



## **OPPORTUNITIES AND CHALLENGES FACED BY FOREIGN MINING INVESTORS IN ETHIOPIA**

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A research report submitted to the Faculty of Engineering and the Built Environment, University of the Witwatersrand, in fulfilment of the requirements for the degree of Master of Science in Engineering.

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## DECLARATION

I, Dakalo Mudau, declare that this research report is my own unaided work, except where indicated and acknowledged. It is submitted in the partial fulfilment of the requirements for the degree of Master of Science in Engineering at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

.....

Dakalo Mudau

Signed at..... On the ..... day of October 2019

## **ABSTRACT**

The purpose of this research is to provide a comprehensive understanding of Foreign Direct Investment (FDI) and its impact on the mining sector of a developing economy. The ideology and principles discussed aim to assist economists, investors and governments in understanding the need for FDI and how to set up a viable and conducive framework. The research links development economics to FDI as a means to creating and sustaining economic growth.

The results of the analysis indicated that there is a direct relationship between development economics and FDI. Political, social and economic risks pose a direct threat to the levels of FDI that a country attracts. A study performed in this research revealed that the higher the perceived risk level, the lower the investment levels. Africa is a resource rich continent; however it ranks low on the investor attractiveness scale. This is due to authoritative political leaders that control corporate and fiscal regimes, ethnic unrest between local tribes and political warfare that is played out in the media. Despite these drawbacks certain African countries are taking steps to improve their attractiveness. Ethiopia is one of them and was selected as the main case study for this research. A benchmark acid test was performed on the policies implemented by government. The Growth Transformation Plan (GTP) I and II (plans set by the government to transform Ethiopia) were reviewed and analysed for feasibility due to the Ethiopian government setting ambitious growth targets. The results of the analysis reveal that investors were attracted to Ethiopia through policies that safeguarded investors' interests, geological attractiveness, afforded tax and duty havens and allow for the repatriation of profits. The research also highlights the negative impact that social unrest and political

violence had on mining FDI. The research concludes on its findings that government policies play a key role in attracting investment. Monetary and fiscal policies must be set to alleviate poverty and create economic growth through the attraction of foreign investment.

Keywords:

Foreign Direct Investment, Development Economics, Political Risk, Social Risk, Economic Risk, Investment Attractiveness Index, Ethiopian Investment, African Investment, Ethiopia

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## **LIST OF ABBREVIATIONS**

CMR	China Mineral Resources
DRC	Democratic Republic of Congo
EIC	Ethiopian Investment Commission
EPC	Ethiopian Privatisation Commission
EETI	Ethiopian Extractive Transparent Initiative
ERCA	Ethiopian Revenues and Customs Authority
EPRDF	Ethiopian People Revolutionary Democratic Front
FDI	Foreign Direct Investment
FMI	Foreign Mining Investors
GTP	Growth Transformation Plan
GDP	Gross Domestic Product
IAI	Investment Attractiveness Index
MNC	Multi-National Company
MPRDA	Mineral and Petroleum Resource Development Act
MNR	Ministry of Natural Resources
NBE	National Bank of Ethiopia
PPI	Policy Perception Index
RMB	Rand Merchant Bank
RN	Resource Nationalism
R&D	Research and Development
SA	South Africa
UNCTAD	United Nations Conference on Trade and Development
USA	United States of America
UN	United Nations
VAT	Value Added Tax

## **LIST OF UNITS**

A\$	Australian Dollar
Birr	Ethiopian Birr
km	Kilometres
MW	Megawatts
R	South African Rands
RMB	Chinese Ren Min Bi
\$	United States Dollar
t	Tonnes (metric)

## **CHAPTER 1**

### **Chapter 1: Introduction**

#### **1.1. Background of the study**

FDI contributes positively to the economic growth of a country through transfer of capital, therefore government policies must be transparent and attractive to the extent that they attract foreign investors instead of being a barrier (Otto and Cordes, 2002). The execution of FDI in the host country, if done properly, can benefit the locals through skills development and employment. As the global demand for commodities increases, there is an increase in the need for FDI to meet this demand (Mtegha, 2015). Countries therefore have to compete on a global scale by managing the main constraints such as political, economic and social risks which are affecting positive FDI inflows.

Prior to 1992, during the Derg regime which ruled from 1974 to 1991, Ethiopia had centralised policies which were not favourable to attract FDI as well as stimulate economic growth. The regime nationalised major industries, land, banks and insurance companies which discouraged private ownership and FDI benefits. In the first five years after the introduction of centralised policies, the country experienced 0.3% Growth Domestic Product (GDP) growth rate and negative growth rate in GDP per capita. During the second phase of the regime, the economy improved due to the good performance of the agricultural sector. The weather was favourable and the GDP increased by 4.6%. Thereafter from 1980 to 1985, the country experienced severe economic meltdown which was caused by drought. Despite the government's effort to revive the economy by attracting foreign investors, political instability and

civil wars discouraged investors, resulting in the dissolution of government in 1991 (Woldekidan, 2005).

In 1991, the new ruling party in Ethiopia, the Ethiopian People Revolutionary Democratic Front (EPRDF), embarked on a journey to reform the economy by changing the previous economic system so that it can be able to compete globally. The government introduced policies that encouraged both domestic and foreign investment and since then the country has been experiencing economic reforms. However, due to the heavy reliance on the agricultural sector, the country experienced adverse economic meltdown in the early 2000s due to adverse weather patterns which brought about droughts. In addition, armed conflicts discouraged foreign aid and investment (Amdetsion, 2015).

The dependence of the Ethiopian economy on the agricultural sector, which in turn depends on weather, is risky. The mining sector in Ethiopia is underdeveloped however, research has shown that it is rich in minerals and government would like to ensure it contributes to the GDP (EEITI, 2018).

In 2010 and 2011 the government of Ethiopia implemented a follow up GTP which identified sectors where potential economic growth could be achieved. A positive response was received from the services and industry sectors. The El Nino drought caused the agricultural sector growth to decline to 8% in 2016 from 10.4% in 2014 (Sennoga, 2017). The government committed to the following to achieve its targets:

- 100% customs duty exemptions on imports is granted to all capital goods, such as plant, machinery and equipment and construction material for a period of up to five years from start of production;

- Bi-lateral investment and double taxation treaties with South Africa (SA) and other countries;
- Dividends tax charged at 10% (Amdetsion, 2015);

## **1.2. Problem statement**

FDI has been identified as a key component in developing the mineral sector of developing countries. Minnit & Kasatuku (2006) noted that FDI contributes to positive capital growth, which alleviates poverty, increases financial resources, creates employment opportunities and develops skills.

Ethiopia has big ambitions for the economy, with the GTP setting out the ambitious target of 10% contribution to the GDP by 2025 for the mining sector. In 2015, the sector contributed only 1.5% of GDP, meaning significant growth in the sector is required within a limited period of time (Ethiopian Investment Commission, 2015).

Ethiopia has the potential to become a significant contributor to the global minerals trade market. However due to social unrest between the largest tribe in the central of the country and government, foreign investors may choose not to invest in Ethiopia. Foreign labour has also been used in the construction of infrastructure at the expense of local labour resulting in high tensions amongst the locals (Deloitte, 2016).

The picture painted above is characterised by political and social risks, which together can affect the economic outlook and the foreign investment inflow in the country. This therefore means that there is a need to identify challenges and opportunities to ensure that the mining sector is attractive to Foreign Mining Investors (FMI) and benefits the communities to minimise such risks.

### **1.3. Research aim and objectives**

The aim of this study is two-fold; firstly, the study will assess the challenges and opportunities that the current investors are facing in Ethiopia, and what the country can do to attract more foreign investors as per their GTP. Secondly, the report will analyse the draft mining policy, amidst the issues of social unrest.

The specific objectives of the study will therefore be:

- To explore the mining opportunities and challenges that FMI are facing in Ethiopia;
- To critically analyse how the implementation of GTP I and II and economic policies have benefited the Ethiopian economy and the FMI thereafter;
- To discuss the performance of selected mineral rich economies from developed and developing economies in order to assist Ethiopian mining sector to draw some lessons from them.

### **1.4. Research questions**

The questions that the envisaged research will attempt to answer with respect to Ethiopian mining investment are the following:

- What are the FDI regulatory and institutional frameworks as well as the incentives offered to foreign investors in Ethiopia to attract FDI?
- What are the legislations regarding mining investors, and what is required by the government from FMI to invest in the mining sector?

- What are the opportunities and challenges faced by FMI in Ethiopia and the government remedial actions to minimise the challenges?

## **1.5. Research methodology**

The research will follow a qualitative research methodology using the secondary data as a source of information such as books and published research literature. These will be used to gain better insight of the policy environment of Ethiopia.

Rahman (2016, p.103) define qualitative method as “*any type of research that produces findings not arrived at by statistical procedures or other means of quantification*”. Through qualitative methods, the source of data in the research will be triangulated to increase the reliability and consistency of the research and the assumptions made. Due to the limited information in the country that the research is based, only secondary sources of information will be used, without risking the fieldwork. The mining policies from Ethiopia will be used to compare and analyse the country’s foreign investment trend. This will assist in understanding the challenges that foreign investors face in Ethiopia as well as the rewards they get by investing in the country.

### **1.5.1. Thematic analysis**

A thematic analysis will be used in this research to analyse secondary qualitative data. This analysis identifies common issues under different themes from the collected data. Braun and Clarke (2006, p.35) write that “*a theme captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set*”.

Thematic analysis allows the researcher to make preliminary observations of the data collected so that the researcher can gain an understanding of the data and prepare a methodology to analyse it. It also explains and systematises the data in detail and interprets diverse features in the research topic. A detailed research will delve into the assumptions about the nature of the data and highlight the findings.

### **1.5.2. Reliability of validation of the data**

In order to validate the research and to ensure that it is reliable, the data collected needs to be linked to the initial research questions so that there is a balance between the methodology and the theory. Reliability means that the research needs to be based on facts so that even when compared with other researches of the similar concepts, the results should be similar. According to Golafshani (2003, p.599) validity *“determines whether the research truly measures that which it was intended to measure or how truthful the research results are”*.

### **1.6. Outline of chapters**

Chapter 1 is the introduction of the research project, purpose and the objective of the study chosen, together with the problem statement. It also gives the context of the studies and methodology the research followed.

The literature review is covered in Chapter 2 and where the definition and types of FDI are explained in detail. The criteria that countries used in attracting foreign investment will be clearly outlined, and the influence that the FDI has on the economic development of the host country, both good and bad will be stipulated.

Chapter 3 will cover the risks and challenges that FMI face globally. The criteria that FMI look for when making the decision on where to invest will be detailed. Mineral policy trends and evolution will be outlined giving the highlights on how other developed and developing countries in different regions have been performing.

Global FDI trends will be discussed in Chapter 4, showing how the various regions performed in both developed and developing countries. The particular focus will be on Africa especially on the growth rates and attractiveness.

Chapter 5 will outline Ethiopia's economic status in terms of GDP and the country's mining status. The policy trends related to mining will be discussed and also the challenges, opportunities, and investment attractiveness in the country and Chapter 6 will give analysis and thereafter Chapter 7 will give conclusions based on the findings of the research.

## Chapter 2: Foreign Direct Investment in Development Economics

### 2.1. Development economics and FDI

Development economics focuses on improving fiscal, economic, and social conditions in developing countries. This is done by considering factors like health, education, working conditions, domestic and international policies and market conditions in evaluating the growth of the economy (Kenton, 2018). FDI therefore contributes to economic development of recipient countries through the following outcomes: higher investment level, increased economic activity, and enhanced knowledge expansion through new technology and human capital.

The World Bank (2017b, p.163) defines FDI as the “*investment made to gain a stable interest in entities operating outside of the investors’ economy*”. Therefore the investor has a significant influence on the management of the enterprise. FDI is therefore the capital that is directly funded by the investor or the investors’ related entities. FDI can be subdivided into three components which are: equity capital, reinvested earnings and inter-company loans. Equity capital refers to share capital or other equity instruments that the investor purchases in a foreign entity. Reinvested earnings refer to investors’ returns from equity capital that is not repatriated but reinvested by the affiliates. Intercompany loans refer to funds lent by the parent company to the affiliate enterprise to fund ongoing operations (Asafo-Adjei, 2007).

Investments can be divided into two types: horizontal and vertical investments. Horizontal investment serves to invest in new markets abroad. This therefore implies that the same product is produced in different markets but with varying costs. This acts as a substitute for exports and greatly reduces the cost of transport, import

duties and other barriers of trade (Chung, 2014). Vertical investment refers to a Multi-National Company (MNC) investing abroad with the intention of reducing production costs. This is done by creating processing plants in different countries and breaking down the production process to be covered by the different countries thereby reducing production costs. Therefore, developing countries will have lower labour costs and take over the assembly and intermediate production stages. Thus vertical investment is also referred to as efficiency seeking FDI (Chung, 2014).

FDI forms a part of private external funding for developing countries. Developing countries currently rely heavily on FDI as a source of foreign capital as shown in Figure 2.1. On average FDI accounted for 39% of external funding for the past five years from 2012, however there was a decline in 2017. Remittances of external funding in developing countries are also growing at a stable rate, and have risen by 8.5% in 2017 as shown in Figure 2.1 (World Bank, 2018).

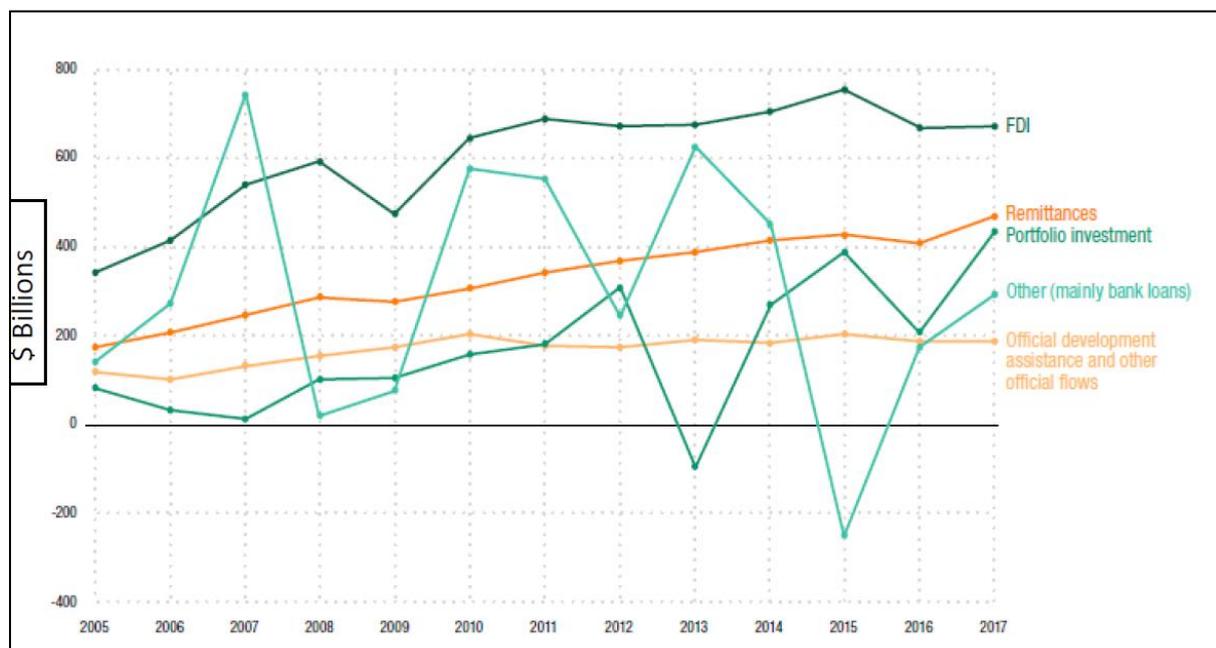


Figure 2.1: External sources of finance for developing economies, 2007–2017.

Source: World Investment Report (2018)

## 2.2. FDI influence on economic development

Economic growth is mainly driven by FDI which opens up the economy to production and job creation. A country's fiscal budget also receives a boost resulting in higher per capita income (Sekerovski, 2015). The majority of developing countries rely on FDI to boost economic growth (Kukaj and Ahmeti, 2016). The Salmon Valley Business and Innovation Centre (2011) define economic development as "*efforts that seek to improve the economic well-being and quality of life for a community by creating and/or retaining jobs and supporting or growing incomes and the tax base*". Economic development is therefore the process of positioning the economy on a higher growth trajectory and without economic development, economic growth is limited (Feldman and Lanahan, 2014). Furthermore, economic development encompasses three major areas such as:

- Government policies to ensure price stability by regulating financial institutions, trade and policies through fiscal policy
- Policies that provide infrastructure and basic services such as housing and educational programs.
- Policies that covers job creation and retention thereafter (Salmon Valley Business and Innovation Centre, 2011)

Mineral endowment should bring extensive economic development especially in poor countries that lack alternative sources of development. Appropriate legal and policy frameworks must be set up for foreign investors to be drawn to rich mineral deposits. Many of the world's richest countries such as Australia, Canada, Finland and Sweden have benefited greatly from minerals extraction which also increased economic growth. Botswana has benefitted greatly from the mining sector owing to

high levels of FDI, which have led to the mass production of diamonds. On the other hand, other developing countries have not taken advantage of the mineral resources in their countries and these remain unused. The mineral sector can assist the country to develop the economy through job creation, generation of new infrastructure such as roads, schools and hospitals (Okan, 2008). Mining companies can be an outward linkage for economic growth through the development of skills and the growth of small businesses i.e., forward linkages to industries that process mineral inputs and/or backward linkages to industries supplying goods and services to the mining industry. On the other hand, the following challenges are indicative of the issues faced by a country willing to develop its mineral sector:

- Difficulties in attracting exploration investment and demonstrating mineral potential;
- Attracting investments through progressive economic policies;
- Lack of investment in Research and Development (R&D) to maximise the benefits of non-renewable resources;
- Dealing with the impacts that could negatively affect mining investments such as corruption and conflicts (The Mining, Minerals and Sustainable Development, 2011).

Above all, the existence of mineral deposits is not an indicator of economic growth, as the outcome is determined by government policies, political landscapes and the local markets.

Multi-National Companies (MNCs) have evolved and expanded their operations to include foreign markets in search of new opportunities such as new orebodies.

Developing countries and emerging markets have created policies that are attractive to FDI and compete for investors. As a result, emerging markets have to set policies that are favourable for MNCs to invest in them.

FDI has many benefits for the host country; among them is technological and infrastructure development, training of local labour force and contribution to the global markets as well as higher economic growth. This in turn alleviates poverty and increases GDP per capita for the host country (Kurtishi-Kastrati and Gerguri-Rashiti, 2015). It also contributes a steady stream of financial resources into the country that helps it to develop its economy. In return MNCs are able to repatriate profits only when their investments begin to yield returns. These are long term projects and MNCs are able to negotiate for affordable interest rates with international funding institutions. These investments greatly contribute to the host country's economic growth and uplift the competitiveness of the local markets (Asafo-Adjei, 2007).

Feldstein (2000) identified the advantages of foreign capital injection as diversification of local financial institutions product ranges, and global integration of capital markets. These factors encourage the development of good corporate governance and accountability rules. In addition to capital injection, MNCs bring advanced technology into a host country, this stimulates economic growth and industrialisation. R&D can be performed more effectively in developing countries with the assistance of MNCs that have the technological know-how of research and resources. The technological advancement in the form of FDI helps the host country develop skills amongst its citizenry through knowledge transfer. Chief among the benefits of FDIs is the creation of employment in the local market and the upliftment of the quality of life of the local populace. With employment comes an increase in

general spending that helps local businesses to increase production and develop infrastructure to accommodate the resultant demand (Kurtishi-Kastrati and Gerguri-Rashiti, 2015).

While FDIs are beneficial to host countries, they also have drawbacks. When foreign ownership becomes too extensive, de-capitalisation can occur through repatriation of profits to the home country, leaving the host country with a loss of capital. Thus, countries are encouraged not to rely excessively on FDI (Asafo-Adjei, 2007). In addition, FDI can damage competition in the host country by bringing firms with skills, technology and capital. This can damage the local market as small indigenous firms are unable to compete and attract skilled personnel. This can force the local firms to go into liquidation and increase unemployment. Although FDI helps increase productivity and efficiency in production, it is difficult to monitor if it is harming local firms (Manemo, 2014). Therefore, it is imperative to monitor MNCs trading patterns as they may force local firms out of competition through price cutting, thereby achieving a monopoly where profit maximisation will take place and leave the host country impoverished (Woldemeskel, 2008). A case in point was in Cochabamba Bolivia in 2000, where locals held violent protests against Bechtel that ran the water service and was doubling prices paid by consumers (Asafo-Adjei, 2007).

A country that relies heavily on foreign investments can formulate policies that are conducive to investors, but may be disadvantageous to the local economy. When this happens, it will lead to locals being undermined as the host government will rely on the capital injection from foreign investors (Manemo, 2014). Some countries prefer to negotiate with foreign investors on a case by case basis in order to protect the local economy. This reduces the net benefits of FDI and the host country runs

the risk of losing FDI to competitors (Woldemeskel, 2008). Foreign investors may opt to finance their operations by borrowing from local banks therefore limiting the capital introduced in the host country. In the end the repatriation of borrowed funds to the foreign country does not benefit the host country (Woldemeskel, 2008).

### **2.3. Factors influencing Global FDI**

The United Nations Conference on Trade and Development (UNCTAD) carried a survey of the top executives of MNCs to evaluate the macroeconomic, external, and corporate factors that can influence the growth of FDI in the future. The MNCs ranked high the economic state of developing economies in Asia, followed by the economic state of the United States as shown in Figure 2.2. In contrast, the geopolitical uncertainty and rising interest rates were amongst the macroeconomic factors that can deter the FDI inflow. This is because the rising interest rate can negatively affect the profitability of the business.

Under the external and corporate factors, technological change (including digital economy) and global urbanisation were the two most important factors that can increase FDI globally going forward. However, the ever increasing threat of terrorism, social security, natural disasters, and cyber-attacks and data security were regarded as factors that can negatively influence the FDI inflow in the country as shown in Figure 2.2.

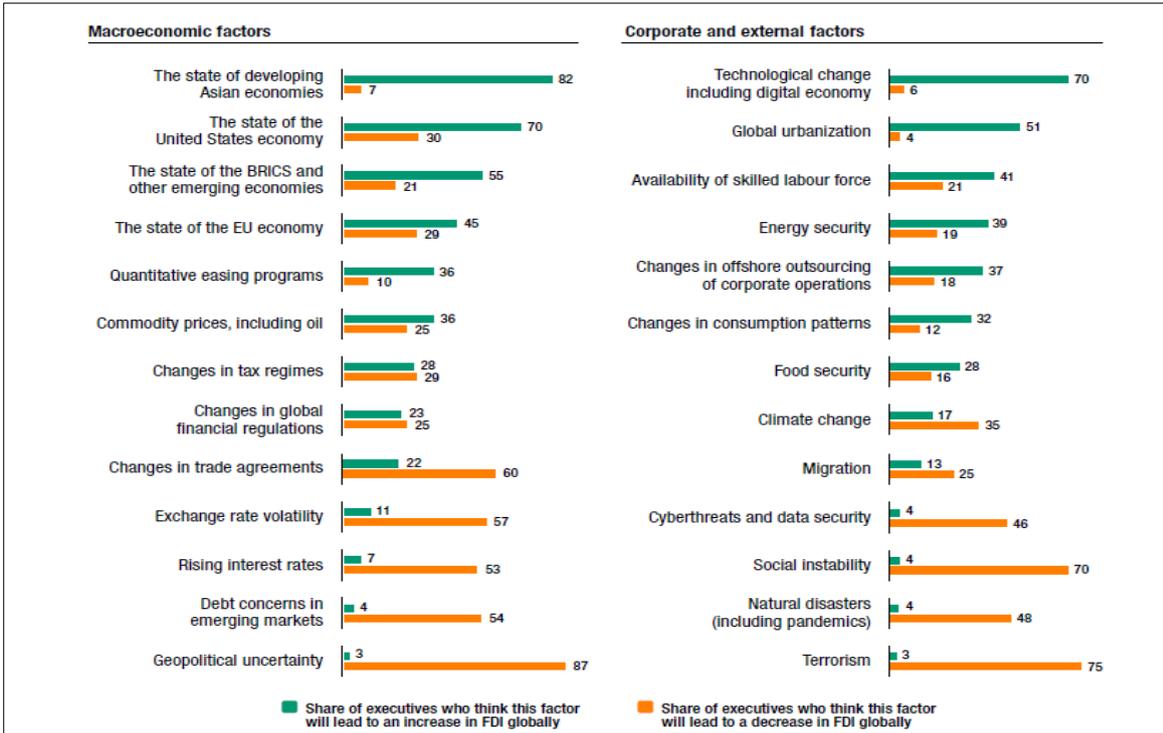


Figure 2.2: Factors influencing the future global FDI activity in percentage of all executives. Source: World Investment Report (2018)

The World Bank (2017) also conducted a similar survey for the Global Investment Competitiveness report to find the factors that influence the global determinant of FDI. The results shown in Figure 2.3 indicated that political stability and a good legal and regulatory environment were the important factors investors considered when making decisions. Therefore, reducing the country risk in terms of investment can make the country attractive to the private investors. Government in both developed and developing countries that are focused on attracting investors, use tax and other incentives to reduce the costs and manage the investment risks (World Bank, 2017). Apart from attractive incentives, government must reduce the investment risk through the creation of institutional frameworks that support business growth and good governance.

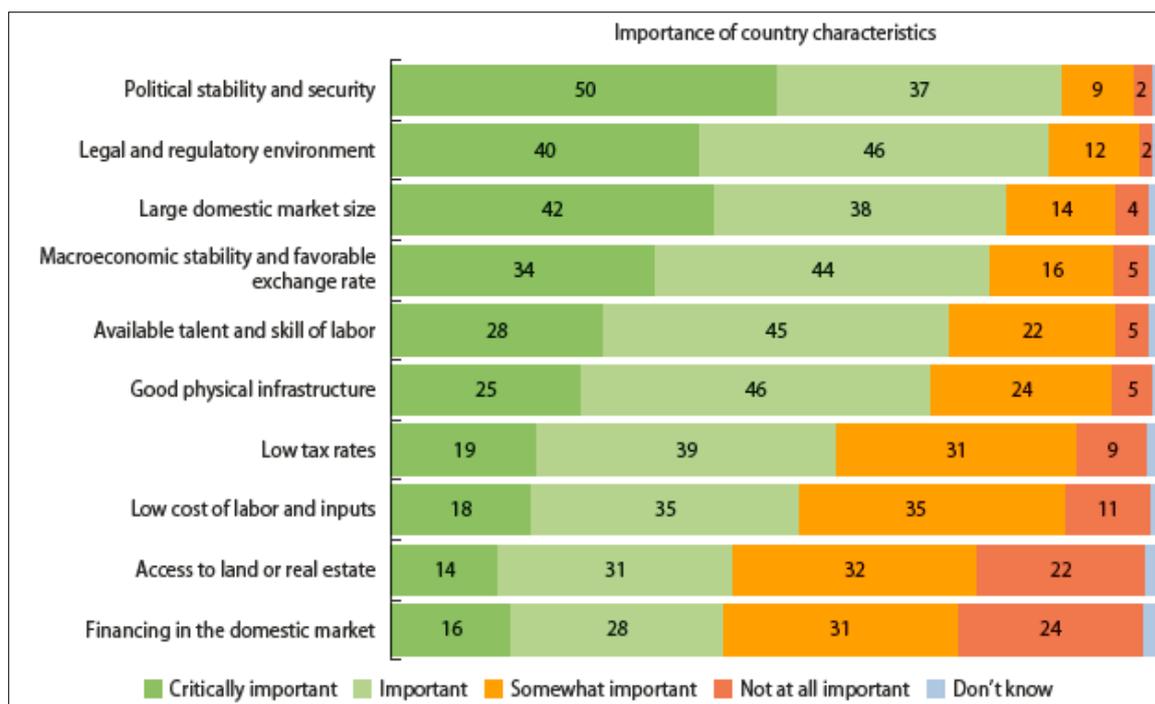


Figure 2.3: Factors affecting investment decisions.

Source: World Bank (2017)

Economies willing to attract FDI must invest in infrastructure development. FDI can easily expand in areas with good infrastructure as opposed to economies with weak infrastructure. Neo-classical economists identified the labour cost as one of the factors that will affect investment decisions. The availability of low cost labour attracts FDI as it increases profitability. This is prevalent in China where the labour cost is cheap and productivity is high (Woldemeskel, 2008). Economies with fluctuating inflation create uncertainty with FDI as real profits (profits adjusted for inflation) diminish with higher inflation levels. Low and predictable inflation rates are attractive indicators for firms willing to invest in domestic economies whilst higher inflation decreases the levels of FDI in an economy (Woldemeskel, 2008).

The fluctuations of the exchange rates can either influence the FDI negatively or positively. In the latter, the inflation adjusted values of foreign investors' capital increase when the host country's currency is devalued. In the former, frequent and

continuous devaluations in the value of the host country's currency decrease FDI inflows (World Investment Report, 2018). Excessive foreign debt in a developing country is a hindrance to FDI, as it creates uncertainty in the macroeconomic environment. A lack of control over spiralling foreign debt will signal a fiscal crisis and deter FDI inflows (World Investment Report, 2018).

