Assessing suppliers knowledge on determinants attractive to investors location decisions in industrial parks: The case of Bole Lemi I and Eastern Industrial Parks, Ethiopia

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[August, 2021]

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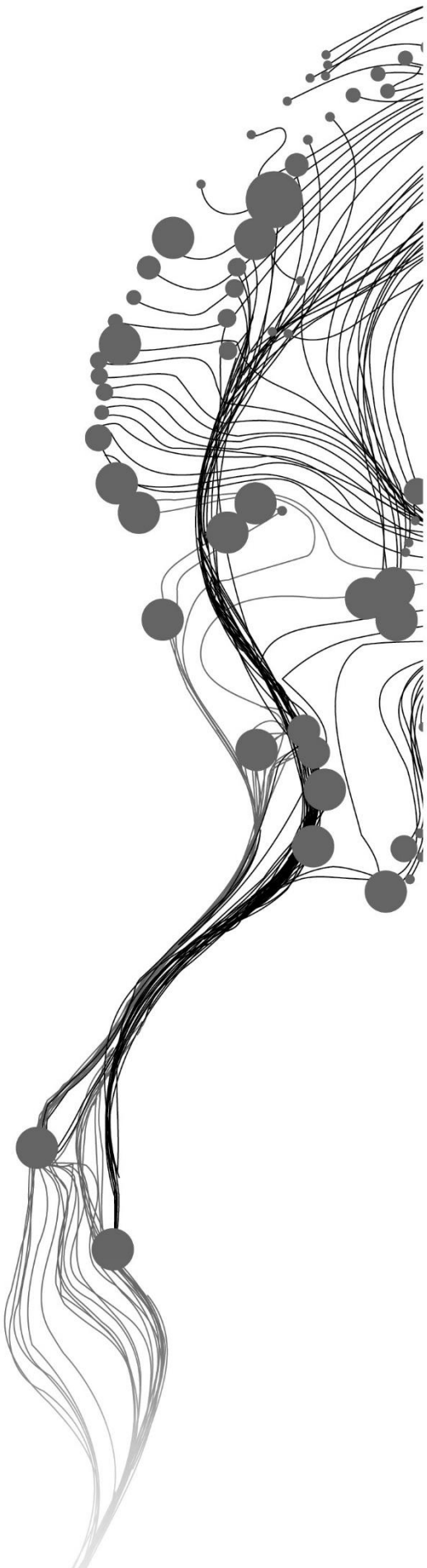

Assessing suppliers knowledge on determinants attractive to investors location decisions in industrial parks: The case of Bole Lemi I and Eastern Industrial Parks, Ethiopia

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ABSTRACT

This thesis paper tried to assess suppliers' knowledge on determinants attractive to investors' location decisions in industrial parks. The study targeted two industrial parks in Ethiopia, Bole Lemi I and Eastern Industrial Zone, which the former is public and the latter is a privately owned industry park. As such, it was interesting to study how the understanding of investors' needs compares across the two ownership spectrums. Based on this, the study examined the potential knowledge gap of policymakers and industrial park suppliers on functions and production factors attractive to investors in Ethiopia and proposed policy recommendations. In order to attract and maintain high-quality private investment, the government of Ethiopia supports and creates a favorable investment climate, including tax holidays, exemption of duty on capital goods and income tax, one-stop-shop services, and ease of access to industrial parks space. On the other hand, Investors consider different factors while making an investment location decision, such as investment incentives, facilities, regulations, and administrative processes. That is why it is extremely important to understand and analyze the factors that influence investors' investment decisions at two moments of time (before and after the investment). This will guide policymakers and industry park developers to focus their efforts on filling the gap. As a research methodology, the study adopted a case study approach to testing the hypothesis of the study, and it was useful to validate the hypothesis of suppliers' knowledge gap on investors' needs. Regarding the data collection and analysis, a mixed-methods approach was employed to minimize the drawbacks of a single approach. It was used for triangulation of different data sources to ensure fewer biases in answering the research question and objectives. As such: semi-structured questions were used to do interviews with policymakers and industrial park developers; close-ended questions were employed to collect data for quantitative analysis; Google images and site pictures were used to interpret and triangulate the result visually. For data collection, the study required both the secondary and primary data, in which websites, spatial data from Open Street Map, reports, and grey literature as secondary, and semi-structured interviews and surveys as primary. Accordingly, 6 companies from Bole Lemi I and 32 companies from Eastern Industrial Parks have participated. The qualitative data from key informants' interviews were summarized and coded manually using Atlas ti 9 software. The quantitative data from the survey were analyzed and interpreted quantitatively by using descriptive statistics such as frequency and percentages. Finally, the functions and production factors that suppliers consider as private investment attractions in both industrial parks and those that investors consider investing in are analyzed. The perception differences from both sides determined, and the function and production factors that should be given priority in the development of future industrial parks are forwarded.

The study found out that there are differences in the perception of functions and production factors from policymakers, industrial park developers, and investors in both industrial parks. The major reason for supplier differences indicated that the location of the industrial parks; (BLIIP located in main urban area and EIP located in a newly urbanized area), characteristics of the industrial parks; (BLIIP is intended for export-oriented industries and EIP mainly focuses on import substitution), and the provision of infrastructures and utilities. With regard to investors' differences across the two industrial parks, investors' nature or motives is mentioned as the main reason. Moreover, the study found out the different functions and production factors important for investors' investment location decisions. Regarding functions, all infrastructures, utilities, and their cost, and regarding production factors, young, abundant, and low-cost labor, all non-fiscal incentives, security, and political instability are the most important matter to investors' investment location decisions in both industrial parks.

Keywords: Agglomeration effect, industrialization, structural change, industrial parks, investment climate, functions, production factors, determinants, investors, suppliers, industrial park developers.

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LIST OF ABBREVIATIONS

BLIIP	Bole Lemi I Industrial Park
EIP	Eastern Industrial Park
EIC	Ethiopian Investment Commission
FDI	Foreign Direct Investment
GTP II	Growth and Transformation plan II
IPDC	Industrial Park Development Corporation
IP	Industrial Park
IPs	Industrial Parks
OSS	One Stop Shop

1. INTRODUCTION

1.1. Background

Industrial parks can be a useful instrument to provide infrastructures and increase the integration of resources for limited production elements in a specific area (Dobronogov & Farole, 2013). It can enhance job opportunities, improve labor skills, and support technology transfer by drawing workers and capital-intensive foreign and domestic investment in manufacturing and service sectors. Additionally, industrial parks create linkages to global value chains to enhance the industrial structure and the country's position by engaging in international competition (FIAS, 2008).

The term "industrial parks" has been used interchangeably with the term "special economic zones," "industrial zones," "economic zones," "free trade zones," "export-processing zones," and "trade and economic cooperation zones" (UNIDO, 2015). But despite the name variation, all have a similar definition. According to UNIDO (2019), industrial parks are defined as a "tract of land developed and subdivided into plots according to a comprehensive plan with the provision of roads, transport, and public utilities, sometimes with common facilities, for use by a group of manufacturers." In this study, this will be the definition of industrial parks, and the term industrial park will be used in a generic way, to comprise a wide range of zone types.

Given their potential advantages, industrial parks have become an important policy instrument for many developed and developing countries (UNCTAD, 2020). Several countries have followed the path to support industrialization and economic restructuring through industrial parks. Their numbers are grown from 176 industrial parks across 47 countries in 1986 to 5400 industrial parks across 147 countries in 2019. The largest number of industrial parks development are located in China, the Philippines, India, the United States, the Russian Federation, Turkey, Thailand, the Dominican Republic, Kenya, and Nicaragua (UNCTAD, 2019). These countries' investment environments are considered sufficiently appealing, and many offer alternative regulatory benefits for investors to attain a direct and indirect economic contribution from industrial park development. This includes an exemption from customs duties and tariffs, fiscal and non-fiscal incentives, business-friendly regulations regarding land access, permits and license, administrative facilities, and infrastructure support (Akinci & Crittle, 2008; UNCTAD, 2019).

Industrial park policy was introduced comparatively late in Africa. It was adopted widely throughout the continent in the 1990s and 2000s, aiming to recreate East Asian countries' rapid growth (Farole, 2010). For a continent like Africa, where infrastructure and institutional weaknesses are the main obstacles to economic growth, the development of industrial parks that allow the government to provide resources and infrastructure in delimited areas is often seen as a practical solution to the structural shortcomings (Farole, 2011; Farole & Akinci, 2011; Dobronogov & Farole, 2016). However, as Farole (2011) study revealed, most African industrial parks have failed to deliver a sufficient and quality investment climate. These include excessive bureaucracy, unnecessarily long delays in obtaining necessary permits, and unavailability of skilled local labor (Farole, 2011).

Currently, there are approximately 237 industrial parks in 38 African countries, some of which are still under construction. Of these, 61 industrial parks are located in Kenya, 38 of which are located in Nigeria, and Ethiopia is placed in third place with 18 industrial parks (UNCTAD, 2019).

Ethiopia is one of the countries in Africa with a vast development of industrial parks (UNCTAD, 2019). In its Growth Transformation Plan II (GTP II), the government focuses on industrial development to become

a middle-income country by 2025 (FDRE, 2016). The establishment of industrial parks across different regions of the country is considered as one strategy to promote industrial development to sustainable growth and as an impetus for economic restructuring (FDRE Ministry of Industry, 2013). It is also seen as means to attract private investment, and the government worked hard to attract and maintain high-quality private investment. To do so, the government supports and creates a favorable investment climate to attract investors to industrial parks, including tax holidays, exemption of duty on capital goods and income tax, one-stop-shop services, ease of access to industrial parks space, etc.

1.2. Problem Statement

The development of industrial parks can help attract private investment to improve production, exports, and employment. To accomplish such advantages, industrial parks must provide an optimum investment climate for the private investors to invest efficiently, ensure successful production and create jobs. Not only the provision but also the investment climate must meet the need of the investors. The investment climate influences decisions of investors of all kinds and within and across countries (Kochendorfer-Lucius & Pleskovic, 2005). For instance, private investors consider their advantages from the standpoint of location with respect to markets and raw materials, the attainability of labor supply, incentives, benefits, or other advantages to be competitive enough. Poor provision of investment climate to the industrial parks could discourage the flow of private investment and fail to achieve the desired results. Even with good provision, it may need an extra effort to attract private investment and meet their need once they invest.

Despite the large number of industrial park development in Ethiopia that integrated with a range of incentive policies, they are plagued by a limited investment climate that hinders investment. According to Ethiopian Reporter Amharic Newspaper (2016), many companies operating in Bole Lemi I industrial park have complained to the parliament about the lack of water supply, electricity, and low quality of cotton raw material, off-site infrastructure, and low exchange rate. Similarly, the problems are also observed in Eastern and Hawassa industrial parks with a different degree (Zhang, Zou Zhen Wang, Zhao, & Abera Gebremenfas, 2018). Such problems can arise from various factors such as late in the provision of necessary investment climates, lack of capacity to provide these infrastructures, and lack of coordination across the various delivery institutions (Farole, 2011; Farole & Moberg, 2014). However, at their root, these problems might result from the knowledge gap that the industrial park developers have on the factors that attract investors to invest in a certain place. Besides the industrial park developers, the policy makers play an important role in various important policy decisions concerning the industrial parks (Farole, 2011). So, the policy makers capacity to affect the program will not go away. Therefore, this study involves both suppliers, policy makers, and industrial park developers. To my knowledge, no study has been conducted to find out if there is a knowledge gap of policy makers and industry park developers on investors' needs, which is indicated as a hurdle for the success of government programs (Farole & Moberg, 2014).

Even though Ethiopia is a latecomer to industrial parks as an instrument for economic development, it continues to promote industrial parks development as a critical element to facilitate private investment to achieve long-term economic growth. Therefore, understanding what private investors are looking to invest in Ethiopian industrial parks is crucial and can support the government, policy-makers, and industry park developers on investment attraction strategies.

As mentioned previously, investors consider different factors while making an investment location decision, such as investment incentives, facilities, regulations, and administrative processes. According to Farole

(2011) finding, access to transport infrastructure, cost and quality of utilities, tariffs, duties, and rules of origin, business regulatory environment, and level of corporate taxes are the top five factors that contribute to investors' investment location decisions in Africa industrial parks. These factors fall into two categories of what can be considered functions and production factors. Functions are any physical infrastructures such as service, equipment, and facilities that have an economic or administrative purpose for certain development (Boerboom, Gibert, Spaliviero, & Spaliviero, 2017), and production factors are the inputs such as land, capital, and labor used in the production of goods (Bórawski et al. 2020; Misztal 2020). In this study, this will be the definition of functions and production factors, and the thesis focuses on identifying these two major factors. Moreover, these are issues that policy makers and industrial park developers have control over.

Investors make decisions about where to invest, how much to invest, and how to engage based on the investment environment that is perceived and experienced (Farole, 2011). However, lagging infrastructure development and delivery is widely recognized in African industrial parks (Farole, 2011; Zhang et al., 2018). These problems can be largely attributed to the discrepancy in factors that matter most to investors in their investment location decisions. Thus, it is relevant to understand investors' investment decisions at two moments in time (before and after the time of investment). In return, it provides guidance to where policy makers and industry park developer can focus their efforts on filling the gap.

It has been identified that there are differences between the two industrial park developers (public and private) in terms of understanding investors' needs. FIAS (2008) has made the most comprehensive review on 30 years of experience of countries with industrial parks, development patterns of industrial parks, and their economic impact. The study finds that, out of 135 countries from the FIAS database, private industry parks cover 62 percent of the 2,301 industrial parks in transition and developing countries. These private industrial parks operate more effectively than government-owned industrial parks. The reason is, they are more responsive to investors' needs, and they tend to fulfill their demand by supplying a wide range of services and utilities. As such, Ethiopia has established not only government-owned industrial parks but also private industrial parks. Therefore, it is interesting to study how the understanding of investors' needs compares across public and private industrial parks.

This thesis will therefore look at the perception of policy makers and industrial park suppliers on the functions and production factors attractive to investors in public and private industrial parks, important functions and production factors for investors' investment location decisions in both industrial parks, and propose policy recommendations.

1.3. Research Objectives

This study's main objective is to examine the potential knowledge gap of policy makers and industrial park suppliers on functions and production factors attractive to investors in Ethiopia and propose policy recommendations.

To answer each of these research objectives, the following research questions are developed:

Sub-objectives 1: To explain differences between policymakers, public and private industrial park space suppliers in terms of the functions and production factors they consider to be in demand from investors in public and private industry parks.

1. What are the functions and production factors that policymakers, the public, and a private industry park developer consider to be private investment attractions in a public and private industrial park?
2. What explains the difference?

Sub-objectives 2: To explain differences between investors in public and private industrial park locations in terms of the functions and production factors they consider important before and after their establishment.

1. What are the functions and production factors that attract private investors to invest in public and private industrial parks?
2. How do these functions and production factors change across time and location?

Sub-objectives 3: To propose policy recommendations based on the differences between what policymakers, suppliers and investors consider important investment attractions in public and private industrial parks.

1. What is the difference between the functions and production factors that the suppliers and investors consider important for attraction in both industrial parks?
2. Which functions and production factors should be given priority by policymakers, public and private industry park developers in the development of future industrial parks in Ethiopia, and why?

1.4. Significance of the study

This study contributes to the body of literature on the knowledge of policy makers and industry park developers regarding investors' needs for investment location decisions in Ethiopian industrial parks and beyond.

It also contributes as a source of information for policy makers and industry park developers in the formulation of policies to deal with what to include in attracting private investors in industrial parks, developing a measurable investment goal, and shifting its investment strategies.

This study also adds to the literature on differences between public and private industrial park developer toward the investors' needs and identify the functions and production factors that are attractive to investors in the context of Ethiopian industrial parks.

1.5. Thesis structure

The thesis is organized into six chapters. Chapter 1 presents the background of the study, problem statement, objectives, and significance of the study. Chapter 2 presents industrial park development as a global experience and industrialization and industrial parks in Ethiopia, including policies to encourage private investment attraction. Chapter 3 explains the research methods used to address the research questions. Chapter 4 presents the results of the research questions functions and production factors for industrial park development: findings from the case study. Chapter 6 discusses the result in terms of the literature. The last chapter 6 presents the conclusion and recommendations based on the findings of the study.

2. LITERATURE REVIEW

This chapter presents the advantage of industrial park development in creating an agglomeration economy and structural transformation, including a global experience. Following that, the study explores the investment climates that influence investors' investment location decisions. The experience and performance of industrial park development in Africa are then discussed, including the important factors that matter to investors' investment location decisions in the African industrial parks. Finally, the study presents in the Ethiopian context of industrial park development, including the objective of industrial park development and the provided investment climate to encourage investors' attraction to these industrial parks.

2.1. The Advantage of Agglomeration Through Industrial Park Development

The rationale for industrial parks is to enable the industry to concentrate and expand at a specific planned location (UNIDO, 2019; UNCTAD, 2019). Many economists indicate that an agglomeration provides three-way benefits. First, the provision of infrastructure for the geographically delineated area is much easier (Porter, 1996; UNIDO, 2019) and reduces the transportation costs of goods and laborers. Marshall (1920) explained that when firms are located close to each other, they gain an advantage from linkage, thus reducing the cost of transportation of final products and raw materials. This production linkage includes backward linkage, where the suppliers of inputs and firms are closely located, and in which firms will be benefiting from lower supply cost and quick delivery, and forward linkage created by a firm selling intermediate inputs to other consumers (Marshall, 1920; Venables, 1994; Ottaviano & Puga, 1998).

The second benefit is, it increases firms' competitiveness due to their easy access to skilled labor (Porter, 1990; M. E. Porter, 1998; Musterd & Murie, 2010). The agglomeration effect offers opportunities to create skilled labor pools in areas where there is high employment opportunity in a specific sector (Combes & Duranton, 2006). Similarly, firms can take advantage of a large number of labor with skills related to their sector (Nadvi, 1999). This makes it easier to match workers with jobs and laborers' movement across firms and industries for better opportunities (Combes & Duranton, 2006).

Third, the co-location of firms provides a major spillover effect in industrial parks. The clustering of firms provides industry-related knowledge spillovers and exchanging ideas between employees and firms (Marshall, 1920; Maskell & Malmberg, 1999 & Feldman, 1999). Additionally, it provides benefits to develop specialization and innovation or technology spillovers, thus leading to firms' growth (Koo, 2005).

These potential benefits from agglomeration effects have led policy-makers to focus on the industrial park policy as a tool for economic growth. Industrial park policies are widely used and have a long history starting from 1930 in Great Britain (Vidová, 2010; Farole, 2011). However, in the late 20th, they gained popularity after the success of the Shenzhen Economic Zone in China (Zeng, 2011), and a number of industrial parks in various countries have been opened (Moberg, 2013).

The purpose of establishing industrial parks varies in different countries and even between developing and developed countries. The purpose relies on how the government views economic transformation in the context of the country's general economic development and structural change (Farole & Moberg, 2014). For example, in 1988, China established industrial zones mainly to change the planned economy to a free-market economy (Yunzhen, 2019). Similarly, Japan established 22 industrial zones envisioned to boost foreign investment. Likewise, many industrial zones in the United Kingdom, France, the United States, and Ireland were established to stimulate growth in economically distressed areas (FIAS, 2008). In general, boosting economic growth, stimulating export efficiency, providing job opportunities, and leading to the

nation's sustainable development or the region is a common goal behind establishing industrial parks (FIAS, 2008). To achieve these diverse objectives, industrial parks need to design to overcome obstacles that hamper investment in the wider economy by offering investors different advantages (Farole, 2011; Farole & Moberg, 2014).

