in Ethiopia are more than double compared to Sub Saharan Africa (SSA). However, exports are about the same as

SSA. Border compliance costs are much lower than SSA. Overlapping institutional setup and lack of coordination create conflicting authorities across different government structures and have brought complaints from private businesses that rely on the well-coordinated administration of regulations and procedures. From the World Bank enterprise survey results, approximately 2.83% of private-sector investors replied that they faced obstacles to customs and trade regulations (see Figure 7). Efficient custom and trade regulations enable businesses to export and import goods directly. Delays in clearing customs for exports and imports create additional costs to the firm. These can interrupt production, interfere sales, and affect supplies or merchandise.

Shortage of foreign exchange: Based on survey results of WB (2020), the shortage of foreign exchange was one of the obstacles that hindered the full operation of manufacturing industries. Approximately 3.76% of interviewers reported that shortage of foreign exchange is one of the constraints that adversely affects the operation of manufacturing industries. The survey results revealed that the constraint related to shortage of foreign currency has pushed import-reliant businesses to break production and even close their doors due to stock-out products. The manufacturing sector mainly imports most raw materials through international trade. Burdensome regulations and span systems of tracking, certifications, and licensing add further costs, such as lengthy stoppages of operations and frequent business closes. Consequently, the shortage of foreign exchange adversely affects firm activity, goals, and factors of production. This shows that government foreign exchange services do not keep pace with the demand for imports in private sector investors in Ethiopia.

The time and opportunity costs associated with securing foreign exchange create additional costs for firms. Domestic private investors are obliged to purchase foreign exchange from the black market by incurring higher costs. Additional reports reveal that firms exert greater pressure on government offices to obtain hard currency, whether through lobbying or bribes or looking at the black market. Not surprisingly, firms operate within government-designated priority sectors, and foreign-owned firms have independent access to foreign currency. Recently, one of the causes of shortage of hard currency in Ethiopia is due to the gradual overvalues the Ethiopian birr against the U.S. dollar.

4. Conclusion and Recommendations

The study assessed the structure and performance of private sector development and identified the key constraint and challenges, and explored its

contribution to the economy using secondary data and evidence from the past three decades. ARDL model was employed to analyze the long- and short-run driving forces of private sector investment. The study analyzed various policy measures designed by the government in response to promoting private sector investment in the country. The result shows an increment trend of the private investment projects (domestic and foreign) has been observed over recent years. However, the majority of investment is owned by domestic than foreign investors. Besides, the implementation rate of projects has been very low across all plans and has particularly declined in recent years. During the last three decades, private sector investment capital flow has been mainly made in the service sector with a minimal investment flow in the agriculture sector, but there are some promising signals in the industry sector which has begun to emerge over the last recent years (since 2018).

The top three leading sub-sectors in terms of capital inflow (both domestic and foreign) made by the private sector over the last three decades are real estate (machinery and equipment, rental and consultancy services) from service, mining, and quarrying from industry, and agriculture and hunting and forestry from the agriculture sector. Similarly, in terms of employment creation, the service sector remains the major contributor, followed by industry and agriculture in their respective order. However, the trends of permanent employment share declined over time. Ethiopia's domestic private sector investors mainly concentrated on real estate and its associated services (from service), mining-and quarrying (from industry), and with less participation in agriculture, hunting, and forestry (from agriculture) subsectors over the last three decades. This implies domestic private sector has not yet vigorously entered productive sectors (agriculture and manufacturing) of the economy. Most domestic private sector investment is concentrated in the service sector primarily due to a lack of industry knowledge, limited access to input markets, technical and managerial skills, experience in operating large manufacturing industries, and the short-term profit maximization motives of firms. Hence, the private sector plays less satisfactory role in the employment generation, export, and output growth of the country. In response to the policy support during GTP I and II, impressive progress of shifting private investment inflow from the service sector to the industry has been made over the last recent years, but less participation of domestic private investors in the manufacturing sub-sector, less participation of FDI, and no or little agriculture sector investment indicating less nascent structural change in the productive sector of the economy. This suggests scale-up the policy supports given to the manufacturing sector during GTP I and II to the agriculture sector

with more balanced policy support between the manufacturing and agriculture sectors are crucial during the current TYDP periods.