The fiscal deficit of a government decreases the real return on investment even if the government prints additional bank notes or increases taxes. Excessive government borrowing reduces the funds available for the private sector as the interest rates are very high. As such fiscal deficits generally result in negative FDI inflows (Deloitte, 2016). FDI has been noted to be determined by geographical proximity as well as cultural and linguistic affinities. FDI inflows can be interrupted by unsettled, implicit, internal or external political disputes and crises. Civil wars, border conflict, corruption, and a fragile political system are likely to deter the inflow of FDI and will continue to do so until political peace is restored (Minnitt and Kasatuka, 2006).

#### **2.4. Summary**

Development economics plays a key role in the economic growth of a developing economy. FDI injections open up the economy of a developing country to improve its citizens' lifestyles, government generates more revenue for its projects and the fiscal budget is improved. There are two types of FDI which are horizontal and vertical FDI. Horizontal investment invests in new markets abroad whereas vertical investment, also invests abroad by MNC's with the intention of reducing production costs. In the developing countries, FDI accounted for an average of 39% between the period of 2012 to 2016.

FDI drives and boosts economic growth by job creation. Mineral endowment brings extensive economic development if policy frameworks are set up appropriately. However, factors such as corruption and conflicts can have a negative impact on the development of the mining sector and deter FDI inflow.

Benefits of FDI includes technological and infrastructure development whereas the drawbacks includes damaging competition in the host country by bringing firms with skills, technology and capital. Results from the survey conducted by UNCTAD shows that geological uncertainty and terrorism can deter FDI and FDI. World Bank survey shows that political stability and security is imperative when making investment decision.

## **Chapter 3: Risk and Perception of Global Exploration and Mining Investments**

### **3.1. Factors influencing mining investment decision**

The benefits of minerals in the host country can only be realised if the mining investment has been made. Mining projects are capitally intensive and involve uncertainty and risk. Exploration can take a long time to complete and there is no guarantee that the resources will become mineable. If mineable minerals are discovered, planning and development of a mine will take a long time to complete and there will also be a long lead time before profits are realised. During the mining phase, the profitability of the mine can be sensitive to several factors such as changes in mineral policies of the host country, market conditions, social risks such as labour disputes, and technical issues within the company. In any investment investors seek to benefit through dividends and capital appreciation, hence the need for the countries to consider abovementioned risks when drafting mining policies (UNCTAD, 2007).

Otto (1992) indicated that the geological attractiveness during exploration phase and security of tenure during the mining phase are the key indicators of a country's potential to attract FMI (as shown in Table 3.1). However, for a country to attract FMI it must offer consistent and favourable policy and regulatory frameworks (Mtegha, 2005). Otto (1992) conducted a survey for the United Nations (UN) in order to establish the top factors that companies look out for when deciding to invest in a foreign country. These factors, as shown in Table 3.1 also assist the country to determine investment areas where the improvements are needed.

Table 3.1: Ranking of mining investment decision criteria factors ranked by importance.

Mining	Exploration	Decision Criteria based on:
1	2	Security of tenure
2	3	Ability to repatriate profits
3	N/a	Measure of Probability
4	8	Stability of exploration/mining terms
5	9	Ability to predetermine tax liability
6	7	Realistic foreign exchange regulations
7	5	Company has management control
8	10	Ability to predetermine environmental obligations
9	4	Consistency and constancy of mineral policy
10	11	Stability of fiscal regime
11	6	Mineral ownership
12	12	Ability to raise external funding
13	16	Method and level of tax levies
14	21	Permitted external accounts
15	17	Import-export policies
16	13	Long-term national stability
17	14	Established mineral titles system
18	18	Majority equity ownership held by the company
19	22	Modern mineral legislation
20	20	Internal (armed) conflicts
21	19	Right to transfer ownership
N/A	1	Geological potential for target demand
N/A	15	Ability to apply geological assessment techniques

Source: Otto (1992)

The World Bank (2002) also conducted similar studies to Otto's and concluded that the following factors influence mining investment decisions:

- The geological potential for the target mineral;
- Political stability;

- Mineral law including mineral ownership, security of tenure, exploration and mining terms, right to transfer ownership and access to minerals;
- Fiscal regime (stability and predictable regime, equitability, ability to repatriate profits, level of tax liability, foreign exchange regulation and permitted external accounts); and
- Institutional factors.

The findings from the survey conducted by Otto (1992) and the World Bank (2002) are similar. From those findings one can conclude that a country with prospective geology during exploration phase, combined with political stability, security of tenure and a predictive investment policy during the mining phase, has a higher chance of attracting FDI.

In developing countries mining policies and codes and uncondusive environments have been identified as constraints to mineral investments. Hence governments must engage investors with a view of creating an investor friendly environment. An investor friendly environment is particularly depended on the publication and promotion of mineral resource inventory, the development of a well-rounded mineral legislation, and attractive taxation regimes. In addition, close attention must be paid to improving the business environment, reduction in political risk, and the improvement of the Corruption Perception Indices (Mtegha, 2015). The World Bank and International Finance Corporation (2002) made seven recommendations to mining policy makers in developing countries to become more attractive which are:

- The pursuance of reform and capacity building for government agencies and ministries;

- The development of fiscal policies to attract foreign investment;
- The improvement of social and environmental frameworks to support responsible mining;
- Privatisation of parastatal mining and industrial enterprises;
- The closure of unprofitable state mines;
- Regularisation of small scale and artisanal mining; and
- Strengthening of partnerships with important stakeholders.

### **3.2. Risks in mining investment**

FMI can be deterred by a number of risks posed by the host country. Risks such as corruption, political instability, armed conflict, and other internal problems are the main factors that negatively affect FMI inflows in developing countries. The higher the risks in the country, the lower the investment (Minnitt and Kasatuka, 2006). Instability in the country may also result in recession, bankruptcy and slow economic growth (Abate, 2009).

#### **3.2.1. Political risk**

Abate (2009 p.75) define political investment risk as “*capital and income losses as a result of policy choices of the host national government*”. Political risks cover a multitude of aspects, amongst which include the breach of contracts, discrimination and expropriation to mention a few (World Bank, 2018a). Government may re-negotiate the contracts or change policies and make it onerous for current investors and less attractive to potential investors. For example, the indigenisation policy in

Zimbabwe resulted in the retraction of major foreign investors even though capital losses were incurred in the process (Shumba, 2014).

Foreigners invest in a country for capital gain; therefore if the government due to changes in legislations forbids the repatriation of profits, capital inflows from foreign investors will be low regardless of geological attractiveness (Minnitt and Kasatuka, 2006). Regulatory measures are necessary in any country, however the governments should guard against making them so difficult that they can create barriers to investments (Otto, 1992).

The Democratic Republic of Congo (DRC) is one of the developing countries with abundant mineral resources in Africa. However, social and political risks such as corruption, changes in policies (without a notice), and high taxes have made the country unattractive for FDI. Dysfunctional public administration deters the protection of property rights and undermines any opportunities of economic growth (PWC, 2012). The Tanzanian government's decision to pass the law on banning the export of unprocessed copper and gold, and the declaration that companies must renegotiate their mineral contracts in addition to increasing taxes on mineral exports has resulted in the decline of mining investments (Van Vuuren, 2018).

Amongst many political risks that can deter the economy is the nationalisation of the mines, only if the state does not manage it properly. In 1970 the Zambian government nationalised mining companies, leading to the decline in mining FDI flows as shown in Figure 3.1. The Zambian economy collapsed following the 1979 oil crisis which led to copper prices plummeting, and the mismanagement of profits by the state (Phiri, 2011). This resulted in mining FDI inflows rapidly declining and negative growth was experienced. The economy became depressed and the foreign

debt increased, and great numbers of mines were shut down. Due to poor management and government policies, Zambia became impoverished with excessively high debt (Limpitlaw, 2011). Major economic reforms were implemented after the new political party assumed power in 1991, and privatisation of the mines started from around 1997 to 2000. The mining sector recorded a notable recovery and the mining FDI inflows responded positively.

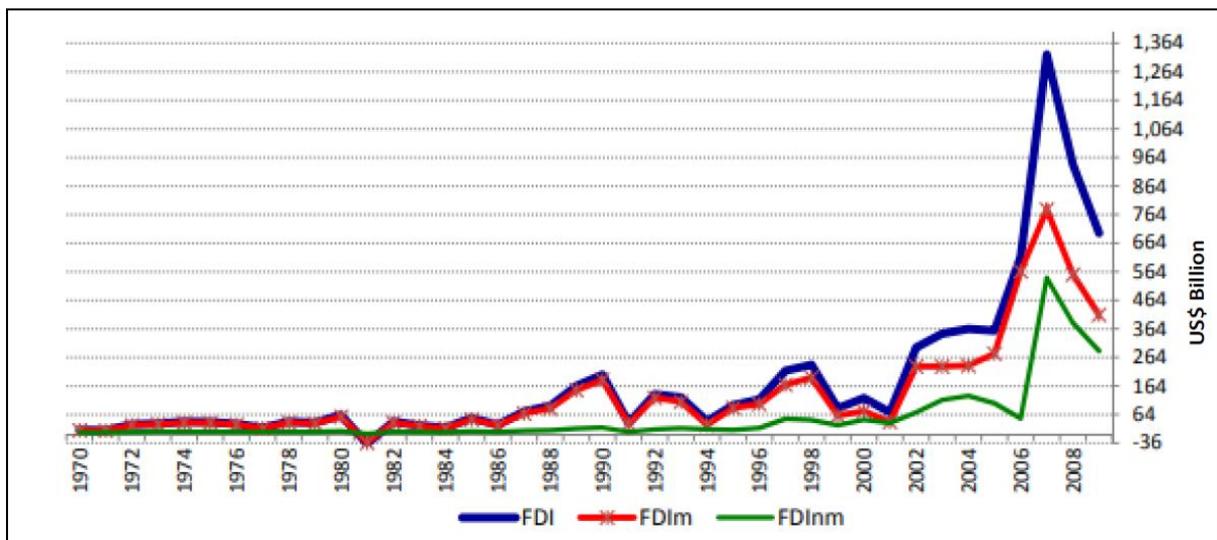


Figure 3.1: Trend of Zambian mining (FDIm), non-mining (FDInm) and overall (FDI) FDI inflows

Source: Phiri (2011)

### 3.2.2. Social risk

Social risk may result when communities are not benefiting from mining operations or employees are not satisfied with their salaries, which often leads to strikes or social unrest. This is one of the major challenges FMI are currently facing in SA. During the social unrest or strikes, private properties are often damaged and production loss is incurred. In 2014, the workers of three major producing platinum companies; Impala Platinum, Anglo American Platinum and Lonmin Platinum in SA went on strike that lasted for five months demanding wage increases. This resulted

in platinum producers losing about R24.1 billion in revenue in the longest wage strike in the country (Solomons, 2014). Consequentially growth in mining investment, GDP, and employment were hugely affected in the aftermath of the strikes as shown in Figure 3.2.

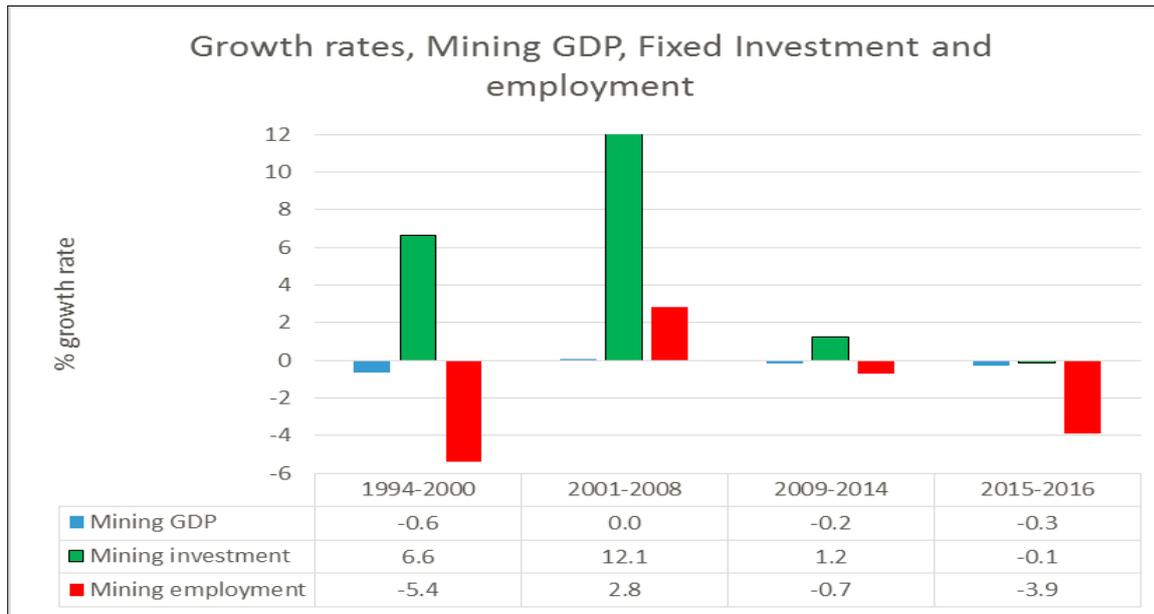


Figure 3.2: The growth rate of South African mining GDP, investment and employment.  
Source: Baxter (2017)

In developing countries like SA any mining investor, domestic or foreign, requires a social licence to operate. The social licence to operate ensures that the surrounding community benefit from the investments in their area (Baxter, 2016)

### 3.2.3. Economical risk

Most significant mineral discoveries are found in remote areas, resulting in higher capital costs. According to Abate (2009), most of the economic risks are directly linked to social and political risk. Furthermore, according to the author, the change in the fiscal regime of a country can result in FMI paying more taxes in the form of

royalties, company taxes or tariffs. The increasing environmental pressure in most countries inevitably leads to an increase in operating and capital costs.

The shortage of foreign currency reserves in a country is an economic risk. Shortage of foreign currency may pose challenges to business environment in the case of import and export. This means that businesses may fail to pay imported inputs to keep the business running or even remit dividends. (Masiyane, 2018) This is one of the challenges Ethiopia is currently facing.

The survey conducted by Ernest and Young (2018) revealed that risks and challenges that mining companies face change over time as shown in Table 3.2. In 2008, skills shortage was the biggest risk because at that time companies were expanding and producing more in order to meet the global commodity demand. A decade later, in 2017, companies were focusing on operating efficiently and at a lower cost.

Table 3.2: Risks faced by businesses in 2017 and 2008.

	2017-2018	2008 (peak of the supercycle)
Top 10 risks	01 Digital effectiveness	01 Skills shortage
	02 Competitive shareholder returns	02 Industry consolidation
	03 Cyber	03 Infrastructure access
	04 New world commodities	04 Social license to operate
	05 Regulatory risk	05 Climate change
	06 Cash optimization	06 Rising costs
	07 Social license to operate	07 Pipeline shrinkage
	08 Resource replacement	08 Resource nationalism (regulatory risk)
	09 Access to and optimization of energy	09 Access to energy
	10 Managing joint ventures	10 Increased regulation (regulatory risk)

Source: Ernest and Young Mining (2018)

Therefore, with an effort to boost productivity and increase revenue margins, companies are opting for digital technology in their processes. New technologies are

aiding companies in the analysis of data, improving reliability and consistency, and introducing predictive capabilities. Consequently, some companies have suffered financial loss due to cyber-attacks and must therefore invest in cyber protection that is costly to setup and manage (Ernest and Young, 2018). In addition, perceived risks whether real or imagined, have the potential to influence the investors' perceptions of countries or mining jurisdictions.

### **3.3. Investors' perception of global mining markets**

In order to develop a successful policy on investment, it is important that decision makers are aware of the perception of the potential investors in that particular industry. The Fraser Institute of Canada produces an annual report that assesses investment perception and outlines the factors affecting the ratings (Green and Stedman, 2018). The results are published annually and the two important factors that policy makers and private investors have to take into considerations are:

- Investment Attractiveness Index (IAI) which is a combination of geological attractiveness and government policy on attracting exploration; and
- Policy Perception Index (PPI) which is a measure of the overall policy attractiveness.

#### **3.3.1. Investment Attractiveness Index**

In their work (popularly known as the Fraser Institute's report), Green and Stedman (2019) lists questions on what investors look for when they invest in mining jurisdictions. Given the global prominence of Green and Stedman's work, it is

therefore important for jurisdictions that are competing for mining FDI to be ranked low on the risk scale as this will influence investors in their investment choices.

Green and Stedman (2019) showed an improvement in investment attractiveness in all mining jurisdictions, with the exception of Argentina as shown in Figure 3.3. Africa's investment attractiveness score remained unchanged in 2018 from 2017, ranking the second least attractive jurisdiction in terms of investment.

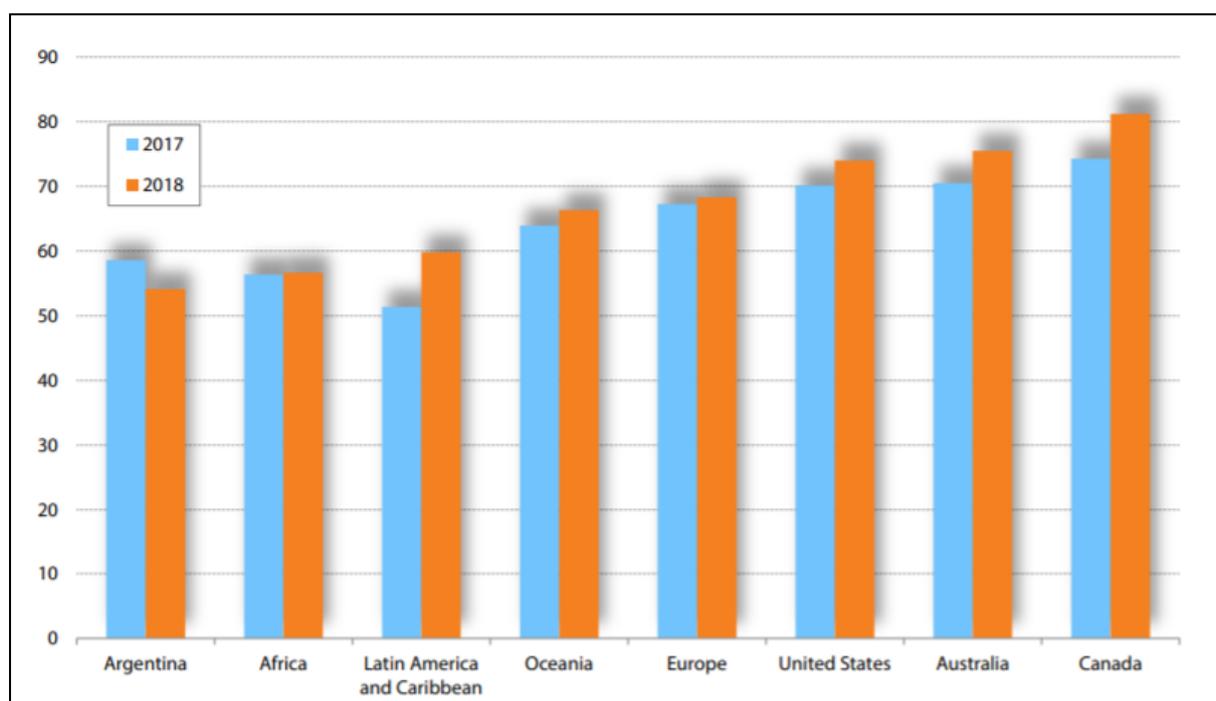


Figure 3.3: Global mining regions' median IAI scores in 2017 and 2018.

Source: Green and Stedman (2019)

In Africa, Ethiopia was the worst performing and the only African country in the bottom ten as shown in Table 3.3. Ethiopia ranked 77<sup>th</sup> out of 83 jurisdictions in 2018 as compared to 68<sup>th</sup> out of 91 jurisdictions in 2016. Social unrest was the main concern (World Investment Report, 2018). A notable change was seen in SA, ranking second highest in Africa.

Table 3.4 gives a clear indication that jurisdictions ranked high in 2018 and 2016 in terms of investment attractiveness were in the economically developed countries. Amongst the most attractive jurisdictions were Nevada, Western Australia and Saskatchewan in the top three. According to the Green and Stedman report (2018), the bottom three jurisdictions in terms of attractiveness were Venezuela, Neuquen and Nicaragua all from developing countries.

Table 3.3: IAI ranking in Africa.

Jurisdiction	Region	2018 out of 83	2016 out of 104
Botswana	Africa	32	19
South Africa	Africa	43	74
Zambia	Africa	45	30
Mali	Africa	50	42
Namibia	Africa	60	53
Zimbabwe	Africa	62	96
DRC	Africa	67	29
Tanzania	Africa	66	64
Ghana	Africa	68	53
Ethiopia	Africa	77	68

Source: Green and Stedman (2019)

Table 3.4: IAI ranking in 2018 and 2016.

Jurisdiction	Region	2018 out of 83	2016 out of 104
Nevada	United States	1	4
Western Australia	Australia	2	3
Saskatchewan	Canada	3	1
Quebec	Canada	4	6
Alaska	United States	5	14
Chile	Latin America	6	39
Utah	United States	7	11
Arizona	United States	8	7
Yukon	Canada	9	15
Northwest Territories	Canada	10	21

Source: Green and Stedman (2019)

### 3.3.2. Policy Perception Index

In terms of Policy Perception Index (PPI), mining regions also improved in 2018 from 2017 with the exception of Argentina as shown in Figure 3.4.

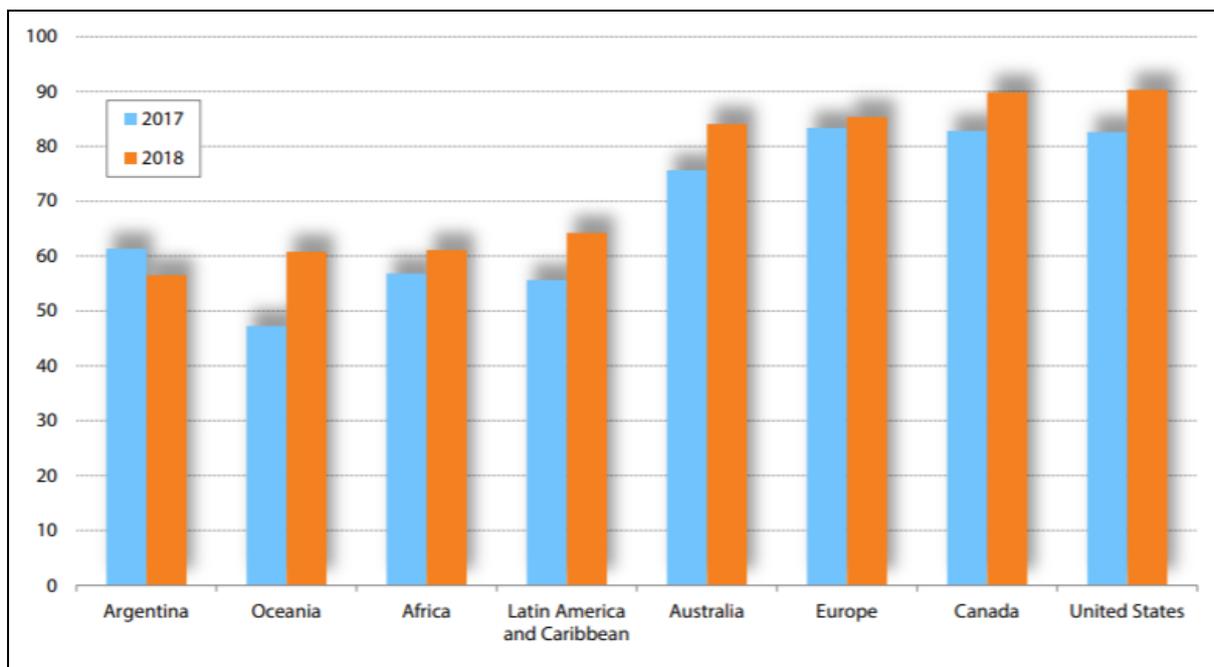


Figure 3.4: Regional median PPI scores in 2017 and 2018.

Source: Green and Stedman (2019)

Developed countries also ranked high in PPI (as shown in Table 3.5) and the top three were Saskatchewan, Nevada and Finland respectively. Botswana, a jurisdiction in the developing country in Africa, ranked 12<sup>th</sup> out of 83 jurisdictions. This was the highest rank amongst jurisdictions in developing countries reclaiming its position from 2016 as shown in Table 3.6. According to the FMI in Botswana, the country encourages explorations and the fiscal policies are transparent (Green and Stedman, 2018). Namibia was ranked 2<sup>nd</sup> in Africa in terms of PPI. The scores in Africa were weighed down by the DRC which had experienced the large decline in the region due to the concerns over trade barriers and disputes over land claims. South Africa experienced a notable increase in 2018 to position 56<sup>th</sup> as compared to 84<sup>th</sup> in 2016 as shown in Table 3.6.

Table 3.5: PPI ranking in 2018

Jurisdiction	Region	2018 out of 83	2016 out of 109
Saskatchewan	Canada	1	2
Nevada	United States	2	5
Finland	Europe	3	4
Ireland	Europe	4	1
Western Australia	Australia	5	9
Northern Ireland	Europe	6	10
Sweden	Europe	7	3
Utah	United States	8	20
New Brunswick	Canada	9	8
Quebec	Canada	10	17

Source: Green and Stedman (2019)

Table 3.6: PPI ranking in 2018 and 2016.

Jurisdiction	Region	2018 out of 83	2016 out of 109
Botswana	Africa	12	12
Namibia	Africa	36	38
Zambia	Africa	53	43
South Africa	Africa	56	84
Ghana	Africa	51	31
Mali	Africa	63	61
Tanzania	Africa	66	59
Ethiopia	Africa	71	79
Zimbabwe	Africa	89	102
DRC	Africa	87	70

Source: Green and Stedman (2019)

### 3.4. Global exploration investment trend

Exploration is the important phase in the development of a mine. Funds invested in exploration provide a good indication on the investment trends. The global exploration budget for non-ferrous commodities in 2017 increased to \$8.4 billion compared to \$7.3 billion in 2016 as shown in Figure 3.5. This was the first increase in four years (as shown in Figure 3.5). According to S&P Global Market Intelligence (2018), the 2017 results were boosted by a sharp increase in reported drilling activity in base metals following the positive trend in metal prices.

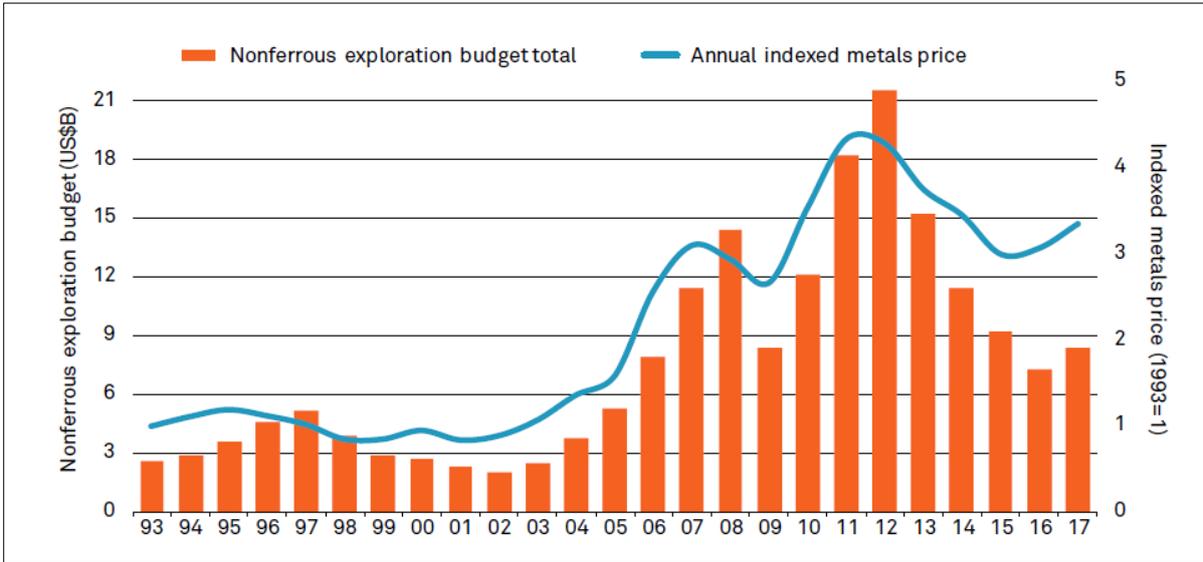


Figure 3.5: Estimated global nonferrous exploration budgets.

Source: S&P Global Market Intelligence (2018)

Gold still attracts the most significant exploration funds, which account for 51% of global non-ferrous exploration budget as shown in Figure 3.6. In 2017, a total of \$4.05 billion was allocated for gold exploration, which was a 22% increase from the 2016 budget. Copper, nickel and zinc-lead (base metals) accounted for 30% of the global exploration budget.