2.2. Industrial Parks, The Investment Climate, and Private Investment Attraction

Industrial parks are a major program for attracting private investment to improve production, exports, and employment (Moberg, 2013). However, the development of an industrial park alone is not sufficient to ensure economic development. In other words, investors or firms need to locate there. To stimulate private investment, it is important to provide a mix of soft[1] and hard factors (Musterd & Murie, 2010) to increase the country's competitiveness and make an attractive place to locate and work. Industrial parks have the potential to integrate hard infrastructure (road, rail, ports, service, utilities such as electricity, water, telecommunications), and soft infrastructure (administrative services such as work permits, register a business, visas process, human capital, and access to the local market) (Farole, 2010). Therefore, the government has a crucial role in adapting and provide private investment guarantees such as freedom from tariffs, duties, incentives, infrastructure, and raw material availability (Farole, 2010; Zeng, 2016), which would make the country investor-friendly. Moreover, these are all meant to improve the competitiveness of investments and decrease business startup and operating costs. Furthermore, it enables the enterprise to compete in the global market.

2.2.1. Functions And Production Factors for Investors Investment Location Decision

However, investors have a lot of demands to determine their location to invest. They choose where and how much to invest and how to engage based on the perceived and experienced investment environment[2] (Farole, 2010). Indeed, their requirements might be different based on their type[3] and objective[4]. However, investment climate certainly matters for all. Considerable research to date (not necessarily related to industrial parks) also shows that the investment climate is a crucial determinant of locations for investors (see Table 1). Despite the fact that the studies in Table 1 are not focused on industrial parks (focus on attraction to countries and regions), they provide an insight into favorable factors that investors need to invest in a certain location, such as the availability and quality of infrastructure, skill and cost of labor, and the availability and size of the market. It can be said that these are the main gateway to attract private investment, but the factors are different in a different context or country. This is a challenge for low-income nations, particularly Africa, where the investment climate is typically poor and has limited resources and can quickly improve the investment climate (Farole, 2010). In such areas, aiming at industrial parks is considered as one instrument to overcome these barriers.

[1] The use of the concept 'soft' is related to human capital, wage costs, quality of life, transport cost and taxation (Musterd & Murie, 2010).

[2] The investment climate includes finance (access and incentive), infrastructure (cost, accessibility, and reliability), labor (cost and skill), the regulatory and policy setting, taxation, and corruption.

[3] The type firms can be defined as foreign or domestic companies, export-oriented or not.

[4] The objectives of firms categorized as either market-seeking or efficiency-seeking (Markusen, 1984; Kusek & Silva, 2018)

Table 1: Studies of functions and production factors that are important for investors investment location decisions

Studies	Case study	Factors analyzed	Determinant factors on the location decision
Zhou, Delios, & Yang (2002)	China	Availability of infrastructure, government policy (trade tariff, tax rate, financial incentives), market size and growth, labor and labor cost	Skilled and cost of labor, availability of infrastructure, and market growth
Adhikary (2017)	South Asian economies (Bangladesh, India, Pakistan, Sri Lanka, and Nepal)	Infrastructure, domestic investment, lending rates, exchange rates, inflation, financial stability/crisis, market size, human capital and stock turnover	Market size and Human capital
Dzung, Tuan, & Tinh (2017)	Vietnam	Infrastructure, quality of public services, preferential policies, labor, market, and social services	Availability of Infrastructure, skilled labor
Akpan, Isihak, & Asongu (2018)	BRICS (Brazil, Russia, India, China, and South Africa) and MINT (Mexico, Indonesia, Nigeria, and Turkey)	GDP, market size, infrastructure, and trade openness	Market size, infrastructure availability, and Trade openness
Tran, Dang, & Thu Tran (2020)	Tay Ninh province, Vietnam	Consumer price index, infrastructure, human resources, trade openness, and private credit	Human resources, Infrastructure and Private credit
Tuman & Erlingsson (2020)	Mexican states	Market Potential, infrastructure, natural resources, labor conditions and skills, and subnational policy environment and security	Market size, education, and deep-water ports
Xuan (2020)	Vietnam	Infrastructure, human resources, quality of public services, the advantage of the investment sector, national brands, investment policy, living and working environment, and competitive input cost	Human resource and infrastructure

Note. The table is prepared by the researcher in order to present the finding from different studies.

2.3. Industrial Park Development In Africa

Many African countries started to promote industrial park programs in the early 1970s, such as Liberia in 1970, Mauritius in 1971, and Senegal in 1974 (Farole, 2010). But, the program is widely implemented at the end of the 1990s in response to the incentives such as the US-Africa Growth and Opportunities Act (AGOA) and the Multi-Fiber Arrangement (MFA) (Newman & Page, 2017).

Several studies show that the experience of industrial parks program in Africa has been less successful. Both Farole studies (Farole, 2010; Farole, 2011) provides a full review of the performance of industrial parks in Africa (both case studies and firm-level surveys). The comparative assessment was done on ten countries, six African countries (Ghana, Kenya, Lesotho, Nigeria, Senegal, and Tanzania), two Asian (Bangladesh and Vietnam), and two in Latin America (the Dominican Republic and Honduras). The success of the program were measure based on short-term effect on exports, investment, employment and long term effect on economic and social spillover. Farole finds that the African industrial parks have failed to perform well in

all of the above aspects. He also pointed out that the attraction of FDI to these African industrial parks is low compared to non-African industrial parks. As a result, the contribution of the agglomeration economies on linkage between firms and market, knowledge and technology spillover on labour and economy is missed (Newman & Page, 2017). Firms' reliance on external[5] supply markets and foreign employees are the signs of losing the effect (Farole, 2011).

In terms of providing an investment climate, the government provides a wide range of infrastructures, utilities, and incentives to investors to the industrial parks. Newman & Page (2017) summarize the numerous Sub-Sahara African industrial policies put in place (obtained online) to attract investors to the industrial parks. Their findings show that depending on the activities they are involved in, all of them provide different investment climates. The most common ones are tax relief on income tax and construction materials, duty-free imports and export, institutional services[6], and repatriation of profits by foreign investors.

However, the industrial parks have a long way to go to be competitive enough to attract investors with a wide range of global alternatives. Farole (2011) also has done a comparative[7] study (firm-level survey) on the performance of investment climate that matters the most to investors to invest in African industrial parks. In his finding, the cost and quality of utilities, access to efficient transport, business regulatory environment, tariffs and duties, and the level of corporate taxes were the top five important factors to investors' investment location decisions (see Table 2). Despite the fact that the investment environment within the industrial parks is good compared to their national economy, these top five important factors to investors did not address well in industrial parks. Beyond this, other reasons have been given: poor timing to the era of globalization[8] and poor industrial planning and implementation capacity (Farole & Moberg, 2014; Newman & Page, 2017).

Table 2: Criteria for location decision in African and Non-African industrial parks (Top five are highlighted)

Investment criteria	African zones	Non-African zones
Cost and quality of utilities	1	3
Access to transport infrastructure	2	2
Business regulatory environment	3	5
Tariffs, duties, and rules of origin	4	8
Level of corporate taxes	5	6
Access to highly skilled labor	6	4
Access to suppliers	7	7
Access to low-cost labour	8	1
Availability/cost of land and buildings	9	10
Access to local and regional markets	10	9
Access to technology	11	11

Note. Adapted from "Special Economic Zones in Africa : Comparing Performance and Learning from Global Experience," by Farole, T., 2011, World Bank, p. 136. Copyright 2011 The World Bank.

[5] It represent material supplier market located outside the country.

[6] Services given for providing licenses, visas and work permits (Newman & Page, 2017).

[7] The study focus on ten countries, six from Africa, two from Asia and three from Latin America.

[8] The era of globalization is expressed at the time (in 1980s & 1990s) When international trade and cross-border investments and global production networks (GPNs) (Farole & Moberg, 2014)

2.4. Ethiopian Industrialization Strategy

Ethiopia is one of the many African countries that began establishing an industrial policy as a growth strategy (Gebreeyesus, 2016), aiming to transform from an economy dominated by the agricultural sector towards focusing on the industrial sector to achieve middle-income level by 2025 (FDRE, 2016). The country goes forward with extensive industrial park development through public and private developers. Also, offer a wide range of infrastructure and incentives in industrial parks to attract global investors. In this section, I presented the industrialization and industrial park development in Ethiopia in two sub-sections. First, I discuss the objective of industrial park development. Then, I present the functions and production factors offered to investors in the industrial parks, which helps to understand what the government put in place to attract investors that could be used for developing questioners later on.

2.4.1. Industrial Park Development in Ethiopia

In 2002/03, the government formulated industrial development strategies and different development plans to initiate the industrial[9] and manufacturing sectors to promote economic growth (Gebreeyesus, Bedasso, Lachisa, Andargie, & Debele, 2016). It paved the way to develop an industrial strategic roadmap. The industrial development strategic roadmap covers a longer period from 2013 to 2025, containing three phases (2013-2015, 2016-2020, and 2021-2025). It aims to bring a structural shift in the country's economy through industrial growth by increasing the share of the industry and manufacturing sector as a percentage of GDP from 13.5% and 4% respectively in 2013 to 27% and 17% by 2025 respectively (FDRE Ministry of Industry, 2013). In addition, they visioned to build diversified, globally competitive, environmentally sustainable, and highly capable manufacturing in Africa that will significantly improve Ethiopians' living standards by 2025 (FDRE Ministry of Industry, 2013).

To support the process of economic growth and industrialization, the government placed the industrial park policy at the center of its strategy. Indeed, Ethiopia's geographical size, lack of access to land for industrial development, and poor infrastructure have also encouraged the government to focus on the spatial concentration of industry (FDRE, 2016). The Proclamation No. 886/2015 is one of the broad industrial park policy emphasizes establishing industrial parks to enhance the contribution of manufacturing to the national economy, pull in a large number of export-oriented foreign direct investors to acquire foreign currency, improve employment creation, encourage technology transfer, improve productivity and promote export-led industrialization (the Federal Democratic Republic of Ethiopia, 2015).

In the industrial park development, the government incorporates public and private[10] industrial parks with adequate water, electricity, road, sewerage system, and an arrangement for one-stop services, fiscal and non-fiscal incentives (FDRE, 2016). Under Growth Transformation Plan II, private developers can develop their industrial parks independently or through a public-private partnership with Industrial Parks Development Corporation (IPDC) (FDRE, 2016). The government allocated 3537 hectares of land across the country (FDRE Ministry of Industry, 2013; UNDP, 2015; Oqubay, 2019). So far, there are 17 industrial parks at the operational stage, 11 from government-owned and 6 from private-owned industrial parks (see Figure 1) (Ethiopian Investment Commission, 2020).

The rapid growth of industrial parks in the country allows firms to invest in the prioritizing manufacturing sectors in both industrial parks (FDRE Ministry of Industry, 2013). As indicated in Table 3, the government-owned industrial parks are devoted to specific sectors such as garment and textile, leather and leather

[9] In 2002/03 industrial development strategy, Ethiopian government aim to support and encourage private entrepreneurs to establish industrial estates focusing on specific priority sectors such as **Textile and Garment Industry**, **Meat, Leather and Leather Products Industry**, **Agro-processing Industry**, **Small and Micro Enterprises** *and* **Construction Industry (FDRE, 2002)**

[10] The public industrial parks are develop by the government, whereas the private industrial parks develop by private investors/developer.

products, and pharmaceutical. The private-owned industrial parks also participate in the same sectors, with some in mixed sectors. These encourage a tendency to agglomerate similar types of firms and acquire agglomeration benefits.

Zhang et al. (2018) study on the contribution of industrial park on employment, export, attraction of investors[11], and foreign currency. They find that the development of industrial parks helped Ethiopia achieve planned objectives by stimulating and increasing the inflow of big export-oriented private companies such as Huajian shoe & George shoe, who expand their company to the industrial park level. Also, it helped to create a wide range of job opportunities for younger populations with the expectation of 11 percent growth. Despite its success, it also shows a drawback in creating forward and backward linkages within the local economy. This is a similar issue that hampered other African industrial parks. Also, similar factors such as: infrastructure deficiency and lack of raw materials, which force the companies to be reliant on their mother company located abroad (Zhang et al., 2018; Beyer & Hagemann, 2019; Giannecchini & Taylor, 2018).

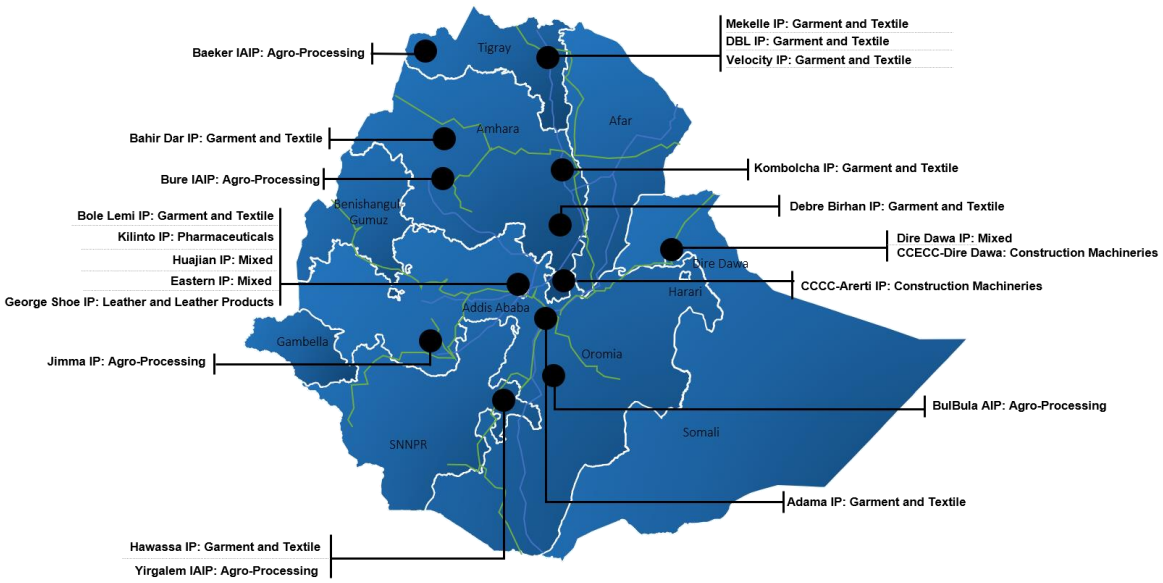

Figure 1: Industrial park development in Ethiopia. Adapted from http://www.investethiopia.gov.et/index.php/investment-opportunities/other-sectors-of-opportunity/government-and-private-parks.html

[11] In their study they focus on the attraction of Foreign Direct investment (FDI).

Table 3: General profile of Ethiopian industrial parks

Nature of IP	Name of Industrial Park	Location	Eligible Sectors	Land in Ha	Status
Government-owned IP	Bole lemi –I	Addis Ababa	Apparel & textile	172	Operational
	Bole lemi –II (2 sheds and serviced land)	Addis Ababa	Apparel & textile	181	- Ready for sublease - Service land available
	Kilinto	Addis Ababa	Pharmaceutical Hub	279	- Ready for sublease - Service land available
	Hawassa	Hawassa	Textile & Garment	140	operational
	Adama	Adama	Garment, Textile & Machinery equipment	120	- operational
	Dire-Dawa	Dire-Dawa	Garment, Apparel, and Textile	150	- operational - Factory buildings available
	Mekelle	Mekelle	Apparel & Textile	75	- operational - Factory buildings available
	Kombolcha	Kombolcha	Apparel & Textile	75	operational
	Jimma	Jimma	Apparel & Textile	75	operational
	Bahir-Dar	Bahir-Dar	Garment & Apparel	75	operational
	Debre-Birhan	Debre-Berhan	Garment & Apparel	100	- operational - Factory buildings available
	Addis Industry Village	Addis Ababa	Garment & Apparel	8.79	operational
	ICT Park	Addis Ababa	ICT	200	operational
	Semera	Semera	Multipurpose	50	Under construction
Private-owned IP	Eastern	Dukem	Mixed	400	Operational
	Huajian	Addis Ababa	Apparel & textile and Leather & leather products	138	Operational
	George shoe	Addis Ababa	Leather & leather products	86	Operational
	Vogue	Tigray	Textile & Apparel	177.5	operational
	DBL	Tigray	Textile & Apparel	70.05	- operational
	CCCC Arerti	Amhara	Construction materials & home appliances	100	- operational
	CCECC Dire Dawa	North-Eastern	Mixed	1000	Not constructed yet

Note. Adapted from: http://www.ipdc.gov.et/index.php/en/industrial-parks & https://www.investethiopia.gov.et/index.php/investment-opportunities/other-sectors-of-opportunity/government-and-private-parks.html

Note: The red shade in the table indicates the industrial parks that are not operating.

Indeed, the government and the industrial park developers provide utilities, physical infrastructure, and incentives. Also, to manage and regulate the development of industrial parks, a favorable investment climate, and support and follow-up the investment, the government established the Industrial Parks Development Corporation (IPDC) and the Ethiopian Investment Commission (EIC). The Industrial Parks Development Corporation (IPDC) was established in 2014 by the council of Ministers (Regulation 326/2014), with a mandate to build and maintain federal industrial parks (FDRE, 2014). The corporation is tasked with pre and post-investment services and collaborates with the Ethiopian Investment Commission (EIC) to deliver a one-stop-shop service for investors in industrial parks. The Corporation is also empowered to avail serviced industrial land, pre-built factory building equipped with all-encompassing utilities and infrastructure facilities (FDRE, 2014).

2.4.2. Investment Climate in Ethiopian Industrial Parks

The government and developers offer a wide range of physical infrastructure and incentives to industrial parks to attract investors. As discussed in chapter 1, section 1.2, this study looks at the two aspects, which are the functions and production factors offered to investors. As defined earlier, functions are all physical infrastructures, and production factors are inputs for production (Boerboom, Gibert, Spaliviero, & Spaliviero, 2017; Bórawski et al., 2020; Misztal, 2020). I document the information available online for both functions and production factors offered in both types of industrial parks. However, the information, mainly the functions in private industrial parks in general, is scarce. Therefore, this part presents the functions in public industrial parks, which are still limited.

2.4.2.1. Functions

The responsibility of IPDC to provide infrastructure remains only to government-owned industrial parks. According to the industrial park proclamation, the responsibility to provide on-site infrastructure to the industrial parks is given to respective developers, which is, for the public, the IPDC is responsible, whereas, for private, the private developers are responsible (FDRE, 2015). The government committed to invest in nationwide public infrastructure, aiming to avoid obstacles and increase the advantages. These include the construction of the Grand Ethiopian Renaissance Dam that expects to produce additional 6,000MW electricity, telecommunication services provision, road infrastructure that connect national and regional markets, Addis-Djibouti railway that connect the capital and regional corridors, air transport with 36 dedicated cargo destinations (Ethiopian Investment Commission (EIC), 2017).

According to Ethiopian Investment Commission (EIC) (2017), all public industrial parks offer pre-developed factory buildings with different sizes and on-site infrastructures. It is also stated that these industrial parks are developed at a strategic location along with the nationwide infrastructure and major local markets, aiming to create linkage and connection in a wide economy.

2.4.2.2. Production factors

In governmental industrial parks, pre-developed factory buildings are provided to investors with a possibility to rent up to 25-45 years with low rental prices ranging from ~ 2-6 USD/ha. In addition, the parks offer the possibility to sub-lease developed land. The sub-lease of the land is offered with zero charges for 60-80 years land lease term (to build employee residence) (Ethiopian Investment Commission (EIC).

The Investment Law of Ethiopia offers a number of incentive packages both in fiscal and non-fiscal incentives to investors in both public and private industrial parks, depending on the enterprises' export potential, sector type, and industrial park location (FDRE, 2012).

Regarding fiscal incentives, investors established in industrial parks enjoy a variety of benefits in both industrial parks. The first is income tax exemption. Under this benefit, companies can enjoy up to 6 years of income tax relief depending on the investment's location, sector type. In addition, 2 -4 years of income tax exemption for those engaged in 80% of production export (Ethiopian Investment Commission (EIC), 2017). The second is duty-free import. Under this benefit, there are a vast number of benefits provided to the investors. Investors can import capital goods and accessories, spare parts, construction material, and motor vehicles duty-free. In addition, all raw materials needed for the production of export commodities can be imported duty-free. The third is export tax exemption. Under this benefit, export tax is exempted for all export products. The fourth is carrying forward loss. Investors can enjoy a right to carry forward loss

incurred for half of the exemption period after expiry, with the maximum limit being 5 years. Besides, all investors benefit from access to foreign loans (Ethiopian Investment Commission (EIC), 2017).