Private sector investment in the productive sector (industry and agriculture sectors) has a trickled down effect of boosting industrial competitiveness and accelerating structural transformation and is thereby, inextricably linked with a reduction in poverty and the unemployment rate from the economy. To this end, the government has to provide much policy support for the productive sector in general (agriculture and industry sectors) and particularly special support for some subsectors that the economy needs most (such as the manufacturing sector). The government should also scale up the policy support given to manufacturing industry during GTP I and II to agriculture sector during TYDP periods. For the productive sector to play the expected transformative role in the economy, the government has to introduce various incentive schemes (for both domestic and foreign investors) to be able to provide quality goods and services and maintain international export standards. The incentive schemes could target tax incentives, export promotion, employment/skills training, incentives for creating permanent employment opportunities, incentives for the adaptation and transfer of foreign technologies (to domestic firms).

The study found out the main constraints and challenges hindering private sector investment includes inadequate physical infrastructure (that is, electricity, transport and logistics, and water supply services), lack of input markets (that is, restricted access to financial services, limited access to land, lack of technically skilled labor force), weak institutional framework (that is, ineffective regulatory environments, malpractice in the informal market, corruption, custom, trade, and tax-related issues), and political instability that lead social unrest in different parts of the county. The results suggest that manufacturing firms have been hit the hardest by the pandemic in several channels which include the reduction of demand, shortage of raw materials and intermediate goods, restricted movement of workers, and absence from the workplace due to prolonged containment measures which lead to the forced closure of business and market place. Therefore, the government should also quickly address the constraints to improve private sector development through designing various short and long-term strategies to allow a much greater role for the private sector in driving economic growth and job creation in Ethiopia.

For the private sector to play the expected transformation role in the economy, the government should undertake the following main activities: create enabling business environment through providing a range of incentive schemes in the priority sector of the economy; resolve the bottlenecks through better functioning

of input market (labor, land and capital) through undertaking reforms in the financial sector, enhancing coordination within and between different layers of the government, and improving skillfully human resource shortages through continual capacity building training; providing quality physical infrastructures and supplying modern, affordable and sustainable energy, providing and facilitating required raw materials and machineries, strengthening inclusive Public-Private-Partnerships by providing preferential support for accessing raw material inputs, technologies, and financial services, and creating enabling business environment in the industrial parks; and ensuring consistent management strategies to minimize corruption, minimizing the violent uprisings by strengthening ways for ensuring peace and stability and build up the confidence of private sectors, and minimizing bureaucratic inefficiencies in the government and financial institutions.

The ARDL model result shows real effective exchange rate and credit have positive significant effect on private investment both in the short and long run. This result implies exchange rate fluctuation and accessibility of financial services are time unbounded constraints of private sector investment and hence financial sectors reform should be undertaken in view of leveraging private sector investment in the upcoming years.

Consistent improvement in real effective exchange rate of the country improves private sector investment. This is because improved real effective exchange rate means private investors have a consistent market and thereby improves their competitiveness on the international market. This is also an indicator of consistent market demand for domestic products in international markets, which is an incentive for private investors. Therefore, it is imperative to focus on production of exportable goods and services. This can be achieved through encouraging investment in high-value export-led manufacturing sector which is crucial to reverse the negative significant effect of currency devaluation and strengthen overseas purchasing power in the years to come. To this end, government should provide various economic incentives for the domestic investors engaged in productive sectors will help produce excess supply to improve the trade balance of the country.

Government expenditure has a positive significant effect in the long run but not in the short run. This is a good indicator that the government expenditure will augment private sector investment in the future. However, such government expenditure should be made priory on capital investment (such as physical infrastructure and development of parks), which naturally takes time to take effect. Therefore, it is helpful to focus on high-impact physical infrastructure and development of parks to stimulate private sector investment in Ethiopia.

Real interest rate has a significant positive effect in the long run but not in the short run. This is a good flag that an increase in real interest rate encourages saving and thereby private investment. The effect of real interest rate can be seen from two directions: the depositor and the borrower perspective. The policy measure that aims to improve real interest rate should maintain the tradeoff between saving and investment. To this end, the government should adjust real interest rate in such a way that encourages saving and private sector investment in the years to come.