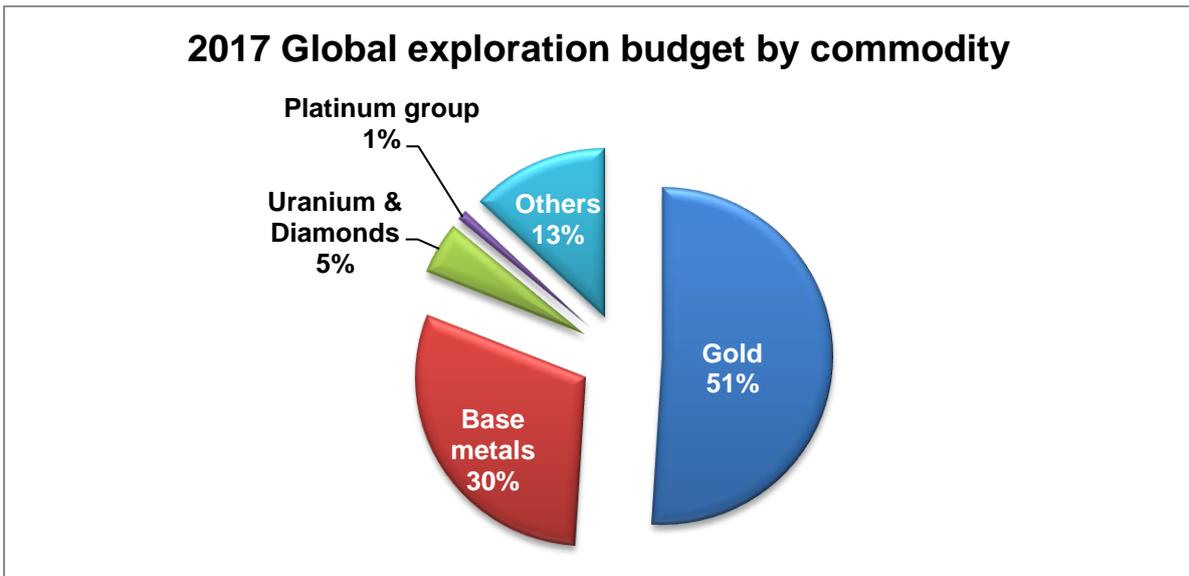


Figure 3.6: Global exploration budget by commodity in 2017.

Source: S&P Global Market Intelligence (2018)

The increase in demand for rechargeable batteries for electric driven vehicles has resulted in a dramatic increase in the cobalt and lithium exploration budget (Rashotte, 2018). The lithium budget has increased fourfold since 2015 to \$157 million, which was almost double from 2016 (as shown in Figure 3.7).

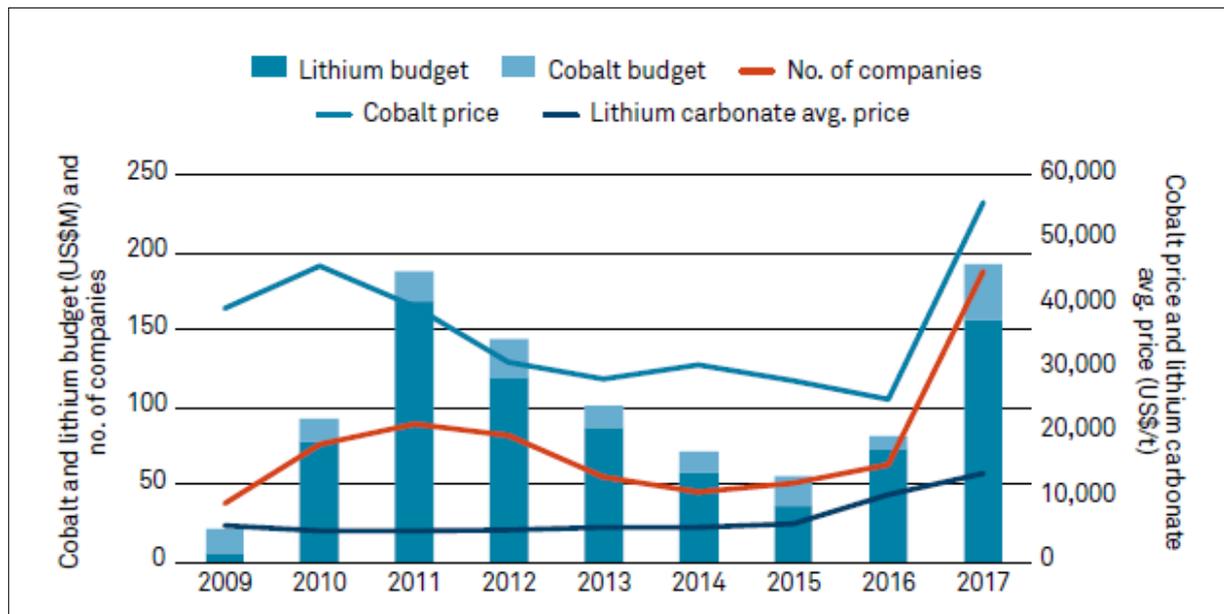


Figure 3.7: Cobalt and lithium exploration budgets, 2009-2017.

Source: S&P Global Market Intelligence (2018)

The exploration budget for cobalt in 2017 increased four times to \$36 million as compared to 2016; the largest producer of cobalt, DRC, received a quarter of the budget (S&P Global Market Intelligence, 2018). The demand for these two commodities also increased the FDI inflow into Morocco in 2017 (World Investment Report, 2018).

Canada, Australia and the United States of America (USA) were the top three destinations for the global general exploration budget. These countries accounted for 13.8%, 13.6% and 7.7% respectively in 2017 (as shown in Figure 3.8). Canada has been in the first place for the 16<sup>th</sup> consecutive year. In 2017, Ontario and Quebec in

Canada account for 28% and 21% respectively with exploration for gold increasing by 35% as compared to 2016 (The Mining Association of Canada, 2017). Gold was also a top exploration target in Australia in which the allocation rose by 24% in 2017. In the USA, the top exploration targets were gold and copper.

Chile, Peru, Mexico, Brazil, Argentina and Colombia accounted for 91% of the Latin American exploration budget, with exploration for gold increasing by 44% in 2017 compared to 2016. On the other hand, Africa only attracted 14% of the global budget, in which the bulk of the budget was allocated to the DRC, Burkina Faso, Tanzania and SA. In the West African region, gold was the top exploration target.

Ramontja (2016) pointed out that irrespective of high investment in exploration in developed countries, developing countries are also becoming important players in attracting exploration investment. Developing countries achieve this by increasing their known reserves and resources of minerals. The knowledge of reserves and resources is one of the factors that influence the increase in exploration investment.



Figure 3.8: 2017 Global budget in percentage for nonferrous exploration.

Source: S&P Global Market Intelligence (2018)

The announced global greenfield FDI projects in the primary sectors (mining, quarrying and petroleum) in 2017 slumped by 61% to \$21 billion as compared to 2016. The weak oil price was the major contributor to the decline (World Investment Report, 2018). The World Investment Report (2018) stated that the greenfield projects indicate how the investment trends will be in future. In contrast, the announced greenfield FDI projects in the African primary sectors saw an increase from \$3 713 million in 2016 to \$10 574 million in 2017. The cobalt and copper greenfield projects contributed to the increase in 2017.

### **3.5. Mining policy trends and evolution**

Randive (2017, p.1) defined policy as the *“rules, regulations, principles and procedures laid down by government for regulating, developing and controlling the respective sectors in the country”*. Therefore mineral policies are derived from the public policy set by the government. Department of Energy and Mineral Resources (1974, p.11) defined the mineral policy as the *“sum of government decisions and actions that influence the mineral system, and the ways in which the system itself affects the economy and society in general”*. The mining policy document should be a fully detailed report that covers all the important aspects needed to develop a country's' mining sector.

The policy should flow out of an intensive consultation process with all stakeholders and it should provide guidance and advice to different authorities and the minerals industry (Otto, 1992). It should address the challenges and responds to important government commitments. The economic development of a country is dependent on the quality of its policy framework, and the decision formulation framework.

Therefore, policies should be formulated to secure equitable distribution of wealth (Randive, 2017). To harness its respective mineral wealth, each nation must formulate a policy for exploration, exploitation, and consumption of their mineral resources depending on their geo-political situation, priorities and preferences.

The legislations related to mining investment are formed by a variety of laws. The investor that is investing in the mining sector before obtaining the licence to mine needs other permits such as water and environmental licence. Those are different regulations but necessary for mining investment. This shows that investment and government mining policy are closely linked because a country can have a vast array of mineral resources, however it can become unattractive if the policies, regulations and fiscal system are not adequate.

Otto (1997) noted that mineral policies evolve in response to geological, political and economic development, advancement in technology, as well as internal and external factors such as macroeconomic stability and exchange rates. He outlined the history of mining policy in order to understand its evolution. In his outline, the evolution of the global mineral policy was divided into the following economic blocks which are: European developed economies, major mineral-producing developed economies and developing economies.

#### **(a) European developed economies**

The term developed economies in this case refers to the countries that have mature mining industries, like the United Kingdom (UK), but have become less attractive to mining investors. The unattractiveness is caused by increased difficulties in obtaining mining licences due to stringent environmental regulations. The exploration activities

in these countries have reduced drastically and therefore resulted in the decline in the need for geological survey departments. Increased globalization of world commodity markets directly reduced the perception of policymakers in achieving national self-sufficiency in minerals. Economic diversification and increased job creation in other sectors have offered new opportunities for workers (Otto, 1997).

### **(b) Major mineral-producing developed economies**

This group of developed countries generally have attractive geological environments for mineral development, and mining still plays an important role in their economies. These countries include USA, Canada and Australia, with the USA being a net importer whilst Canada and Australia are net exporters. In Canada, the government encourages mining investment and has also developed policies that stimulate and attract investors (Otto, 1997).

- **Canada**

In 1973, the Canadian government introduced the Foreign Investment Review Act for foreigners who owned businesses or those who were planning to acquire or establish new businesses (The Mining Association of Canada, 2017). The government could at any time conduct an automatic review of the business if they were above their specified threshold value. However, the procedure brought uncertainty to the investors because it was unclear and secretive, and was unfair to most investors. The Act allowed government to negotiate with the investors and have a legal binding commitment to undertake certain activities that were beneficial to the local content (UNCTAD, 2007). The investors claimed that the Act was burdensome and too restrictive. In the early 1980s, the Canadian

government removed legal and regulatory barriers to the FDI and later in 1985 the Act was replaced by the Investment Canada Act. The Act's objective focused on the private companies allocation of capital according to global efficiency. The Act promoted both domestic and foreign investment (UNCTAD, 2007).

After reviewing the policies, Canada became an attractive destination for mining FDI. Furthermore, the government invested more in R&D to improve its attractiveness to foreign investments (Marshall, 2015). A total of 677 million Canadian dollars (C\$) had been channelled into R&D as of 2012, which resulted in C\$58.5 billion in foreign investment (Marshall, 2015). FDI stock grew fourfold, from 2003 to 2008, from a level of under C\$5 billion to over C\$20 billion as shown in Figure 3.9. This was due to the acquisition of senior Canadian mining firms, namely Inco by Vale, Noranda by Xstrata and Alcan by Rio Tinto. Chinese investments in Canadian metal firms have also been received in recent years. Most of the major international mining companies now have a presence in Canada (such as Anglo American, BHP Billiton, DeBeers, RioTinto, Vale, and Xstrata).

Canada still remains the world's top destination for non-ferrous exploration spending. However since 2016 the spending has since declined by 20% year on year. In 2017, Australia and Canada were the top destinations (The Mining Association of Canada, 2017). Policies formulated towards the mining industry in Canada are implemented at provincial level, although the federal government also plays a role through foreign investment and tax laws, as well as environmental policies and indigenous issues.

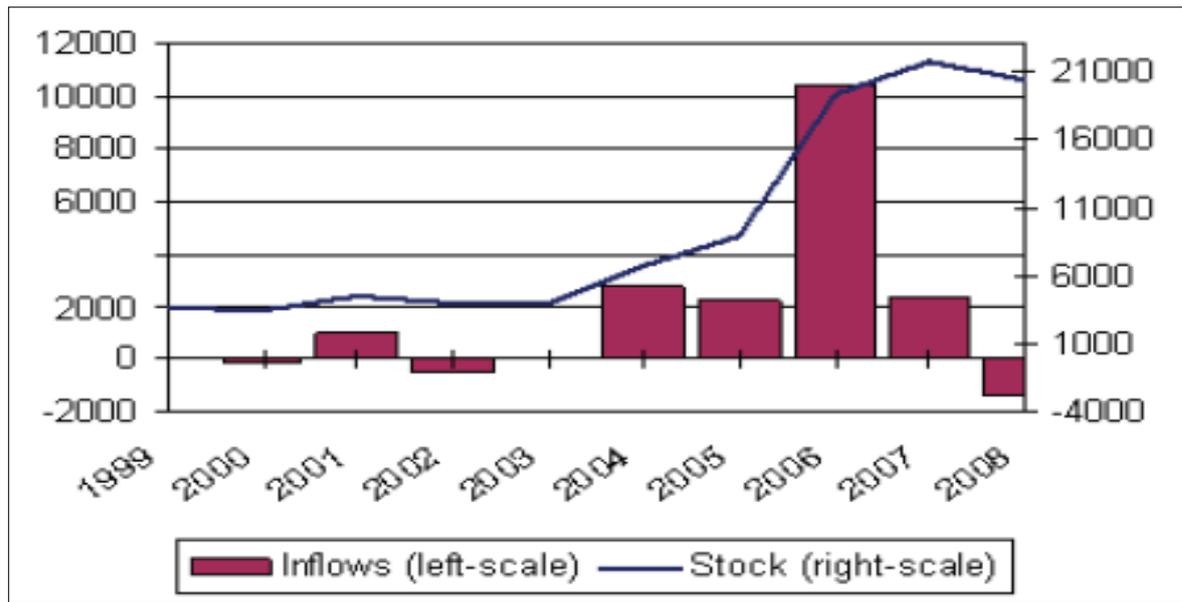


Figure 3.9: FDI Inflows and stock in Canada.

Source: UNCTAD (2007)

Canada's global attractiveness as a business investment destination was mainly due to the federal government's low of the corporate tax rate of 15%, the lowest corporate tax rate in the G7. Mineral Exploration Tax Credit and the super-flow-through share provision in the 2017 federal budget received positive feedback from investors (The Mining Association of Canada, 2017).

Competitive tax policies and rates in international mining jurisdictions have contributed to the government's objective of increasing mining FDI into Canada, as shown in Figure 3.9. Free trade, investment and taxation agreements are amongst the factors that help to facilitate investment inflows in the mining sector. These agreements assist in the reduction of barriers for investment, enhancing transparency, and advancing cooperation. Reduction and elimination of tariffs increased the competitiveness of Canadian mineral products in foreign jurisdictions, thus enabling companies to capture a greater market share.

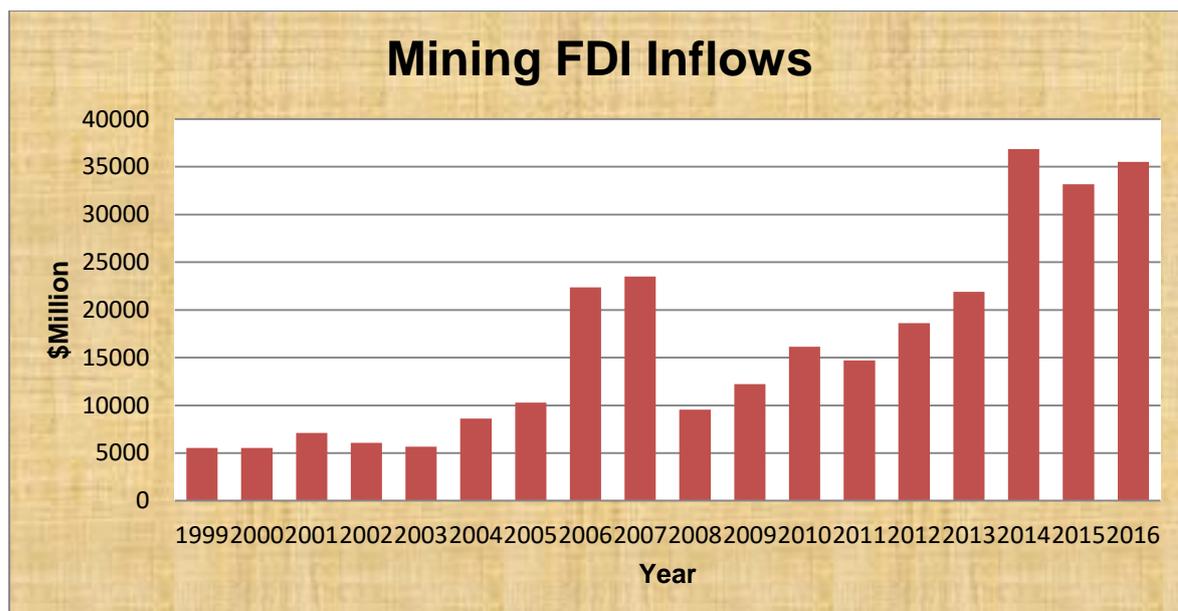


Figure 3.10: Canadian mineral industry FDI.

Source: The Mining Association of Canada (2017)

Despite the geological attractiveness, low tax regime, and investor friendly mining laws, the Canadian environmental laws became very strict over time in areas considered highly sensitive. This has lengthened the timeframe to obtain the relevant exploration and mining permits. Security of tenure has been affected by increased environmental awareness, the rights of native people, development of NGOs and increased community involvement (Ramontja, 2016).

The capital investment in the Canadian mining industry has been declining for four consecutive years. In 2016, 5.4% of C\$12.9 billion FDI was spent by the mining industry, which was down from 15% in 2015. Besides the metal price cycle, the following internal forces have contributed to the decline of mining projects (The Mining Association of Canada, 2017):

- The reviews of federal environmental legislation;
- The pan-Canadian climate change policy;

- Long-standing transportation, infrastructure and trade developments;  
and
- Growing uncertainty in Canada mining policy.

The Mining Association of Canada (2017) facts and figures report indicates that Canada's competitiveness as the top destination for mineral investment can be affected and be outperformed by Australia.

- **Australia**

Australia has been hugely successful at attracting investment into the mining sector due to their favourable policies and advanced mining technologies. Another merit is that doing business is easy because of sophisticated and competitive logistics systems. An added advantage is its close proximity to China and other major markets for its minerals such as Japan and Korea. In addition, Australia has an efficient and well developed financial system (ranked 6<sup>th</sup>), receiving good ratings for higher education and training (ranked 9<sup>th</sup>) and primary education (ranked 10<sup>th</sup>) on the 2017 Global Competitiveness Index (World Bank, 2018a). Australia has also established a number of Free Trade Agreements with countries such as the USA, China, Chile and New Zealand. Chinese investment in Australia was attracted by the mining industry and is the 5<sup>th</sup> largest direct investor with a stock value of 41 billion Australian Dollars (A\$) (Lockwood, 2016). In 2017, the mining sector received A\$315 billion, a record high which accounted for 37% of the total FDI stock value in Australia and also received the highest value in the industry sector of 50.9% FDI from China (Australia Trade, 2018) and (Jericho, 2018).

The increase in global demand for coal, iron ore and liquefied natural gases has resulted in Australian mining companies injecting more capital expenditure in order to increase the productive capacity of the resource sector over the past decade (Jenner and Walker, 2018). The injection of Capex during the period saw total mining investment increase from an average of 2% of GDP to a peak of 9% in 2012 and 2013. As a result, the mining sector roughly doubled its share of the economy's capital stock and also increased its share of total output.

Coal is the largest commodity exported from Australia, reaching earnings of almost A\$44 billion in 2017. India is Australian's largest export destination for metallurgical coal while Japan is the largest export for thermal coal. The success of Australia's mining industry in the global coal markets has been due to reliability and competitive supplies of high quality metallurgical and thermal coal. The other destinations include China, South Korea and Taiwan. The expansions of coal projects are increasing resulting in the production growth. The government expanded the port capacity, including the upgrades of infrastructure at coal terminal ports in order to alleviate constraints pertaining coal exports. Due to the growth in coal exports, the government is looking into an infrastructure expansion project to support the growth. And therefore coal has been identified as the most valuable export commodity in Australia.

The other important commodity that attracts investors to Australia is Iron Ore, which is exported to the Asian market for steel production. Australia holds approximately 28% of the world's iron ore reserves and it is also the largest exporter in the world (as shown in Figure 3.11). Australia's ability to produce low cost-high grade iron ore provided a significant advantage over its competitors

with the exception of Brazil (Adkins, 2017). Despite the decrease in exploration investment and new mine development in recent years, iron ore export continues to grow due to on-going productivity, operational efficiencies, cost cutting, and project expansions. Iron ore exploration expenditure declined by 9% to A\$288 million in 2016 and was followed by a further decline of 7.3% in the March 2017 to A\$54 million, the lowest quarterly figure since 2006. Innovation is one of the key factors that alleviate the mining sector. As such, in 2015 there was a significant fall of iron ore prices and the mining companies had to seek efficiency gains to maximise returns. Remote operation centres and autonomous haulage systems were implemented in an effort to drive down the costs of production.

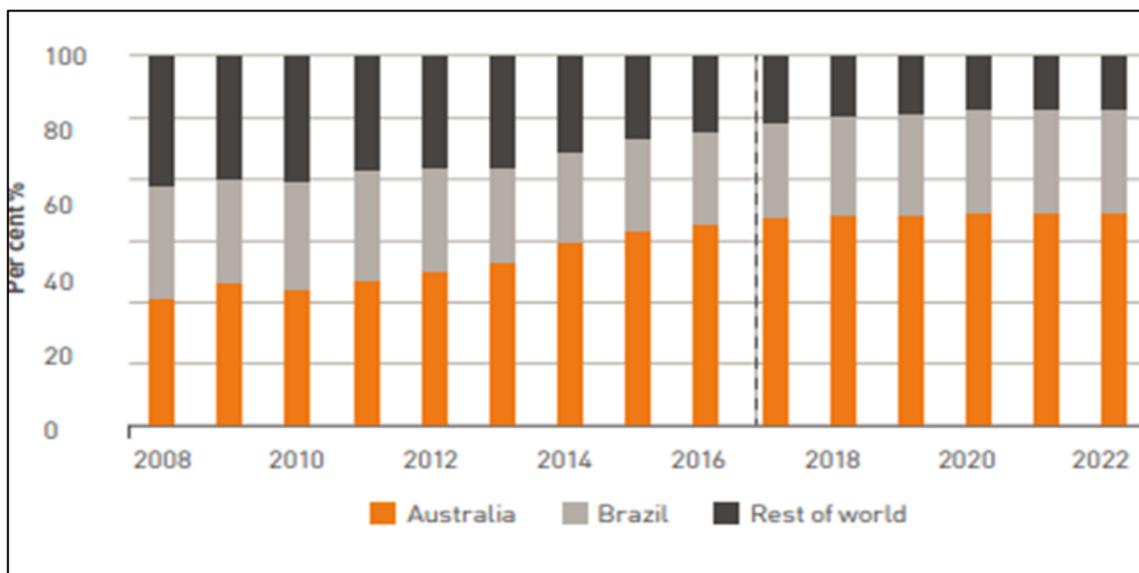


Figure 3.11: Share of world iron ore exports.

Source: Adkins (2017)

Bulk commodities are transported by rail from the mine of origin to the port of export in Australia. The rail networks are owned by dedicated railway companies who provide third party access to their rail networks. Iron ore rail networks are largely owned by major mining companies (Adkins, 2017). Rail networks are

often facing capacity constraints, and require an expansion, extension or upgrade to the rail network. The costs of these upgrades are linked to a mine's cost of production.

The production of minerals is governed by the legislation of the state, or territory in which the production occurs in Australia and each state imposes the royalties on the production of the minerals within its borders. For most minerals, a fixed rate of royalty per tonne is specified with the exception of coal and iron ore which have variable rates. For example in the case of coal, in Queensland Australia, a royalty of between 7% and 15% is levied based on the value of coal, and in Western Australia, a royalty of A\$1 per tonne for locally mined coal is levied and 7.5% of the value of export coal is levied (Adkins, 2017).

The mining investment peaked between 2012 and 2013, and investment has been declining in subsequent years. One of the challenges faced by investors is that the environment regulations have been more complex and burdensome. The introduction of new mining taxes and the raising of existing ones also played a role. Social impacts also contributed to the decline due to the requirement of securing and maintaining a social licence to mine (PWC, 2014).

### **(c) Developing economies**

Many developing countries had underdeveloped mining operations due to a lack of investment in the mining industry and many of these are now experiencing resource nationalisation. Cawood and Oshokaya (2016 p.46) defines Resource Nationalism (RN) as the "*rightful sovereign claim to share mineral wealth*". Nationalisation is one of the RN instruments that states use to change ownership of all mineral resources

from private ownership to state ownership. Between 1960 and 1970, during the colonial era, the number of state owned mining companies increased due to high mineral prices. Countries like Zambia, Ghana, Peru, DRC and Chile nationalised their mines and during this period the environmental protection was not a priority (Otto, 1997).

The end of the colonial era in the early 1970s brought about a change in the mineral policy front. Developing economies such as Zambia realised that progressive economic growth would be achieved by managing minerals effectively through the nationalisation of foreign owned mines. Thereafter in the 1980s, mines went through a period of reprivatisation when global mineral prices were in a recession. This occurred because the state owned companies were struggling to generate expected profits. This struggle caused most countries to re-evaluate, amend and introduce new mining laws necessary to attract major foreign investors due to:

- Lack of mining and exploration skills and technology to develop the industry
- Lack of capital needed to develop exploration and mining
- Limited access to foreign exchange
- Negative mine cash flows with the mines that requires state rescue
- Increased competition for State investment for other sectors
- Slow pace in developing the mining sector (Otto, 1997)

Due to the need to attract foreign investors in the mining industry, countries reformed regulatory systems and access to land improved and in other countries taxes were more attractive. Subsequently by 2007 and 2008, an outcry was heard over the lack

of benefits host economies were receiving from MNCs operating domestic mines. Corrective action was taken to force MNCs to give back to the host countries through an increase in taxes, royalty payments, control, and regulation of the permit process, refusal to give mining permits in areas that could be damaged environmentally, moratorium on all exploration and mining activities and equity ownership (Otto, 1997).

- **South Africa**

SA started addressing problems such as social issues through the Social Labour Plan Act; Environmental issues through National Environmental Management Act; Health and Safety issues through the Mine Health and Safety Act, and equitable sharing of benefits through the Mining Charter. As previously stated in Chapter 2, amendments of regulations cause uncertainty among investors. This was the case in SA when the introduction of the Mining Charter led to a decline in investment in the mining industry (as shown in Figure 3.12).

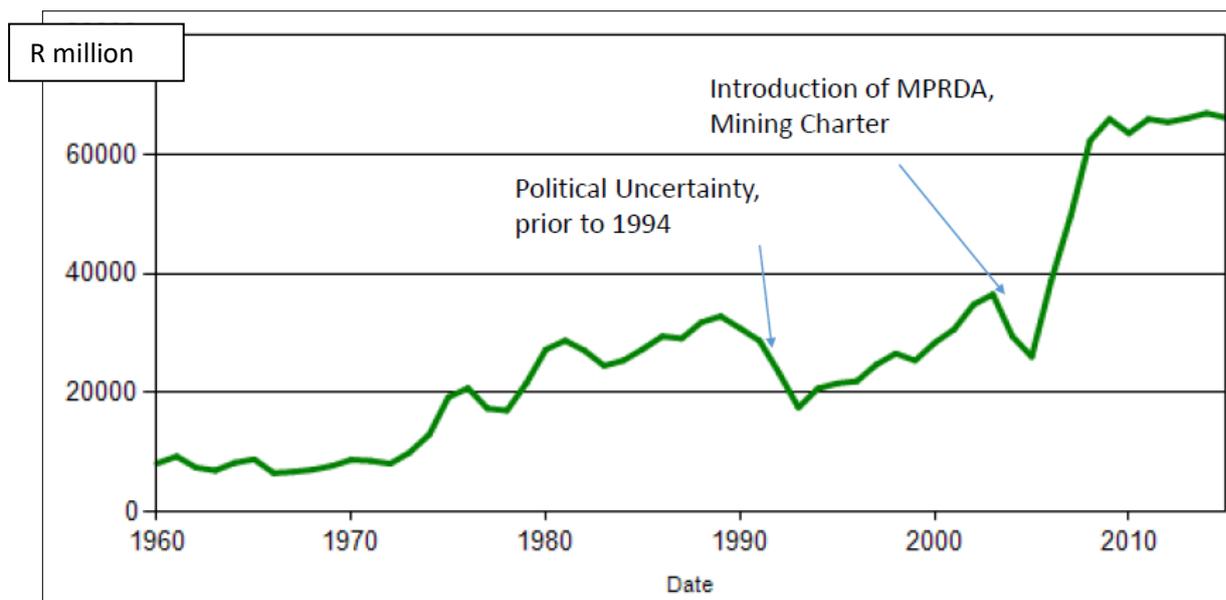


Figure 3.12: South African Mining Gross Fixed Capital Formation 1960-2015.

Source: Ramontja (2016)

According to the Mineral and Petroleum Resources Development Act (MPRDA), the South African people's heritage lies in their mineral and petroleum resources. These resources are controlled by the State to ensure that the people benefits from them. The State through the National Treasury charge royalties on the extraction of minerals. This culminated in the enactment of the Mineral and Petroleum Resources Royalty Act (28 of 2008) in November 2008 (Van der Zwan and Nel, 2010).