Regarding non-fiscal incentives, industrial parks offer one-stop-shop services with all frontline institutions, expedited visa procedure, subsidized utility rates _ and lowest energy costs with 3 US cent/kWh and water cost with 0.50/m^3 for greater than 501 m^3 consumption, guarantee for remittance of capital for payments related to profits and dividends, interest and principals on external loans, and related to the invested capital; and foreign investors have the permission to open and operate foreign currency accounts (Ethiopian Investment Commission (EIC), 2017).

Furthermore, the government offers duty-free, quota-free access to a wide market, USA and EU through African Growth and Opportunities Act (AGOA), Everything But Arms (EBA), and Common Market for Eastern and Southern Africa (COMESA) (Ethiopian Investment Commission (EIC), 2017).

More recently, Mihretu & Llobet (2017) assess the important factors for PVH[12] company investment location decision to Ethiopia and specifically to HIP[13]. They find that fiscal incentives were the most important production factors for the company investment location decision in the HIP. These include income tax exemption, free duties, and other taxes on imports construction material, machinery equipment and vehicles, spare parts, raw materials, and zero land lease charges up to 80 years. Moreover, there were important production factors (such as labor cost, power cost, political stability, and raw material availability) and functions (such as availability of water and electricity, infrastructure, and access to transport (port and cargo) for the company investment location decision. But, these were used as criteria for their investment location decision to Ethiopia rather than to the industrial parks.

2.5. The Conceptual Framework

The conceptual framework in Figure 2 explains the relationship between the provision of functions and production factors by suppliers (policymakers and industrial park developers) and the private investment attraction in industrial parks. Private investment is important to stimulate economic growth, enhance the manufacturing and service sectors, and increase firm linkages (UN-Habitat, 2014). There is a relationship between private investment decisions and the functions and production factors developed in industrial parks. As Farole (2010) mentioned, companies' decisions in location choice depend on the investment climate such as finance, infrastructure, labor, and institutional environment. The government also provides different investment climates hoping to attract investors and ease their productivity after their investment (Newman & Page, 2017). However, industrial parks have shown low private investment attraction (Farole, 2010; Farole, 2011; Farole & Moberg, 2014). Ethiopia is also fostering industrial park development; however, the country faces the same challenges (Zhang et al., 2018). This can raise the question, "Do the suppliers know the investors' needs?"

[12] PVH is the world's second largest apparel company that invest in Hawassa Industrial Park.

[13] Hawassa Industrial Park

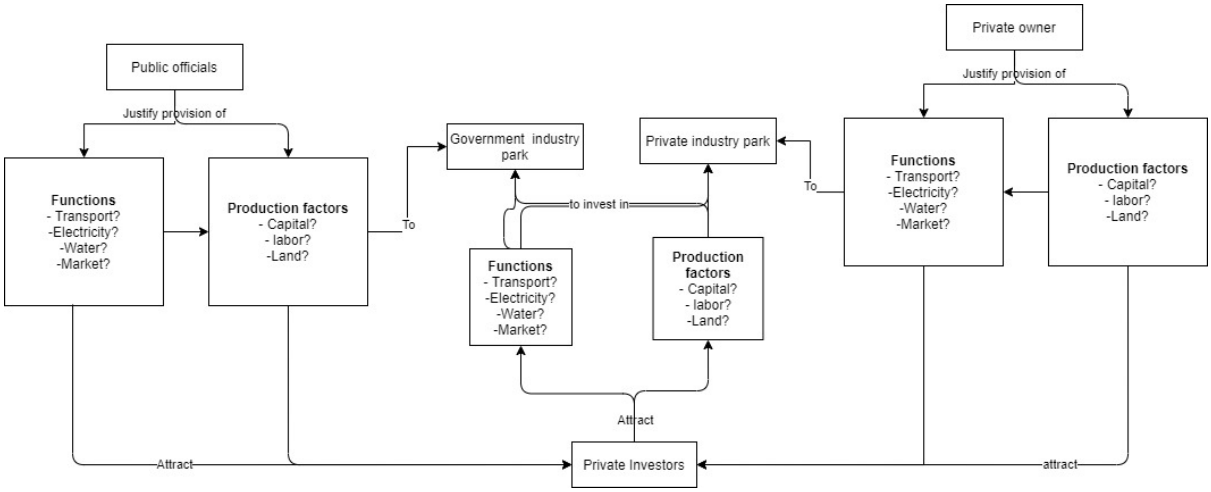

Figure 2: Conceptual framework

3. RESEARCH DESIGN AND METHODS

This chapter presents the background of the two case study area (Bole Lemi I and Eastern industrial parks) and describe the research design and methods used to answer the research objectives and questions.

3.1. Study Area

The government envisioned establishing industrial parks through private and public industrial park development across different regions of the country (FDRE Ministry of Industry, 2013).

The two industrial parks, namely Bole Lemi I[14] and Eastern[15] Industrial Parks, were chosen due to their diverse nature in ownership, and specialization, which allows to capture different sectors choices regarding the functions and production factors in their investment location decisions and compare the understanding of investors' needs across public and private industrial parks. The two industrial parks are also located close to the capital city so that the research assistant can easily and safely access the industrial parks for data collection. (The current situation in Ethiopia is unstable, and it is hard to travel for fieldwork mainly out of Addis Ababa.)

3.1.1. Eastern Industrial Park

The Eastern Industrial Park is one of the first industrial park development, developed and owned by a private developer, Jiangsu Qiyuan Group (Qiyuan Group). It is also the first pilot project for Ethiopia's industrial parks development (Giannecchini & Taylor, 2018; Oqubay, 2018). It was established in 2008 and started its operation in 2010 (Zhang et al., 2018). The industrial park is located between the two towns of Dukem and Debrezeit, Oromia regional state, and 35 km southeast of the capital city, Addis Ababa (see Figure 3). Also, it is located on the Addis-Djibouti highway, along the Addis-Djibouti railway line with its own station within the park[16] (see Figure 4), and 50 km north of Mojo dry port.

The industrial parks cover a total area of 238 ha of land of the total 500 ha. The park is fully serviced with the road, electricity with 252,000 KVA capacity, water, sewage treatment plant, expat residence, and other necessary infrastructure facilities (Jiangsu Yongyuan Investment Co. Ltd, 2017). Moreover, the park offers factory buildings ready for rent (pricing from 39-47 USD/sqm for one year) and sale. Similarly, the park offers the possibility of sub-lease land[17] for companies to construct their own factory building. The industrial park also charges for utility consumption. Usage of electric power from the supplied transformers costs 0.05 USD/kWh and 0.04 USD/kWh for those who install their own transformers[18]. Also, water costs 0.25 USD/ton.

In addition to infrastructure provisions, the industrial park offers all incentives packages that are offered in any given industrial park to investors. These include both fiscal and non-fiscal incentives.

[14] Inaugurated in 2014 http://www.ipdc.gov.et/index.php/en/industrial-parks/bole-lemi-i

[15] Inaugurated in 2010 http://www.e-eiz.com/about.php?lg=en

[16] On May 2021, the government launched a trackless station_ an office located far from the railway line http://www.xinhuanet.com/english/2021-05/06/c_139928536.htm

[17] In sub-leasing of land, the company pay 23,229 -30972 USD for 666.7 sqm and 1 Ethiopian Birr/sqm year for rent to the government (Jiangsu Yongyuan Investment Co. Ltd, 2017).

[18] For every capacity increase, companies have to pay 77 USD for 1 KVA (Jiangsu Yongyuan Investment Co. Ltd, 2017).

So far, the industrial park attracts 127 manufacturers companies; 3 joint ventures (Chinese and Ethiopian investors), and 124 foreign companies, with combined export-oriented and processing industries (Zhang et al., 2018; Ethiopian Investment Commission (EIC), 2021). These include, cement, footwear, automobile assembly, steel rolling, textile, and garment industries.

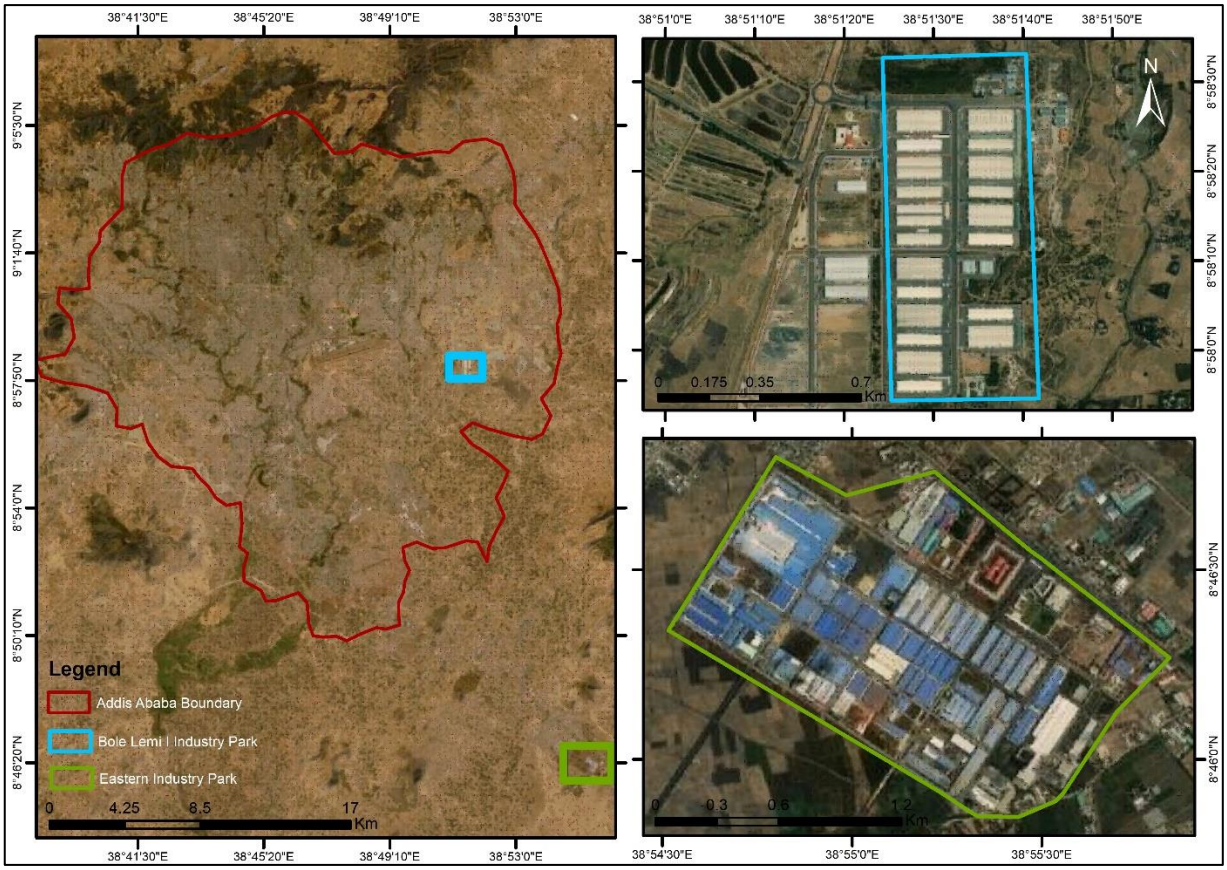

Figure 3: Study area location, Bole Lemi I and Eastern Industry Parks (Source: Esri Basemap)

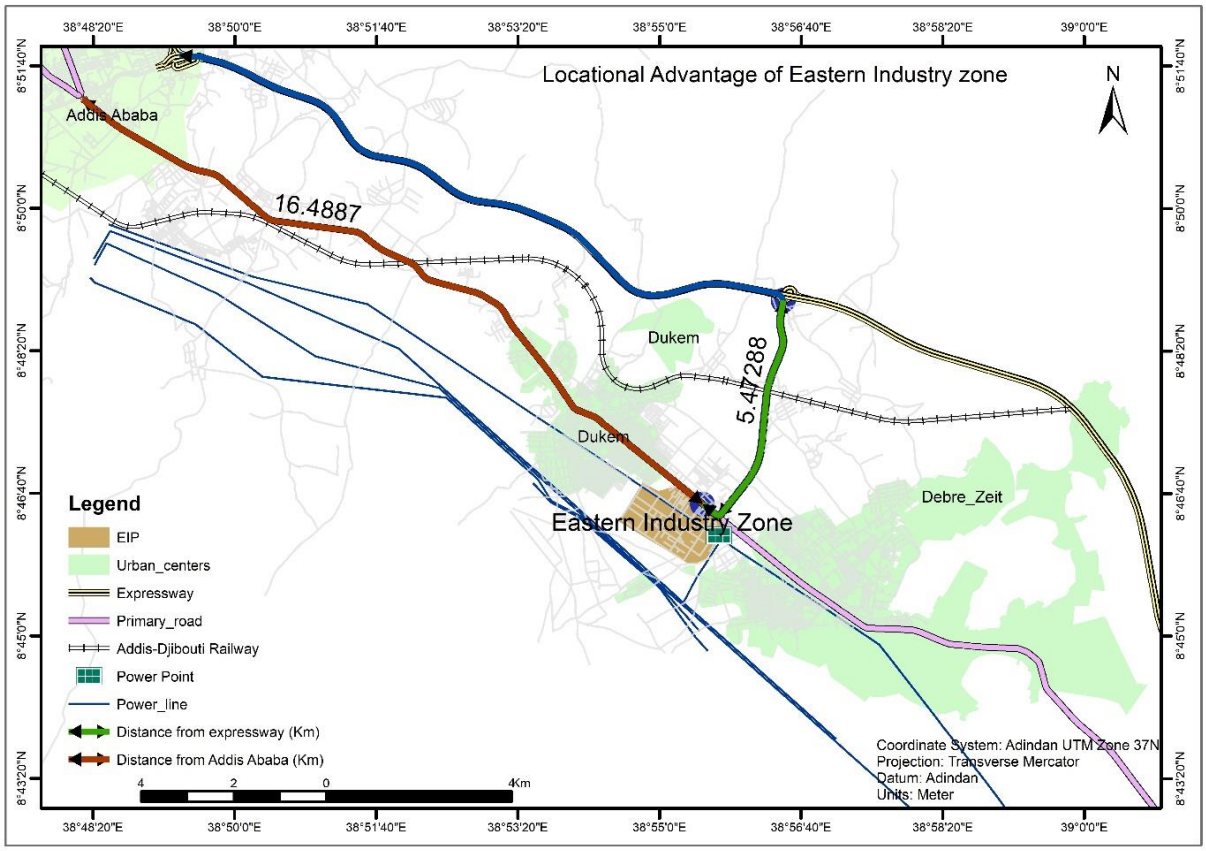

Figure 4: A map of the Locational Advantage of Eastern industry zone. Source: Open street map

3.1.2. Bole Lemi I Industrial Park

Bole Lemi I Industrial Park is the second industrial park but the first to develop by the government, the first government-owned industrial park. It is located 10 km southeast of Addis Ababa, with direct access to the capital city, Addis Ababa airport, Addis-Djibouti railway, and huge road infrastructures (see Figure 5). It was inaugurated in 2012 and began operation in 2014 (Zhang et al., 2018).

The industrial park covers a total area of 156 ha. It consists of 20 pre-erected factories, on-site road, electricity, water, waste water treatment, and residence for the employee that is constructed by a private company [19] (Industrial Parks Development Corporation (IPDC), 2021). The industrial park offers a possibility of renting the pre-erected factory buildings (pricing range from 1-1.50 USD per one year) and sub-leasing of developed land (zero charges up to 80 years) to investors mainly for the construction of a residence for their employee. The utility cost is the same for all government-owned industrial parks, which is 0.04-0.26 USD/m^3 of water consumption and 0.045 USD/kWh for electricity. Similarly, the industrial park offers all incentives packages, including fiscal and non-fiscal incentives, to investors.

The industrial park is focused fully on export-oriented industries specialized under specific sectors such as textile and garments and leather and leather products. To date, eight foreign companies are located in the industrial park (Industrial Parks Development Corporation (IPDC), 2021).

[19] Residence for employee is constructed by the company called Shints Garment Plc.

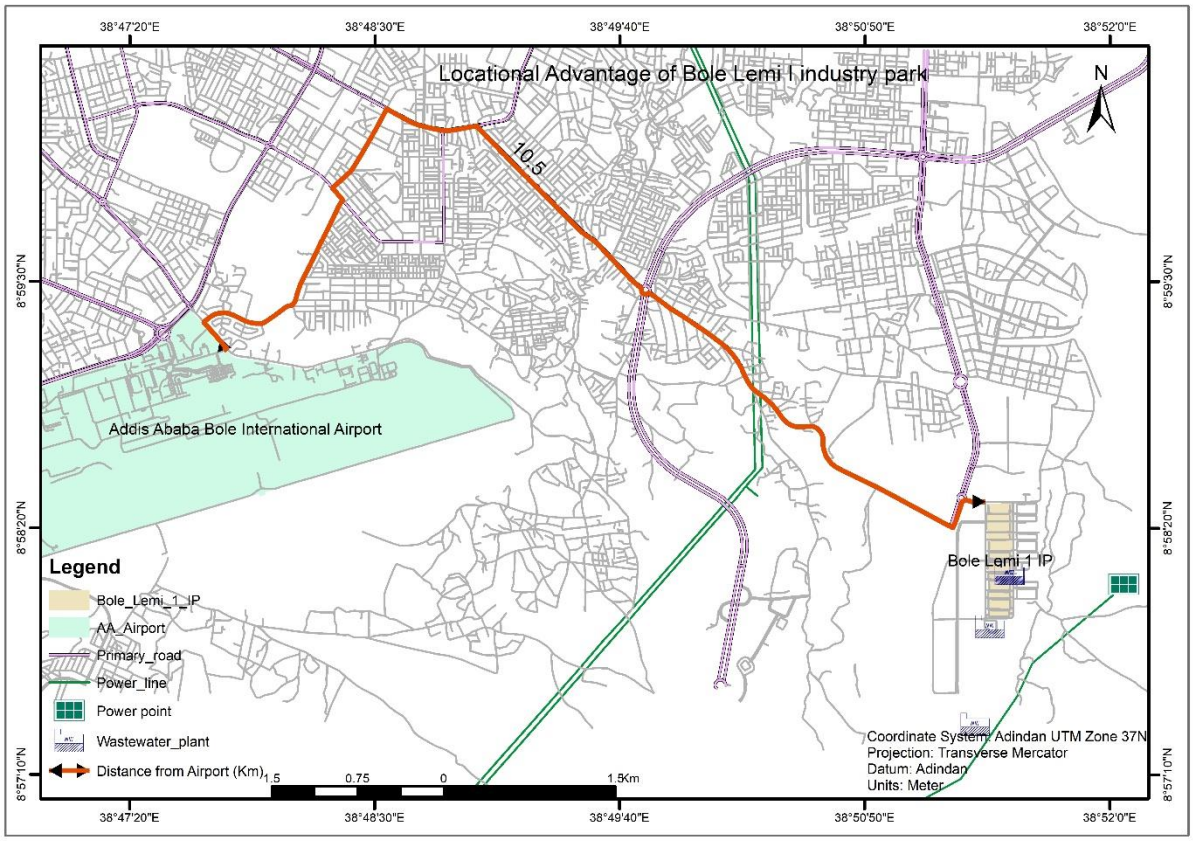

Figure 5: A map of the Locational Advantage of Bole Lemi I Industrial Park. Source: Open street map

3.2. Research design and approach

The main aim of the study is to examine the knowledge gap of suppliers on functions and production factors attractive to investors in Ethiopia and propose policy recommendations. In this case, the study adopts a case study approach to test the hypothesis of the study. A case study approach is a detailed and in-depth experimental analysis that clarifies a certain matter (Mills, Durepos, & Wiebe, 2010a). Therefore, the case study in this research helps to validate the hypothesis on suppliers' knowledge gap on investors' needs.