References

- Abdisa, L. (2018). Power Outages, Its Economic Cost and Firm Performance: Evidence from Ethiopia. MPRA Paper No. 88217. University of Milan.
- African Economic Outlook. (2021). From Debt Resolution to Growth: The Road Ahead for Africa. Accessed November 7th, 2021. <https://www.afdb.org/en/countries/east-africa/ethiopia/ethiopia-economic-outlook>
- Agnessa, W. A., & Premanandam, P. (2021). Impact of Micro and Small-Scale Enterprises on Improving Socio-Economic Status of Women in Ethiopia: The Case of Hawassa City.
- Amanu Daba Waktola. (1920). Analysis of Determinants of Private Investment in Ethiopia. *International Journal of Economics and Management Science*. 9(5): DOI: 10.37421/ijems.2020.9.581.
- Ambachew Mekonnen. (2010). Determinants of Private investment in Ethiopia: A time serious study. *Ethiopian Journal of Economics*, Volume XIX, No. 1: 75-124.
- Amha, W. (2019, March). Growth and Challenges of the Ethiopian Private Sector. In *Challenges and Opportunities for Inclusive Development in Ethiopia: Proceedings of Conferences held in 2017* (p. 177). Forum for Social Studies.
- Clem Nwakoby & Alajekwu Udoka Bernard. (2016). Effect of private sector investment on economic growth in Nigeria. *NG-Journal of Social Development*, Vol. 5, No. 4. 3.
- Dalberg. (2019). Ethiopia Threshold Program Preparation: Financial Sector Review.
- David Romer. (1996). *Advanced Macroeconomics*. McGrawhill, 10th edition.
- Domar, E. D. (1946). Capital Expansion, Rate of Growth, and Employment. *Econometrica*, 14: 137-147.
- EEA. (2015). Report on the Ethiopian Economy: Challenges of Structural Transformation in Ethiopia. Ethiopian Economics Association (EEA), Addis Ababa, Ethiopia.
- Ethiopia Investment Commission (EIC). (2021). Investment Flow Data. (1991/2- mid of 2021). Unpublished data base, Addis Ababa, Ethiopia.
- European Union. (2014). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A new skills agenda for Europe Brussels.
- FDRE. (2020). An Analysis Prepared by the Government of Ethiopia and the Millennium Challenge Corporation of the United States of America for the Development of a Millennium Challenge Threshold Program. <https://assets.mcc.gov/content/uploads/Ethiopia-CA.2020-3.pdf>
- FDRE National Planning Commission. (2016). Growth and Transformation Plan II (GTP-II), Volume I-Main Text.
- Federal Democratic Republic of Ethiopia (FDRE). (2002). Ethiopian Industrial Development Strategy. Addis Ababa, Ethiopia.

- Gebreeyesus, M. (2019). The private sector in Ethiopia's transformation. The Oxford handbook of the Ethiopian economy, 687-703.
- Gizaw, G. A., Dedeho, N. H., and Lodamo, T. L. (2021). The nexus between foreign direct investment, domestic investment and economic growth: Evidence from Ethiopia. *Review of Socio-Economic Perspectives*, 6(2), 47-57.
- Green, W. H. (2002). *Econometrics Analysis*. Fifth Edition Prentice Hall, Upper Saddle River, New Jersey
- Halvorsen, S. K. (2021). Labor turnover and workers' well-being in the Ethiopian manufacturing industry (No. wp-2021-36). World Institute for Development Economics Research (UNU-WIDER).
- Iimi, A., H. Adamtei, J. Markland, and E. Tsehaye (2019) Port Rail Connectivity and Agricultural Production: Evidence from a Large Sample of Farmers in Ethiopia. *Journal of Applied Economics*. 22(1):151-172.
- Jobs Creation Commission Ethiopia. (2020). COVID-19: Ethiopia, Potential Impact on Jobs and Incomes and Short-term Policy Options. https://www.jobscommission.gov.et/wp-content/uploads/2020/04/Potential-impact-of-COVID-19-on-Jobs-and-Income-JCC_English.pdf (Accessed on 28th October 2021).
- Joseph Magnus Frimpong and George Marbuah. (2010). The Determinants of Private Sector Investment in Ghana: An ARDL Approach. *European Journal of Social Sciences*. Volume 15 (2)
- Kifle, T., and Atilaw, A. (2018). Constraints to private seed sector development in Ethiopia: A case study. *African Journal of Agricultural Research*. 13(48):2748-2756.
- Ministry of Education. (2019). Education Statistics Annual Abstract 2011 E.C. (2018/2019). Federal Democratic Republic of Ethiopia.
- Ministry of Finance Economic Development (MoFED). (2010). Growth and Transformation Plan-I: 2010/11-2014/15, Addis Ababa, Ethiopia.
- Mulu Gebreeyesus (2019). The private sector in Ethiopia's Transformation (chapter 39). pp 688 -720. In: Fantu C., Cramer, C., Arkebe O. (Eds.), *The Oxford Handbook of THE ETHIOPIAN ECONOMY*. Oxford University Press, United Kingdom.
- Nakamura, S., T. Bundervoet, and M. Nuru. (2019) Rural Roads, Poverty, and Resilience: Evidence from Ethiopia. *Journal of Development Studies*. 56(10):1838-1855.
- National Planning Commission (NPC). (2016). Growth and Transformation Plan-II: 2015/16-2019/20, Addis Ababa, Ethiopia.
- Nikus, T. A. (2021). Economy-wide impact of tax reform in Ethiopia: A recursive dynamic general equilibrium model. *Journal of Accounting and Taxation*, 13(2), 78-88.
- Pesaran M. H, Shin, Y., and Smith, J. R. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics* 16(3) 289-326
- Pesaran M. H., Shin, Y., and Smith, P. R. (1999). Pooled Mean Group Estimation of Dynamic Heterogeneous Panels. *Journal of the American Statistical Association*, Vol. 94, No. 446, pp. 621-634.