Mineral royalties became effective in 2010 in SA. A mineral royalty is by definition, "*payment to the holder of the mineral rights for minerals that are extracted from the land and sold on the markets*" (Cawood and Minnit, 2001). These royalties are paid as compensation to the government for depleting the natural resources. In 2017, the government of SA collected R7522 million of royalties, which was an increase of 29.6% as compared to 2016 (SARS, 2018).

In 2016, the mining industry contributed 15% towards the South African FDI, which has been shrinking for over the past two years. The main concerns in SA are the policy uncertainty and labour unrest. In 2015, the industry incurred an accumulated loss of over R30 billion due to the 2014 platinum mines labour unrest which lasted for five months. Corruption allegations, credit ratings, slow issuing of the mining and prospecting rights, and the Department of Mineral Resources' claim regarding unfairness of stopping mining activities under Section 54 of MHSA were amongst the factors hindering the growth of the industry (Baxter, 2017). The Mining Charter 2017 caused waves in the mining industry

because mining stakeholders and unions claimed that they were not consulted during the drafting period.

- **China**

China is the leading mineral producer and the world's largest energy producer and consumer. In 1986, the country's Mineral Resource Law opened up the mining industry to local private investors and thereafter in 1993 included FDI. According to the Investing News Network (2018), the process of obtaining exploration and mining right permits in China was described as transparent and straightforward. Since 2011, the China Mineral Resources focused on increasing the known reserves in the country in order to attract more investors through the Belt and Road initiative. As a result, the reserves and resources of minerals such as coal, oil, gold, gas and graphite increased; and in 2017, there was an increase in 42 kinds of remaining reserves. With the progress of this focus, giant deposits were discovered and by the end of April 2018, accumulative geological reserves of shale gas were reported to be more than 1 trillion cubic meters.

The geological exploration investment in 2017 saw a rebound of 1% as compared to 2016, with the investment totalling Ren Min Bi (RMB- China local currency) 78.3 billion, a recovery after falling for four consecutive years. The oil and gas minerals contributed to the rebound, after an increase of 10% from RMB52.8 billion in 2016 to RMB58.4 billion in 2017. Non-oil and gas minerals saw a further decline of 19.8% from RMB24.7 billion in 2016 to RMB19.8 billion in 2017. In non-oil and gas investments, iron ore, molybdenum, and phosphate rock contributed to the decline significantly (Farooki, 2018).

In 2018, the People's Republic of China established the Ministry of Natural Resources (MNR). Within a month of its formation, the MNR released into public domain between 56 000 and 85 000 geological information and data files for the public to view. Currently there are over 170 000 files that are in circulation (Campbell, 2018). The government also ensures the constant improvement and revision of mineral policies and regulation to keep the mineral sector attractive.

Moreover, the implementation of scientific and technological innovation of mineral resources was fully implemented since the government invested a lot in R&D. In order to strengthen the relationship between the foreign investors and the government, In July 2017, Beijing reduced the number of restrictions in foreign investment from 93 to 62. Mining specific restrictions were placed on mining FDI in the mining and processing of lithium and the exploration and mining of precious metal (Campbell, 2018).

China introduced the first special tax law in December 2017, called the green tax system, to promote the protection of environment. China levied the environmental tax and ceased the sewage charges from January 2018. Total resource tax collected was RMB84 billion which increased by 20.2% (Farooki, 2018). In a nutshell, the mining companies' pay 3% resource tax (royalties), 25% income tax and 17% Value Added Tax (VAT) on the sale of concentrates in China. China is the world's top gold producer, and in 2017 gold production (as a by-product of base metals mining) declined by 15.7% on a year on year basis due to Beijing forcing operations located in nature reserves to reduce or terminate their gold production.

### **3.6. Summary**

The chapter focused on the investors view in understanding the different risks associated with mining investment, and how the investor can make an informed decision on which country to invest in. Investment of any nature carries a potential risk for the investor, and a comprehensive research on developing an understanding of the country's laws where an investor wishes to invest must be done.

The mining sector in any country carries different risks, mainly political, social and economic risks. These risks are ranked into different levels by country to help investors make informed decisions. Developing countries are generally ranked low due to inadequate or unattractive policies that result in lower levels of mining FDI. Developed countries are generally rank high on the list as the governments of these countries invest time to R&D and offer attractive incentives to potential investors. The following chapter will focus mainly on Africa, particularly on FDI in different regions.

## Chapter 4: Foreign Direct Investment in Exploration and Mining

### 4.1. FDI Trends

International capital flows have been increasing in developing countries. One of the fastest growing investments globally as of 1995 was FDI (Asafo-Adjei, 2007). The FDI stock between 1982 and 1995 had quadrupled; resulting in FDI reaching a high of \$388 billion in 1996. By 2012, the FDI inflows in the developing countries were \$703 billion, 20 times higher than they were in 1990 (Asafo-Adjei, 2007).

According to World Investment Report (2018) policy uncertainty and geographical risks were the two factors that could still obstruct the recovery of foreign investment inflows in the world. In 2017, the world FDI inflows declined by 23% to \$1.43 trillion as compared to 2016 (as shown in Figure 4.1). In the last quarter of 2017, FDI hit the lowest of \$280 billion since 2013 (World Investment Report, 2018)

FDI in developing countries remained almost constant in 2017, moving from \$641 billion in 2016 to \$671 billion in 2017, meaning that there was no recovery from the 14% decline from 2015 to 2016, and the flow to Less Developed Countries and weak economies remained low (World Investment Report, 2018). The share of global FDI in developing countries in 2017 increased to 47%, rising significantly from 36% in 2016. The FDI flows in Africa continue to decline, dropping by 21% from \$59 billion in 2016 to \$42 billion in 2017, the major contributor to the decline were the countries that export higher percentage of commodities. In contrast, the FDI flows in developing Asian countries remained stable at \$476 billion, and as a result, Asia became the largest recipient of FDI in developing economies. Latin America and the

Caribbean rose by 8% from \$142 billion in 2016 to \$151 billion in 2017 due to economic recovery (World Investment Report, 2018).

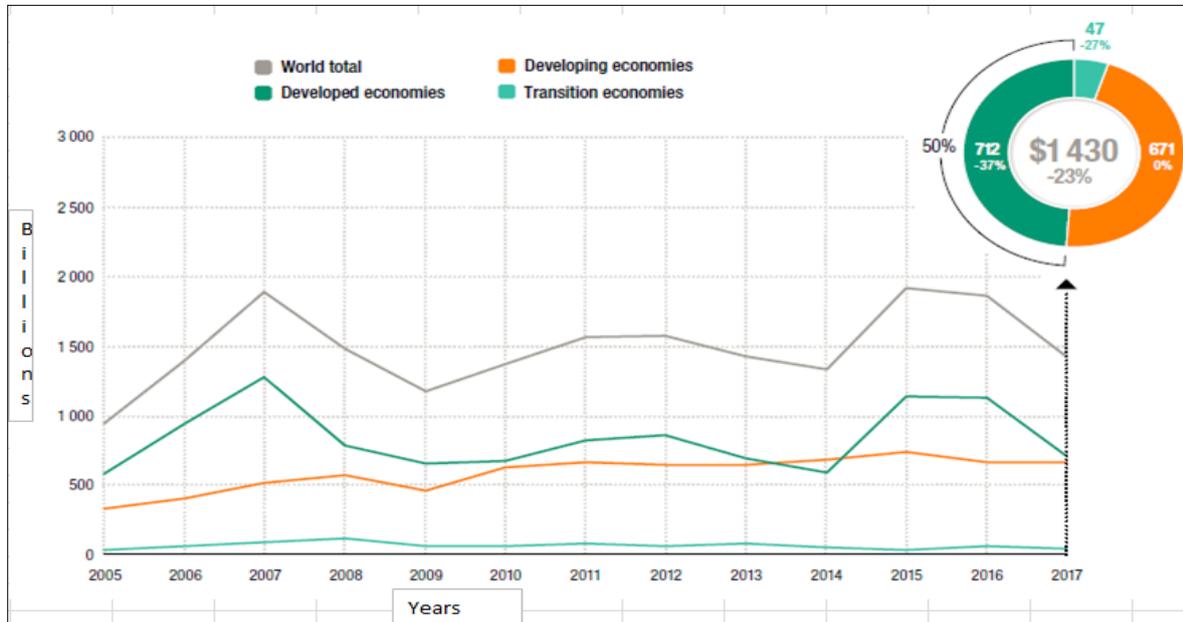


Figure 4.1: FDI inflow in Billions of dollar.

Source: World Investment Report (2018)

Figure 4.2 shows that the majority share of the FDI capital flow in the developing economies went to Asia with 33% global share of FDI and became the 2<sup>nd</sup> largest FDI recipient globally. The largest recipients of FDI in Asia were China, Hong Kong and Singapore (United Nations, 2018).

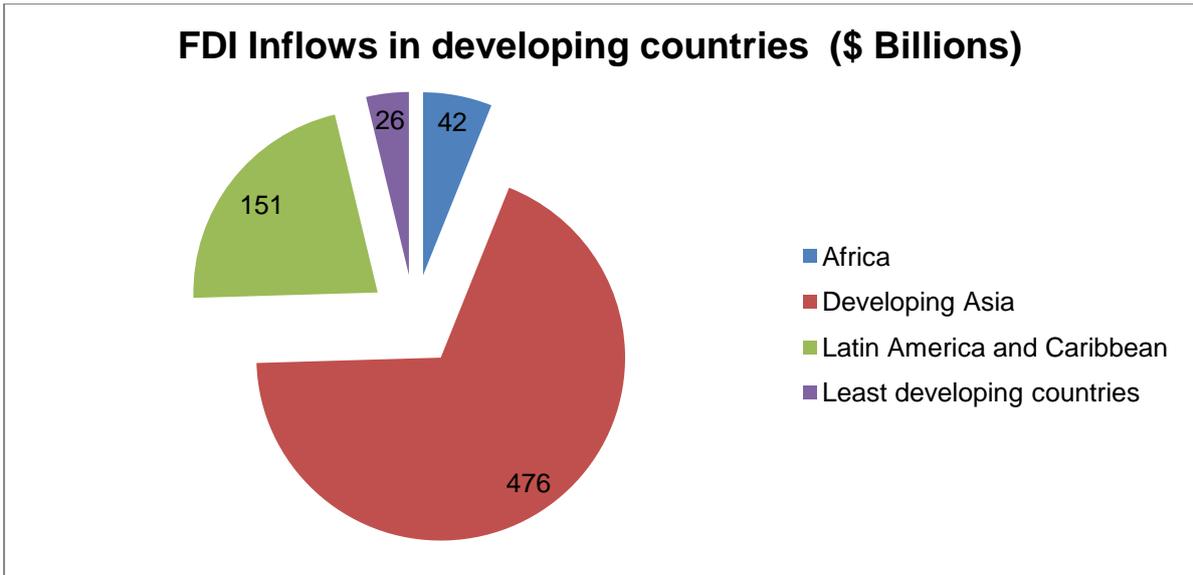


Figure 4.2: FDI inflows in developing countries in 2017.

Source: World Investment Report (2018)

Similar to global FDI, the FDI inflows in developed economies also declined in 2017 by 37% from 2016 (as shown in Figure 4.1) with developed economies holding a global share of 49.8%. The FDI inflows in developed economies declined because of relatively high inflows in the previous year. In 2015 and 2016, the increase in cross border mergers and acquisitions has resulted in FDI inflow of more than \$1 trillion. As a result, FDI inflows in the United States declined by 40% in 2017 from \$275 billion in 2016 to \$391 billion in 2017 (World Investment Report, 2018). The FDI inflows in the European region contracted by 41% in 2017 (as shown in Figure 4.3). This contraction was mainly contributed by the UK which declined by 92% to \$15 billion from \$254 billion in 2016 (Hessler, 2018).

In transition economies, the FDI inflow also decreased by 27% in 2017, to \$47 billion, after a drastic increase of 81% in 2016 mainly due to geopolitical uncertainties as shown in Figure 4.3 (World Investment Report, 2018).

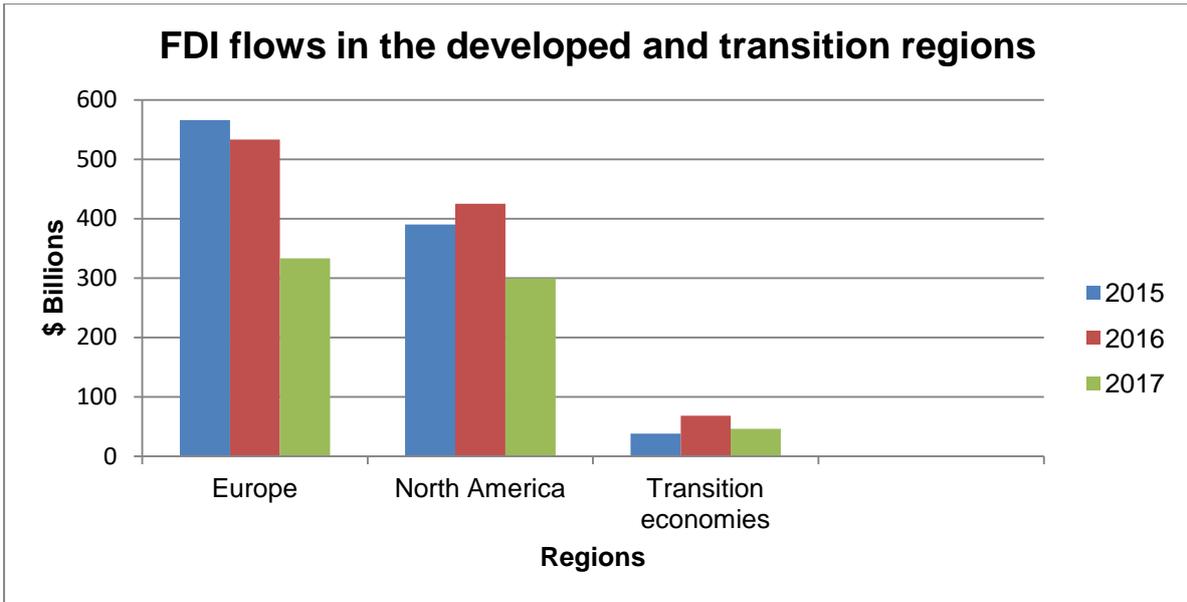


Figure 4.3: FDI flows in the developed and transition regions.

Source: World Investment Report (2018)

#### 4.2. Top FDI recipient and investors

In 2016 and 2017, the United States received the most FDI in the world. During these years, the country received \$391 billion and \$275 billion respectively. China, a developing economy, was the 2<sup>nd</sup> highest FDI recipient globally. The drastic FDI decline in UK in 2017 forced it out of the 2<sup>nd</sup> position to the 14<sup>th</sup> position in 2017 (as shown in Table 4.1).

Table 4.1: Top 10 FDI recipients in 2016 and 2017.

Ranking	Region	2016 Billion \$	Region	2017 Billion \$
1	United States	391	United States	275
2	UK	253	China	136
3	China	134	Hong Kong, China	104
4	Hong Kong, China	117	Brazil	63
5	Netherlands	92	Singapore	62
6	Singapore	62	Netherlands	58
7	Brazil	59	France	50
8	Australia	48	Australia	46
9	India	44	Switzerland	41
10	Russian Federation	38	India	40

Source: World Investment Report (2018)

FDI outflow is dominated by the developed countries. Table 4.2 shows that in 2016 and 2017, seven out of ten top recipient countries of FDI were from the developed economies. In addition, developed economies accounted for 71% of the global outward FDI flows. However, the FDI outflow in the developed economies dropped in 2017 by 3% to \$1 trillion. The United States was the world's largest country that invested in other countries both in 2017 and 2016. Japan scored the 2<sup>nd</sup> position in 2016. This occurred after the FDI of the country's outflow increased to \$160 billion from \$145 billion in 2016. This increase was due to the Softbank deal that was signed (World Investment Report, 2018). The European outflow went down by 21% to \$418 billion in 2017, the major contributors to the downfall were the Netherlands which dropped from \$174 billion in 2016 to the lowest of \$23 billion in 2017. Switzerland declined by \$87 billion to negative \$15 billion. In contrast, UK made a significant comeback, with the outflow improvement from negative \$23 billion to \$100 billion, securing the 4<sup>th</sup> position in 2017, as shown in Table 4.2.

In 2017, the developing economies' FDI outflow declined by 6% to \$381 billion. The outflow in developing countries was boosted by China's outflow. China's 2017 decline was the first decline since 2003. The decline dropped China from the 2<sup>nd</sup> position in 2016 to the 3<sup>rd</sup> position in 2017 as shown in Table 4.2. The decline in FDI outflow from China was the result of constraining outward policies with regards to FDI.

In 2017, the outflow in Africa increased by 8% with SA, Angola and Morocco's outflow increasing by 64%, 40% and 66% respectively. Weak commodity prices and higher borrowing costs were amongst the main contributors to the contraction of FDI outflow in many African economies.

Table 4.2: Top 10 FDI benefactors in 2016 and 2017.

Ranking	Region	2016 Billion \$	Region	2017 Billion \$
1	United States	299	United States	342
2	China	183	Japan	160
3	Netherlands	174	China	125
4	Japan	145	UK	100
5	Canada	66	Hong Kong	83
6	Spain	62	Germany	82
7	France	62	Canada	77
8	Hong Kong	60	France	58
9	Germany	51	Luxembourg	41
10	Luxembourg	44	Spain	41

Source: World Investment Report (2018)

### 4.3. FDI inflow in Africa

Between the years 2016 and 2017, FDI inflow into Africa decreased by 21%, however, the FDI global share remained unchanged at 2.9% (World Investment

Report, 2018). Weaker oil prices and prolonged effects from the commodity bust, which resulted in volume contraction, in commodity-exporting countries such as Angola, Congo, Mozambique, Egypt and Nigeria contributed to the decline of FDI inflow (World Investment Report, 2018).

Figure 4.4 shows that investment from China into Africa grew by \$49 billion between the years 2004 and 2016 (Rand Merchant Bank, 2017). In 2016, China became the largest investor in Africa. This occurred only three years after announcing plans to invest about \$1 trillion in different infrastructure projects in Asia, Europe and Africa to boost trade links (Analyse Africa, 2017). The United States, UK and France also remained the top investors in Africa.

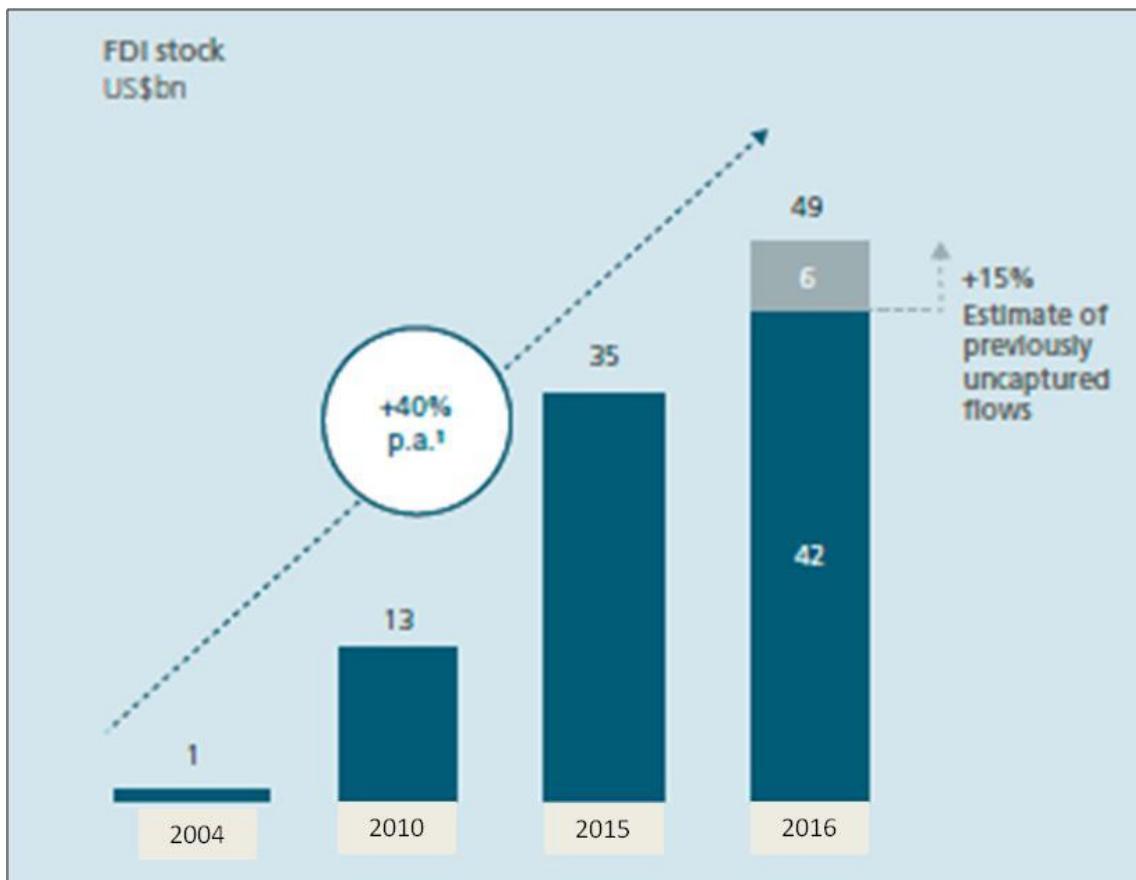


Figure 4.4: FDI Stock from China to Africa.

Source: Rand Merchant Bank (2017)

### 4.3.1. FDI in North Africa

The total inflow of FDI in all African sub-regions declined in 2017 as shown in Figure 4.5. During this year, the largest FDI recipient region in Africa was North Africa and the lowest was Southern Africa. North Africa received FDI of \$13 billion in 2017, a decline of 4% from 2016 and a representation of 31% of the total inflows into Africa. The sub-region was boosted by the inflows into Morocco which increased by 23%. As a result, Morocco became the 5<sup>th</sup> top FDI recipient in Africa. According to the World Bank (2018c), the transport sector attracted the most FDI due to the investment into new car technology (battery and electrical motors). As a result Morocco was the leading destination for investment in the transport sector. The relationship between Morocco and China also strengthened, with China investing more into the banking sector (United Nations, 2018).

Egypt, also in the north of Africa, remained the largest FDI recipient in Africa despite the 9% decline in 2017. China was also the biggest investor in Egypt, investing more on light manufacturing industries (World Investment Report, 2018). The country that was hit hard in the sub-region was Algeria, which depends heavily on oil and gas exports. The country's FDI declined by 26% to \$1.2 billion in 2017 from \$1.6 billion in 2016. According to the World Bank (2018c), the investors are waiting for Algeria's policy on energy law to be completed. Investors anticipate that the policy will be implemented successfully and will boost investment in the oil sector. The Chinese investment into the Sudan's oil sector boosted the FDI inflow; as a result, the inflow remained stable at \$1.1 billion.

### **4.3.2. FDI in West Africa**

The flow of FDI into West Africa declined by 11% between 2016 and 2017. West Africa accounts for 27% of FDI inflows in Africa as shown in Figure 4.5. The major contributor to the decline was Nigeria, with an FDI decline of 21% in 2017. Policy uncertainty and security of tenure regarding foreign investments were amongst the major issues in the country, several South African companies exited the country in 2016 (United Nations, 2018). Ghana's FDI inflow also declined by 7% in 2017. Ghana is one of the two fastest growing economies in Africa. The investment from Italy into the oil and gas sector boosted the FDI inflow into the country.

### **4.3.3. FDI in East Africa**

The East African region is a host to the fastest growing economies in Africa. However, the FDI declined by 3% between 2016 and 2017 and half of the share went to Ethiopia. FDI in Ethiopia declined by 10.1% between 2016 and 2017 after a drastic increase of 45.8% in 2016. Ethiopia became the 2<sup>nd</sup> highest recipient of FDI in Africa after Egypt and one of the two fastest growing economies in Africa (African Development Bank Group, 2018). The government in Ethiopia focused more on infrastructure investment to attract more FDI into the country.

FDI in Kenya increased drastically by 72% in 2017 to \$672 million. One major attractiveness in the country is the tax incentives given to the foreign investors (Tralac, 2018). South African investors are expanding in Kenya. The FDI in Tanzania was boosted by the strong gold price as well as the diversified economy. However, the FDI in the country declined due to change of fiscal policies in 2017.

Tanzania banned the exports of unprocessed minerals which impacted negatively on the foreign investors in 2017 (World Bank, 2017).

#### **4.3.4. FDI in Central Africa**

The Central African region was the 4<sup>th</sup> highest FDI recipient in Africa in 2017 although investment declined by 22% in 2017. The DRC's FDI fell by 67% to \$1.2 billion due to the economic crisis in the country, the volatility of the oil sector investment, and weak FDI in non-oil sectors (World Investment Report, 2018). The FDI was boosted by the investment into the cobalt and copper mines in line with the change in technology in cars (battery cars) and with Glencore mine purchasing two mining assets in the country (World investment Report, 2018).

#### **4.3.5. FDI in Southern Africa**

The Southern African region received the least FDI in Africa in 2017. FDI received amounted to \$3.8 billion which represented a 66% decrease from 2016. The FDI inflow in Angola was impacted by the decline in oil production and policy uncertainties towards the foreign investors. The FDI declined from \$4.1 billion in 2016 to negative \$2.3 billion in 2017 as foreign affiliates in the country transferred funds abroad through intra company loans.

In SA, the FDI inflow also declined by 41% from 2016 in 2017 to \$1.3 billion due to the mining sector which underperformed and political uncertainty. The automotive industry attracted a significant amount of FDI into the country from Germany and UK, however the United States remained the largest source of FDI into the country. FDI

in Mozambique also declined, however the coal sector attracted significant investors from China, Britain and SA (World Investment Report, 2018).

In contrast, FDI into Zambia increased by 65% in 2017 from 2016 to \$1.1 billion, with more investment being injected into the copper mines. The diversification of economy into the cement production saw an investment interest from China (World Investment Report, 2018).

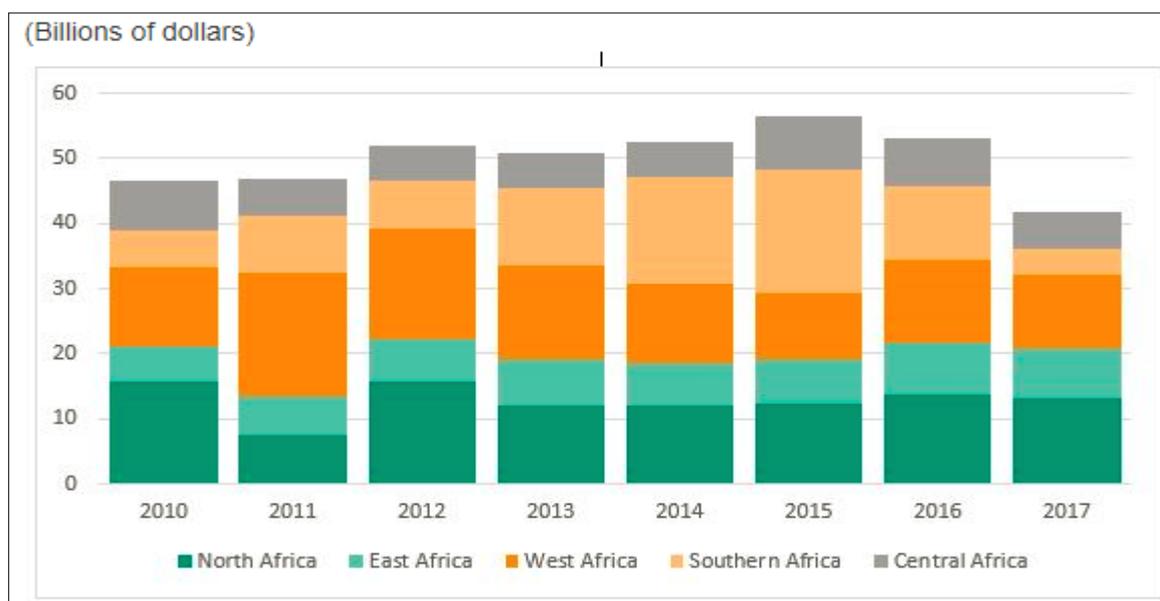


Figure 4.5: Regional distribution of FDI into Africa.

Source: World Investment Report (2018)

#### 4.4. GDP growth rate in Africa

Figure 4.6 shows that the growth rate in Africa was estimated to increase to 3.4% in 2017 from 2016. East Africa is the region with the fastest growing GDP on the continent with a growth rate of 5.6% in 2017, a 0.7% increase from 2016. Ethiopia leads the region with an average growth rate of 10% a year (Maseko, 2018). According to the World Bank (2018d), the Ethiopian economy is expected to double

within the next 7 years, which means in 2025 the country is expected to become a middle income nation. Rwanda was ranked 9<sup>th</sup> in the list of fastest growing economies in Africa (World Bank, 2018c). The 2<sup>nd</sup> Rwandan Economic Development and Poverty Strategy draft outlined economic growth strategies aimed at poverty reduction with a benefit of boosting economic growth (World Bank, 2018c).

The North Africa region was the second growing sub region in Africa, with a growth rate of 5% in 2017, an increase from 3.3% in 2016 (as shown in Figure 4.6). Libya boosted the growth rate in the North, with a GDP increase of 55.1% in 2017 which was mainly due to the recovery of oil production (African Development Bank Group, 2018). The economic growth in Egypt was boosted by the returns from FDI and net exports, however the growth declined from 4.3% in 2016 to 4.1% in 2017.