In this study, a mixed-methods approach was employed for data collection and analysis. A mixed-methods minimizes the drawbacks of a single approach and fits with case study research (Mills, Durepos, & Wiebe, 2010b). The mixed methods were used for triangulation of different data sources in order to ensure fewer biases in answering the research question and objectives. As such, mixed methods in data collection and analysis ensure the validity & reliability of the result as well as the study (Given, 2012). Semi-structured questions were used to do interviews with policy makers and industrial park developers on what functions and production factors that they consider to be private investment attractions in public and private industrial parks. This study were used close ended questions to collect data for quantitative analysis. Google images and site pictures were used to visually interpret and triangulate the result.

In this study, the questions for semi-structured interviews and surveys were developed through an extensive review of the documents, reports, and grey literature. During the process, a lot of information was gathered. Therefore, coding strategies were used to organize, minimize the findings' complexity, and grasp the

information well. The codes were developed based on the collected data using Atlas.ti 9 (Friese, 2021), called the inductive coding strategy[20] (see Appendix 5).

3.3. Data source and collection methods

The study uses both primary and secondary data sources. For secondary data, websites, spatial data from OpenStreet Map, reports, and grey literature on industrial park development and investment climate in industrial parks were referred. I rely entirely on internet sources to obtain all documents, reports, and grey literature. However, data on the available physical infrastructures and access to transportation of the two industrial parks were scarce. Therefore, the spatial data derived from OpenStreet Map were used to assess the locational advantage of the two industrial parks. For primary data collection, semi-structured interviews, surveys were employed. Table 4 indicates the summary of the data type, format, and source of the data used in this study.

KoBoToolbox[21] application was used to conduct the survey in two industrial parks. To analysis the collected data, Excel tools were used. Besides, Zoom[22] and WhatsApp[23] communication platforms were used to conduct interviews.

Table 4: Data type, their source, and format used in the study

Type of data	Format	Acquired date	Source
Spatial data	Shapefile	April 2021	OSM
Aerial Image	Images	May 2021	Google Earth
Site pictures	Images	June 2021	Field
What are the functions and production factors that suppliers consider to be private investment attractions in a public and private industrial park?	Interviews	April and May 2021	Key informants
What are the functions and production factors that attract private investors to invest in public and private industrial parks?	Survey	May 2021	Field/ Investors

3.3.1. Sampling technique

In this study, purposive, random, snowball, and stratified sampling techniques were used. Purposive and snowball samplings were applied to select key informants. In the first step, the key informants were selected purposively based on their experts with insight information in relation to the subject matter. The selection was made from relevant organizations, such as IPDC, EIC, Eastern industrial park management team. Due to the busy schedule of some selected key informants, I was unable to reach and conduct the interviews. Therefore, snowball sampling was used to select other responsible key informants for interviews. In order to reduce biases and to triangulate, two key informants were selected from each organization. Close-ended questions were used to gather perceptions of investors with regard to the functions and production factors that attract them to invest in public and private industrial parks, including two moments to time. These investors are the people who have been registered in both Bole Lemi I and Eastern industry parks. In Bole

[20] Developing codes directly from the data is called Inductive coding (Skjott Linneberg & Korsgaard, 2019).

[21] https://www.kobotoolbox.org/

[22] https://zoom.us/

[23] https://www.whatsapp.com/

Lemi I Industrial Park, due to its small size (8 companies), all companies were taken for the survey. A random and slightly purposive sampling technique was adapted to ensure the spatial distribution of responses in Eastern Industrial Park. The sample size for Eastern Industrial Park was calculated based on known population size, which is 127 companies (see Table 5). To calculate the sample size (see Equation 1), 80 % of confidence level and 10 % margin of error were used in order to reach as many respondents as possible within a short time.

$$Sample\ size = \frac{\frac{z^2 \times P(1-P)}{e^2}}{1 + \left(\frac{z^2 \times P(1-P)}{e^2 N}\right)}$$

Equation 1: Sample size formula

z = z-score (used 1.28 at 80% confidence level)
P = Population proportion (taken 50% = 0.5)
e = Margin of error (taken 10%)
N = the size of population

$$Sample\ size = \frac{\frac{(1.28)^2 \times 0.5(1-0.5)}{(0.1)^2}}{1 + \left(\frac{(1.28)^2 \times 0.5(1-0.5)}{(0.1)^2(127)}\right)}$$

$$Sample\ size = 31.9711 \sim 32$$

Table 5: Sample size for the survey

No	Target population	Sample technique	Total population	Sample size	Methodology
1.	Investors in Bole Lemi I Industry park/ representative	No sampling	8	8	Survey
2.	Investors in Eastern Industry park/representative	Random & Purposeful sampling	127	32	Survey
	Total		**138**	**40**	

3.3.2. Key informant interview

The primary data were performed in the form of one-to-one interviews with key informants. The interviews were done in two rounds. The first round, which was held on the 15th, 16th, & 20th April and 7th, 9th & 10th May 2021, focused on data collection in general. The interviews were meant to examine the functions and production factors that suppliers consider private investment attractions in public and private industrial parks. The second round interview only with one key informant held on the 18th of June was done to clarify some missing aspects. In this study, the key informants represent the suppliers, which are policymakers and industrial park developers (see Table 6). The interview was conducted using semi-structured questions (see Appendix 1) and was recorded audio based on their consent. Then in later, the recorded audio was transcribed. According to Gubrium & Holstein (2012), semi-structured interviews provide in-depth discussions to gain detailed information and allow the researcher to incorporate follow-up questions. The conducted interviews provided further information that was not captured through grey literature and literature review.

Table 6: List of interviewed key informants

Type	Position of key informants	
Key informants interview	Industry Park Facilitation Directorate at EIC	Key informant 1
	Investment Promotion Directorate at EIC	Key informant 2
	Branch manager of IPDC at Bole Lemi I Industry Park	Key informant 3
	Head of Investor's Support and Follow up Services at Bole Lemi I Industry Park	Key informant 4
	Branch Manager of EIC to Eastern Industry Parks	Key informant 5
	Eastern industry park top management team	Key informant 6

3.3.3. Survey

The survey was done to gather investors' perceptions regarding their choice of investment climate to invest in Bole Lemi I and Eastern Industrial Parks. To obtain such information, the survey includes choice questions between important and not for each list of functions and production factors and open-ended questions to obtain additional inputs (see Appendix 2). Two moments of time (at the time of their investment decision and current) were used to capture investors' choice difference. In Bole Lemi I Industrial Park, all eight enterprises established in these parks were contacted and asked to participate in the survey; two declined, only six of them participated in the survey.

3.3.4. Data collection procedure

Due to Covid-19 travel restrictions for fieldwork, the researcher could not collect all the relevant primary data from the organization and industrial parks by herself. Therefore, a research assistant was assigned to proceed with the survey with the investors on her behalf, and the researcher only did online interviews with the key informants. In addition to that, the research assistant was assigned to deliver the letter of cooperation to the respective organization for interviews. Moreover, during the fieldwork, the research assistant took photographs of the area. This helps the researcher to get a clear understanding and familiarize with the environment of the study area.

The research assistant is an employee in Wasse International Plc.[24]. Therefore, the research assistant had experienced in data collection and the use of KoBoToolbox software. Prior to the data collection, the researcher gave training for the research assistant for one day on the study content and the questions to familiarize and minimize the errors that may be introduced in data collection. There was also discussion and meeting with the research assistant on a daily basis, which is mainly to ease the process for the research assistant by giving clarification when needed and to follow up if the work is done properly.

3.4. Method of data analysis

The qualitative data on the perceptions of key informants' interviews regard to the functions and production factors that they consider attractive to investors was transcribed from recorded into word documents. Following that, the data was summarized and coded manually using Atlas ti 9 software (Friese, 2021). The

[24] https://waasinternational.com/about-waas/

summarized data provide a list of functions and production factors that the key informants consider attractive to investors. Then it was classified and categorized under respective codes that were developed during document collection. This analysis method is helpful to convert huge information to simple and organized input.

In addition, the quantitative data from the survey was analyzed and interpreted quantitatively by using descriptive statistics such as frequency and percentages, which are presented using charts for better understanding the functions and production factors matters to investors in both industrial parks. Based on the frequency result, the functions and production factors are sorted accordingly. This is in line with Farole's (2011) study, which used descriptive analysis to explore the prominent factors on investors' investment location decisions in African industrial parks. Using both results, the comparison across people, space, and time was analyzed. Similarly, the grey literature review was used to complement the result from interviews and surveys.

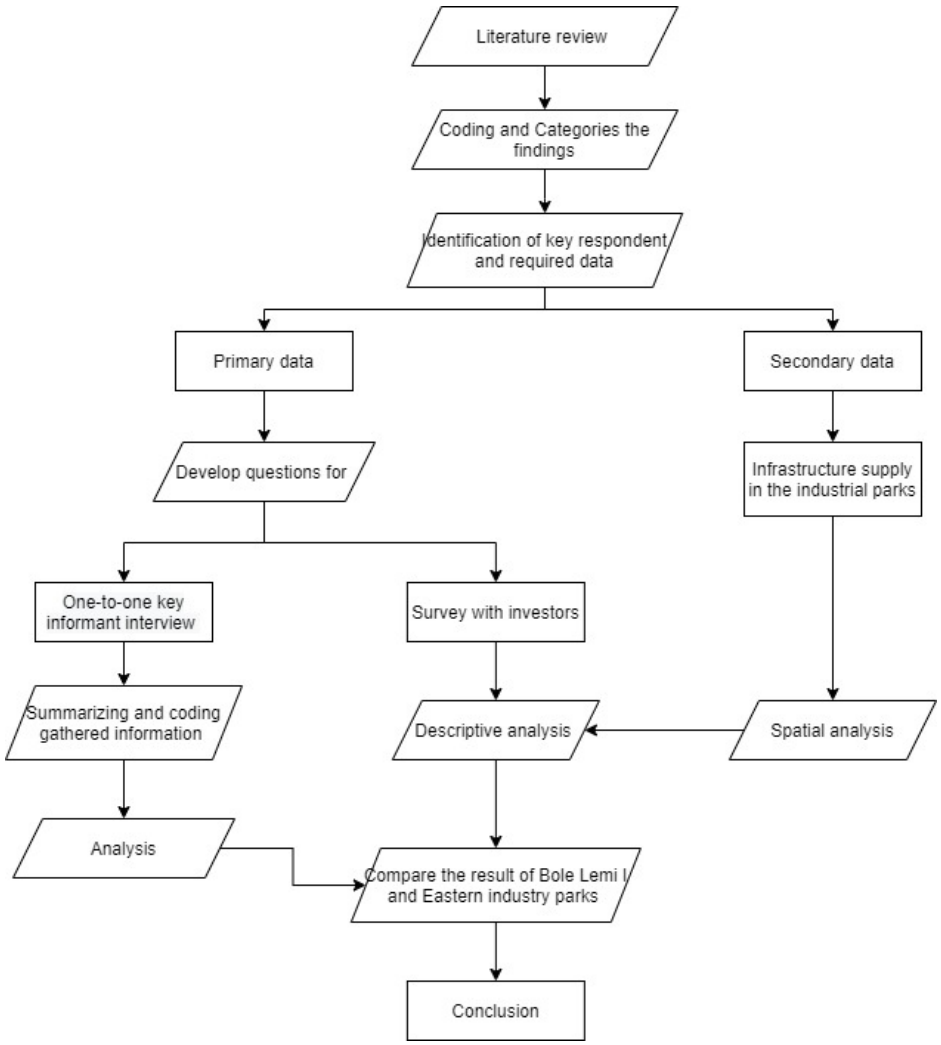

Figure 6: Overall research method flow chart

3.5. Ethics Considerations

Prior to the fieldwork, the researcher has obtained a support letter from the University of Twente regarding the research aim and authorization for a research assistant. The research assistant gave a full clarification for the collection of the data and presented the obtained letters to all relevant respondents before any

participation. In every procedure of data collection, the consent of respondents were asked for their involvement in the research. Also, the consent of key informants were asked for the audio recording of the sessions. The researcher and the research assistant followed ethical protocols during interviews and surveys. Permission was obtained from organizations such as The Industrial Parks Development Corporation and The Ethiopian Investment Commission before performing surveys and interviews. Both key informants and investors representatives were prior notified for agreement on appointment for interviews as well as for survey respectively. The data gathered for use in the study has been fully acknowledged.

4. RESULT

This chapter presents the findings from the case study in three main sections. In the first section, the result of interviews of the key informants (suppliers) on functions and production factors considered attractive to investors in Bole Lemi I and Eastern Industrial Parks is presented, and differences are explained. In the second section, the results of the survey on functions and production factors that investors consider as investment attractions in Bole Lemi I and Eastern Industrial Parks are presented, and differences are explained in location and time. Finally, the difference of perception between suppliers and investors is presented. The complete analyzed data is placed in **Appendices 4 & 5**.

4.1. Functions and production factors that suppliers consider as private investment attractions

I identified the functions and production factors that suppliers consider as private investment attractions in public and private industrial parks and explain their differences. The findings were obtained from six key informants' interviews (see Table 6). Using their knowledge of the area, each provided a list of functions and production factors that they consider attractive to investors in public and private industrial parks (**Error! Reference source not found.** column). Also, **Error! Reference source not found.** shows perception differences between respondents regarding the two industrial parks (table rows).

The key informants focus mainly on railway and road networks and, to some extent, on-site infrastructure (see **Error! Reference source not found.**) regarding functions they consider important to investors in Bole Lemi I Industrial Park. But, in Eastern Industrial Park, all key informants focus mainly on on-site infrastructure. One of the reasons for key informants' perception difference might be differences in infrastructure provision. In government-owned industrial parks, the government provides infrastructure and incentives (Ethiopian Investment Commission (EIC), 2017). In contrast, the government only provides incentives[25] for privately owned parks because of the government's limited economic and capital capacity (key informant 1). Thus private industrial park developers are responsible for developing on-site infrastructure for their industrial park (FDRE, 2015).

The findings from the in-depth interviews with key informants also confirmed differences in the provision of infrastructure, which is Eastern Industrial Park is better-equipped than Bole Lemi I Industrial Park. For example, comparing Bole Lemi I and Eastern Industrial Parks in terms of water, EIP is better because it has 4 to 5 drilled underground water wells to provide an uninterrupted and self-sufficient water supply. Whereas BLIIP only has one water station supply with a capacity of up to 1,500 cubic meters of water per day. Regarding electricity, EIP is also better because it has a reliable and sufficient power supply through the permanent park sub-stations that have a capacity of up to 252 MW. In contrast, BLIIP has a portable substation with a capacity of up to 40 MW.

The other reason for their differences might be the characteristics and the location of the industrial parks. Bole Lemi I Industrial Park is intended for export-oriented manufactures. Likewise, it is located only 10 km away from the capital city center with direct access to the airport and existing road infrastructure. This strategic location of Bole Leim I Industrial Park provides an advantage of easy access to import and export activities to investors. This, therefore, the key informants tend to consider the national infrastructure as a

[25] The government provides the same incentive packages, in both form of incentive packages such as fiscal and non-fiscal incentives, for public and private industrial parks.

private investment attraction, in addition to on-site infrastructure. Whereas the key informants in Eastern Industrial Park mainly consider on-site infrastructures as private investment attractions.

In terms of production factors, the key informants focus on the proximity to the capital city, security, and cheap factory building lease costs in Bole Lemi I Industrial park. In Eastern Industrial Park, the key informants focus on the linkage within the park and the surrounding, proximity to markets, and the opportunity to build, rent, and buy factory buildings in the industrial park (see Table 7).

This difference might arise from the characteristics and location of the industrial parks. Bole Lemi I Industrial Park's export-oriented nature and proximity to the capital city provide many advantages, such as security and access to different organizations/institutions. Besides, the industrial park offer factory buildings at lower rental prices than Eastern Industrial Park, which is 2-6 USD/ha in BLIP, but 39- 46 USD/m^2 in EIP (Jiangsu Yongyuan Investment Co. Ltd, 2017). This, therefore, the key informants tend to focus on these production factors in Bole Lemi I Industrial Park.

Whereas Eastern Industrial Park is characterized by import substitution[26]. As a result, it has linkage to the surrounding and local markets. In addition, the industrial park offers land to investors in different ways, for example, to build their factory buildings and rent or buy existing factory buildings (Jiangsu Yongyuan Investment Co. Ltd, 2017). This, therefore, has led the key informants to tend to consider these production factors as private investment attraction in Eastern Industrial Park and attribute to differences between industrial parks.

[26] Import substitution is the idea that prompts replacing foreign imports with domestic production (Baer, 1972)

Table 7: Functions and production factors suppliers consider as private investment attraction in Bole Lemi I and Eastern Industrial Parks (Source: key informant interviews)

		Bole Lemi I Industrial Park					Eastern Industrial Park				
		Industry Park Facilitation Directorate	Investment Promotion Directorate	Branch Manager	Head of Investor's Support and Follow up Services		Industry Park Facilitation Directorate	Investment Promotion Directorate	EIC Branch manager	Top management team	
Functions	On-site infrastructures	■	■	■			■	■	■	■	
	Addis Ababa to Djibouti railway	■			■						
	Proximity to the airport	■			■						
	Road network				■						
Production factors	Fiscal incentives	■	■	■	■		■	■	■	■	
	Non-fiscal incentives	■		■	■		■				
	Security	■		■	■		■				
	Located in the capital city	■			■						
	Cheap factory building lease cost		■								
	Abundant labor force			■	■				■		
	Cheap labor costs								■		
	Proximity to Addis Ababa markets								■		
	An opportunity of building their own factory buildings									■	
	Rental and buying opportunity of the existing									■	
	Linkage with local markets						■				
	Plenty related companies						■				

Note: In here, non-fiscal incentives represent only one-stop-shop service and custom service.

4.2. Functions and production factors that investors consider to invest

I identified the functions and production factors that attract investors in Bole Lemi I and Eastern Industrial Parks and explains the differences in location (BLIIP located in main urban area and EIP located in a newly urbanized area) and time (before and after their investment). The findings were obtained through a survey. The survey was conducted with 6 investors representatives from Bole Lemi Industrial Park and 32 investors representatives from Eastern Industrial Park. As discussed in chapter 1, section 1.2, there is an expectation of discrepancy on the important functions and production factors across times. Therefore, the survey questions involved two moments of time, before and after their investment see Appendix 2.

The findings are presented using the stacked bar that shows the important functions and production factors for investors' investment location decisions in both industrial parks and both moments in time. The functions and production factors in the chart were sorted according to the respondent frequency. The complete analysis tables are presented in Appendix 5.

Characteristics of respondents

The total number of respondents from the two industrial parks is 38. Among 6 respondents in Bole Lemi I Industrial Park (see Appendix 3), 2 (33.3%) are owned by the Chinese, 2 (33.3%) are owned by Indias, and

2 (33.3%) are owned by South Korea. Concerning the sector of the companies, 5 (83.33%) of them involves in textile, and garment and 1 (16.67%) leather and leather product manufacturing, and all participate fully in exporting their products. In the case of Eastern industrial park, out of the total 32 surveyed companies, 27 (84.38%) are owned by the Chinese, 3 (9.38%) are owned by Indians, and 2 (6.25%) are owned by Joint ventures (Chinese and Ethiopian Diaspora). These companies have participated in different manufacturing sectors such as textile, packaging, food, electronics, building material, medicine (see Appendix 3), etc. Most of these companies, which is 30 (94%) sell their products to local markets, 1 (3%) sell their products to both local and abroad markets, and 1 (3%) fully export their products.

4.2.1. Functions

The literature review (see chapter 2 section 2.2.1) indicated that the provision of infrastructure influences investor's location decisions to invest in specific locations (Zhou et al., 2002; Farole, 2010; Dzung et al., 2017; Akpan et al., 2018; Xuan, 2020; Tran et al., 2020). Based on the survey results (see Figure 7), the provision of telecommunication services, water supply, electric supply, and low tariff rate for water and electricity played an important role for investors in their investment location decision in Bole Lemi I and Eastern Industrial Parks.