- Pesaran, M. H., & Shin, Y. (1999). *An autoregressive distributed lag modeling approach to cointegration analysis*. In: Strom, S. (Ed.), *Econometrics and Economic Theory in 20th Century: The Ragnar Frisch Centennial Symposium*. Cambridge University Press, Cambridge Chapter 11.
- Planning and Development Commission. (2020). *Ten-Years Development Plan 2021-2030*, Planning and Development Commission of the Federal Democratic Republic of Ethiopia, Addis Ababa, Ethiopia.
- Raphae Kolade Ayeni. (2020). Determinants of private sector investment in a less developed country: a case of the case of the Gambia. *Cogent Economics & Finance* Vol.8 No.1
- Solomon Deneke. (2001). *Private Sector Development in Ethiopia*. International Conference on African Development Archives. Paper 19. http://scholarworks.wmich.edu/africancenter_icad_archive/19
- Solomon Tilahun (2021). The determinants of public investment in Ethiopia: An ARDL approach, *Cogent Economics & Finance*, 9:1, 1929680, DOI: 10.1080/23322039.2021.1929680
- Stebek, E. N. (2015). Challenges in Access to Urban Land for Business Activities under Ethiopian Law: Between Oligarchy and Broad-based Private Sector. *Mizan Law Review*, 9(1), 37-82.
- TAK-Innovative Research and Development Institution (TAK-IRDI). (2016). *Assessment of the Role the Private Sector Plays in GTP II*, Addis Ababa Chamber of Commerce and Sectorial Associations, Addis Ababa, Ethiopia.
- UN Ethiopia. (2020). *Socio-Economic Impact of COVID -19 in Ethiopia*. UN-Socio-Economic-Impact-Assessment-FINAL. Accessed on November 7th, 2021. <https://www.google.com/search?client=firefox-b-d&q=UN-Socio-Economic-Impact-Assessment-FINAL>
- UN Women African. (2021). <https://africa.unwomen.org/en/news-and-events/stories/2021/07/feature--un-women-and-partners-work-to-enhance-womens-political-participation-in-ethiopia> (Accessed 29th October 2021)
- United States Agency for International Development (USAID). (2020). *Gender Equality and Women's Empowerment*, <https://www.usaid.gov/ethiopia>
- World Bank. (2016). *Ethiopia's Great Run: The Growth Acceleration and How to Pace it*. World Bank, Washington, D.C.
- _____. (2016). 'Ethiopia: Priorities for Ending Extreme Poverty and Promoting Shared Prosperity: Systematic Country Diagnostic', Report No: 100592-ET, World Bank, Washington, DC.
- World Bank. (2020). *Ethiopia Poverty Assessment: Harnessing Continued Growth for Accelerated Poverty Reduction*.
- _____. (2021). *The World Bank in Ethiopia*. The World Bank is helping to fight poverty and improve living standards in Ethiopia. Goals include promoting rapid economic growth and improving service delivery. <https://www.worldbank.org/en/country/ethiopia/overview#1>.