Despite the decline in FDI inflow into the Southern African region, the region's growth in 2017 doubled to 1.6%, up from 0.9% in 2016 (African Development Bank Group, 2018). The growth rate in SA increased to 1.3% in 2017, which was better than the expected growth rate of 1% (Smith, 2018). The growth rate was attributed to the increase in agriculture production which was low in 2016. Zambia and Angola's growth rates also expanded to 4.1% and 2.1% respectively (African Development Bank Group, 2018).

Ghana located in West Africa was one of the fastest growing economies in 2017 on the continent. The rapid growth of the economy was boosted by the service sector. The Central African region underperformed in 2017 despite the recovery in oil prices. The growth rates in DRC and Equatorial Guinea have contracted by 4% and 7.3% respectively. Political instability, unstable economic conditions, and dependency on

oil revenue are amongst the factors that deterred the growth rate in the sub region (World Investment Report, 2018).

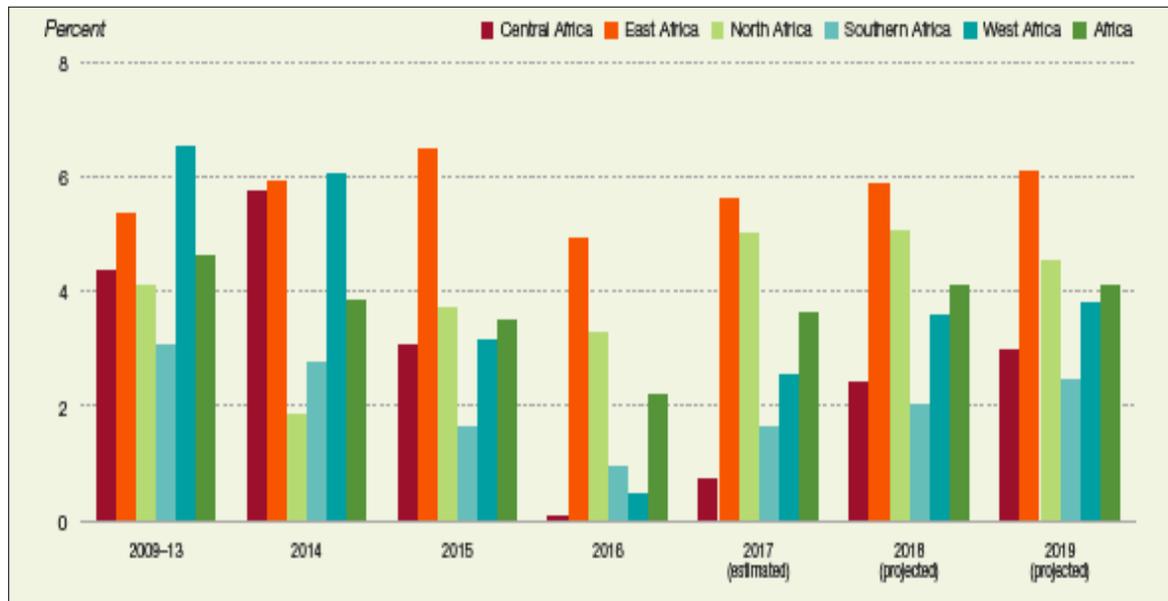


Figure 4.6: Real GDP growth in Africa.

Source: African Development Bank Group (2018)

#### 4.5. Investment attractiveness in Africa

The Rand Merchant Bank conducts an investment attractiveness survey ranking in Africa. The survey scores are based on the market size, economic growth, doing business index, global competitiveness index, corruption perception index, and economic freedom index (Rand Merchant Bank, 2017). Figure 4.7 shows the list of top ten African countries in which to invest based on the findings of the survey. SA has lost the 1<sup>st</sup> spot since the report's inception. This is due to low GDP growth rates which have deteriorated for the past seven years, as well as the governance issues. Egypt was ranked as the most attractive investment destination in Africa, scoring high on economic growth which was the only advantage over SA. The other notable changes were two countries from East Africa region, Rwanda and Ethiopia which

climbed four and three spots placing them to the 8<sup>th</sup> and the 4<sup>th</sup> position respectively. Ethiopia being the fastest economic growth and Rwanda being the fastest reforming economies in the world boosted their scores (Rand Merchant Bank, 2017).

Nigeria and Algeria both moved out of the top ten due to subdued economic growth in Nigeria and slow growth in the non-oil industry in Algeria. Botswana, Mauritius and Namibia did not feature in the top ten due to the small market size. However the respective countries were rated as good investment destinations with regard to the ease of doing business and also considered less risky environments. With that said, Mauritius was rated the top African country with the best business environment (Businesslive, 2018). According to IMF (2017) a country with a good operating business environment has a potential to attract investors and also make existing investors expand their business.



Figure 4.7: Investment attractiveness score.

Source: Rand Merchant Bank (2017)

According to Rand Merchant Bank (2017), macroeconomics and political stability were among the factors that determined FDI inflows. These factors incorporated the country's periodic economic growth and the ease and flexibility that pertain to the business environment. The size of the economy in US dollar terms also influences investors and in addition to this, the sovereign credit rating of the country is an important factor.

The majority of Sub-Saharan Africa is putting extra effort into expanding its transportation networks. Eastern Africa is leading the way with about 60% of its budgetary allocation channelled in that sector. In contrast, Central Africa allocates about 20% of its budget to transport infrastructure, which is the reason why this part of the continent is less paved. This has hindered economic development due to different parts of the region being inaccessible. According to Rand Merchant Bank survey (2017), 75% of the respondents affirmed that infrastructure development over the past five years had been stagnant.

#### **4.6. Summary**

Africa is rich in mineral resources. The continent still requires high levels of mining FDI in order for many mineral rich African countries to experience economic growth. East Africa ranks the highest in the attractiveness index due to governments that set up attractive incentives for investors. Northern Africa is 2<sup>nd</sup> on the list owing to its rich oil reserves that attract investors. Western, Central and Southern Africa have been receiving less investment due to fewer mineral reserves, political, and social unrests. Among the countries in Africa, Ethiopia has managed to catch the attention of foreign investors and it has one of the highest economic growth rates in Africa. In the

following chapter the focus will be on Ethiopia, largely seeking to investigate how a shift in government policy can boost economic growth through the mining sector.

## Chapter 5: Mining regime in Ethiopia

### 5.1. Economic overview of Ethiopia

Ethiopia is located in the Eastern side of Africa, known as the horn of Africa, with Kenya, Somalia, Sudan and Eritrea as its neighbouring states as shown in Figure 5.1.

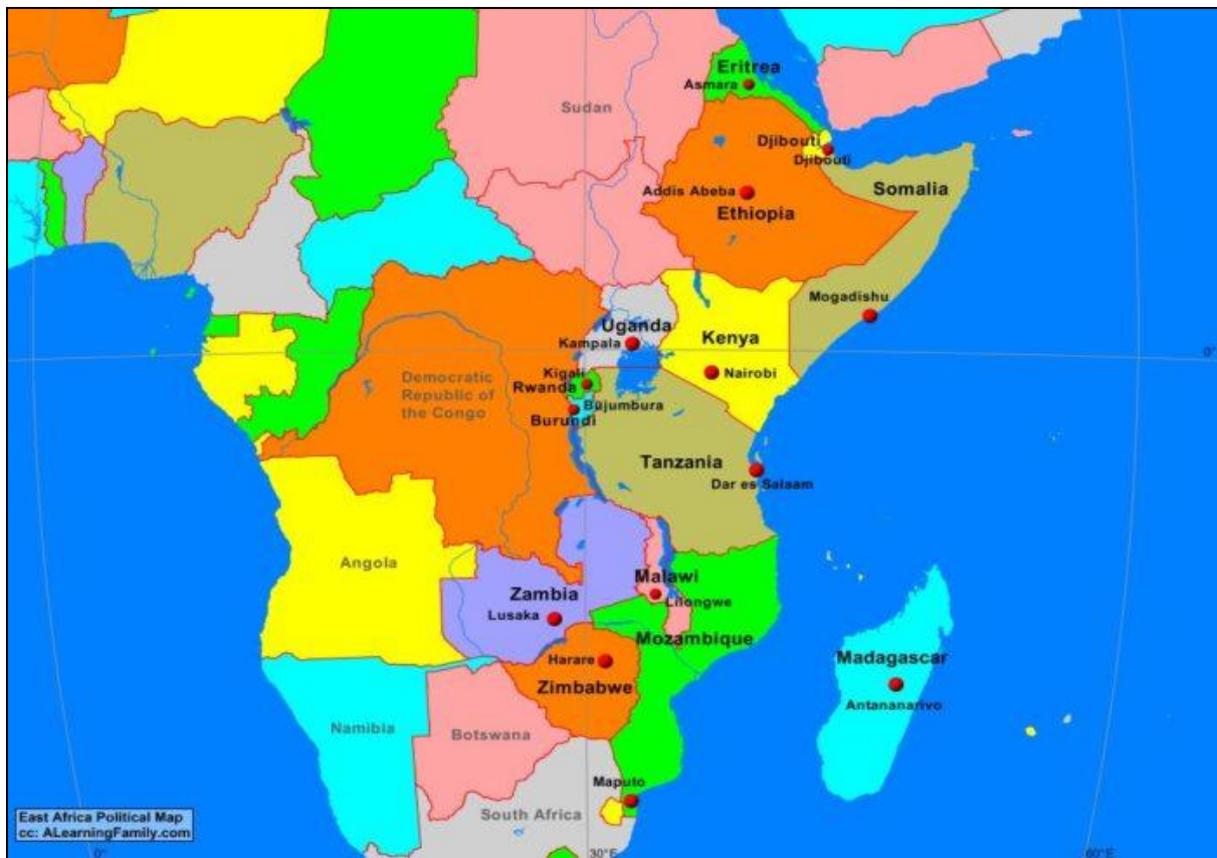


Figure 5.1: Map of East Africa showing the location of Ethiopia.

Source: A learning family

The country has the second largest population in Africa after Nigeria, and one of the fastest growing economies. Despite this, Ethiopia remains one of the poorest countries in the world with a GDP per capita of \$772 in 2018 (World Bank, 2018d).

Ethiopia's government aims to reach lower-middle-income status by 2025 through Growth Transformation Plan (GTP) I and II. GTP is a five year government programme developed to divert Ethiopian economic focus to other sectors other than the agricultural sector. In order to achieve this target, the government committed to work on physical infrastructure through public investment projects so that the country can be transformed into a manufacturing hub. The GTP I focused on the following objectives:

- Maintaining at least an average real GDP growth rate of 11%;
- Expanding and ensure the quality of education and health services;
- Ensuring growth sustainability by realizing all the above objectives within stable macroeconomic framework (MoFED, 2010).

GTP I was carried from 2010 to 2015, and GTP II from 2016 and is expected to run until 2020. The Ethiopian economy grew by an average of 10.3% a year from 2005 to 2015, compared to a regional average of 5.4%. In 2018, Ethiopia's real GDP accelerated from 7.7% in 2017 to 9.2% as shown in Figure 5.2. The focus on the economic growth through GTP I and II brought about a positive trend in FDI and poverty reduction. In 2000, about 55.3% of Ethiopians lived in poverty and by 2011 the figure declined to 33.5% (World Bank, 2018d).

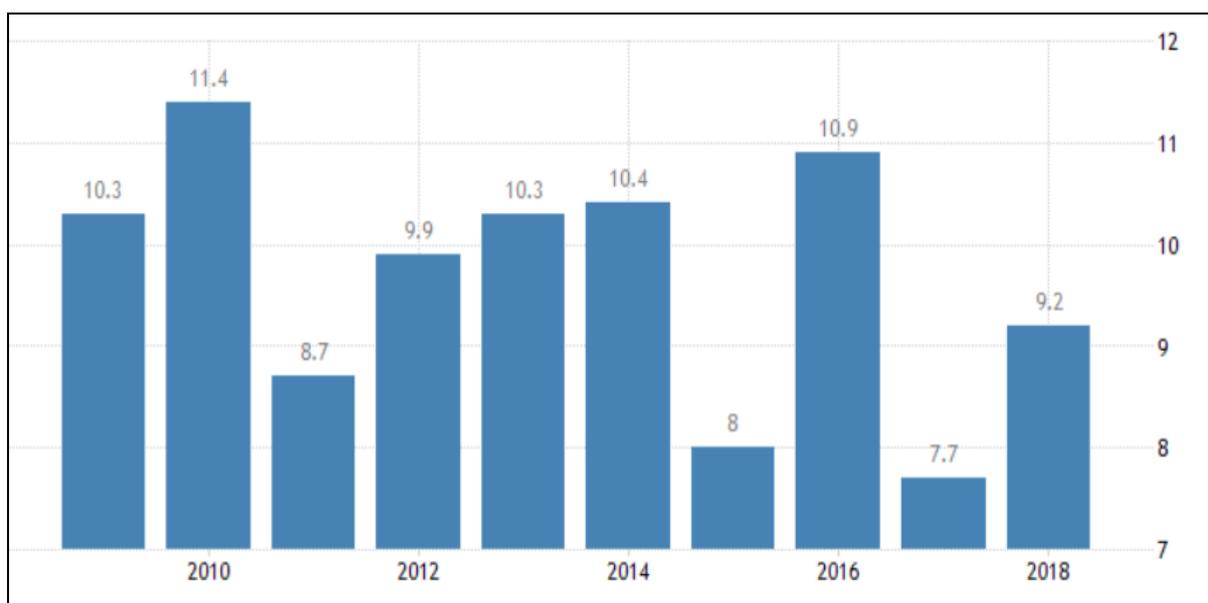


Figure 5.2: Ethiopia GDP annual growth rate.

Source: Trading Economics (2019)

During the GTP I period, as shown in Figure 5.3, the agricultural sector's contribution which includes farming, fishing and forestry to GDP declined from 41.45% in 2010 to 36.06% in 2015. The services sector which covers government activities, transportation, finances, communications, and all other private economic activities that do not produce material goods experienced a similar downward trend, declining from 41.76% in 2010 to 39.55% in 2015 as shown in Figure 5.3.

On the other hand, a different trend was noticed from the industry sector which includes mining, manufacturing, energy production and construction, which saw an increase from 9.44% in 2010 to 16.30% in 2015. The GDP contribution of the industrial sector concurred with the GTP plan since the government committed to focus more on the sector through private and foreign investment in order to achieve faster economic growth (MoFED, 2010).

The main contributor in the industry sector was construction which saw a share in GDP increase from 4% in 2010 to 8.5% in 2015. The agricultural sector was

hampered by the El Nino between 2014 and 2015, which resulted in droughts, and climate variability. Despite the good performance made during the first GTP period, the majority of the population lived in poverty and unemployment remained high. This resulted in the government focusing more on industrialisation and structural transformation to attract FDI (World Bank, 2018d).

The growth rate during the GTP I period indicated the positive response from the investors, and Ethiopia became the fifth fastest growing economy. Between 2013 and 2014, the country's sovereign rating was assessed by three international credit agencies and recognised the broad based economic growth and development performance in the country which attracted FDI and increased the country's trade potentials and opportunities. The GDP per Capita increased from \$377 in 2010 to \$691 in 2014 due to the growth performance the country experienced (National Planning Commission, 2016).

Although there were gains made from the implementation of the GTP I, the Ethiopian government failed in implementing tax policies to generate revenue for fiscal programmes. As from 2015, the country only collected taxes amounting to 13.3% of GDP, the lowest within the region (Amdetsion, 2015). This was mainly due to low customs taxes that had been set to attract FDI to the country. GTP II was approved by the Ethiopian parliament in December 2015 which combined the successes and the lessons learnt from the failures GTP I.

GTP II *"aims to continue expanding physical infrastructure through public investments and to transform the country into a manufacturing hub"* (National Planning Commission, 2016 p.2) GTP II put emphasis on the development of the private sector and FDI. The government has committed to provide a stable

investment climate by ensuring macroeconomic stability when redirecting the focus to attract private and foreign investors (Ministry of Finance, 2017).

The government also committed to continued investment in large-scale social, infrastructure, and energy projects which will aid in sustaining a GDP growth rate of 11%. In 2017, the share of agriculture in Ethiopia's GDP was 34.12%, industry continued to expand and contributed to 22.9%, and the service sector contributed about 36.92% which was the highest amongst the other sectors. This information is shown in Figure 5.3.

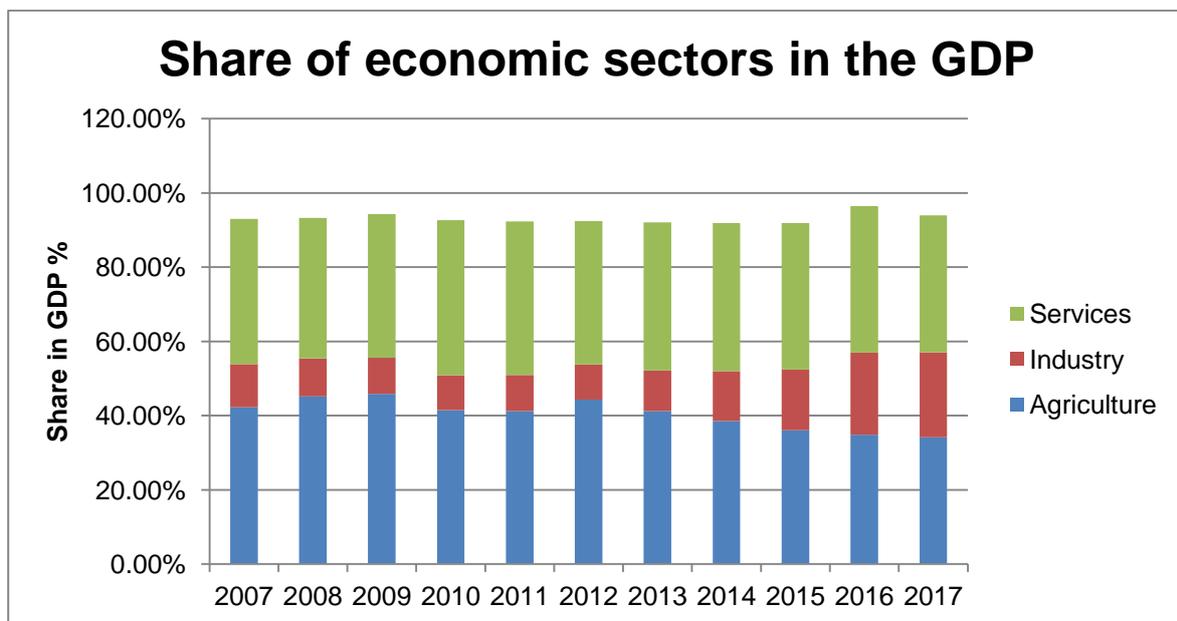


Figure 5.3: Share of economic sectors in the GDP from 2007 to 2017.

Source: Statista (2018)

The target to keep the inflation within the single digits was a challenge during the first two years of the GTP I period. From 2010 to 2011, the inflation rate increased from 8.1% to 33.2% which has resulted in high price increase as well as a decline in GDP growth rate (Analyse Africa, 2017). As a result, the mission to attract and promote private and foreign investment was hampered because the inflation reduced the real

return on investment and the competitiveness of firms (Analyse Africa, 2017). The government revised the fiscal and monetary policies in attempt to stabilise the economy which resulted in an inflation rate decline to a single digit of 8.1% in 2013 and further to 7.4% in 2014 (Trading Economics, 2019). However, due to political instabilities and shortage of foreign currency, the inflation in 2017 went back to a double digit of 10.7% and further deteriorated to 13.8% in 2018 (Trading Economics 2019).

## **5.2. FDI origins and performance in Ethiopia**

Ethiopia's economic performance is divided into two economic systems namely: the pre 1991 economic system, which covered the periods from 1974 to 1991. This system was a closed economic system that discouraged both domestic and as well as foreign investment. The post 1991 economic system was different from the previous system in that it focused on attracting foreign investments in addition to domestic investment (UNCTAD, 2010).

### **5.2.1. The pre-1991 period**

In 1974, the liberal policies were replaced by the command system policies which discouraged market economic growth and private ownership. The land reform measure was the major policy reform which was changed immediately. Private land ownership ceased to exist and in addition, the government nationalised all medium and large enterprises which included insurance companies and banks (Woldemeskel, 2008).

The pre-1991 period's economic performance was characterised by three phases. The 1<sup>st</sup> phase was from 1974 to 1978 whereby most policies changed and the introduction of nationalisation resulted in poor economic performance due to a decline in foreign investors (UNCTAD, 2010). The figures for FDI during the pre-1991 period are not available. During the second phase, which ran from 1978 to 1980, there was an economic recovery with a growth rate from 0.3% to 4.6%. The major contribution was from the agricultural sector, good weather caused the sector to contribute 3.6% towards the growth rate. However, during the third phase from 1980 to 1985, the economy performed badly and incurred negative growth rate. The country was hit by a drought which had affected almost all the regions (Woldekidan, 2005).

The government then decided to save the economy by adopting a ten year perspective plan which aimed at reducing the share of agriculture in the GDP and diversifying the economic portfolio. This caused the annual GDP to increase by 6.9%; however the growth remained at 2% with the negative GDP per capita. The nationalisation of major industries and political instability discouraged FDI into the country which resulted in the implementation of corrective measure to revive the economy through the 1983 Joint Venture Proclamations. The Joint Venture Proclamation offered income tax relief, import and export duty relief, tariff protection, and repatriation of profits and capital as incentives (Deloitte, 2014). Despite these efforts, the proclamation failed to attract FDI.

In 1989, the government revised the proclamation by retracting the barrier and allowing private ownership in many sectors. In addition to this, the government also provided investors with protection. Political instability and prolonged civil wars

caused FDI levels to remain low (Woldemeskel, 2008). As the result of the political instability, the regime was dissolved in 1991.

### **5.2.2. Post- 1991 period**

The Ethiopian People Revolutionary Democratic Front (EPRDF) came into power in 1991 and adopted the World Bank and International Monetary Fund (IMF) structural adjustment programmes. The government focused on improving human capital by introducing macroeconomic stability and eliminating structural distortion that hindered economic growth (Woldemeskel, 2008). The following reform measures were implemented to change the command system of the previous regime in order to encourage participation in private sector to develop the economy, inter alia:

- Deregulation of domestic prices;
- Devaluation of the national currency (Ethiopian Birr is Ethiopian national currency and currency symbol is birr) by 141.55% from 2.07 birr per dollar to 5 birr per dollar;
- Liberation of the foreign exchange market;
- Elimination of export taxes except coffee;
- Lowering of maximum import duties from 230% to 60%; and
- Provision of adequate incentives, strengthening and institutional support for the sector (Haile and Assefa, 2006).

The privatisation programme started in 1994 and the Ethiopian Privatisation Agency was responsible for the transfer of state owned enterprises to private ownership (Woldekidan, 2005). The introduction of investment incentives raised the share of

inward FDI from 0.04% in 1992 to 27% in 1997 as shown in Figure 5.4. Based on the Ethiopian Investment and Innovation Policy Review by UNCTAD (2010), the Middle East accounted for the largest share of the post 1992 FDI projects in the country. However, from 1998 to 2000 the conflict with Eritrea had a negative effect on the FDI flow and the economic growth rate in particular. The reliance on agriculture also had negative effect on the growth rate (Masele, 2016).

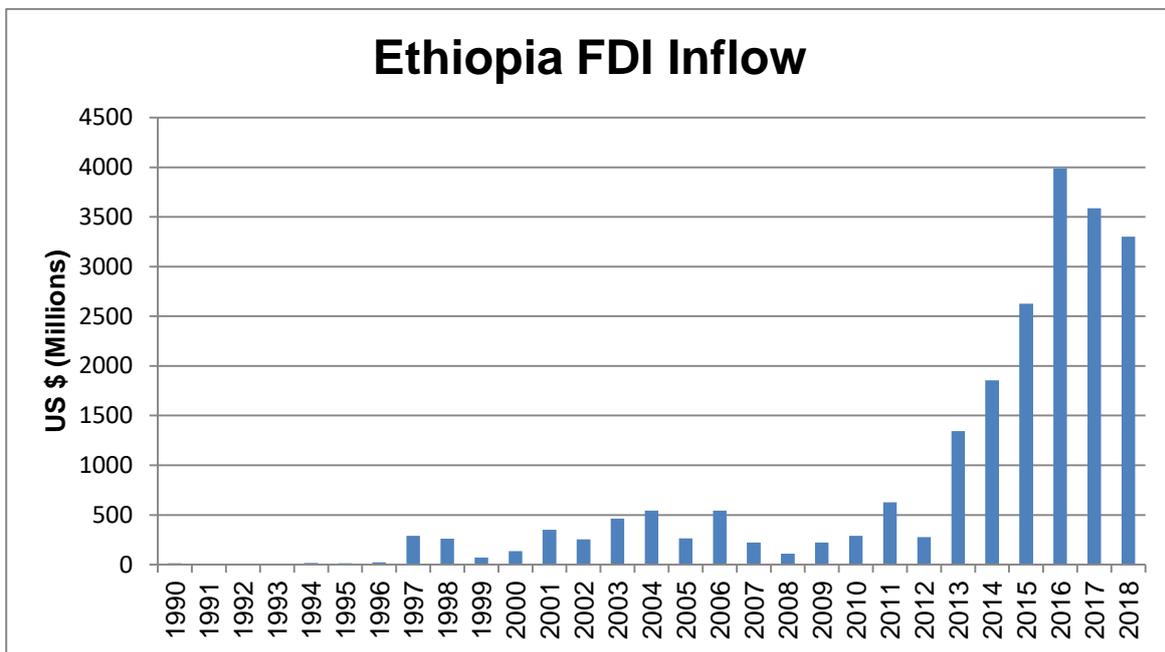


Figure 5.4: Ethiopia FDI inflow from 1990 to 2018.

Source: World Investment Report (2019)

The introduction of GTP I and II had brought about positive FDI inflow in Ethiopia as shown by the FDI inflow in Figure 5.4. The government had focused on the prevailing peace, stability and security in order to attract potential investors in the country. According to the World Economic Forum (2018) Ethiopia has made an improvement in overall points with regard to strengthening of institutions in its goods and market. The country reached an all-time high point of 43.8 points in 2017 as compared to 3.74 points in 2016 (World Economic Forum, 2018). As a result,

Ethiopia’s FDI has been increasing every year except in 2017 and 2018. In 2018, FDI declined by 18% to \$3.3 billion as shown in Figure 5.4 due to social unrest and foreign reserve shortages. However Ethiopia remained the top rank in East Africa with investments in mineral extraction, petroleum refining and manufacturing (World Investment report, 2019). The FDI inflow target in the first half of GTP II was \$7.15 billion; the government has recorded foreign investment operational projects worth \$9.17 billion.

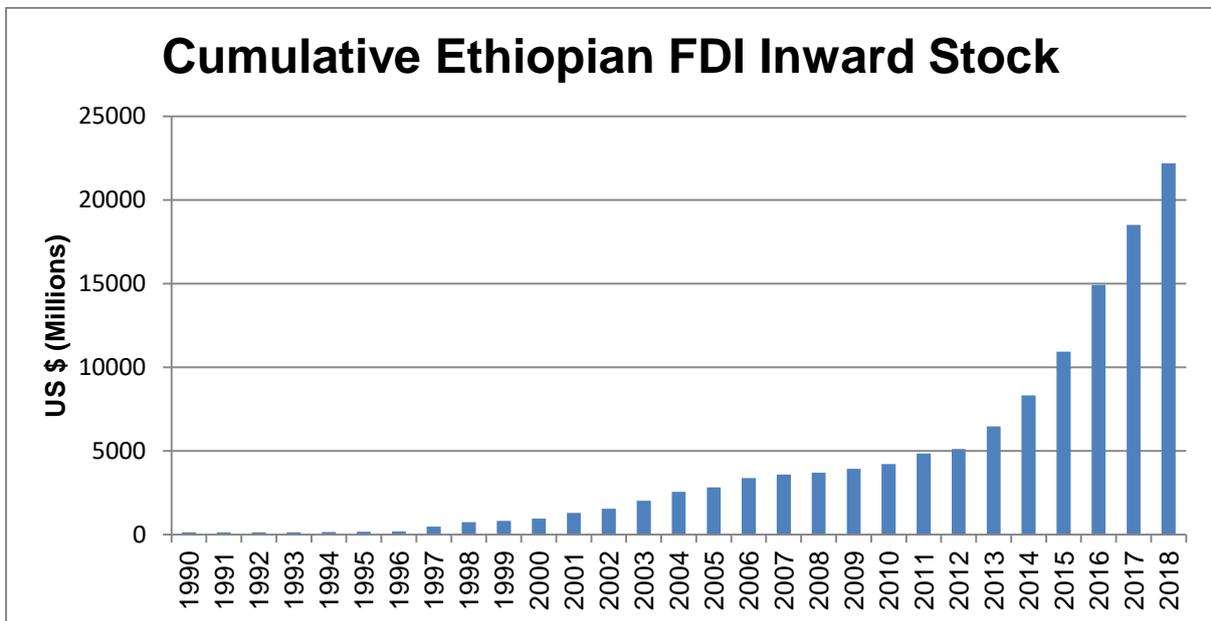


Figure 5.5: Cumulative Ethiopian FDI inflow from 1990 to 2018.