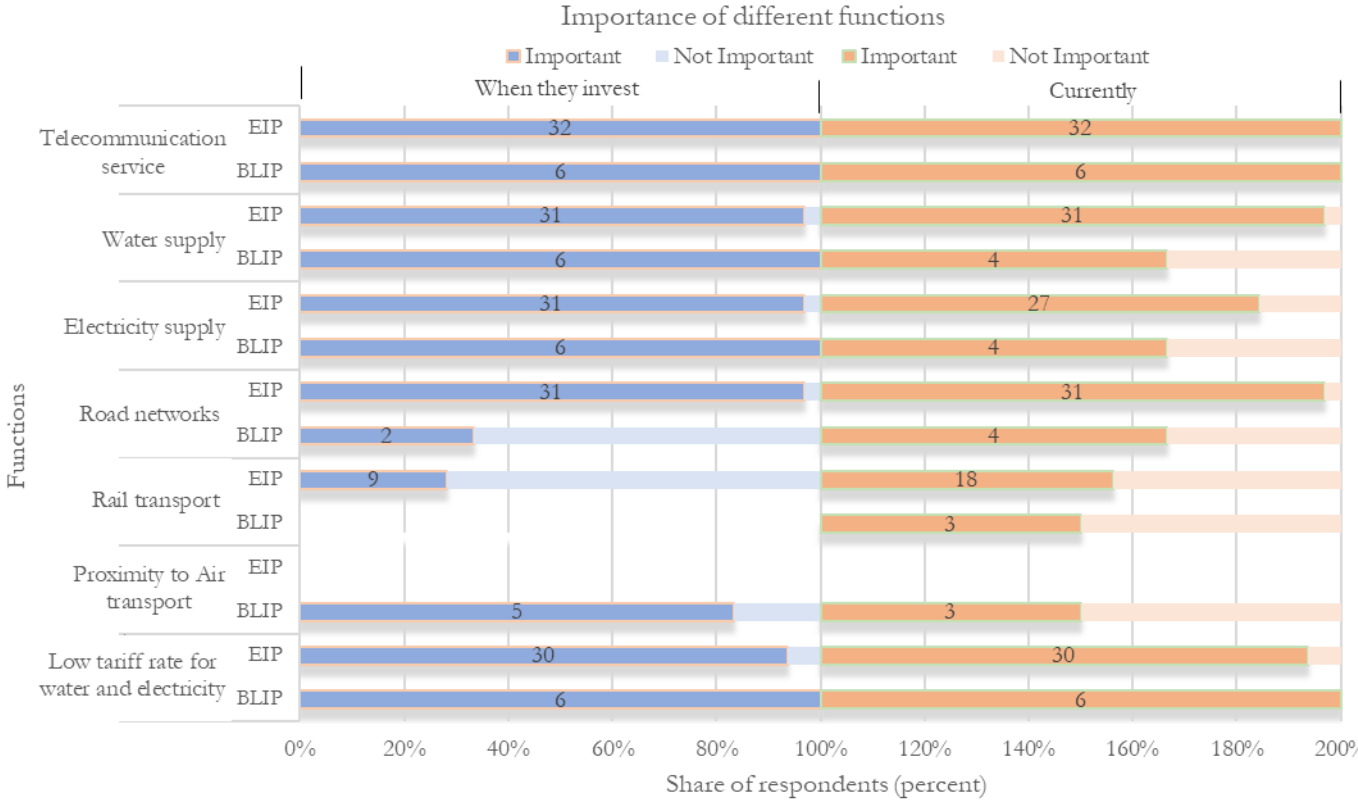

Figure 7: Important functions for investors' investment location decision
Note: The numbers in the charts represent the number of respondents.

The findings from the survey show a change in the importance of these utilities, infrastructure supplies, and cost of utilities after their (companies) establishment. As shown in Figure 7, telecommunication services and low tariff rates for water and electricity are very important in both moments in Bole Lemi I Industrial Park, but water supply and electricity supply have decreased in importance. The reasons from respondents pointed out that there is a power outage and shortage of water supply, so that these problems decreased the importance of the two functions for investors' investment location decision in Bole Lemi I Industrial Park.

Similarly, proximity to air transport shows a decrease in its importance for their location decision in Bole Lemi I Industrial Park.

For functions such as road network mainly in Bole Lemi I Industrial Park and rail transport in both Industrial Parks show an increase in their importance for investors' investment location decisions. This is mainly because of the better infrastructures development or the complete development of these infrastructures (see Figure 9 & Figure 10), which might have an influence on the importance of these infrastructures for investors' location decisions. As indicated in Figure 9 & Figure 10 (a & b), the construction of all planned roads and railway lines was completed or better in 2020. More than 50 percent of the surveyed companies in both industrial parks are established before the complete construction of railway and road networks. This led to less important for investors' investment location decisions in both industrial parks (see Figure 8). The completed infrastructure development increased the importance for investors' investment location decisions in both industrial parks.

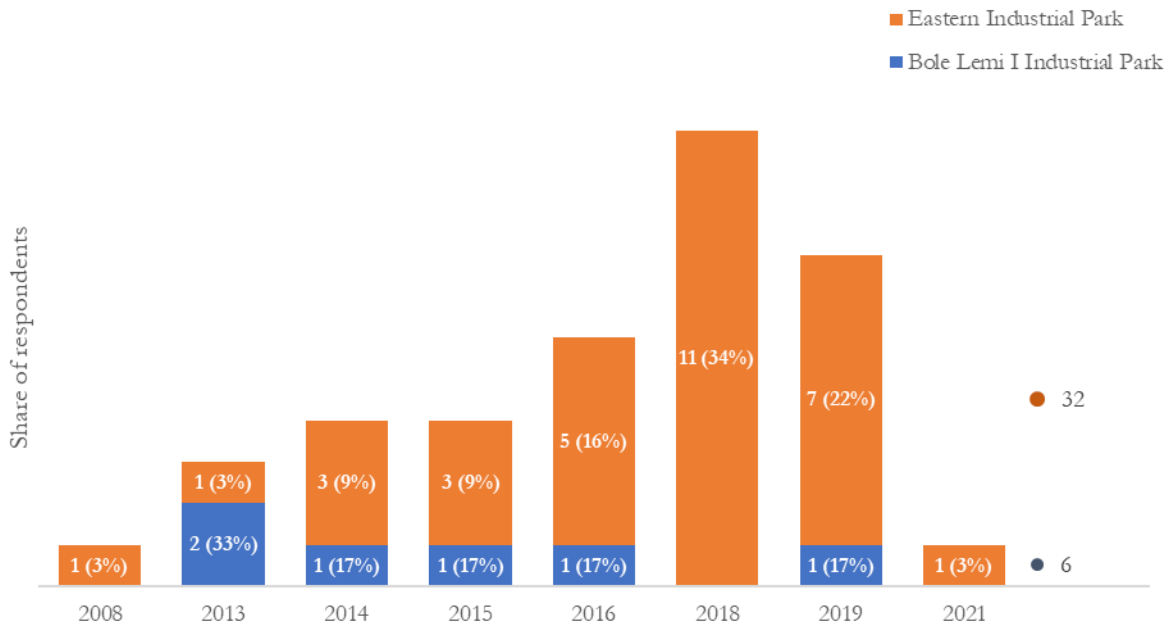

Figure 8: Companies year of establishment

Figure 9: (a-b): Road network and railway line development in and around Bole Lemi I Industrial Park (Source: Google Earth Pro, 2013 and 2020)

Figure 10: (a-b): Road network and railway line development in and around Eastern Industrial Park (Source: Google Earth Pro, 2013 and 2020)

4.2.2. Production factors

The production factors refer to the inputs used in the production of goods (Bórawski et al. 2020; Misztal 2020). These include land, capital, labor, raw material, and so on.

4.2.2.1. Characteristics of labor

The literature review (see chapter 2 section 2.2.1) indicated that the characteristics of labor, such as skill, abundant and cost of labour, influence the investment decision of investors (Zhou et al., 2002; Dzung et al., 2017; Akpan et al., 2018; Xuan, 2020; Tran et al., 2020). According to UN data, the share of Ethiopia's working-age[27] population increased from 51.8% in 2007 to 58.4% in 2019, providing a boost to labor supply (United Nations, 2008; United Nations, 2020). Based on the survey results (see Figure 11), the availability of a young, abundant labor force and low labor costs were important for the location decision in both Bole Lemi I and Eastern Industrial Parks. The importance of those three characteristics of labor remains the same in both locations and moments of time.

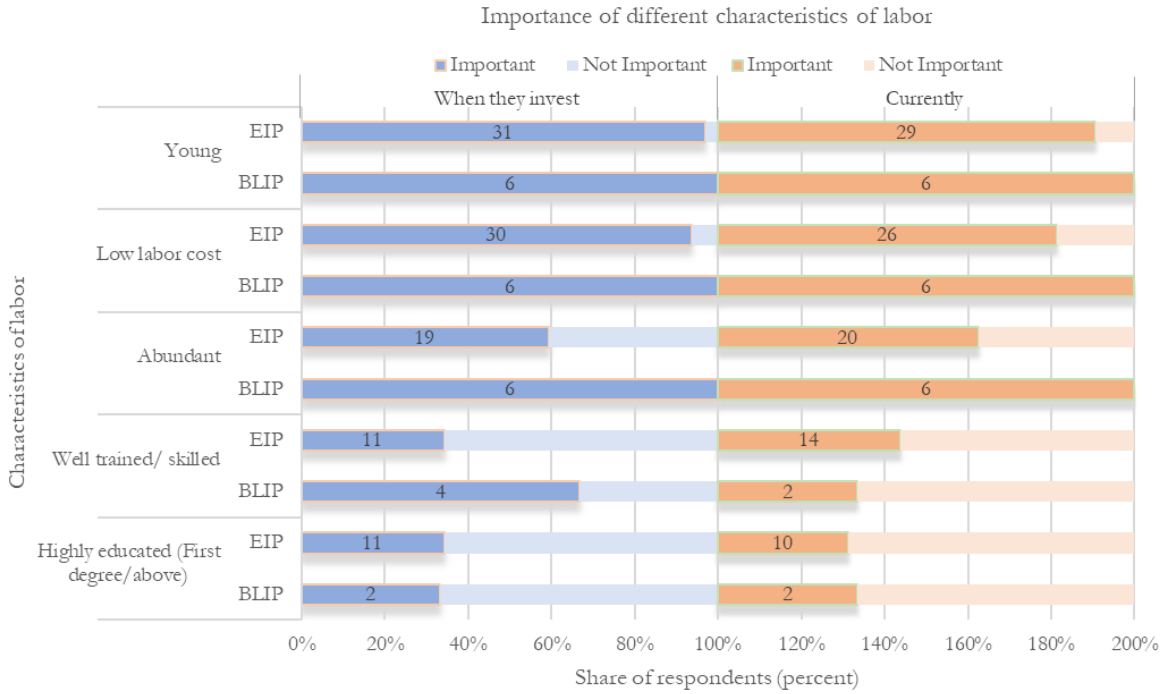

Figure 11: Important characteristics of labor for investors' investment location decision
Note: The numbers in the charts represents the number of respondents.

One piece of evidence consistent with this finding is that the employees of these companies come from nearby residential areas (see Figure 12), which indicates that there is an abundance of employees in the surrounding of Bole Lemi I and Eastern IPs. Also, the key informants pointed out that there is a supportive policy that facilitates labor force sourcing for industrial parks aiming to minimize the time it takes to search for employees by companies and to connect young workers to the right job. As one of the key informant expressed that:

> *"In the case of the labor force, the source of the labor force has its own system. The labor forces are recruited mainly by the city administrations that are located near and around the industrial parks, such as Woredas[28]or Sub-City or*

[27] 'Working-age' usually characterized as those aged 15 to 64 https://ec.europa.eu/social/main.jsp?langId=en&catId=1196&newsId=2500&furtherNews=yes
[28] Woreda is the third level administrative division after zones and regional state.

> *the Micro and Small Enterprises that work on job creation or the Trade and Industry Office, the Ethiopian Investment Commission in the industrial parks and sometimes industrial park developers together. We will develop various projects to recruit labor forces together. Based on these, the job seekers go to the nearest city administration and register. Accordingly, recruiting labor forces will be made available to organizations as needed."* – Key informant 1 (Researcher's translation).

This, therefore, results in almost all participant investors considering the abundant labor forces to their investment location decision.

There is a vast work on educational centers across the country (more than 50 Universities and 1300 Technical and Vocational Education and Training (TVET)) to provide an educated and trained labor force (EIC, 2017). It is also noted that one-week training for new employees is given prior to their starting date (Key informant 3). However, findings from the survey reveal that a well-skilled and highly educated labor force was the least important for their investment location decision and still remain the same with a slight change in both industrial parks. This is mainly because low-cost labor provides an advantage for less-skilled labor-intensive sectors such as garment and textiles in these industrial parks (see Appendix 3). However, for some companies (such as electronics manufacturing) in Eastern Industrial Park, the reason for the least important skilled and educated labor force for their investment location decisions was the lack of skilled and up-to-date technical labor forces in the area. Due to this, they indicated that they provide training for their new employees. This, therefore, has influenced the importance of these characteristics of labor in contributing to investor's location decisions in both industrial parks.

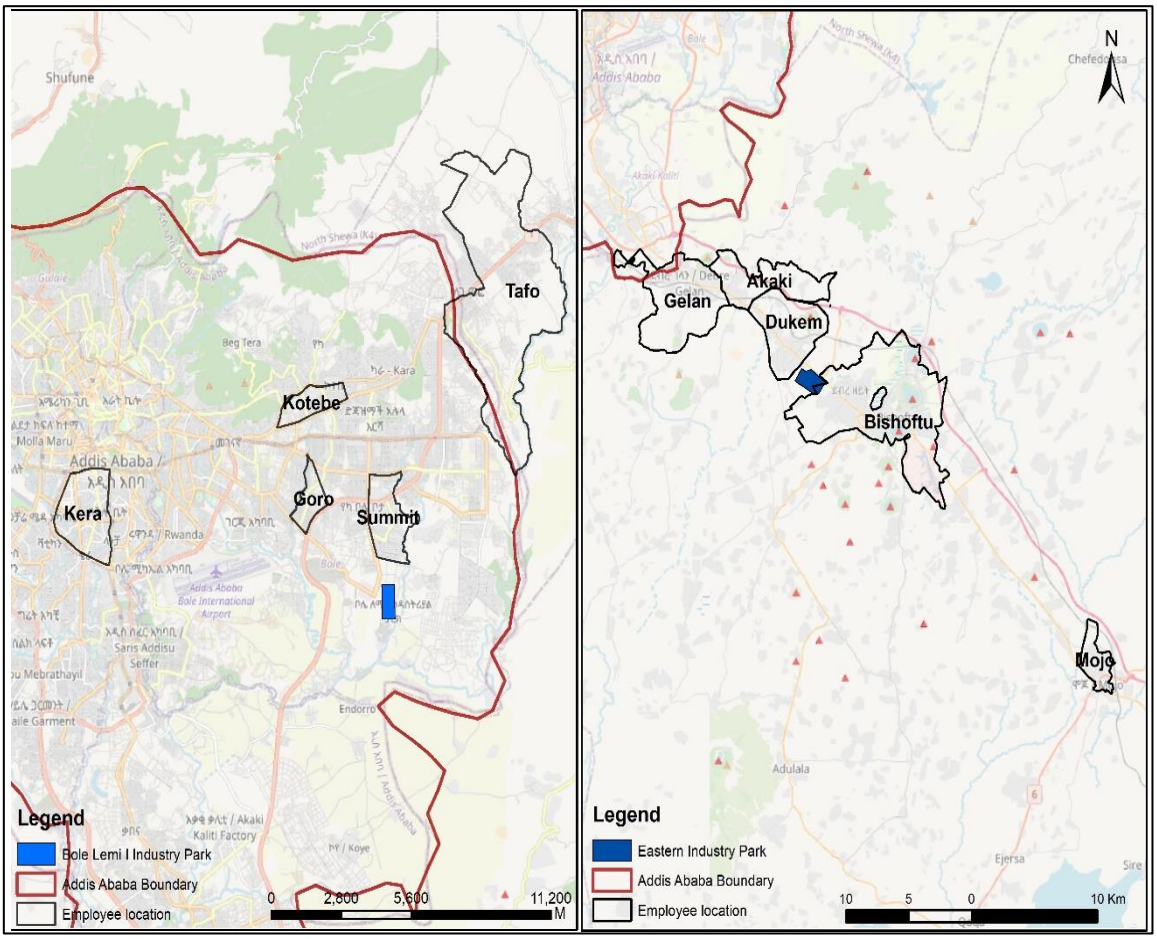

Figure 12: Employee location of Bole Lemi I and Eastern IPs

4.2.2.2. Incentives (fiscal and non-fiscal incentives)

The literature review (see chapter 2, section 2.2.1) indicated that incentives and access to finance are considered influential investment environments (Farole, 2010). Regarding fiscal incentives, all six respondents from Bole Lemi I Industrial Park considered export tax exemption, customs duty, and other tax-free import, subsidized land lease and factory buildings rental rates, and income tax exemption as important fiscal incentives for their investment location decisions to invest in Bole Lemi I Industrial Park (see Figure 13). In the case of Eastern Industrial Park, income tax exemption, and customs duty, and other tax-free imports, have been considered by most investors for their investment location decision. This is mainly because all government-owned industrial parks are designed and legally regulated firms to persuade export-oriented manufacturing in specific sectors, such as textile, garment, and leather and leather products, which are targeted to increase export performance. These industrial parks offer diverse extra advantages for exporter companies. Such as export tax exemption, 8 - 10 years income tax exemption depending on investment's sector and export, and additional exemption of customs duty and tax-free import such as machinery spare parts, motor vehicles, and all raw materials. This is, therefore, companies in Bole Lemi 1 Industrial Park are export markets oriented, and having these benefits allowed them to consider for their location decisions to invest in Bole Lemi I Industrial Park (see the characteristics of respondents**Error! Reference source not found.**).

Companies located in Eastern Industrial Park are not exporters except for two or three companies. Due to the import substitution[29] character of the industrial park, they are granted only 8 - 10 years income tax exemption depending on investment's location and sectoral engagement, customs duty, and tax-free import that exclude export advantages. Therefore, the companies in the Eastern Industrial Park did not consider the export tax incentive.

After their establishment, fiscal incentives such as income tax exemption highly decrease their importance mainly in Bole Lemi I Industrial Park, subsidized land lease and factory buildings rental rates, and loss carry forward slightly decrease their importance in both industries parks. However, despite the lack of access to foreign loans because of the scarce of foreign currency, the investors still consider access to the foreign loan an important fiscal incentive for their investment location decision in both industrial parks.

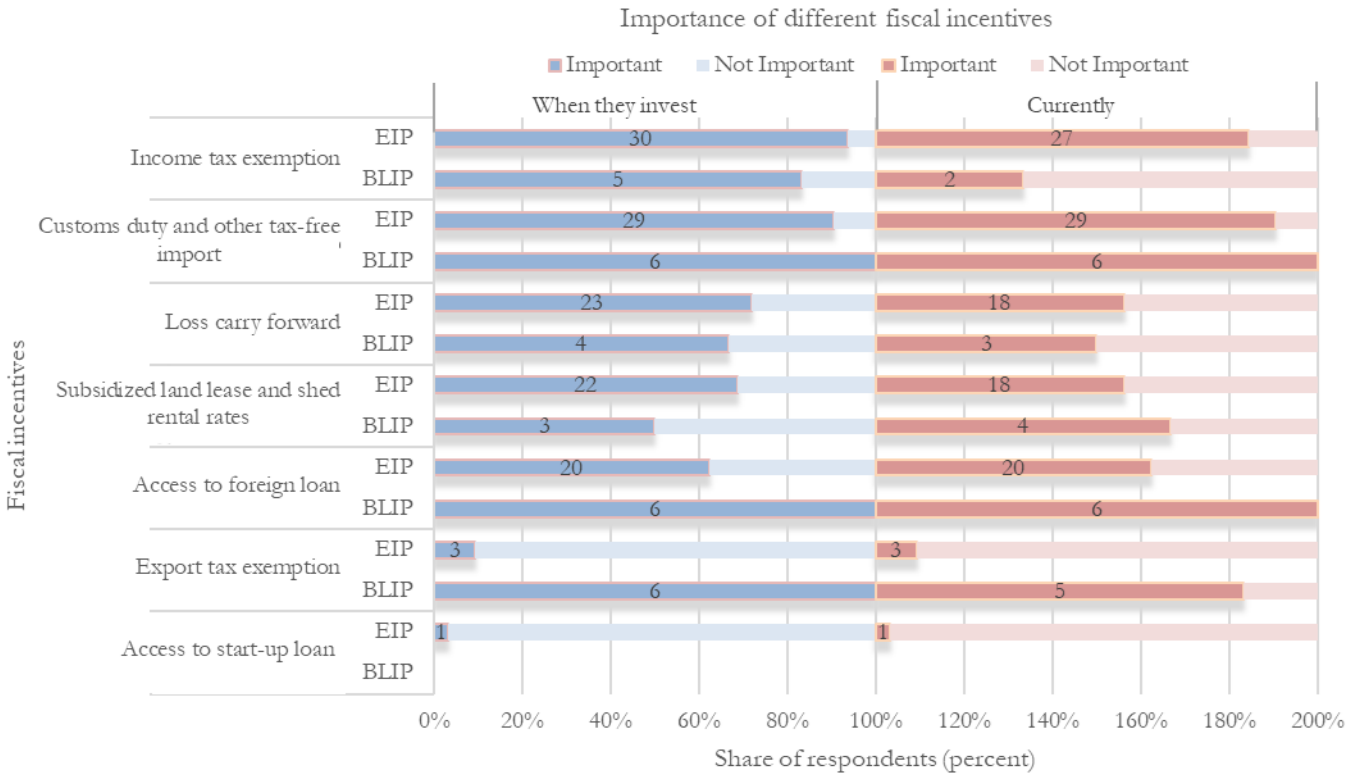

Figure 13: Important fiscal incentives for investors' investment location decision
Note: The numbers in the charts represents the number of respondents.

Concerning non-fiscal incentives, both Bole Lemi I and Eastern Industrial Parks have been granted the same incentives. Except for subsidized utility rates in Bole Lemi I Industrial Park, all non-fiscal incentives played an important role in investors' investment location decisions in both industrial parks. Also, the important non-fiscal incentives remain important in both industrial park locations and time (see Figure 14).

[29] Import substitution is the idea that prompts replacing foreign imports with domestic production (Baer, 1972)

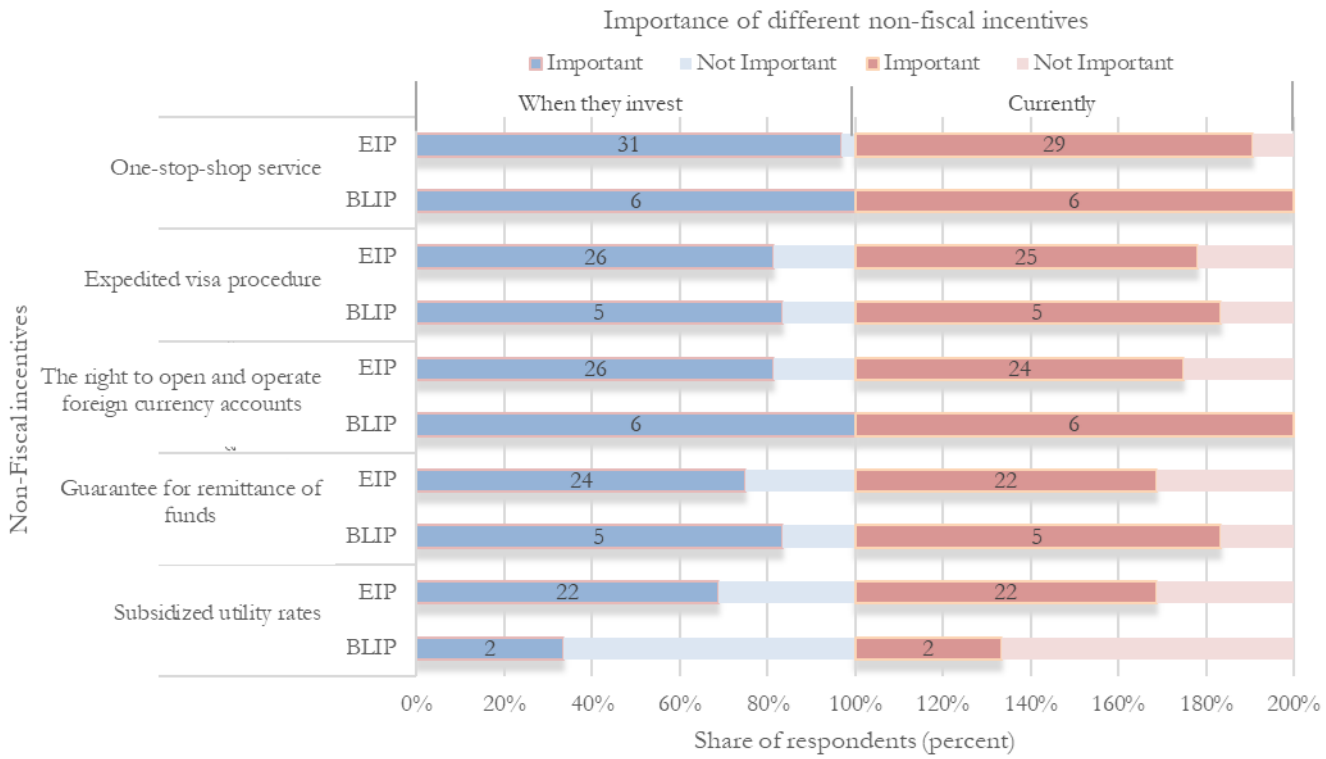

Figure 14: Important non-fiscal incentives for investors' investment location decision
Note: The numbers in the charts represent the number of respondents.

4.2.2.3. Political stability

Political stability is also crucial for investors' location decisions (UNIDO, 2019). As indicated in Figure 15, even though the level of importance varies in both industrial parks, all forms of political stability were important for their investment decisions. Likewise, these three forms of political stability show an increase in importance for an investment location decision. One situation consistent with this result is that of continued instability in different parts of the country, which increases the factors' priorities. Also, a key informant emphasized that: "*We are witnessing political instability in Ethiopia over the past few years. But there is good stability and safety in industrial parks.*"—Key informant 1.

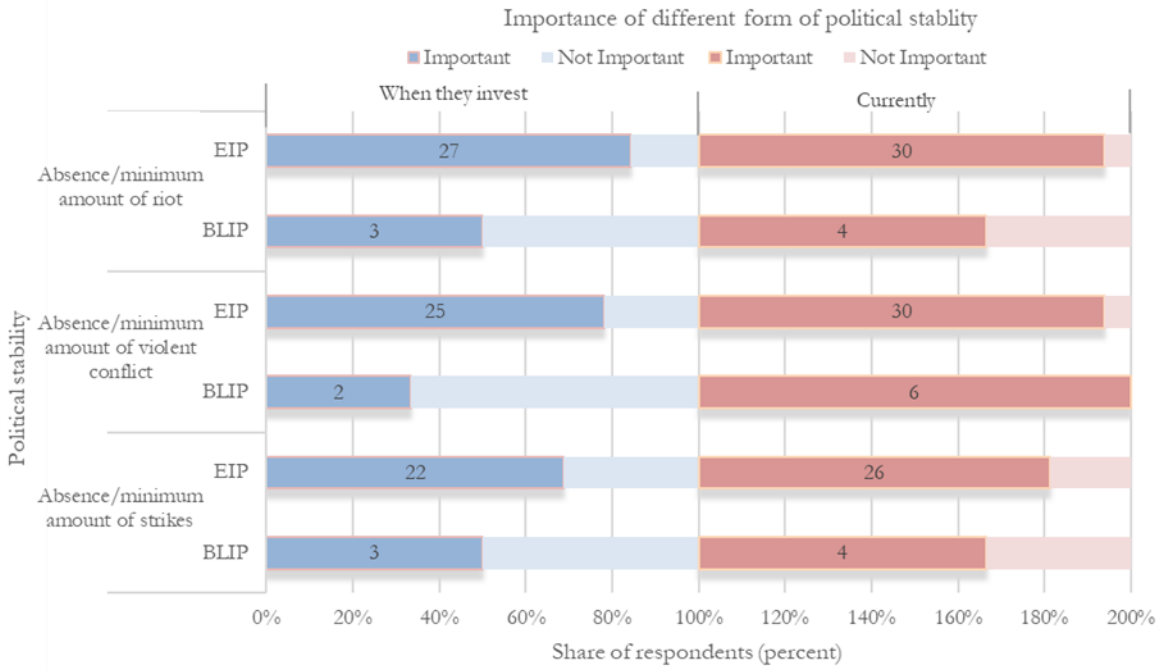

Figure 15: Important different form of political stability for investors' investment location decision

4.2.2.4. Additional production factors

In addition, as indicated in Figure 16, all investors in both industrial parks considered the security offered within the industrial parks as a major production factor in their investment decision. This is in line with one of the key informants who mentioned the provision of security personnel, police stations, and security cameras to protect the employees, factories, and the industrial parks, as well as a screening of all workers and containers, to avoid infiltration of non-employees and thieving (key informant 3 & 6) (see Figure 17).

In Bole Lemi I Industrial Park, cheap factory building lease cost per month and having duty-free, quota-free access to a wide market, including major markets such as the USA and the EU (AGOA and EBA), was an important role for investors investment location decision. This is because the government offers export access to global trade network mainly to the United States and EU through AGOA & EBA agreement and ample infrastructure to attract a large number of successful companies to the industrial parks (FDRE Ministry of Industry, 2013; Ethiopian Investment Commission (EIC), 2017). This makes it possible for investors, especially exporters, to eliminate their operational and production costs and help them serve the consumer markets in high-income countries, thus maximizing their profit and bringing the targeted foreign currency to the country. This, therefore, results in the high importance of access to the US and EU market for investors' investment location decisions in Bole Lemi I Industrial Park.

In comparison, proximity to the Addis Ababa market, abundant land/office space, and plenty of partner companies played an important role in investors' location decisions in Eastern Industrial Park.

Furthermore, the availability of raw materials and cluster of supporting industries were the least important production factors in both industrial parks. The reason some investors give for the less importance to the availability of raw material is that rising values and scarcities of needed raw materials in local supply force them to rely on suppliers abroad, mainly from their mother companies.

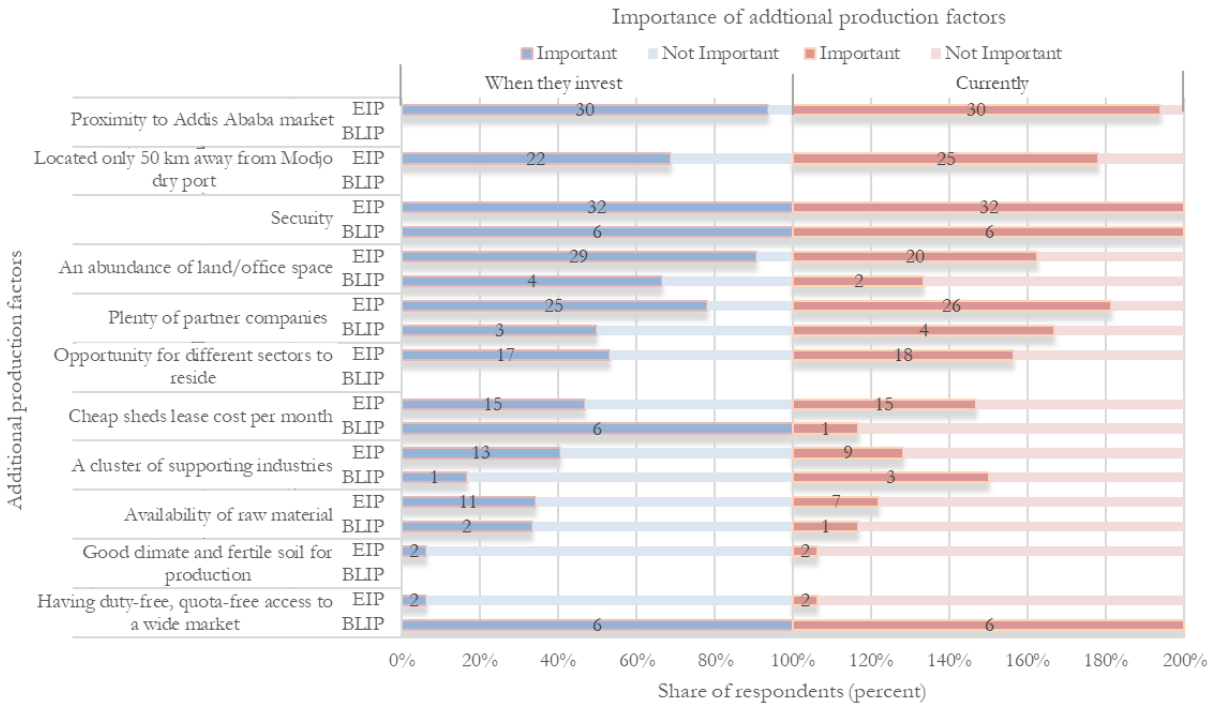

Figure 16: Important additional production factors for investors' investment location decision

Figure 17 (a-b): Security provision in Bole Lemi I and Eastern Industrial Parks

Figure 17 (a): the police station in Bole Lemi I Industrial Park, and Figure 17 (b) security camera in Eastern Industrial Park.

A similar indication shows on the survey that out of the surveyed companies in Bole Lemi I Industrial Park, 50 % of them import their raw material from abroad, namely China, Brazil, Bangladesh, India, and Hong Kong, and 50 % of them get their raw material from both abroad and local markets (Addis Ababa, Hawassa, and Modjo). Whereas out of the surveyed companies in Eastern Industrial Park, only a few of them, 13%, get their raw material from a local market (Jimma, Awash, Oromia zone, Zeway, Bishoftu, and Fiche), 38% get their product from both markets, and 50% of them import their raw material from abroad such as China, India, Indonesia, Malaysia, Dubai, Egypt, Middle-east countries, Bangladesh, USA, Europe (see Figure 18). This is interesting to see that the location of the industrial parks to major cities and infrastructures provide a locational advantage of easy access to airport, railways and dry ports to transport their raw material and productions to and from factories (Figure 4 & Figure 5).

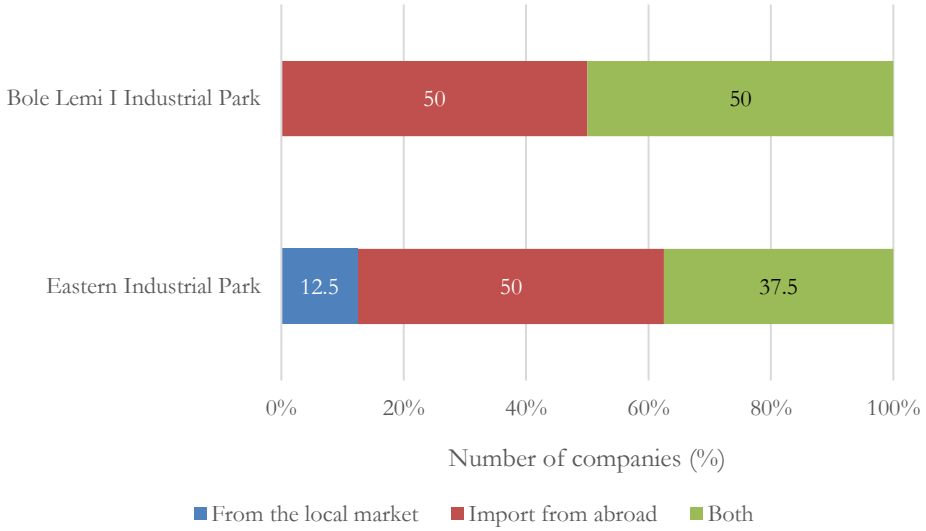

Figure 18: Location of raw materials for companies in Bole Lemi I and Eastern Industrial Parks

4.2.3. Summary

This subchapter presents the functions and production factors important for investors' investment location decisions of each industrial parks. Regarding functions, all infrastructures, utilities, and their cost, and regarding production factors, young, abundant, and low-cost labor, all non-fiscal incentives, security, and political instability are the most important matter to investors investment location decisions in both industrial parks. Difference in the importance of functions and production factors across the two industrial parks is observed. All fiscal incentives, free access to global markets, proximity to port (airport, railway), and cheap factory building lease cost are highly important for investors' investment location decisions in Bole Lemi I Industrial Park.

Whereas, proximity to the local market and proximity to a port, which is Modjo dry port are the most important production factors for investors' investment location decisions in Eastern Industrial Park.

In the next chapter, I will discuss the reason mainly their differences regarding functions and production in two industrial parks.

4.3. Differences of perception between suppliers and buyers on functions and production factors in Bole Lemi I and Eastern Industrial Parks

Based on the hypotheses in chapter 1, section 1.2, this section examines the differences between key informants and investors of what functions and production factors they consider as private investment attractions in both industrial parks and identifies major functions and production factors that need emphasis for better formulation and implementation of industrial and investment attraction policies and strategies. The findings obtained from the analysis are discussed below:

4.3.1. Perception difference between suppliers and buyers on functions and production factors in Bole Lemi I and Eastern Industrial Parks

The result of the qualitative analysis on the knowledge of suppliers (policymakers, public, and private industrial park developers) on functions and production factors attractive to investors shows that all key informants have knowledge. However, they list of functions and production factors in a generic way rather than break them apart. For example, one of the production factors that they consider attractive to investors in both industrial parks is fiscal incentives, and they indicate that all fiscal incentives are attractive to

investors. However, based on the survey result, these fiscal incentives with more than five sub-division have different importance to different investors, industrial park location, and time.

4.3.2. Functions and production factors that should be given priority in the development of future industrial parks

According to the survey result, functions and production factors that show differences between times, especially those that decrease their importance due to problems, need to be given priority. These are, regarding functions, mainly electricity supply and water supply. As indicated in the findings, the majority of investors located in Bole Lemi I Industrial Park face a problem of a power outage and water interruption, which leads to a decrease in their importance. This, therefore, need to give higher priority to better infrastructure service in industrial parks.

Regarding production factors, the highly educated and well trained/skilled labor, foreign currency, availability of raw materials, and political stability need to be given priority. Indeed, some production factors such as foreign currency and political stability are country-wide issues and managed by country level. However, they still have a huge influence on investors' attraction to industrial parks. Therefore, these factors need to resolve with coordination across the various government bureaucracies. Similarly, providing educational sectors to generate highly educated and well-trained labor and supply of raw materials.

5. DISCUSSION

This chapter presents the discussion of the findings based on the set objectives.

5.1. Differences of perception between suppliers on functions and production factors in Bole Lemi I and Eastern Industrial Parks

This study sought to explain differences between suppliers regarding the functions and production factors they considered as private investment attractions in Bole Lemi I and Eastern Industrial Parks. As noted by FIAS (2008) study, there is a difference in understanding investors' needs between the two nature of industrial park developers. Different studies also frequently emphasize the advantages of private industrial parks in terms of responsiveness to investors' needs over public industrial parks (Watson, 2001; FIAS, 2008). In fact, both industrial park developers have an objective of attracting private investment to achieve the country's goal, such as creating employment and sustain the national economy (FDRE Ministry of Industry, 2013). So, the government and private industry park developers provide different incentive packages (including fiscal and non-fiscal) and infrastructures (including utilities and factory buildings), along with location advantages to transport infrastructure that are more reliable than available outside of these two industrial parks.