Source: World Investment Report (2019)

Ethiopia’s FDI stock has increased significantly, this is shown in Figure 5.5. In 2018, the country recorded cumulative FDI stock of \$22.2 billion as compared to \$0.15 billion in 1990.

### **5.2.3. FDI by sectors and regions**

According to the Ethiopian Investment Commission (EIC) (2018), the manufacturing industry has shown an increase in FDI inflow as compared to other sectors of economy in 2017. In that fiscal year alone, 136, 42 and 23 foreign companies were operational in the manufacturing, services and agricultural sectors respectively (Yohannes, 2018).

The licenced FDI projects in the manufacturing sector by March 2017 were 45.7% of the total licenced foreign projects in Ethiopia; followed by the real estate, machinery and equipment rental and consultancy services sectors with a share of 18%; and agricultural sector with 14.7% (Ministry of Finance , 2017). Manufacturing is currently leading with 66% in terms of capital invested in the licenced projects, followed by agriculture with a share of capital of 15.4% of the projects, and real state with 7% share of capital as shown in Figure 5.6.

Government's foreign investment policy was favourable to FDI and this resulted with an upsurge in investment. China, India and Netherlands were the leading investors in the manufacturing sector (Derso, 2018). The manufacturing industry took a big portion of the FDI in Ethiopia for the previous two years and continues to lead. The country's competitiveness in infrastructure development by the government in energy, rail, road and air network and incentive packages were amongst factors that have contributed in the increase in FDI in the industry sector (Yohannes, 2018).

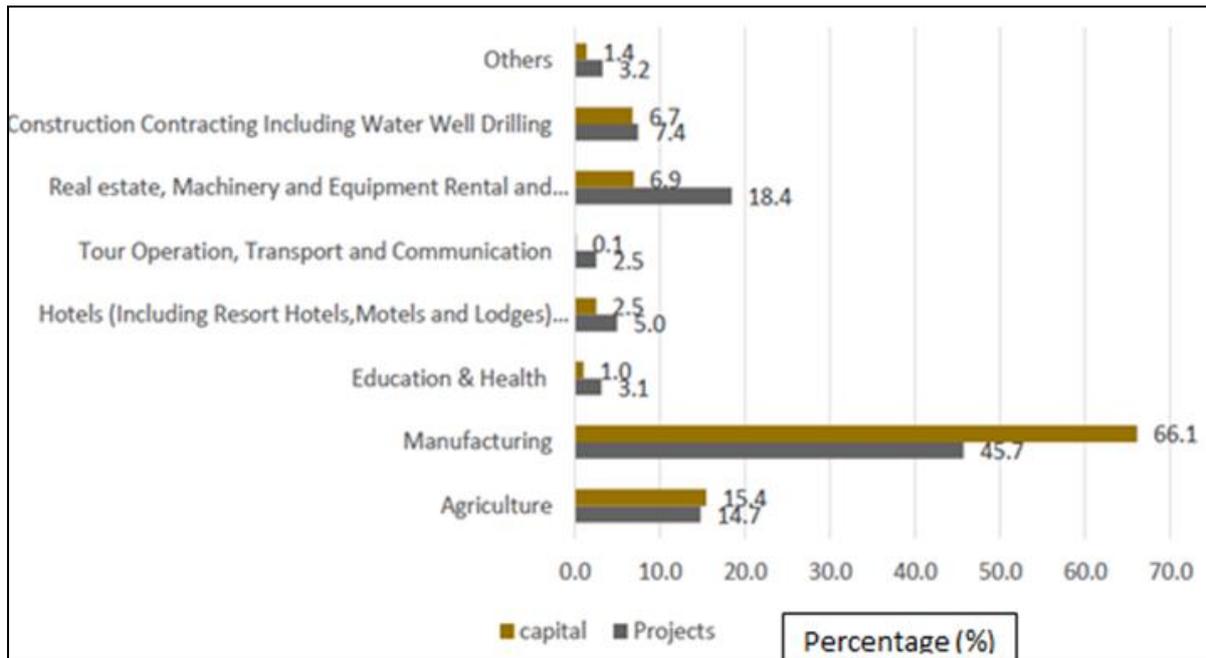


Figure 5.6: Total FDI projects sectorial share by number of projects and capital  
 Source: Ministry of Finance (2017)

From the period of 1992 to 2017, the development of FDI projects that are operational in manufacturing accounted for 45% in which the capital investment reached 69% as shown in Figure 5.7. Investments in real estate, machinery and equipment rental, and consultancy services accounted for 22.9% of operational FDI projects with only 6.5% capital invested. This low percentage is due to the fact that these industries require less capital as compared to other industries. The increase in FDI projects in the manufacturing industry was in line with the objectives of the GTP programme to attract investors.

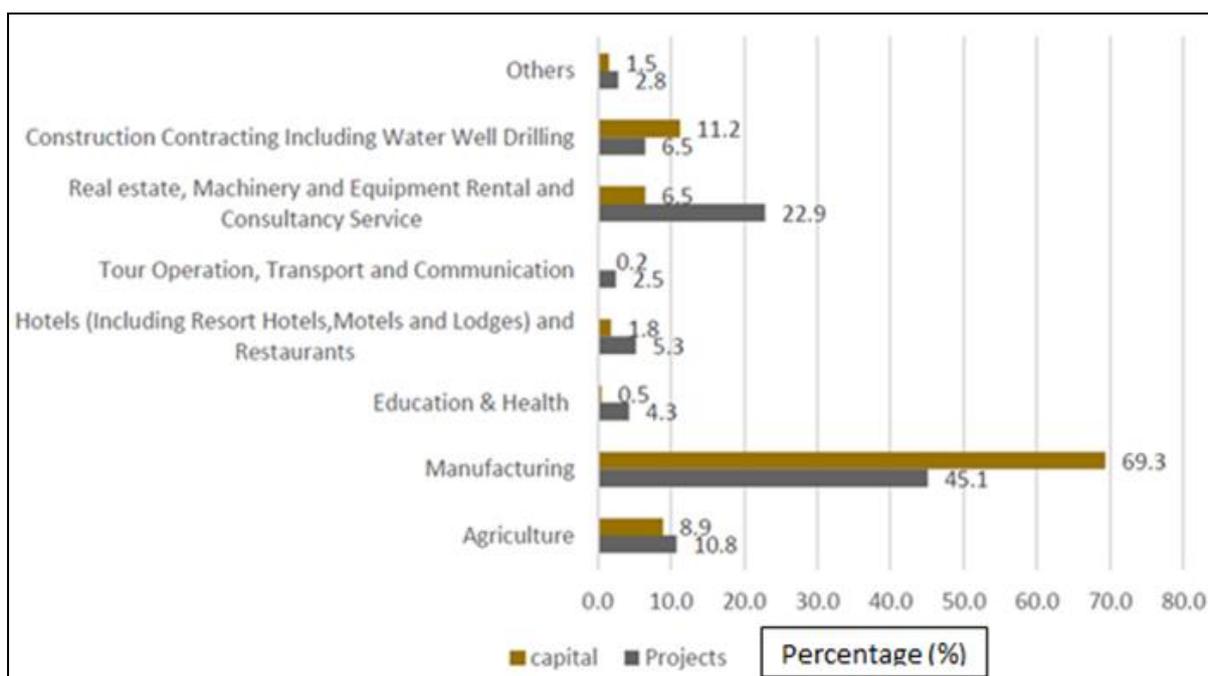


Figure 5.7: Total operational FDI projects sectorial share by project and capital from August 1992 to March 2017.

Source: Ministry of Finance (2017)

From the period of 1992 to 2017 the majority of licenced projects were located in Addis Ababa (the capital city) which accounted for 52% of the total licenced project in the country, followed by the Oromia regional government which accounted for 32% and Amhara regional government with 4% as shown in Table 5.1. However, the majority of capital investment in licenced projects went to the Oromia regional government which secured 46%, followed by Addis Ababa with 23% and Amhara with 14%. This means that the capital city received less capital investment by value compared to Oromia as shown in Table 5.1, despite the large number of projects being located therein (Ministry of Finance, 2017).

Table 5.1: Regional Distribution of FDI from August 1992 to March 2017.

Region/ City	Total licenced*		Total operational*	
	No of projects (%)	Capital (%)	No of projects (%)	Capital (%)

Addis Ababa	52	23	23	37
Afar	1	1	1	0
Amhara	4	14	14	9
B. Gumze	1	1	1	0
Dire Dawa	1	5	5	2
Gambella	0	0	1	1
Harari	0	0	0	0
Multiregional	4	3	3	4
Oromia	32	46	46	40
SNNPR	3	3	4	4
Somali	0	0	0	0
Tigray	2	2	2	2

\*The numbers are rounded off and do not necessarily add to 100.

Source: Ministry of Finance (2017)

However, if the landscape of operational projects were to be observed in Ethiopia, a different picture starts to emerge. For example, between the years 1992 and 2017, the share of operational projects was higher in Oromia region, accounting for 45.6% and the invested capital in those projects was 40% of the total capital investment in operational projects. The percentage of licenced projects in Addis Ababa and Amhara which were operational in the same period was 23.3% and 14.9% respectively, with the share of capital invested in operational projects being 37% and 9% respectively (Ministry of Finance, 2017).

Despite the government's effort to attract FDI undeveloped in regions such as Gambella, Harari, Afar, Somali and Benishangul-Gumuz, interest by investors in these areas was very poor (World Bank, 2017). This shows that FDI inflow is unevenly distributed within the country.

#### **5.2.4. FDI regulatory framework in Ethiopia**

To improve the investment climate and ensure that the country attracts high volumes of FDI, the government has created sound policies that are favourable to investors. The first investment proclamation No. 15/1992 was issued in 1992; however the proclamation provided limited incentives for the agricultural sector only (Woldekidan, 2005). In 2003, the Investment Proclamation No. 280/2002 was amended, and constituted the main legal framework for both domestic and foreign investment. It also included different forms of incentives, capital requirement and investment permits. The major limitation imposed in the Investment Proclamation No. 280/2002 is a 27% equity ownership interest by the domestic partner in the case where the foreign investors partnered with a domestic company (Woldekidan, 2005). Furthermore, both the domestic and foreign investors had to report to the government on the progress of the projects bi-annually.

The Ethiopian Investment Commission (2018) stated that to increase FDI attractiveness in the country, the Investment Proclamation Code has been revised four times since 1992 to 2013. This was to ensure that the code was transparent, attractive and competitive. The latest Investment Proclamation No. 769/2012 and Investment Regulation No. 270/2012 introduced positive changes with regard to foreign investors and the results can be seen in Figure 5.4.

The minimum FDI in Ethiopia is \$200 000 per project for full ownership. However, in the case where the foreign investor decided to invest in a joint venture with a domestic investor, a minimum equity capital required from the foreign investor is \$150 000. The current Investment Proclamation revoked the minimum 27% ownership by the domestic investor in a joint venture (Ethiopian Investment

Commission, 2018). The initial minimum capital requirement stipulation is exempt from foreign investors who export at least 75% of their production and reinvest their profits and dividends back into the Ethiopian economy. However, the investors must still obtain an investment permit to invest in Ethiopia from the EIA or regional investment authorities (Ethiopian Investment Commission, 2018). The investment code provides guarantees to creation of a conducive environment for potential investors.

The principal government agency responsible for most aspects of FDI in the country is the Ethiopian Investment Commission. The EIC was formulated to “*promote, coordinate, and facilitate foreign investment in the country*” (Ethiopian Investment Commission, 2015).

To encourage private investment and FDI inflow into the country, the current revision of the proclamation policy offers investors attractive incentives. However the incentives vary according to the sector invested in. For example some of the mining investment incentive includes:

- Exemption from import customs duty: 100% exemption from payment of import custom duties and other taxes levied on imports of capital goods;
- Exemption from paying export tax on export product. (Ethiopian Investment Commission, 2018).

In addition, Ethiopia is a member of Multi-lateral Investment Guarantee Agency and the World Intellectual Property Organisation, entered into over 30 bilateral treaties and over six multilateral investment agreements with countries such as China, the USA, SA and Egypt. The agreement guarantees protection to the investors against

expropriation and nationalisation. The government committed to providing the investor with adequate compensation values at the current market value of such property (ALN, 2018).

The other advantage of the free trade agreements is the easy market access to the receptive countries. Other than the bilateral agreement, the country also had a double taxation avoidance agreement with countries such as Algeria, South Africa, Italy and Russia (ALN, 2018). Remittance of funds is permitted on the principal amount plus interest of external loans, payment related to technology transfer agreement, profits and dividend acquiring investment and proceeds from the sale of an enterprise out of Ethiopia.

### **5.3. Mining in Ethiopia**

Ethiopia is a country that is endowed with significant mineral resources and gold has been the main commodity exported since ancient times. Artisanal and small-scale mining is extensive and primarily focused on gold. However, the mining sector is under developed. Its contribution to the economy is still insignificant and it only employs 0.01% of the working population. From 1974 to 1991, the mineral resources were 100% state owned (Ethiopian Investment Commission, 2015). Post 1991, the new government channelled the sector into a new market by introducing economic policies. With regard to mining, the new mining proclamations were formulated to encourage private participation and mining FDI inflow. The sector is undergoing a huge transformation as opportunities of investment have opened up (World Bank, 2018d).

The government, under the GTP I plan, has set the target for the sector to contribute 10% to the GDP by 2024 which would require a tenfold increase in the period of 14 years. Therefore, significant growth is needed to achieve the target by the set date. In 2010, on the first year of the GTP I implementation, the mining sector contributed 1.5% (1.1% from the mineral rents) to GDP (\$32 billion) and accounted for \$618 million (19%) of mining exports with gold making up almost 100%. Most of the gold produced came from artisanal mining and it secured \$199 million in foreign exchange earnings (World Bank, 2016).

GTP I and II had similar goals concerning the mining sector. The focus on both GTP's is to "*expand the production of minerals for foreign exchange generation and import substituting industries*" (National Planning Commission, 2016 p.33). However, the GTP II puts more focus on developing the sector taking into account environmental protection, community development and employment creation. In order to further develop and expand the mining sector, GTP II development objectives are as follows:

- Enhancing the implementation capacity of the mining sector by improving policy, legal frameworks, regulatory and working systems;
- Increasing export revenues through promotion of mining value creation activities;
- Saving foreign currency by producing minerals inputs for import substituting manufacturing development, mainly to speed up the sector's transformation; and
- Expanding the Geo-sciences mapping coverage of the country both in quality and accessibility (National Planning Commission, 2016).

The major targets set in GTP II are also aligned with those of GTP I. During the five year period, the government will be focusing on increasing the production of raw materials such as gold (modern and artisanal mining) from 9 053.53kg in 2015 to 25 370.0 kg by 2020. The government also planned to boost export earnings from \$343.73 million to 2.011 billion by 2020. It also plans to increase revenue collection from 152.79 million birr to 570.4 million birr during the same period (National Planning Commission, 2016). The targets will assist the government to provide employment opportunities in the mining sector and help alleviate poverty (Atlaw, Teklemariam, and Dong-Geun, 2014).

With regard to geological mapping, GTP II has set a target of increasing the mapping coverage from 55.5% to 100% by the end of the planned period (National Planning Commission, 2016). The government had to design a suitable strategy so that the mining sector can attract FDI and bring development, and as a result the sector is becoming a great source for FDI (World Investment Report, 2018)

### **5.3.1. Mineral opportunities for investment**

Figure 5.8 shows a regional geological map of Ethiopia at a scale of 1: 250 000 and covers 94% of the land mass. The geological mapping and generation of geological data is the responsibility of the Ethiopian Geological Survey institution which is under the Ministry of Mines. The geological map of Ethiopia shows the endowment of Precambrian basement rocks which cover 25% of the land mass. These rocks are exposed in three different parts of the country namely the Northern, Western and Southern Green Stone Belts. Palaeozoic and Mesozoic sedimentary rock cover 25%

of the land mass of the country whereas the Cenozoic volcanic and sedimentary rocks covered the remaining 50% as shown in Figure 5.8 (Bedassa, 2016).

The potential metallic minerals, found in the Northern belt of the country, include primary and placer gold and base metals. In the Western part of the belt traces gold, platinum, iron, and base metal deposits can be found. Lastly, the Southern belt has the potential to produce minerals such as gold, nickel, tantalum and chromite. The largest gold mine in the country (Lega Dembi) is located in the Southern part of the belt (Ministry of Mines Petroleum and Natural Gas, 2017).

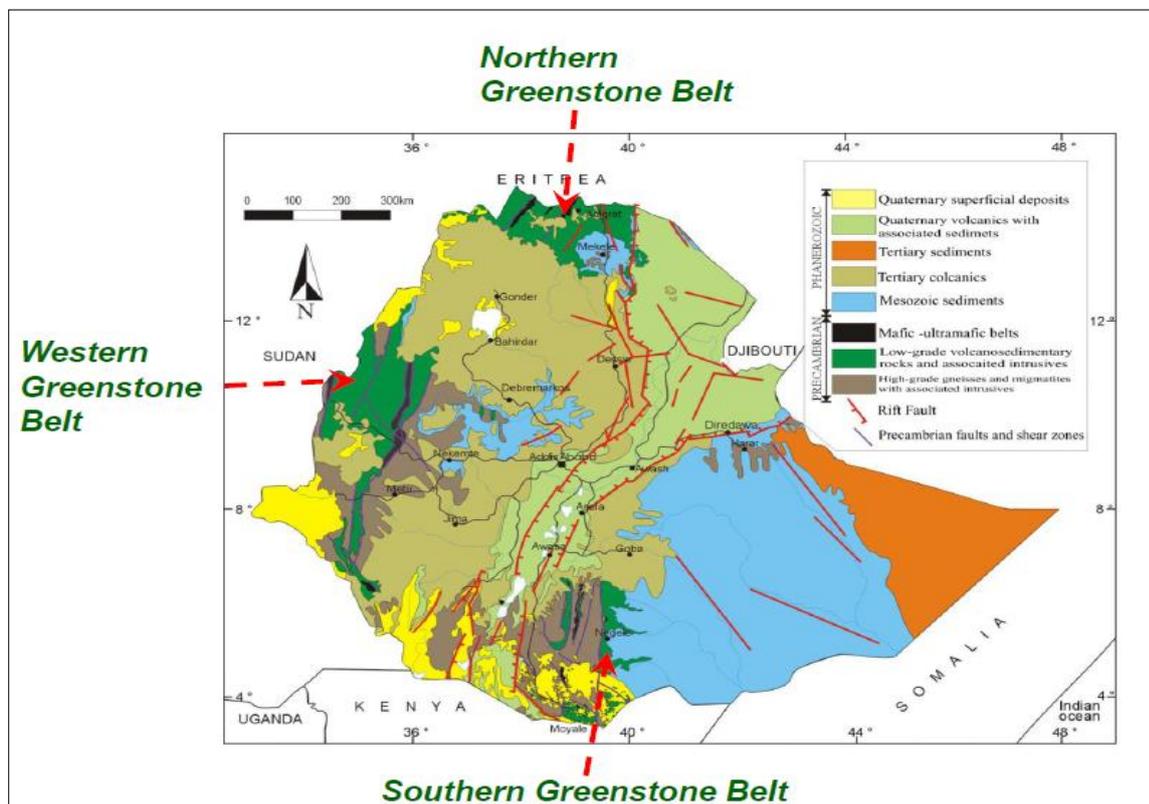


Figure 5.8: Regional geological map of Ethiopia

Source: Bedassa (2016)

Industrial minerals such as Potash, limestone, gemstone, granite, silica sand, and salt amongst others also occur in abundance with a potential for investment. Within

the industrial minerals, potash is becoming more attractive to the investors. This occurred subsequently to the acquisition of two projects by the large and small-scale miners. This acquisition has the potential to place Ethiopia as the major potash producer. One of the projects is owned by Circum Minerals Potash and has the potential to become one of the world's biggest potash projects (Mining Technology, 2018). The deposit is found in shallow area with measured and indicated resources of 2.8 billion tonnes (t) and inferred resources of 2.1 billion t of the 40% of the mining licenced area (Mining Technology, 2018).

The other industrial mineral which is becoming attractive for to FMI is limestone, since the country focused on construction development. The construction sector requires cement for its building purposes and investors saw an opportunities to invest in the industry. Previously the country was importing cement for its growing economy which became unfeasible because the amount needed was high. The shortage of cement became an issue in Ethiopia. Currently Chinese firms are producing cement in the country. A South African cement company, Pretoria Portland and Cement (PPC), also bought a stake in the Ethiopian cement company Habesha Cement Share Company after the rising opportunity (Hailemeskel, 2017). The cement production capacity has increased significantly, and raw materials for cement are plentiful in the Mesozoic formations. In March 2012, the country banned cement imports to support the domestic industry as specified in the GTP I.

Other minerals which offer a wide opportunity of investment for exploration include: gold and copper in unexplored and unoccupied areas as shown in Figure 5.9, energy minerals such as lithium, base metals such as tantalum and platinum which is found in most geological settings. Dish Mountain and Ashashire represent an undeveloped

district which offers opportunities of more than two million ounces of gold. Other minerals that have the potential to be mined are Iron or steel, manganese, graphite, and coal. The government encourages FMI to engage in joint venture opportunities with the mines that have already been licenced (Ministry of Mines Petroleum and Natural Gas, 2017).

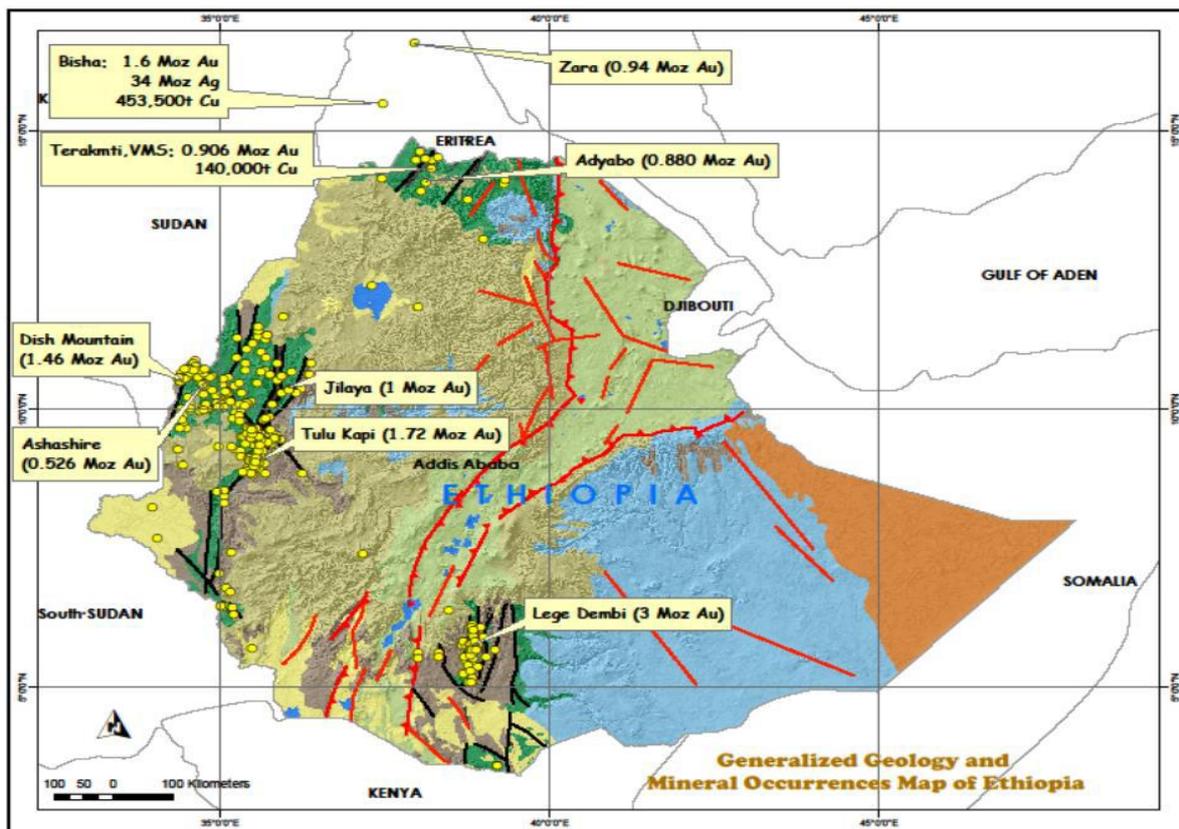


Figure 5.9: Location of artisanal mines, prospects and major gold and copper deposits in Ethiopia.

Source: Kefi Minerals (2018)

### 5.3.2. Mineral Legislations

Previously, the Ethiopian government developed a minerals sector which was not contributing significantly to the GDP. However, in 1993, the government issued mining laws that aimed to attract private and foreign investment and also assist in

sustainable mineral resource development of the country. The mining proclamations and regulations for mineral operations in Ethiopia are regulated under the following legislations:

- The Mining and Income Tax Proclamations No. 53/1993 (amended in 1996 (23/1996) and 2016 as No. 979/2016): which was put in place to provide a regulatory framework to promote investment in mineral exploration and production in Ethiopia;
- A Draft Mineral Policy in 2008 to evaluate policies that the government must consider to fulfil the potential of the mining sector; and
- The Mining Operations Regulation 182/1994 (ammended in 2010: 678/2010 and No 816/2013): which includes key legislations governing the mineral sector (Abera, 2016).

The policies that were formulated focused on the promotion of sector growth through the creation of backward and forward linkages, eradication of poverty (by increasing employment and development of communities rich in mineral resources), as well as privatisation of the mineral sector (Amdetsion, 2015). Additionally, the Ethiopian government promoted political stability, security of all citizens, creation of attractive fiscal incentives and higher employment levels for mining engineers (Amdetsion, 2015). The first step taken to attract investment was the privatization of Lega Dembi, a gold mine previously owned by the State (Ethiopian Embassy, 2010).

The main features and aims of the legislations mentioned above include:

- Promoting private investment in all types of minerals and attract investment;

- Guaranteeing investors licence rights to sell minerals;
- Exempting equipment, machinery and vehicles used for mining operations from custom duties and taxes;
- The smooth opening and operation of foreign currency accounts in banks;
- Government requirement of 2% to 7% royalties ad valorem on production site;
- Exploration cost recovery for companies that started with mining operation;
- Exclusion of economic rents;
- Tax deductible pre-production expenses; and
- Government ownership limited to 5% (Amdetsion, 2015).

The Ministry of Mines, Petroleum and Natural Gases is the main government body which regulates the mineral sector. It has the power to issue licences to private investors engaged in exploration and mining operations. The Ministry of Mines also coordinates the transactions and operations of artisanal mining in addition to conducting R&D related to the sector. However, the health and safety, and environmental standards of the mines are regulated by the Ministry of Labour and Social Affairs and the Ministry of Environment and Forestry respectively (Abera, 2016).

### **5.3.3. Exploration and mining rights**

A licence is required to undertake exploration activities in Ethiopia. The exploration licence is valid for an initial period stated in the licence and it may not exceed three years. The licence may be renewed twice for a period not exceeding one year each

and there is a possibility for an extension of up to five years. The exploration licence holder is permitted to remove, transport, analyse, and export minerals for testing. The Ministry of Mines gave a condition that the licensee has to commence with exploration activities within 60 days from the effective date of the licence. It also requires duplicates of the tested samples to be kept (Addis Fortune, 2018). On the other hand, the licensee has the right to apply and be granted the mining rights after the completion of the exploration.

Mining rights are divided into four categories depending on the scale mining. These are small-scale, special small-scale, artisanal mining, and large-scale. The licences of the categories vary as follows:

- A large-scale mining licence is granted for the period not exceeding 20 years and the licence can be renewed for a period not exceeding 10 years;
- Small and special small-scale mining licences are granted for a period not exceeding 10 years and can later be renewed for a period not exceeding 5 years, and
- An artisanal mining licence is granted for a period not exceeding 3 years and the licence can be renewed twice for 3 years each (Suleman, 2016).

The granted minerals of extraction are specified in the licence and the licensee has the choice to either sell the specified minerals locally or export the minerals. To avoid losing the licence, the licensee has to commence with the mining activities within two years from the effective date of the licence. Only the minerals stated in the mining licence may be mined or explored. The foreign investors from the countries that Ethiopia has the investment treaties with will receive favourable treatment as opposed to the countries without the treaties.

#### **5.3.4. Ethiopian draft mineral policy**

Prior to 2008, Ethiopia did not have a minerals policy. In 2008, the government of Ethiopia drafted the mining policy document setting out objectives and plans that the government has regarding the management of the mineral sector. The policy formulation was aligned to the GTP I. Consultation with private sector investors, government officials at a federal and regional level, and local and international NGO's was conducted (World Bank, 2014).

##### **(a) Objective of the Mineral Policy**

The government's main objective was to achieve more foreign earning currency through the mining sector and reduce poverty through job creation in the mining sector. By 2024, the sector envisioned to contribute at least 10% to the GDP. The policy indicated that the mining sector must be private led sector. To ensure the growth and attraction of private investors, the licencing and fiscal regimes have been designed to attract the investors. In addition to an attractive legislative and regulatory framework, the draft mineral policy sets out a more pro-active approach to attracting investment such as clear legislative regime, provision of quality geo-scientific information, an enabling fiscal and tax regime, security of tenure and a first come first serve system for licence application (World Bank, 2014).