The findings of the research clearly indicate that the understanding of investors' needs across public and private industrial parks is different. The reasons identified for their differences are the location of the industrial parks; (BLIIP located in main urban area and EIP located in a newly urbanized area), characteristics of the industrial parks; (BLIIP is intended for export-oriented industries and EIP mainly focuses on import substitution) and the provision of infrastructures and utilities. Several studies have stated that the location/proximity to ports, transportation, markets, large cities, and labor pool increases the attractiveness of industrial parks (Watson, 2001; Akinci, Gokhan; Crittle, 2008; Farole, 2011). The attractiveness of the location varies with investors' motivations. Mainly proximity to the port and transportation is very attractive for investors who required access to inputs and export products (Farole, 2011; World Bank Group, 2017; Kusek & Silva, 2018a). But it also holds true for market-based investors, which may have less need to access ports but require proximity to local consumer markets and transportation to deliver the products. On the whole, firms and suppliers (the government and developers) benefit from the industrial parks' agglomeration effect. Thus, due to the different nature of the two industrial parks' production and attracting investors with different motives, it is reasonable that the suppliers have differences in understanding investors' needs across public and private industrial parks.

The difference in on-site infrastructure provision has been identified across the nature of industrial parks. A number of studies frequently suggest that private industrial parks tend to offer a more complete on-site infrastructure than public industrial parks (Watson, 2001; FIAS, 2008; Farole, 2011). Indeed, a government with many constraints can't compete with profit-driven private developers, which could respond quickly to investors' needs by providing a wider range of infrastructures and utilities. Private industrial park developers finance themselves to develop and provide infrastructures and facilities (FIAS, 2008). But, the government relies on loans to overcome the constraints. In Ethiopia, for example, the government constructed the industrial parks, cases like Bole Lemi II and Kilinto Industrial Parks, with the financial support of the World Bank (UNDP, 2015; Newman & Page, 2017; Zhang et al., 2018). But, it is still observed inadequate provision of infrastructure and facilities (Watson, 2001; FIAS, 2008; Farole, 2011). This study also observed that in Eastern Industrial park, significant infrastructures are already in place, particularly on-site facilities, including reliable electrical substations, self-sufficient water supply, and wastewater treatment plants. The Eastern Industrial Park developers had invested a total of US $ 146 million for the infrastructural development (Jiangsu Yongyuan Investment Co. Ltd, 2017; Zhang et al., 2018). This, ratifies what is in the

literature (FIAS, 2008). Overall, due to infrastructure provision differences between the two industrial parks, suppliers consider the national infrastructure as a private investment attraction in Bole Lemi Industrial Park.

5.2. Differences of perception between investors on functions and production factors in Bole Lemi I and Eastern Industrial Parks

The development of the industrial parks is a specially designated area more convenient for the investors as it offers certain benefits and opportunities that are not available outside the industrial parks. The literature highlights that investors decide where to invest, how much to invest, and how to participate based on the perceived and experienced investing climate (Farole, 2010). Also, investors' motivations, to some extent, guide their investment location decisions (Farole, 2011; World Bank Group, 2017; Kusek & Silva, 2018a). This study observed that all fiscal incentives, free access to global markets, proximity to port (airport, railway), and cheap factory building lease cost are highly important for investors' investment location decisions in Bole Lemi I Industrial Park. This finding seems to coincide with the findings of other studies. Findings from firm-level surveys in African and non-African industrial parks by Farole (2011) found access to transport infrastructure, tariffs duties and rules of origin, and level of corporate tax are the most important production factors for investors' investment location decision in African industrial parks. Besides, a case study conducted on PVH company by Mihretu & Llobet (2017) found that fiscal incentives, such as income tax exemption, free duties and other taxes on imports, and zero charges of land lease up to 80, and AGOA agreement to access the global markets was an important production factors for PVH company to locate in Hawassa Industrial Park, Ethiopia. This is because the Ethiopian government nurtures an export-oriented manufacturing cluster in public industrial parks, and this type of investors referred to as efficiency-seeking investors that are sensitive to costs and seeks free access in export markets, incentives, and cost-competitive locations more than other investors with different motives (Echandi & Newson, 2014).

This study also found out that proximity to the local market and proximity to a port, which is Modjo dry port are the most important production factors for investors' investment location decisions in Eastern Industrial Park. This is because Eastern Industrial Park mainly focuses on attracting import substitution industries. These investors, referred to as market-seeking investors, value proximity to a local market, access to transport, and the size of the domestic market (Echandi & Newson, 2014).

In addition, this study found that, regarding functions, all infrastructures, utilities, and their cost, and regarding production factors, young, abundant, and low-cost labor, all non-fiscal incentives, security, and political instability are the most important matter to investors investment location decisions in both industrial parks. This is in line with the findings of Mihretu & Llobet (2017) that functions (such as availability of water and electricity, infrastructure, and access to transport (port, and cargo) and production factors (such as labor cost, power cost, political stability, and raw material availability) were important for PVH company investment location decisions. But, these functions and production factors were important for their investment location decisions in Ethiopia rather than specific industrial parks.

5.3. Policy recommendation for future industrial park development in Ethiopia

The main goals of Ethiopia's industrial park policy is to enhance the contribution of manufacturing to the national economy, pull in investors, improve employment creation, encourage technology transfer, improve productivity and promote export-led industrialization (the Federal Democratic Republic of Ethiopia, 2015). Even though the government has enacted a wide range of incentives and infrastructure to help industrial parks and to attract investors to the industrial parks, the measures are hardly targeted enough to help the specific problems. These challenges, if not properly addressed, could prevent the country from obtaining the intended objectives.

5.3.1. Improving utility supply in industrial parks

The literature highlights that provision of infrastructure has a significant influence on investors' investment location decisions (Zhou et al., 2002; Farole, 2010; Dzung et al., 2017; Akpan et al., 2018; Xuan, 2020; Tran et al., 2020). This study also observed that all provided infrastructures are important to investors' investment location decisions in both industrial parks. However, the research findings related to electricity and water supply clearly indicate challenges of a frequent power outage and water interruption in Bole Lemi I Industrial Park, which decreases the importance for investors' location decisions. Although Bole Lemi I Industrial Park invested in its own portable substation and water station (key informants 3 & 4), challenges of a power outage and water interruption are still reported by investors. These problems have been stressed out in Ethiopian industrial parks, mainly public industrial parks and many African industrial parks (Farole, 2011; Farole & Moberg, 2014; Zhang et al., 2018). Adapting useful practices is important, especially from Eastern Industrial Park, which once had the same problems (Zhang et al., 2018) but resolved by dedicated permanent substations and drilled water wells for reliable utility supply. Therefore, it is important to give prior to utility provision, which has the potential to affect investors' location decisions not only to industrial parks but also to Ethiopia in general. Also, it is obvious that most public industrial parks are located in peripheral regions, and likely such utilities are not already in place. Therefore, the developer needs to provide these utilities before the development of the industrial parks. Moreover, It is important to note that the availability of utility and its reliability is crucial to attracting investors.

5.3.2. Upgrading labor skills and education

The characteristics of labor, such as skill, abundance, and cost of labor, influence the investment decision of investors (Zhou et al., 2002; Dzung et al., 2017; Akpan et al., 2018; Xuan, 2020; Tran et al., 2020). This study shows that a young, abundant, and inexpensive labor force attracts all investors in both industrial parks. However, a skilled and educated labor force is less important for investors' location decisions in both industry parks.

The government partnered with City Administration located in industrial parks to supply labor to industries. But finding technical skilled or experienced with industrial technology and educated labor is reported as a challenge. Furthermore, the government provided training for a new employee (key informant 3) and had made a vast investment in vocational education and training institutes (TVET) (EIC, 2017). However, this was unable to answer effectively to the type of labor needs of the companies. This results in companies relying on expatriate staff (Farole, 2011; Mihretu & Llobet, 2017), which in return affect knowledge spillovers. Although low educated labor results in cheaper labor costs, this also affects the productivity of the companies (Farole, 2011; World Bank Group, 2017). To overcome this problem, collaboration/coordination needs to be created between a respective institution in education and industry and create a linkage between students and industries through internship programs.

5.3.3. Enhance industrial parks linkages to local markets

One of the advantages of an industrial park, which also encourages the location of investors, is proximity to raw material, referred to as backward linkage (Farole, 2011; Farole & Akinci, 2011; World Bank Group, 2017). However, this study indicates a problem of availability of raw material, which results in the least important for investors' location decisions in both industry parks. This is because of the shortage of needed raw materials as domestic supplies could not keep up with demand and the rising cost of raw materials in the local market. As a result, over 50 percent of the companies in both industrial parks source their material inputs from abroad, which leads to weak backward linkages (see Figure 18) and an increase in the dependability of companies on importing goods. This fits with the study by (Zhang et al., 2018) that backward linkage in Ethiopian industrial parks are weak because of a lack of raw materials locally. Similar

finding is also observed on Farole (2011) study that investors in both African and non-African industrial parks rank access to suppliers as less important for their investment location decisions. The less important of raw materials for investors' investment location decisions might hold true for short-term. Mainly due to the incentive of duty free imports of raw materials. However, it might not be consistent for long-terms when prices for transportation or deliveries and even for raw material overseas is increased. Therefore, the government needs to formulate and implement the right set of policies to build local supply linkages. One solution could be allowing local firms to participate in the value chain. Indeed, the government working on attracting domestic firms to industrial parks by offering loan from Development Bank of Ethiopia (Ethiopian Investment Commission (EIC), 2017). But, the government need to identify investors' areas of interest for better result.

5.3.4. Improving political stability

Instability can contribute to the distraction of investment property as well as affect the availability of labor force which influences production directly and indirectly. Given the risk of political instability, investors might take a cautious approach and withdrawn planned investments (Farole, 2011; Farole & Moberg, 2014; UNCTAD, 2019). Moreover, it might affect the linkage of the industrial parks with local markets (World Bank Group, 2017). This study also identified the three forms of political stability (absence of violent conflict, strikes, and riot) are important production factors for their investment location decision in both industrial parks. According to World Investment Report (UNCTAD, 2020), the country's instability contracted FDI inflow to Ethiopia, and regions with industrial parks declined by 4 percent in 2019. Therefore, it is important for the government to maintain and improve the country's stability for better private investment attraction and increase their productivity.

6. CONCLUSION AND RECOMMENDATIONS

The study aims to examine the potential knowledge gap of policymakers and industrial park space suppliers on functions and production factors attractive to investors in Ethiopia and propose policy recommendations. This study performed interviews and surveys with key informants and investors respectively in public and private industrial parks to compare the functions and production factors attractive to investors.

The explanation differences between suppliers regarding the functions and production factors they considered as private investment attractions in Bole Lemi I and Eastern Industrial Parks provided a ground to understand the knowledge differences between the two industrial parks.

6.1. The contribution of Ethiopian industrial park development

Although Ethiopia is a latecomer in industrial parks as a tool for economic development, it continues to promote the development of industrial parks as a key element to facilitate private investments for long-term economic growth. Therefore, it is crucial to understand what private investors aim to invest in Ethiopian industrial parks and support investment attraction strategies by governments, policymakers, and industrial park developers.

From this study, we can observe that there are many functions and production factors that could attract investors to industrial parks. But major findings are observed for contribution to the knowledge of industrial park development within the context of Ethiopia and other Sub-Saharan African industrial park development. The finding of the study clearly shows that mainly low-cost utility rates regarding functions and abundant and low-cost labor regarding the characteristics of labor are important factors in attracting investors to industrial parks. Moreover, income tax exemption, availability of raw materials, and political stability are the important production factors for attracting investors to Ethiopian industrial parks. Therefore, the government's decision to develop industrial parks needs to incorporate these major factors quickly responsive to investors' needs.

6.2. Policy recommendations

As stressed out in section 5. 3, the study recommended four improvements that need the attention of policymakers and industrial park developers. The first one is improving utility supply in industrial parks, which otherwise be difficult for the investors to sustain the manufacturing business. The next recommendation is upgrading labor skills and education, which is directly linked to improving the quality of educational and vocational training systems. The other recommendation of the study is enhancing industrial parks linkages to local markets. Creating a better and reliable value chain for the investors tends to attract more investors and keep registered ones running since importing raw materials that could be developed locally is not feasible by its nature. Last but not least is improving the political stability of the nation. Although political instability is unpredictable and difficult to solve in policy change, most private investors who got interviewed requires rule and order to operate safely.

Furthermore, this study recommends that strategic policies should be formulated and implemented by policymakers and industrial parks developer to develop a highly competitive industrial park with self-sufficient infrastructure, utility, and labor supply that maintain investors' needs and increase productivity. This would undoubtedly increase the attractiveness of the industrial parks and competitiveness for international markets.

6.3. Public VS Private Industrial Park developer

The findings indicate that the understanding of investors' needs across public and private industrial parks is different. The main reasons identified for their differences are the location of the industrial parks, characteristics of the industrial parks, which is Bole Lemi I Industrial Park intended for export-oriented industries and Eastern Industrial Park intended for import substitution, and the provision of infrastructures and utilities. This ratifies what is in the literature that private industrial parks are more responsive to investors' needs than public industrial parks, and they tend to fulfill investors' demand by supplying a wide range of services and utilities (FIAS, 2008).

6.4. Study limitations and recommendations for further research

The research sought to examine the potential knowledge gap of policymakers and industrial park developers on functions and production factors attractive to investors in Ethiopia and propose policy recommendations. However, the research is not without limitations. The study faced by inadequate data and documents mainly on the provided infrastructures and facilities in both industrial parks. Moreover, limitations of readily available spatial data restricted the use in triangulating the result. The small sample size for the survey, due to the time constraint and reliance on limited key informants due to unresponsiveness of some key informants are some other problems that existed in practicing the research.

The literature of Farole & Moberg (2014) stated that there is a government knowledge gap on factors that will attract investors, which obstacle to the success of the industrial park programs. However, there are no studies to find out if there is a knowledge gap of policymakers and industry park developers on investors' needs. Therefore, this study's findings seek to serve as a foundation to open more such studies, not only in the context of Ethiopia's industrial parks but beyond in other African industrial parks. Moreover, this study also adds to the literature on the functions and production factors that are attractive to investors in the context of Ethiopian industrial parks. For instance, this study found that low-cost labor is more important than highly skilled and educated labor forces.

Similarly, despite the higher rate of utility cost in private industrial parks, it is important for investors in Eastern Industrial Park. Therefore, it is important to consider that the case-specific findings cannot be generalized for all since industrial parks and investors' motives generally have different characteristics. Further studies regarding these would allow rational conclusions to be drawn for policy formulations for investment attraction.

The study also finds a change in the importance of functions and production factors to investors' investment location decisions in two moments of time, before and after their investment. This study also recommends a more in-depth historical-comparative study with existing investment climates inside industrial parks to know the truthfulness since such change might create through different factors other than investment climates. Overall, the hypotheses and, more importantly, the findings arising from the research must be tested at both the national and industrial park levels

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APPENDICES

Appendix 1: Key informants interviews

Part 1

Introduction

Thank you for meeting with me today. My name is **Eden Tsehaye Wasehun,** I am an MSC student from the University of Twente, Netherlands. This interview is prepared for the purpose of collecting data for my MSc research under the title of "Determinants for private investment location decisions in industrial parks: Case of Bole Lemi I and Eastern industrial zones, Ethiopia." The purpose of this interview is to identify and understand the investment climate that the public officials/ industry park developers provide to attract investors to industrial parks. This interview is prepared exclusively for academic purposes and the result will be anonymous. I will be the only one that has access to this data, and will not be shared.

This interview is expected to last 30 to 45 minutes. I would like to ask for your consent to record the interview (wait for responses). Okay, I will record the interview with a recording device or recording online and after it is over, I will make a transcript of what you said. If there is any part of the interview that you would not like to be quoted or recorded, you are very welcome to inform me. I can also make the transcript available to you, then you can inform me if there is any part of the interview you wish not to be quoted on.

General questions

- Date of Interview:……..
  Interview Start Time:……
  Interview End Time:……
- Can you explain to me briefly what your work typically entails?

Questions for Bole Lemi industry park developer

1. The government provides different incentive packages and infrastructure support to attract investors to the industrial parks. In your opinion, what are the advantages that investors have from investing especially in Bole Lemi 1 industrial park?
2. I know that all companies in Bole Lemi 1 industrial parks are foreign companies mostly from Asia countries such as China, S.Korea, and India. So, how do you attract these foreign companies to the industrial park?
3. The 3,000 sqm sheds (manufacturing hall) are built for domestic investors, however, these sheds are not available in Bole Lemi 1 industrial park. So, how do domestic investors get involved in Bole Lemi 1 industrial park?
   3.1. If they get involved, How do you attract them?
4. In your opinion, what do you think attracts foreign investors to locate in Bole Lemi 1 industrial park?
5. Indeed, most countries with industrial parks development offer similar incentives packages and basic infrastructure provision. However, given the fact that industrial park development is a recent experience in Ethiopia, such provision can be learned from other countries in order to attract investors, and be successful. So,
   5.1. Where do you get the inspiration regarding such investment in infrastructure and facilities to attract foreign investors? What did you adopt from this country?
   5.2. Where do you get the inspiration regarding such investment in infrastructure and facilities to attract domestic investors? What did you adopt from this country?
6. Do you have any studies, documents, or reports to share on the provision of infrastructure and facilities, the kind of investment opportunities provided to Bole Lemi 1industry park, and a complete list of companies?

7. Could you recommend at least three persons that you think can help me to gain more understanding about investment in industrial parks and the provision of infrastructure in these areas?
8. Do you have anything you would like to add to what we have discussed?
9. I would like to ask you for your availability for follow-up one or two questions after if needed?

Thank you so much for your time and cooperation.

Questions for Eastern industrial park developer

1. According to the memorandum of understanding between the government and the EIP developer, the government offers incentive packages whereas, the developer develops infrastructure to attract investors and facilitate business operation. In your opinion, what are the advantages that investors have from investing in Eastern industry parks?
2. More than 80 companies are invested in Eastern industrial parks. So,
   2.1. How do you attract foreign investment to Eastern industrial parks?
   2.2. How do you attract Domestic investment to Eastern industrial parks?
   2.3. What has been done differently than the government parks to attract investors to the park?
3. In your opinion, what do you think attracts investors to locate in Eastern industrial parks?
4. Indeed, most countries with industrial parks development offer similar incentives packages and basic infrastructure provision. However, given the fact that industrial park development is a recent experience in Ethiopia, such provision can be learned from other countries in order to attract investors, and be successful. So,
   4.1. Where do you get the inspiration regarding such investment in infrastructure and facilities to attract foreign investors? What did you adopt from this country?
   4.2. Where do you get the inspiration regarding such investment in infrastructure and facilities to attract domestic investors? What did you adopt from this country?
5. Do you have any studies, documents, or reports to share on the provision of infrastructure and facilities, the kind of investment opportunities provided to Eastern industry park and a complete list of companies?
6. Could you recommend someone you think can help me to gain more understanding about investment in industrial parks and the provision of infrastructure in these areas?
7. Do you have anything you would like to add to what we have discussed?
8. I would like to ask you for your availability for follow-up one or two questions after if needed?

Thank you so much for your time and cooperation.

Questions for policy makers (Ethiopian investment commission)

1. The government provides different incentive packages and infrastructure support to attract investors to the industrial parks. In your opinion, what are the advantages that investors have from investing especially in Bole Lemi 1/Eastern industry park?/
2. I know that all companies in Bole Lemi 1 industrial parks are foreign companies mostly from Asia countries such as China, S.Korea, and India. So,
   2.1. How do you attract these foreign companies to the industrial park?
   2.2. The 3,000 sqm sheds (manufacturing hall) are built for domestic investors, however, these sheds are not available in Bole Lemi 1 industrial park. So, how do domestic investors get involved in Bole Lemi 1 industrial park?
      2.2.1. If they get involved, How do you attract them?
3. More than 80 companies are invested in Eastern industrial parks. So,
   3.1.1. How do you attract foreign investment to Eastern industrial parks?
   3.1.2. How do you attract Domestic investment to Eastern industrial parks?
4. In your opinion, what do you think what do you think attracts investors to locate in Bole Lemi 1/ Eastern industrial park?
5. Indeed, most countries with industrial parks development offer similar incentives packages and basic infrastructure provision. However, given the fact that industrial park development is a recent experience in Ethiopia, such provision can be learned from other countries in order to attract investors, and be successful. So,

5.1. Where do you get the inspiration regarding such investment in infrastructure and facilities to attract foreign investors? What did you adopt from this country?

5.2. Where do you get the inspiration regarding such investment in infrastructure and facilities to attract domestic investors? What did you adopt from this country?

6. Do you have any studies, documents, or reports to share on the services and facilities provided for investors in both Bole Lemi 1 and Eastern industrial parks, and a complete list of companies (Bole Lemi 1 and Eastern industry parks)?
7. Do you have anything you would like to add to what we have discussed?
8. I would like to ask you for your availability for follow-up one or two questions after if needed?

Thank you so much for your time and cooperation.

Appendix 2: Survey with investors

Introduction

Hello, my name is **Yishak Abreham** and I am here on behalf of **Eden Tsehaye Wasehun**, an MSC student from the University of Twente, in the Netherlands. This survey is prepared for the purpose of collecting data for her MSc research under the title of "Determinants for private investment location decisions in industrial parks: Case of Bole Lemi I and Eastern industrial zones, Ethiopia." This survey is prepared completely for academic purposes and the result will be anonymous. Me and Ms. Eden will be the only one that has access to this data, and will not be shared for anyone.

If you want to stop participating in this survey or not respond to any specific questions for any reason, you may do so without hesitating. The survey is expected to take 20 minutes. I am thankful for your cooperation in advance.

I want to tell you about what we want to discuss with you before we begin this interview. The researcher wants to know your opinion regarding the investment climate that has attracted you as investors to the industrial parks.

A. Questions for investors in Bole Lemi I industry park

Background of the company

Name of your company_____

Year of Registration? _____

Country origin of the company_____

In which sector does the company operate?_____

Investment climate that attracted investors

1. Which investment climate is the most important for you to invest in Bole Lemi 1 industry park?

Choice	When you made investment decision		Currently	
	Important	Not	Important	Not
Political stability				
Absence/minimum amount of violent conflict				
Absence/minimum amount of strikes				
Absence/minimum amount of riot				
Other				
Characteristics of labor				
Abundant				
Young				
Well trained/ skilled				
Highly educated (bachelor/above)				
Low labor cost				
Other				
Infrastructure supply				
Telecommunication service				

Road networks connecting major areas, cities and local markets				
Proximity to Air transport				
Rail transport (Addis Ababa light rail and Addis Ababa-Djibouti electric railway)				
Water supply				
Electricity supply				
Low tariff rate for water and electricity				
Other				
Incentive Packages (Fiscal)				
Income tax exemption up to 2 years for manufacturing in Addis Ababa industrial parks				
Customs duty and other tax-free import				
Export tax exemption				
Loss carry forward				
Access to foreign loan				
Other				
Incentive Packages (Non-Fiscal)				
1. One-stop-shop service				
2. Expedited visa procedure				
3. Subsidized utility rates				
4. Guarantee for remittance of funds				
5. The right to open and operate foreign currency accounts				
Other				
Subsidized land lease and shed rental rates				
Availability of raw material				
An abundance of land/office space				
Cheap sheds lease cost per month				
A cluster of supporting industries (local procurement is easy)				
Plenty of partner companies (delivering companies)				
Having duty-free, quota-free access to a wide market, including major markets such as the USA, and the EU (AGOA and EBA agreement)				
Other				

2. Which other industrial park location did you consider?
   2.1. What was wrong with the location?
3. Can you tell me where most of your employees come from?

   _____
4. Where do you purchase raw materials for your company?
   i. From the local market
   ii. Import from abroad
   4.1. Can you tell me the location?_____
5. Where do your customers located?
   i. Within the country
   ii. Abroad
6. Any questions or additional comments on what we have discussed?

Thank you so much for your time and cooperation.

B. Questions for investors in Eastern industry park

Background of the company

Name of your company_____
Date of Registration/Year of established?_____
Country origin of the company_____
In which sector does the company operate? _____

Investment climate that attracted investors

1. Which investment climate is the most important for you to invest in Eastern industry park?

Choice	When you made investment decision		Currently	
	Important	Not	Important	Not
Political stability				
Absence/minimum amount of violent conflict				
Absence/minimum amount of strikes				
Absence/minimum amount of riot				
Other				
Characteristics of labor				
Abundant				
Young				
Well trained/ skilled				
Highly educated (bachelor/above)				
Low labor cost				
Locational advantage				
Located only 50 km away from Modjo dry port/				

Other				
Infrastructure supply				
Telecommunication service				
Road networks (expressway) connecting major areas, cities, and local markets				
Rail transport (Addis Ababa-Djibouti electric railway)				
Water supply				
Electricity supply				
Low tariff rate for water and electricity				
Other				
Incentive Packages (Fiscal)				
Income tax exemption up to 6 years for industrial parks outside Addis Ababa				
Customs duty and other tax-free import				
Export tax exemption				
Loss carry forward				
Access to foreign loan				
Access to start-up loan (domestic investors) from the Development Bank of Ethiopia				
Other				
Incentive Packages (Non-Fiscal)				
One-stop-shop service				
Expedited visa procedure				
Subsidized utility rates				
Guarantee for remittance of funds				
The right to open and operate foreign currency accounts				
Other				
Subsidized land lease and shed rental rates				
Availability of raw material				
An abundance of land/office space				
Cheap sheds lease cost per month				

A cluster of supporting industries (local procurement is easy)				
Plenty of partner companies (delivering companies)				
Opportunity for different sectors to reside				
Good climate and fertile soil for production				
Having duty-free, quota-free access to a wide market, including major markets such as the USA, and the EU (AGOA and EBA agreement)				
Other				

2. Which other industrial park location did you consider?
   2.1. What was wrong with the location?
3. Can you tell me where most of your employees come from?
   _____
4. Where do you purchase raw materials for your company?
   i. From the local market
   ii. Import from abroad
   4.1. Can you specify the location?_____
5. Where do your customers located?
   i. Within the country
   ii. Abroad
6. Any questions or additional comments on what we have discussed?

Thank you so much for your time and cooperation.

Appendix 3: Description of surveyed companies in Bole Lemi I and Eastern Industrial Parks

- **List of surveyed companies in Bole Lemi I Industry Park**

S.N	Name of companies	Country of origin	Sector	Registration year
1	Arvind Lifestyle Apparel Manufacturing PLC	India	Garment	2013
2	Evertop Sports Wear Plc.	S.Korea	Garment	2016
3	Jay Jay Garment PLC	India	Garment	2013
4	KEI Industrial Engeneering Consultancy PLC	S.Korea	Garment	2015
5	Lyu Shoutato Factory PLC.	China	Leather & Leather product	2014
6	Sumec Eth.Textile & Manufacturing Plc	China	Textile & Garment	2019

- **List of surveyed companies in Eastern Industry Park**

S.N	Name of companies	Country of origin	Sector	Registration year
1	Aofan	China	Textile	2016
2	Arova Plastices Plc	India	Packing material	2016
3	Ashe textile Plc	China	Textile	2018
4	Esteem Food Products PLc.	India	Biscuits manufacturing	2015
5	Ethio-India packaging Plc	India	Packaging	2018
6	Hongchang Textile Plc.	China	Textile	2016
7	Huasheg Cable Manufacturing	China	Cable Manufacturing	2019
8	Jili electronics Plc	China	Electronics manufacturing	2014
9	Jore Textiles Manufacturing Plc.	China	Textiles	2015
10	Kok milk manufacturing plc	China	Processing of milk and dairy products	2018
11	L & H Building materials Manufacturing Plc	China	Building material manufacturing	2017
12	Laxi Beverages manufacturing PLc.	China	Beverage industry	2021
13	Michot Diaper Manufacturing	China	Diaper (sanitize)	2019
14	Oriental steel manufacturing plc	China	Manufacturing of structural metals products	2017
15	Purewood pulp paper & packaging Plc.	Ethiopia and China	Soft paper manufacturing	2017
16	Sansheng pharmaceutical PLc	China	Medicine	2018
17	Shadeka spare parts manufacture plc	China	Spare parts and accessories for motor vehicles	2013
18	Sino weaving technology plc	China	Spinning, waving and finishing of textiles	2014
19	Sls textile manufacturing plc	China	Manufacturing of wearing apparel	2018
20	Tgs textile and garment	China	Manufacturing of wearing apparel	2015
21	Three D juice manufacturing plc	China	Juice/fruit and vegetable processing	2018
22	Ty wood manufacturing plc	China	Wood manufacturing	2019
23	Xiaobel Textile Manufacturing Plc	Ethiopia and China	Textile	2019

24	Xinda shoe	China	Manufacture of plastic products excluding plastic shopping bags	2019
25	Xuaxin Metal Plc	China	Metal manufacturing	2014
26	Xuwu textile manufacturing plc	China	Textile	2016
27	Yafei juice manufacturing plc	China	Fruit and vegetable processing	2018
28	Young wang textile plc	China	Weaving, finishing and printing of textiles	2019
29	Yuan dong non woven manufacturing plc	China	Textile manufacturing	2019
30	ZEHAO Textile Plc.	China	Textile (Blanket)	2017
31	ZHAOXIN Wang Wood Manufacturing	China	Wood and Plastic	2016
32	Zhongshun cement manufacturing plc	China	Building material/cement manufacturing	2008

Appendix 4: Investors investment criteria to invest in Bole Lemi I and Eastern Industry Parks

- **Survey result of investors in Bole Lemi I Industry Park**

	When they invest		Currently	
Functions	**Sum**		**Sum**	
Infrastructure supply	**Important**	**Not**	**Important**	**Not**
Telecommunication services	6	0	6	0
Water supply	6	0	4	2
Electricity supply	6	0	4	2
Low tariff rate for water and electricity	6	0	6	0
Proximity to Air transport	5	1	3	3
Road networks connecting major areas, cities, and local markets	2	4	4	2
Factory sheds	1		1	
Rail transport (Addis Ababa light rail and Ababa-Djibouti electric railway)	0	6	3	3
Production factors				
Political stability				
Absence/minimum amount of strikes	3	3	4	2
Absence/minimum amount of riot	3	3	4	2
Absence/minimum amount of violent conflict	2	4	6	0
Characteristics of labor				
Abundant	6	0	6	0
Young	6	0	6	0
Low labor cost	6	0	6	0
Well trained/ skilled	4	2	2	4
Highly educated (first degree/above)	2	4	2	4
Fiscal Incentives Packages				
Customs duty and other tax-free import	6	0	6	0
Export tax exemption	6	0	6	0
Subsidized land lease and shed rental rates	6	0	5	1
Income tax exemption up to 5 years for manufacturing in Addis Ababa industrial parks	5	1	2	4
Loss carry forward	4	2	3	3
Access to foreign loan	3	3	4	2
Non-Fiscal Incentives Packages				
One-stop-shop service	6	0	6	0
The right to open and operate foreign currency accounts	6	0	6	0
Expedited visa procedure	5	1	5	1
Guarantee against expropriation	5	1	5	1
Subsidized utility rates	2	4	2	4
Other				
Security	6	0	6	0
Cheap sheds lease cost per month	6	0	1	5
Having duty-free, quota-free access to a wide market, including major markets such as the USA, and the EU (AGOA and EBA agreement)	6	0	6	0
An abundance of land/office space	4	2	2	4
Plenty of partner companies (delivering companies)	3	3	4	2
Availability of raw material	2	4	1	5
Subsidized utility rates	2	4	2	4
A cluster of supporting industries (local procurement is easy)	1	5	3	3

- **Survey result of investors in Eastern Industry Park**

	When they invest		Currently	
Functions	**Sum**		**Sum**	
Infrastructure supply	**Important**	**Not**	**Important**	**Not**
Telecommunication service	32	0	32	0
Road networks (expressway) connecting major areas, cities, and local markets	31	1	31	1
Water supply	31	1	31	1
Electricity supply	31	1	27	5
Low tariff rate for water and electricity	30	2	30	2
Rail transport (Ababa-Djibouti electric railway)	9	23	18	14
Production factors				
Political stability				
Absence/minimum amount of riot	27	5	30	2
Absence/minimum amount of violent conflict	25	7	30	2
Absence/minimum amount of strikes	22	10	26	6
Characteristics of labor				
Young	31	1	29	3
Low labor cost	30	2	26	6
Abundant	19	13	20	12
Well trained/ skilled	11	21	14	18
Highly educated (First degree/above)	11	21	10	22
Locational advantage				
Proximity to Addis Ababa market	30	2	30	2
Located only 50 km away from Modjo dry port	22	10	25	7
Incentive Packages (Fiscal)				
Income tax exemption up to 6 years for industrial parks outside Addis Ababa	30	2	27	5
Customs duty and other tax-free import	29	3	29	3
Loss carry forward	23	9	18	14
Access to foreign loan	20	12	20	12
Export tax exemption	3	29	3	29
Access to start-up loan (domestic investors) from the Development Bank of Ethiopia	1	31	1	31
Incentive Packages (Non-Fiscal)				
One-stop-shop service	31	1	29	3
Expedited visa procedure	26	6	25	7
The right to open and operate foreign currency accounts	26	6	24	8
Guarantee for remittance of funds	24	7	22	9
Subsidized utility rates	22	10	22	10
Other				
Security	32	0	32	0
An abundance of land/office space	29	3	20	12
Plenty of partner companies (delivering companies)	25	7	26	6
Subsidized land lease and shed rental rates	22	10	18	14

Opportunity for different sectors to reside	17	15	18	14
Being an import substitution industrial park	16	16	16	16
Cheap sheds lease cost per month	15	17	15	17
A cluster of supporting industries (local procurement is easy)	13	19	9	23
Availability of raw material	11	21	7	25
Good climate and fertile soil for production	2	30	2	30
Having duty-free, quota-free access to a wide market, including major markets such as the USA, and the EU (AGOA and EBA agreement)	2	30	2	30

Appendix 5: Coding strategy detail

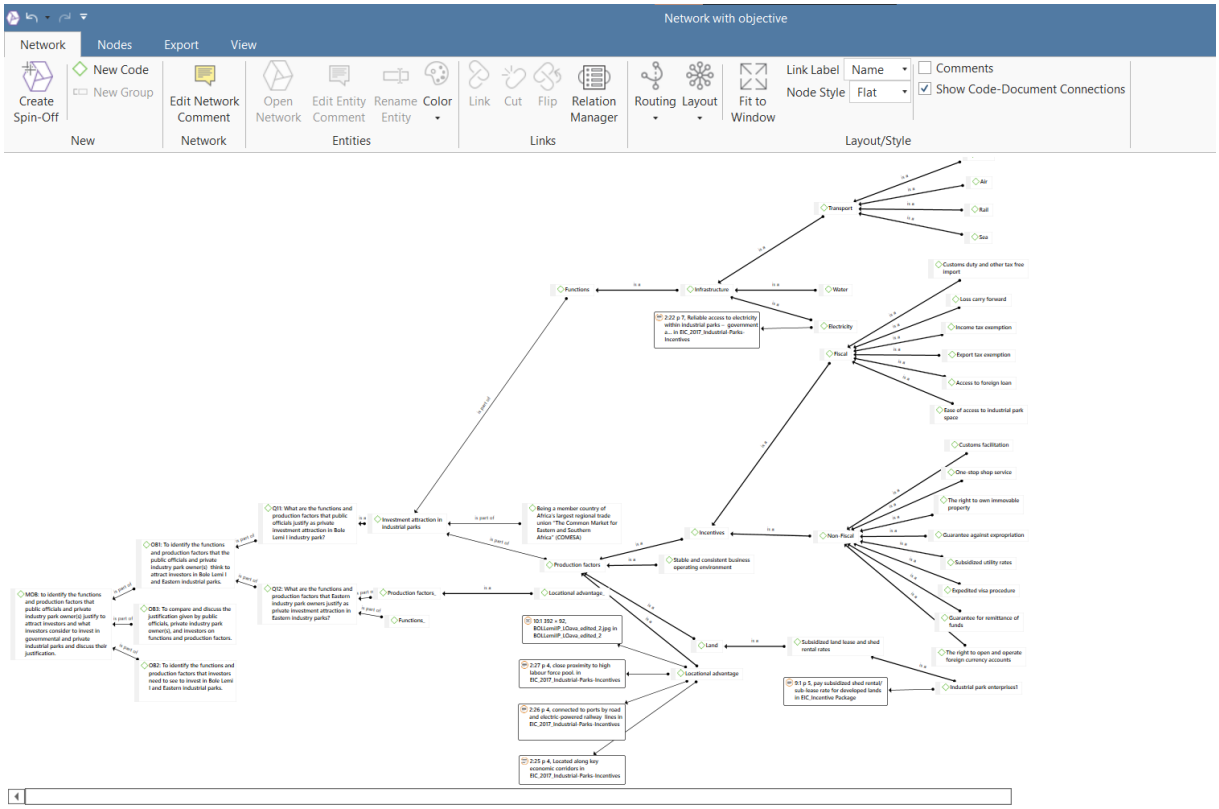

Figure 19: Code network in Atlas.ti

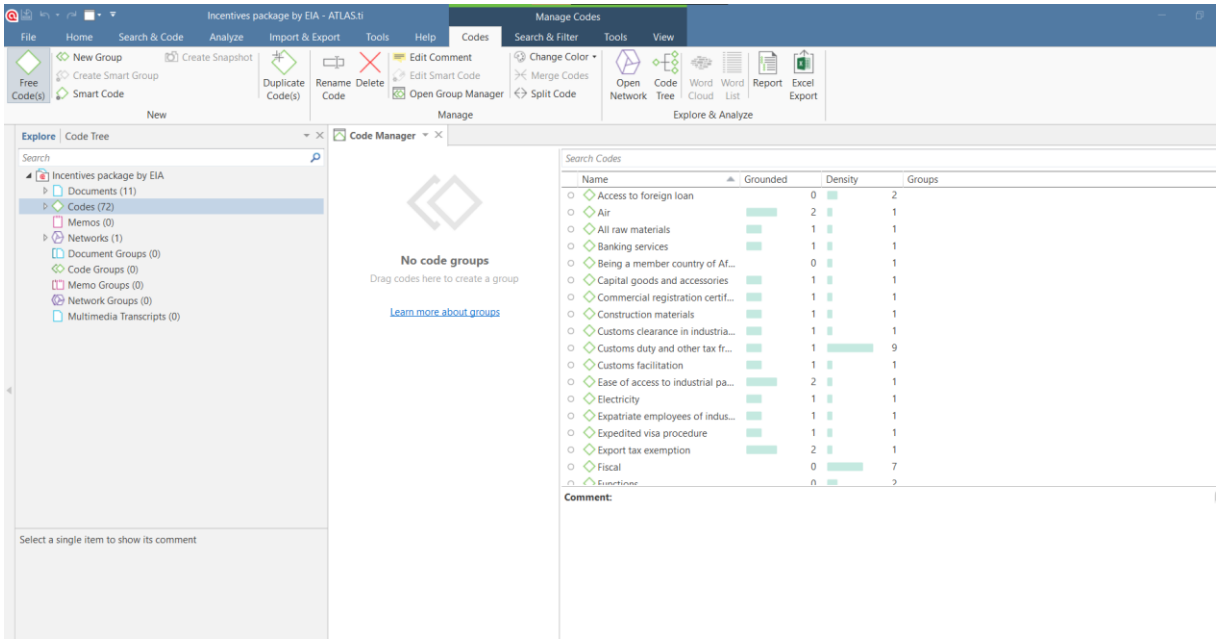

Figure 20: Coding the factors in Atlas.ti

Appendix 6: Field observation

Figure 21: (a-f) Infrastructure supply in Bole Lemi I Industrial Park (Source: Yisehak fieldwork, 2021)

Figure 21 (a-b) infrastructures (road, street light, factory buildings), Figure 21 (c) one-stop-shop service office, Figure 21 (d) wastewater treatment plant, Figure 21 (e) fire station, and Figure 21 (f) police station.

Figure 22: (a-f) Infrastructure supply in Eastern Industrial Park (Source: Yisehak fieldwork, 2021)

Figure 22 (a) infrastructure (road, street light), Figure 22 (b) factory buildings, Figure 22 (c) one-stop-shop service office, Figure 22 (d) different services such as bank services, Figure 22 (e) wastewater treatment plant and Figure 22 (f) power sub-station.