According to the World Bank (2014), apart from the regulative system set to attract FDI, the policy also has other ways of making the sector attractive, such as the Mining Investment Promotion Strategy and Minerals Marketing Policy. The promotion strategy was formulated to develop and implement an investment strategy including

the provision of geological information to private investors. On the other hand, the marketing policy was formulated to facilitate the trade of minerals.

The other objective of the draft mining policy is the integration of the mining sector into the rest of the economy, thus including the development of infrastructure and the promotion of mineral beneficiation. The government made a commitment to cooperate with the mining companies on the establishment, maintenance and operation of infrastructure (National Planning Commission, 2016). Mineral beneficiation will be promoted by supporting industrialisation of the country through developing mineral based industries that will add value to the raw materials extracted in Ethiopia as stipulated in the GTP I.

Skills and development was also one of the objectives set out in the mining policy draft. This assists the government in prioritising the Ethiopian nationals when qualified candidates are available. This will be done through the enhancement of education and training system in the mining industry, including the development of accreditation of mining sector skills (World Bank, 2014).

The promotion of women and disabled people in mining was also set as a high priority since the sector is male dominant. One of the requirements during the licence application is the submission of the employment policy by prospective companies to ensure that they are aligned with the policy's objectives. The policy encourages harmonisation of mineral legislation, cross border mineral processing, and removal of barriers to labour and capital across the East Africa and Gulf regions (Abera, 2016).

Countries are becoming stricter with regard to environmental protection in the mining sector, thus the government of Ethiopia also outlined detailed policy measures relating to environmental protection, including compliance with the National Environmental Policy. A plan on environmental, social and sustainable development management is required during the licence application process. Therefore Environmental Impact Assessments and Environmental Management Programmes have to be done by the companies before the licence is granted. This assists the government in mitigating the social and environmental problems caused by the mining sector. The sustainable development of the artisanal and small-scale mining sector forms an integral part of the policy formation (Ministry of Mines Petroleum and Natural Gas, 2017).

The draft minerals policy also established a legislative and regulatory framework to provide effective administration of the mineral sector. In relation to that, the 2010 Mining Operations Proclamation was enacted to ensure on-going process reviewing and updating the legislative regime. The Proclamation was amended again in 2013. The Mining Operations Proclamation is the key legislation governing the mining sector that investors wishing to invest in the mining sector must understand (Ministry of Mines Petroleum and Natural Gas, 2017).

The Mining Operations Proclamation stipulates that mineral resources in Ethiopia are the property of the government and the people of Ethiopia and the government is the custodian of the mineral resources (Ministry of Mines Petroleum and Natural Gas, 2017). The Proclamation focuses on establishing rules and procedures for a licencing system including all the key aspects of the various licences, rules and

procedures for access to mineral rights, as well as all the rights and obligations of licence holders and the incentives (Federal Negarit Gazette, 2014).

### **(b) The Fiscal regime**

The legal basis to collect tax and royalty payment emanates from a set of proclamations and regulations including the Mining Tax Proclamation and has been amended twice. Ethiopia has designed an attractive tax regime to attract mining investments and is comparable with some resource rich developing countries like China. The Small-scale and large-scale tax requirements differ. Small-scale mining licence attracts an income tax rate of 35% whereas the large-scale mining attracts an income tax rate of 25%. The large-scale mining income tax was lowered from 35% by the federal government as a means to attract FMI (Ethiopian Investment Commission, 2018). An addition of 10% tax on dividends calculated after income taxes have been paid. Above other taxes, the government collect royalties which is paid based on the sales price set in the commercial transaction of minerals produced. Different royalty tax rates are shown in Table 5.2.

Table 5.2: Ethiopian royalty rates for different minerals.

<b>Mineral type</b>	<b>Rate (%)</b>
Precious Minerals	7
Semi-precious	6
Metallic	5
Industrial and salt	4
Construction	3
Geothermal	2

Source: Ministry of Finance (2017)

Lastly, the government may acquire a participation interest of 5% of any large-scale or small-scale mining investment. Additional equity participation may be provided by

agreement as detailed in Amendment of Mining Operations Proclamation 2013 (Yibrah, 2016). For the first three months, the holder of either a small-scale or large-scale licence holder may import free custom duty consumables required to start and sustain commercial production.

Unfortunately income tax holidays are not provided for the mining sector. They are only applicable to manufacturing and agro-industry investments. However to encourage investment, the government has no provision for introducing tax on windfall profits. Losses from mining operations can be carried forward for 10 years. Mining Income Tax Proclamation allow for ring fencing each licence as a separate tax unit, this was introduced in 2009. Deduction for amount deposited into fund for mine rehabilitation is also applicable. The proclamation also allows for ministerial discretion for granting temporary tax relief (Ministry of Finance, 2017).

### **5.3.5. Mineral sector's contribution to the economy**

As a result of the conducive fiscal and legislative environment, participation from both foreign and local investors in exploration and mining has increased substantially. The total investment injected into the economy by the private sector reached \$1 billion in 2009. Ninety-five percent of the investment emanates from FDI for mineral development (Ethiopia Trade and Investment, 2010).

The growth in the mining sector has been noted by the Ministry of Mines. In the first half of GTP II, about 71 mining companies with registered capital of about 73 billion birr joined the mining sector, and a total of 140 mineral exploration licences were granted. The total production of 16 223 kilogram (kg) of gold and 578 t of tantalum

was produced from those mining companies with an addition of 1 000 kg of opal for exports (Addis Fortune, 2018).

According to the East African Mining News (2017), a total of 280 companies have exploration licences while over 135 companies are on production phase, resulting in a total of over 3 250 licenced companies. Figure 5.10 shows the mineral exploration and mining licences that have been granted to FMI either as wholly owned or with joint-venture. Fifty-one percent of the licences were granted to FMI. In 2017 the Ministry of Mines cancelled over 50 mining and exploration licences due to failure to commence the operations within stated period after signing a contract with the government. This brought the total cancellation of mining and exploration licences to 211 since 2004, of which: 130 were owned by foreign firms, 49 by joint ventures and 32 by local firms (East African Mining News, 2017).

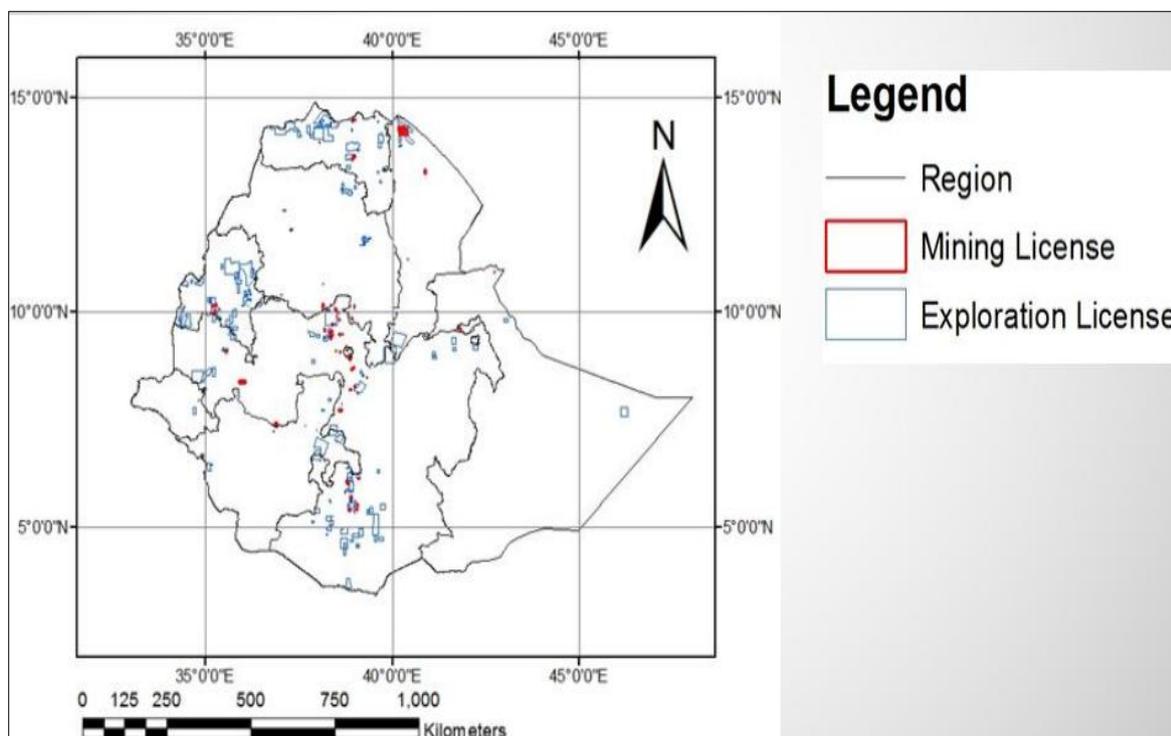


Figure 5.10: Exploration and mining licences granted.

Source: Ministry of Mines Petroleum and Natural Gas (2017)

Despite the increase in registered companies, the industry has been undergoing tough times with negative growth rate and declining revenues. This was due to suspended mining licences in other mines, social unrest and cancelled exploration licences by the government amongst other causes (East African Mining News, 2017). The Ethiopian Extractive Industries Transparent Initiative (EEITI) reports of 2018 and 2016 indicated that the revenues collected from the mining sector was 2.1%, 0.71% and 0.70% of the total government revenue, in the 2014, 2015, and 2016 fiscal years respectively (EEITI, 2018 and EEITI, 2016).

The contribution to the government revenue from the mining continued to decline at 0.6% in the 2016 fiscal year. Figure 5.11 shows the tax revenue collected by the Ministry of Mines from 2013 to 2017 fiscal year (EEITI, 2018)

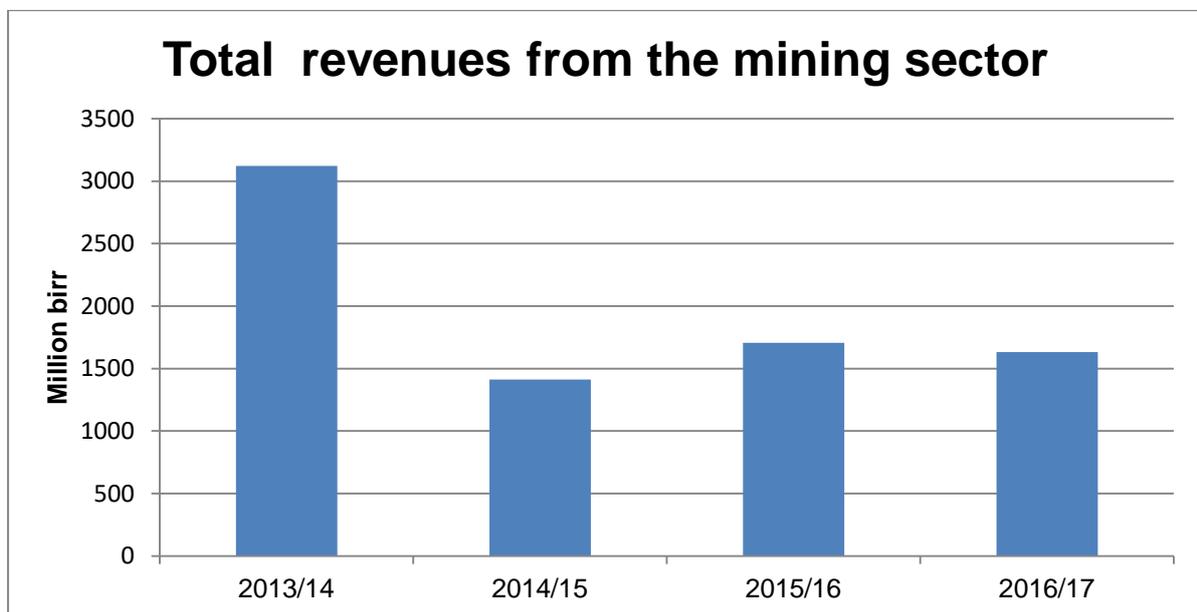


Figure 5.11: Total tax revenues from the mining sector.

Source: EEITI ( 2016 and 2018)

Gold has remained the major commodity in Ethiopia, contributing over half of the total tax revenues collected from the mining sector as shown in Figure 5.12, followed

by the cement sector. In January 2016, a total of 170 licenced companies were engaged in exploration and development of gold, with 51% of the licences issued to foreign firms and 21% to the joint ventures (foreign and locals) (East African Mining News, 2017). In 2016 fiscal year, gold contributed \$47 million of the total \$58 million revenue which is equivalent to 1 323 million birr (EEITI, 2018).

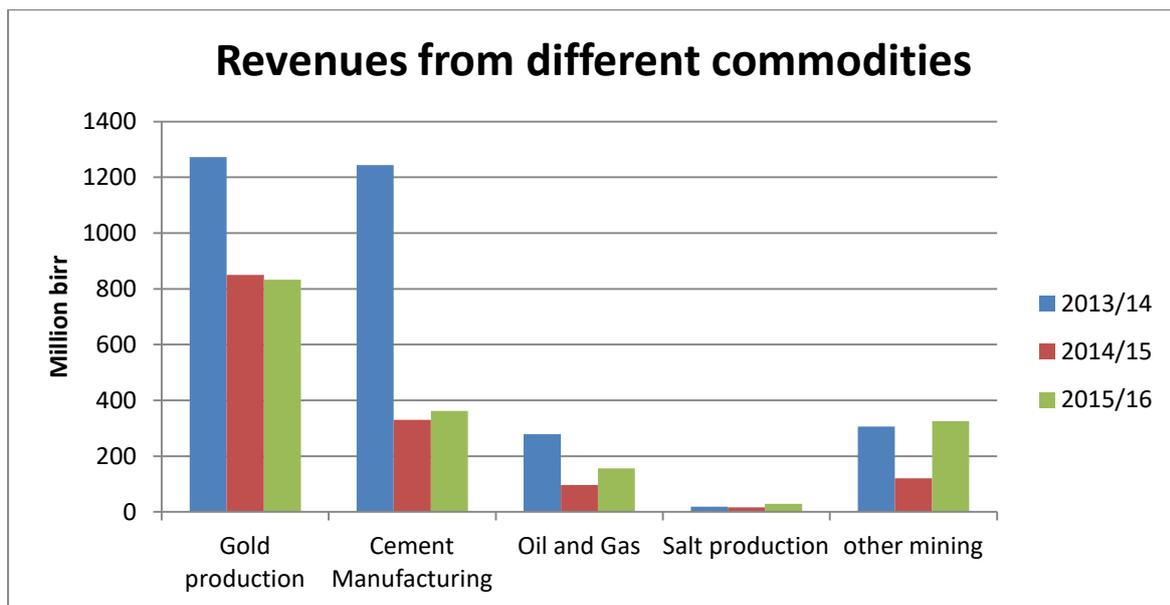


Figure 5.12: Tax revenues from different commodities

Source: EEITI (2018)

The top five mining companies that had contributed significantly in the total mining revenues 2016 fiscal year are shown in Figure 5.13.

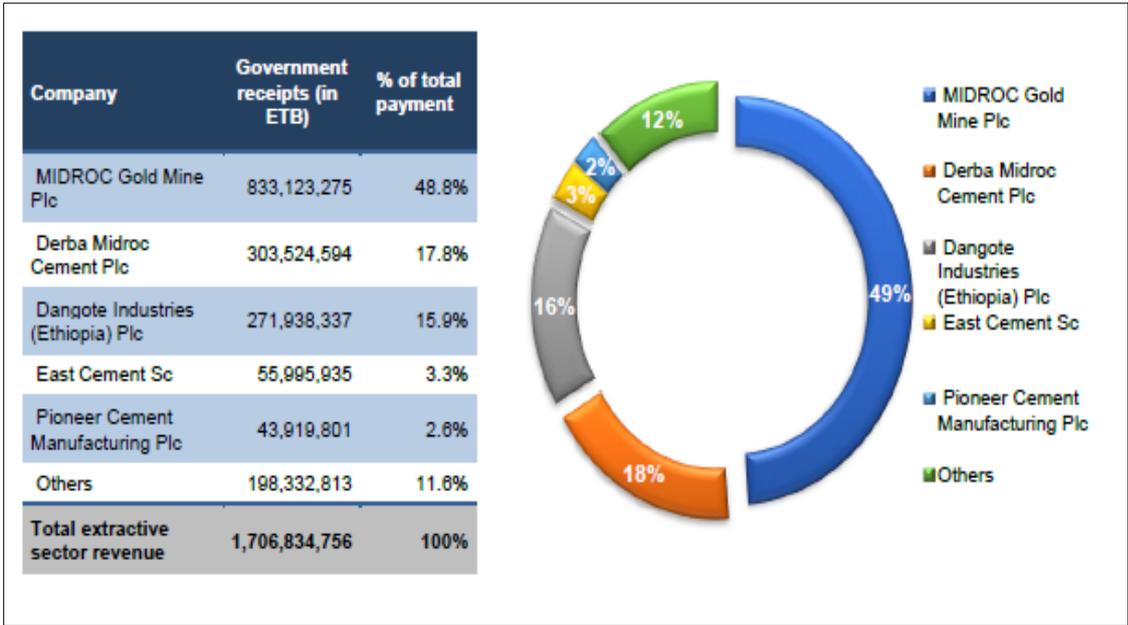


Figure 5.13: Top 5 companies' contribution to the government's revenue.

Source: EEITI (2018)

It is important to note the appearance of the foreign company, Dangote Industries (Cement), which was not present during the inception of the EEITI report in March 2015. Midroc gold mine Plc's contribution increased from 40% in 2013 to 48.8% in 2016 fiscal year (EEITI, 2018).

Government revenue for 2016 fiscal year indicates that different types of taxes are used to recoup profits from FDI activities as shown in Figure 5.14. The highest tax contribution comes from VAT, which contributed 33% of the total tax revenue collected, and Income tax, Schedule C (Mining) accounted for 28% of total government revenue. The government has collected less Income Tax and VAT as compared to what they have collected in 2013 fiscal year. This was due to the incentives being introduced in the sector to attract foreign or private investors (Addis Fortune, 2018).

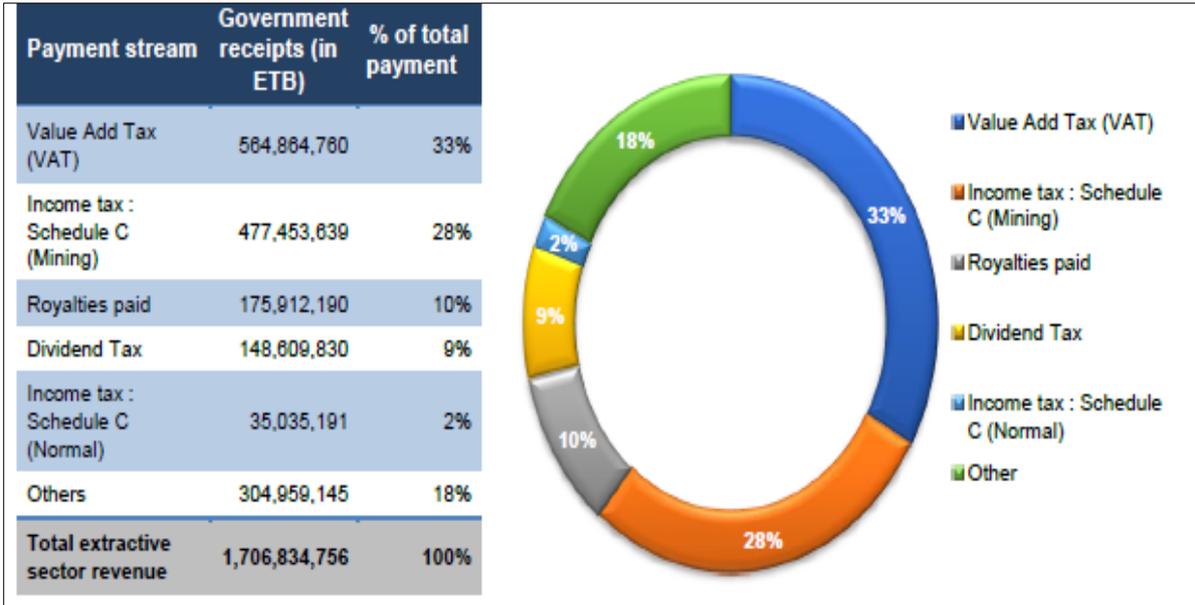


Figure 5.14: Payments received by the government from the mining sector.

Source: EEITI (2018)

In 2013 fiscal year, custom duty payment was part of the top five payments collected, and contributed 6% of the mining revenue; however 2016 its contribution was insignificant. The government used to charge a “signature bonus” which in 2013 it accounted for 6% of mining revenue. Royalties collected from the sector increased from 6% in 2013 to 10% in 2016 (EEITI, 2018).

Gold was also the leading exporter in the mining sector, however its contribution to the export earnings of the country has been declining. In 2016, gold accounted for 10% of the total exports as compared to 19.1% in 2011 (Bekele, 2018). Export revenue from cement increased by 47% to \$25 million in 2017 from \$17 million in 2016 falling short of the set target of \$42 million (Asnake, 2018). Tantalum and Platinum accounted for at least 0.7% of the total exports earnings in 2016, and other commodities were considered insignificant (Asnake, 2018).

The total export earnings from the mining sector have been declining, from \$520.5 million in 2009 fiscal year to \$49 million in 2018 fiscal year as shown in Figure 5.15.

The export earnings collected in 2018 fiscal year was the lowest earnings recorded in Ethiopia as well as the other East African countries in decades. The decline was caused by some mining operations which ceased production due to shortage of foreign currency and unrest in the mining areas (Gerieselassie, 2019). Illegal mining and contraband trade of minerals also contributed to the decline from the sector. During the GTP II, the government projected a growth in mining export earnings using 2014 as a base year (National Planning Commission, 2016). However, comparing the actuals and the projected export earnings, the vast difference is noticeable.

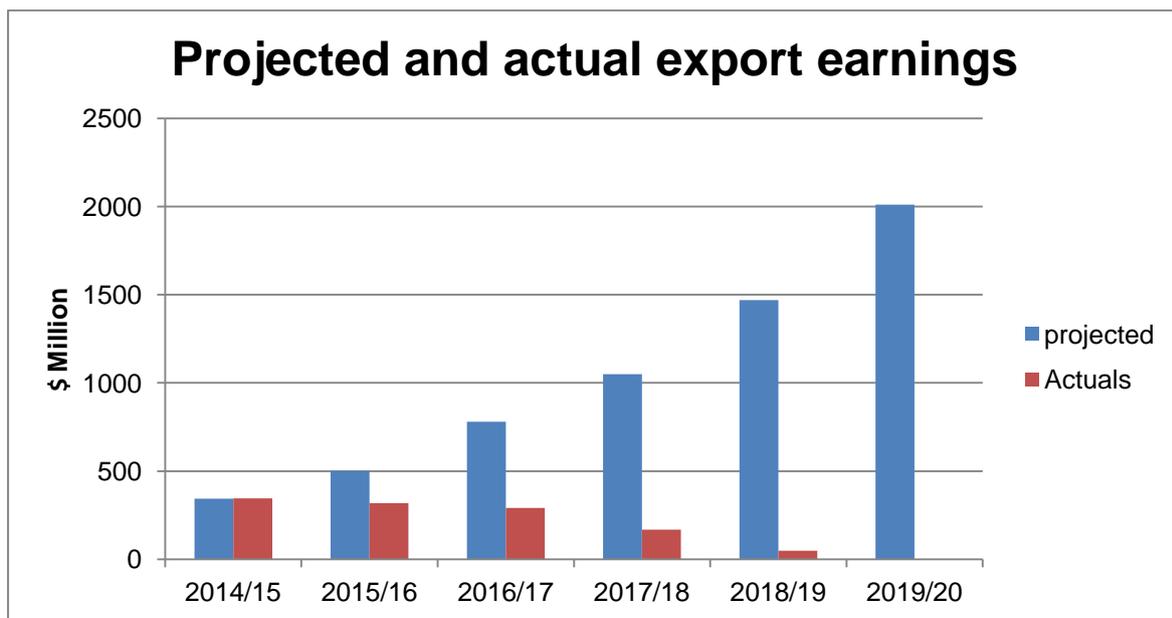


Figure 5.15: Actual and Projected mining export earnings

Source: National Planning Commission (2016) and EETI (2018)

The mining sector's contribution to the GDP indicates that the sector is not growing despite the government's effort to attract investors. According to EETI report (2018), between 2010 and 2014 fiscal years the mining sector's GDP contribution declined from 10.8% to 0.8% due to economic challenges that affected the industry during the period (as shown in Figure 5.16). The mining sector in Ethiopia has also show a

negative growth although a recovery of 3.3% was recorded in 2016 fiscal year compared to the 25.6% reduction in 2015 (Bekele, 2018).

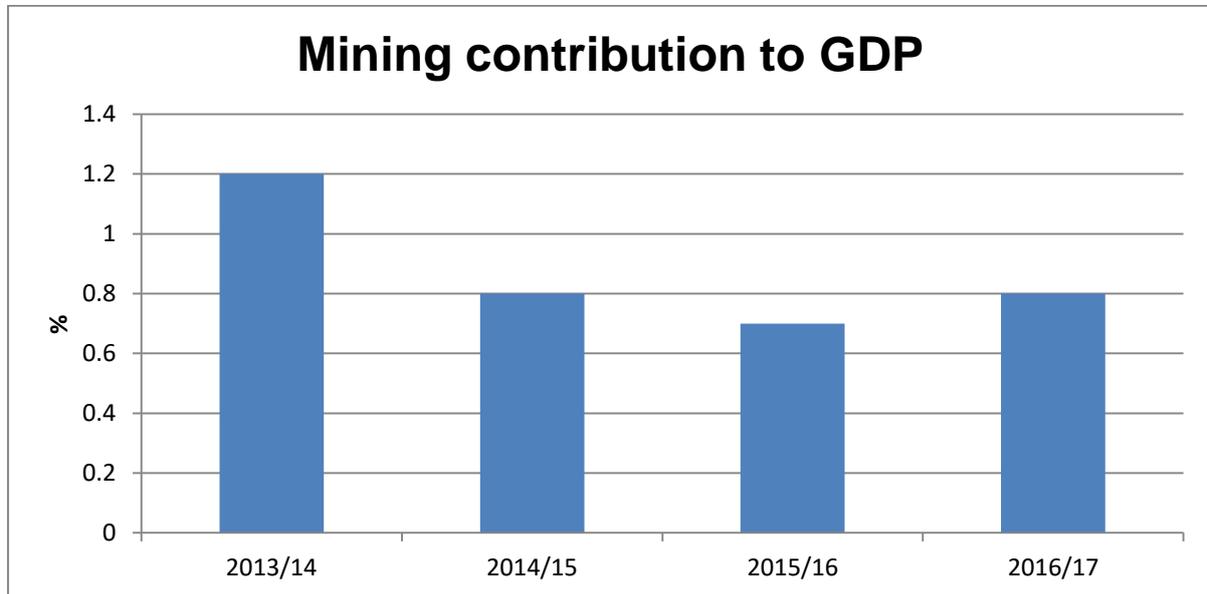


Figure 5.16: Mining sector's contribution to the GDP.

Source: EEITA (2018)

### 5.3.6. Domestic and foreign mining operations and projects

- **Gold mining**

Ethiopia has extensive artisanal mining of placer gold which covers about 60% of the nation's gold output. This type of mining is conducted by the local people and produces close to a million tonnes (Mt) per year and exports of about 9 t of gold per year. In the 2017 fiscal year, artisanal mining has contributed over \$91 million in terms of foreign currency earnings (Tibebu, 2017).

Artisanal mining is labour intensive and can be less productive if not assisted with modern technology. Artisanal mining is not limited to gold only, it also occurs in

the opal and gemstone commodities (Mining Review, 2017). The challenge that the Ministry of Mines raised was that the sector is exposed to contraband export.

The gold is supposed to be sold through the NBE, however the expected gold is not supplied because of illegal smuggling of gold out of the country. This smuggling is encouraged by difference in pricing between the black market and the bank (Ministry of Mines Petroleum and Natural Gas, 2017). In response to the smuggling, the bank has been making efforts to provide the best prices to traditional miners, and to ensure the increase of bank accessibility. The government has a plan is to transform artisanal scale-mining into small-scale mining in the near future to avoid conflicts with large-scale mining (Ministry of Mines Petroleum and Natural Gas, 2017).

Currently there is one large-scale gold mine operating in Ethiopia which is the Lega Dembi primary gold mine. This mine was transferred from public to private ownership in 1997 and started production in 1998. The mine is owned by Midroc Gold mine, which is an Ethiopian and Saudi Arabian company and is situated in the Guki Zone of Oroma region as shown Figure 5.17. Lega Dembi gold mine produces an average of 3.5 to 4 t of gold per year and is one of the largest gold mines in Africa in terms of production (All Africa, 2018).

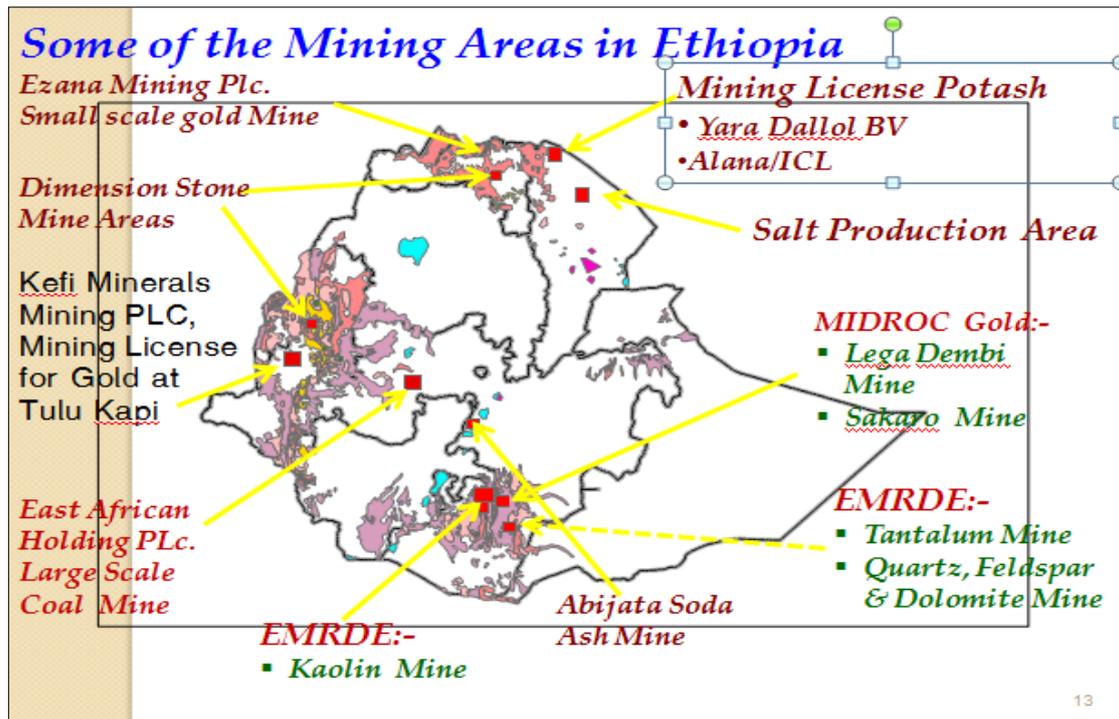


Figure 5.17: Mining areas in Ethiopia.

Source: Abera (2016)

Lega Dembi has been operating under Midroc Gold mine for 20 years, which is the mining period the company was given when awarded the licence. During the first ten years, the company extracted 34 000 kg of gold from the mine, earning close to \$0.5 billion. Over 3.5 billion birr in taxes and royalties have been collected by the government, and the mine employs over 1 300 of Ethiopian citizens. In the first three quarters of the 2017 fiscal year, Lega Dembi extracted 3 800 kg of gold which was contributed largely to gold exports revenue (All Africa, 2018).

In April 2018, the government renewed Lega Dembi's mining licence with an extension of ten years which has fuelled anger amongst local communities. As a result, the local community protested against the renewal of the licence which resulted in the government suspending the mining licence renewal (Fortune, 2018). According to Fortune (2018), the protestors alleged that the company was

disposing chemicals within the surrounding area and causing environmental pollution. As a result, the 2018 fiscal year experienced a major decline in export earnings since the majority of export came from the Lega Dembi's mine (News Business Ethiopia, 2019).

The company discovered the gold deposits 3 km from Lega Dembi in 2008, in the Sakaro area, and the government awarded the company ten year mining agreement. The company also holds two exploration licences, the Adola-Lega Dembi exploration licence which is located near the mine and the Metekel exploration licence, located 600 km northeast of Addis Ababa (MIDROC, 2014). There are about 100 companies involved in gold exploration in Ethiopia, however Midroc Gold has dominated the industry.

The second large-scale gold mining deposit in Ethiopia is owned by a London based company, Kefi Minerals Limited. The project (Tulu Kapi) is located in Ethiopia's largest gold region in Oromia, west of Ethiopia as shown in Figure 5.17. Tulu Kapi was previously owned by an Italian company, Nyota Minerals Limited, which acquired the licence from 2009 to 2013 and previously it was owned by a Canadian company in 1996 to 1998 (Kefi Minerals, 2018a). Prior to that, there were other four companies that were involved in the project of Tulu Kapi. The multiple ownership of the Tulu Kapi project was due to its modest historic grade of 2.73 g/t indicated and 2.03 g/t inferred resources that made mining almost uneconomic. Wars and civil uprising, the collapse of the gold price in the late 1990s, as well as the overcapitalisation of the project in times of gold price instability were some of the modifying factors that made it difficult to mine (Mining Technology, 2018).

Kefi Minerals acquired 75% of Tulu Kapi gold deposit in 2013, and in 2015 acquired the remaining 25% which was converted to a large-scale gold mining licence. Upon the granting of the 20 year mining licence in 2015, the government became entitled to a 5% free carry interest as stated in the Mining Proclamation regulation. The government also granted full permits for the development and operation of the project (Aregay and Granitzio, 2017). The project indicated probable ore reserves of 1.05 million ounces and mineral resource of 1.72 million ounces of gold (Aregay and Granitzio, 2017).

The Tulu Kapi gold mine planned an annual production rate of 140 000 ounces from its open pit for the first seven years, and forecasted a total gold production of 980 000 ounces. There is also a potential to advance to underground mine in future to access high grade resources of 1 million ounces which is under the open pit along the strike (Kefi Minerals, 2018b).

Production is planned to commence in 2020 and according to the Kefi Minerals (2018c), the operation will be the first modern large-scale mine in Ethiopia. The mine plans on having a workforce that will be predominantly Ethiopian i.e. 95% of the workforce will be local. The local will be upskilled by following specialized training program. The remaining 5% of the workforce will be foreign nationals. The government has invested \$20 million funding to construct all off site infrastructure such as power, and roads that will assist in smooth operation of the Tulu Kapi mine (Kefi Minerals, 2018b).

Ezana Mining, which is an Ethiopian company, owns gold and base metal exploration licences over Northern Ethiopia in Tigray region. This company has also built a gold processing plant in the outskirts of Shire. In 2012, the company

has signed a ten year exploration agreement with the Ministry of Mines. In 2017, the company started trial mining at Terakmiti mine, in the location is shown in Figure 5.17 (Ezega, 2017). The mine has resources of 0.906 million ounces of gold and 453 500 t of copper and during the trial mining, the company produced an average of 4.5 kg of gold per day (Ezega, 2017).

Due to local capacity constraints, the company is working jointly with three foreign companies, Tigray resources from Canada, Shandong from China, and Newmont Goldcorp from the USA, for different exploration activities for gold and base metal, to boost exploration and ultimately mining. Ezana mining trains at least fifteen students per year from local Mekele University with practical applications in mineral exploration and analytical laboratory skills. The company also provides technical training to local artisanal gold miners in collaboration with the government (Ezana, 2014).

- **Tantalum mining**

Kenticha tantalum mine is situated in the Southern part of Ethiopia in the Oromia region. The mine was operational from 2000 to 2013 and is owned by the Ethiopian Minerals Petroleum and Bip Fuel Corporation. The mine was established in 2000 on the back of 116 Mt of tantalum reserves. It had a plant with a capacity of 17 000 t of tantalum concentrates for export market, mainly to China. During operation, the plant produced 200 tonnes per day (tpd), half of its installed capacity. Due to aging equipment and financial constraints, the actual operating efficiency of the plant dropped with time (Malta and Oliviera, 2016).

In its peak, the mine generated revenues of about \$20 million per year from the export of tantalum. In 2013, the government's effort to privatise the mine failed. The mine has not been in operation since November 2017 due to the allegation of the mine's tailings dam exceeding the capacity and therefore polluting the surrounding area. As a result, the local Environment Protection Authority suspended mining activities (Mzamo, 2018). Thereafter the mine has been carrying out rehabilitation and corrective actions to address the allegations levelled against them (Mzamo, 2018).

In January 2018, the government announced a tender of the tantalum mine again in joint venture arrangements, whereby four large foreign mining companies showed interest. Trucksis Enterprise Inc. of Luxembourg was the highest bidder amongst the other companies (Gebregziabher, 2018). The Ministry of Public Enterprise in Ethiopia withdrew the tender in May 2018 due to local unrest regarding the environmental issues. The locals demanded the handover of the mine, and extraction of sites to indigenous people. The mine was also looted by unknown parties, there was also a theft of 2 t of tantalum concentrate at an estimated value of \$72 000 from a stockpile during the shutdown (Bekele, 2018). Apart from the Kenticha mine, in 2014 and 2015, artisanal miners extracted tantalum and gained revenue of \$9.6 million (Gebregziabher, 2018).

- **Potash mining**

Potash in Ethiopia has also been identified to have huge potential for investment, based on the exploration done. The biggest deposit is in the Afar region, North East of Ethiopia known as Danakil Depression. The area is very hot with the temperature exceeding 50 degree Celsius (Mining Technology, 2018).

Exploration work was conducted by various local and foreign companies. The exploration revealed the presence of two ore bodies, which are the Crescent and Musley ore bodies. The ore reserves in the Crescent ore body have been estimated to be 10 to 12 Mt with a cut-off grade of 25%, and a possible recovery of 3 Mt (Mining Technology, 2018).

On the other hand, the Musely ore body has the largest potash deposit with proven ore reserves estimated at 66 Mt, and probable ore reserves estimated at 32 Mt (GSE, 2010). However, with the on-going exploration and research, potash has estimated resources of between 12 billion to 14 billion tonnes. The following international companies are operating in the Danakil Depression region for potash and related salt minerals: Circum Minerals, Danakali in Eritrea, Yara International, and Israel Chemicals which acquired Allana potash project. Figure 5.18 shows the potash mining companies location map and their respective reported resources (GSE, 2010).

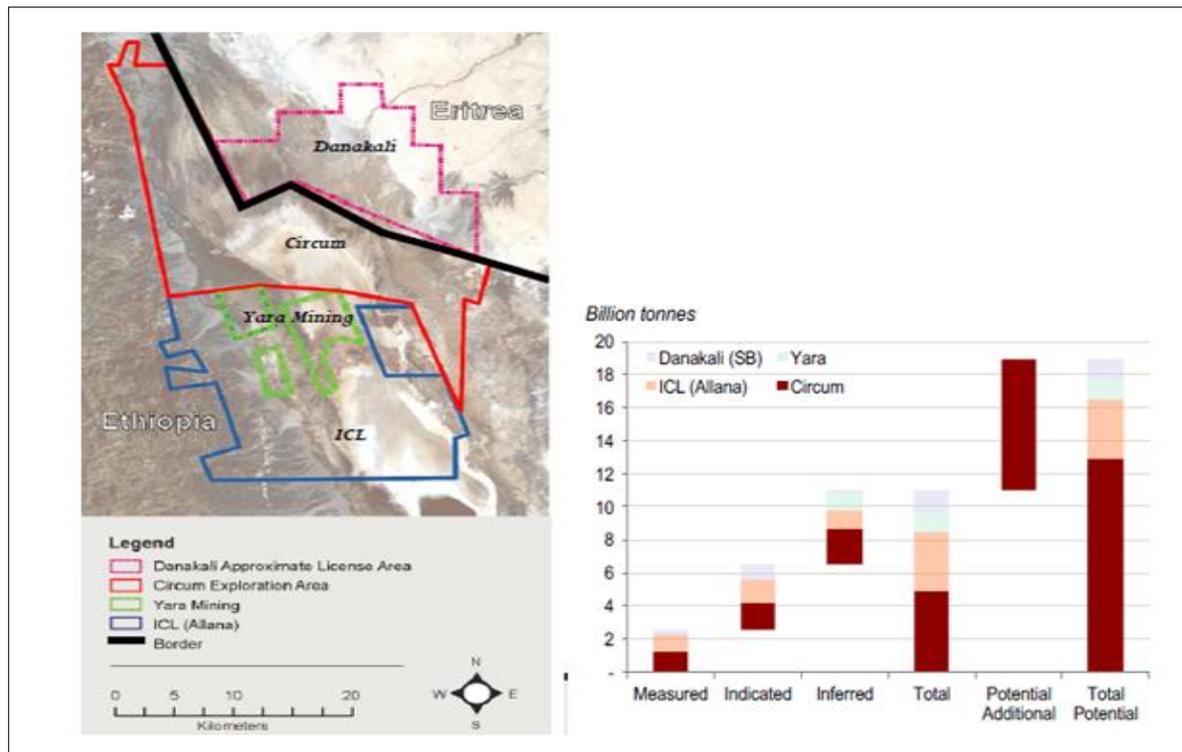


Figure 5.18: Potash mining companies location and their respective reported resources. Source: Yara International (2017)

The British company, Circum Minerals was awarded with a mining licence in March 2017 to extract potash minerals in Danakil Depression. The licence is valid for a period of 20 years with the access of over 4.9 billion tonnes of potash resources. The Circum project became the second largest resource base among global potash projects. The company has been exploring potash in the region since 2008 and in 2013 it acquired 70% interest in Danakil Potash project from AgriMinco Inc. In 2014 Circum acquired the remaining 30% (Vuuren, 2017).

Circum has planned to establish a production plant that is expected to produce 2.75 billion tonnes of potash, in which 2 Mt will be of potassium chloride and the rest will be potassium sulphate (Vuuren, 2017). The production is planned to commence in 2022, and the supply will be channelled to local market and export market. This will occur despite the decline of the potash price over the years,

from \$570 in 2013 to \$215.50 per tonne in 2018 (Endeshaw, 2017). Solution mining will be used since the depth of potash is 200 to 300m, which means that underground access won't be required. To support this type of mining, water exploration was conducted and the results showed that there was sufficient water for the project despite being located in the desert (Endeshaw, 2017).

Another foreign company, Yara International from Norway acquired a mining licence in November 2017 for the development of Dallol potash mine. Yara International owns 51.8% of the project, the other owners are Liberty Metals and Mining Holdings and XLR Capital own 25% and 23.2% respectively. A production capacity of approximately 600 000 t of Sulphur of Potash has been planned for over a period of 20 years. Dallol mine will also use solution mining to extract minerals and will supply local and export markets (Yara International, 2017).

One of the failed projects in the Danakil region was the potash project acquired by the Canadian Allana Potash Company. Allana prospected the potash deposit for more than 6 years and discovered 3.2 billion tonnes of potash. In 2013, the government granted Allana a mining licence to enable the company to mine potash. However, due to the commodity market crash that has affected the potash price, the company failed to raise the required investment capital to finance the project (Bekele, 2017c). As a result, in 2015 Israel Chemicals limited bought the Allana potash project. Consequently, due to failed proper communication channels between the government and the two companies, the government refused to transfer the mineral rights from Allana to Israel Chemical Limited and then later terminated the project.

According to Ethiopian Revenues and Customs Authority tax evasion regarding VAT tax arrears and capital gain tax for the acquisition of the project was the main issue. The government has taken over the Potash project and is in the process of finding a new partner to develop the mine (Bekele, 2017c). BHP Billiton also abandoned the potash project in 2012 after three years of exploration (Bekele, 2017b). Besides the large scale development of Potash mining, artisanal mining operations continue to cut and transport halite (by-product of potash) by camel train to the salt market in Makelle (Goode and Anderson, 2017).

- **Limestone mining**

Due to the growth in the construction sector, there has been an increase in the demand of cement. Infrastructure development is the main driver of the cement demand as well as local housing projects (Hailemeskel, 2017). As a result of the demand, there have been new entrants in the construction market, which include Dangote Cement (a Nigerian owned cement company), Habesha Cement and the Ethiopia-Saudi owned company Derba MIDROC Cement (Hailemeskel, 2017).

Ethiopia is rich with limestone reserves with estimated reserves of 223 Mt. The Dangote, Habesha, and Derba cement plants have the capacity of producing 2.5, 1.5 and 2.5 Mt per annum of cement respectively. There are about 20 more cement production companies in Ethiopia with production capacities of 250 to 400 tpd, with the exception of Mugher, Moseba, and National Cement (EEIT, 2018).

The foreign company, Dangote cement is the market leader of the cement sector in Ethiopia and was commissioned in 2015. The government has issued a 100 years limestone mining licence as well as a mining licence for basalt, silica sand, clay, gypsum and pumice. The company imports coal for clinker and packaging bags from SA and Egypt respectively and the rest of raw materials are sourced locally. More than 2000 local citizens have been employed and the company has also created about 5000 indirect jobs (Global Cement, 2018).

The growth of cement market in Ethiopia has fuelled the demand for coal. Ethiopia imports over 750 000 t of coal annually, of which more than three quarters is used for cement. Rificot in Kenya and HC trading Plc won the bid in 2017 to supply 700 000 t of coal (600 000 t and 100 000 t respectively) to the cement industry (Fortune, 2017).

- **Coal mining**

The country has an abundance of coal reserves. There is a large coal deposit in Yayo district, South West of Ethiopia. The exploration results showed an estimation of 230 Mt of coal in the area with high quality and high calorific value. The untapped deposit has the potential to produce 300 Mt of coal per annum for several decades (Assaba & Wakuma, 2016). As a result, the government has planned to construct a thermal power plant in the Oromia regional state (Suleman, 2016).

In the Oromia region, there is also a large-scale coal mine operating which is owned by East African Mining Holdings. The company acquired the licence in 2005 and currently operates an open cast mine and supplies coal to cement

factories, textile manufacturers and also as a source of energy. Due to an increase in coal demand in Ethiopia, the mine also planned to develop an underground mine as studies show large reserves lying beneath the open cast (East African Holdings, 2018).

- **Iron ore mining**

The first large-scale iron ore mine development in Ethiopia is an Italy-Chinese joint Venture company, Sekota Mining. Sekota secured a large-scale mining licence in August 2017, after five years of exploration work. The resources are located in Sekota and Ziquala West of Wag Himra Zone in Amhara region (Bekele, 2017a).

Total mineable reserves of 29 Mt of iron ore with 24 Mt of contained iron ore were explored. The company has planned to build an iron ore processing plant that will manufacture sponge iron to supply local factories as well as the export market. The steel industry in Ethiopia has expanded, with the upcoming Sekota Mining; the product will reduce the importing of raw materials by the steel companies and augment the growth of the manufacturing sector. The country currently imports 1 Mt of iron annually (Content, 2017)

- **Other minerals**

There are several Chinese mining firms involved in mineral exploration projects in Ethiopia. As such, the Chinese Geological Survey has been jointly undertaking geophysical studies with the Ethiopian Geological Survey to identify minerals deposits such as gold, silver, copper and iron ore in South West of Ethiopia. The

Chinese government has funded the project and provided experts and equipment due to lack of such resources in Ethiopia (Bekele, 2017a).

### **5.3.7. Investment risks and challenges in Ethiopia**

- **Political risk**

From 1991, Ethiopia maintained a stable environment to attract investors. This stability changed mid-November 2015 when social unrest erupted. Nonetheless, in mid-November 2015, violent protests destabilised towns throughout Oromia and security forces were deployed to quell the unrest. The Ethiopian government halted the expansion plan in January 2016, meant to transform the city of Addis Ababa into an economic trading hub, due to ethnic unrest in the Oromia region. This was done to give government an opportunity to engage with the Oromia communities and find a peaceful resolution to the ethnic unrest (Horne, 2017).

The prolonged ethnic unrest led to public protests where angry protestors ran amok burning and looting factories in Oromia including foreign owned entities. The Ethiopian government declared its first state of emergency in October 2016, which lasted until August 2017. During July 2016, continued disputes over a lack of identity and administrative constraints resulted in a prolonged strike, where citizens confronted security forces in Gondar. This continued into 2017 and spread to Oromia, Somali and Amhara regions where acts vandalism towards foreign owned property and government buildings took place. In the midst of protest, more than thousand protestors were killed since November 2015 (BBC, 2017). The protest consequently resulted in a 20.1% decline in FDI (to \$1.2 billion) in the six months of the 2017 fiscal year (Manek, 2017).

Prime Minister Hailemariam Desalegn Boshe was forced to resign in February 2018, and thereafter the second State of Emergency was called for by government. The new State of Emergency empowered security forces to arrest and detain any activities (carried out by citizens) deemed suspicious. These powers meant foreign nationals would be arrested or detained without a warrant or notifying the respective Foreign Embassy (Schemm, 2018).

The violent was caused mainly by limitations in land distribution and the lack of transparency in resource allocation. Migration out of the troubled Amhara region increased as Tigrayan people returned to their homeland in Tigray. January and February 2016 marked a dark period in Ethiopia where tribal wars led to massacres and mass infrastructural damage as Nuer and Anuak tribes fought against each other (Lilley, 2016). Business and trade were dealt a massive blow in the Somali and Oromia regions due to violent attacks that escalated in October 2017 (Horne, 2017). It is important to note that the majority of mining and exploration activities are located in the Oromia region.

In an effort to control the situation, the Ethiopian Government shut down internet, cellular and phone services. This measure disrupted the flow of communication between foreign embassies and their citizens. The country's sole service provider, Ethio is plagued with poor infrastructure and constant disruptions to services, thereby hindering business activities. This made the service provider unable to meet the increased demand brought about by economic development (Adepoju, 2018).

- **Economic risk**

The Ethiopian local currency was devalued in September 2010 and October 2017 due to acute foreign reserve shortages and hyper-inflation. Exorbitant transportation costs, bureaucratic delays, and prolonged import and export delays are the main challenges faced by businesses in Ethiopia. The Birr lost 98% of its trading value against the US dollar between August 2010 and February 2017, including 20% devaluation in September 2010 and thereafter 15% devaluation in October 2017 (U.S. Department of State, 2018).

The devaluation of the Birr caused the NBE minimum saving rate to increase from 4% to 7%, limiting the loan growth rate of commercial banks to 16.5% (Trading Economics, 2018). In an unprecedented move, the government instructed all banks to transfer 30% of all foreign currency earnings to be moved to the National account to assist in government fiscal programmes (U.S. Department of State, 2018).

Reserves of foreign currency have been critically low in Ethiopia, by July 2017, they amounted to \$3.2 billion, enough to cover 21 months of imports. Main contributors to the depleted foreign currency levels included high government expenditure, reduced earnings from coffee, and low commodity prices. Businesses also struggled to obtain foreign currency for trading due to long delays in the application process of obtaining foreign currency (which can take up to eight months). This resulted in slower business growth and business insolvency (US Embassy, 2018).

Due to a lack of foreign currency, investors have been unable to repatriate profits with delays reaching up to two years in some instances. Companies have been forced to come up with alternative means of sourcing inputs locally and partnering with export agencies. Despite these challenges, growth occurs, but at a slow rate and it is inhibited by foreign currency shortages (U.S. Department of State, 2018). As a result of shortage of foreign reserves currency had a negative impact on the FDI inflow in 2018 (World Investment Report, 2019).

Phillips (2018, p.1) writes that “*inconsistencies in tax assessments and excessive penalties are a challenge when conducting business in Ethiopia*”. Tax administration and law are fundamental aspects that investors must take cognisance of before investing in any country (Phillips, 2018).

In order to make the process of acquiring a business licence easier, the EIC has set up a platform that makes the process more simplistic. A business licence can take up to one day to process with the new system (Addis Fortune, 2018). The World Bank (2018b) highlighted that the process of starting a business in Ethiopia requires 12 procedural steps and a processing time of 33 days. This delay is unfeasible and has left Ethiopia in position 161 out of 190 countries in terms of business registration efficiency. Although the current process is manual, steps are being taken by the Ministry of Trade to digitize the process in the foreseeable future. Yearly business registrations were also scrapped in an effort to ease the regulations around business registration processes.

- **Social risk**

The youth employment rate in the country rate is very high with an estimated percentage of 25% to 50% for the 15 to 24 year old age group (Addis Standard,

2018). This has resulted in instability and uncertainty in the cement industry. Due to the high rate of unemployment and unrest, in 2017, the government ordered the cement makers to hand over control of some parts of their mining (pumice, sand and clay) to local young people. However Dangote cement raised the point that mismanagement of mining infrastructure could lead to a total breakdown of their business since it was not part of the initial agreement when the government awarded them with a mining licence (Addis Standard, 2018). The foreign company even considered to shut down their business if the government does not intervene.

During the 2016 unrest, the Dangote factory and the plant were among several foreign businesses that were attacked where the trucks and the machineries were torched (Addis Standard, 2018). This disagreement hampered the company to invest more in the country. It caused Dangote to halt its plans to expand so that they can double the production capacity (Bloomberg, 2017). Despite the government's promise to provide support and protection required by investors the country manager of Dangote cement and two colleagues were murdered near Dangote factory in Mughher during 2018 (Manek, 2018).

Another incident occurred at an exploration site owned by Web Gemstone Mining plc. in June 2018. The site was overrun by a mob estimated at between 300 to 500 persons and fortunately the employees and service providers were safely evacuated with only two employees suffering minor injuries (Ruiz, 2018). The infrastructure that was breached on site included the residential camp and some equipment and instruments which were looted as shown in Figure 5.19. Illegal

miners occupied the mining area, some were armed and they outnumbered police officers posted on site. (Gemfields Group Limited, 2018).



Figure 5.19: Destroyed infrastructure and invaded mine by the protestors.

Source: Gemfields Group Limited (2018)

- **Human resource development risk**

Although labour remains readily available and inexpensive in Ethiopia, human capital shortage is also one of the major problems in the mining sector. Mining is a newly developed sector in the country and the lack of skilled workers especially in the field of geology, mining engineering, and mineral economics is an issue. FMI added that the lack of skilled manpower has caused production costs to soar. Due to lack of skilled manpower, equipment life span reduced because most local operators are not familiar with the equipment and technology used (Hailemeskel, 2017).

As a result, skilled labour costs are extremely high because of heavy reliance on expatriate personnel. The majority of the mines and cement factories are managed and run by international experts as opposed to locals (Hailemeskel,

2017). According to the World Bank (2014) lack of mining technical and vocational education centres are the factors creating skill shortage challenges to the mining sector.

In addition, the largest Potash deposit in Danakil Depression requires skilled manpower for exploration since the entire area is not potash. Experienced drillers and geologist are required to perform technical work to understand and analyse the core samples. Therefore a company such as Yara Dallol utilised international consultants for such and later trained some local geologists (Bekele, 2017). Therefore the government need to realise that human capital in the mining sector is a prime asset (Hailemeskel, 2017).

Geochemical laboratories also pose a challenge for mineral exploration in Ethiopia. Geochemical laboratory at the Geological Survey of Ethiopia is not certified with ISO-17025 International Standards Organisation. As a result, mineral samples are still sent abroad for test which delay the task (Tibebu, 2017).

- **Infrastructure risk**

Lack of nearby infrastructure including electricity and other support services was also a challenge that compels the investors to develop private infrastructure with limited to no use by communities. Due to lack of electricity in the Danakil area, the project depends on the generators which mean diesel supply has to be constant. Danakil is remote, there was not internet and mobile connection this means that investors have to install a Very Small Aperture Terminal for better communication. Therefore the investors need assurance from the government that the proper infrastructure will be in place and on time (Bekele, 2017b).

Electricity demand outpaces the supply as new hydropower dams struggle to produce at full capacity. Power transmission lines and distribution facilities are inadequate to meet the demand. As a result, the mining companies experienced shortages of power which hinders production (US Embassies, 2018).

- **Legal and environmental risks**

In the case of exploration and mining rights, the government of Ethiopia has in many cases granted licences to different holders for different minerals on the same area. Allowing different explorers to explore for different minerals in the same area can present challenges. For an instance, if a large deposit is found by one explorer, others who may also be exploring that area for different minerals must be accommodated which may cause conflict. As such, the potential for uncertainty and difficulty in administering such titles may arise. Such activity contradicts the draft mining policy which states that “*the right to explore and mine for all minerals in Ethiopia will be administered by a system of exclusive licences*” (World Bank, 2016:p.21).

According to the World Bank (2016), exclusivity means that two or more companies cannot be granted the same type of licence for the same mineral over the same area, but it is possible for two or more companies to be granted licences for different minerals in the same area as stated by the mineral proclamation regulation. However, the challenge investors’ face with such is the matter relating to the responsibility for environmental degradation, infrastructure and the economic damage caused by one mining operation intruding on another (World Bank, 2016).

The other challenge faced by investors involved in the Potash project in Danakil is the severe climatic conditions where the temperature can go up to 50 degrees Celsius. Therefore, during the hottest hours of the day they halt production and this reduces the productive time in the projects and affects efficiency (Yara International, 2017).

#### **5.3.8. Government interventions to attract investors in the mining sector**

Ethiopia requires significant inflows of foreign resources to meet its GTP II targets. As such, the government has put maximum effort to transform the sector in a way that they reach the set targets. Infrastructure development was a major obstacle in the development of FDI in Ethiopia. The government's actions towards infrastructure development resulted in a positive response from FMI.

With regard to the mining sector whereby the choice of location is determined by the mineral location, in most instances, the mineral location has no developed infrastructure. In other sectors, majority of firms are located near Addis Ababa for easy access to the market. In order to address this, the government has mounted an economic infrastructural development program so that the investors can locate their operations where they see it will be profitable, be it in the remote areas (National Planning Commission, 2016).

The program which was part of GTP I focused on the expansion of electricity capacity and distribution, road length, water and sanitation supply, and telecommunication services across the country (Henok, 2012). In 2012, infrastructure connections to neighbouring countries, including transportation and

power links, were developed to increase the high chances of attracting FDI in the country (Henok, 2012).

Road networks with neighbouring countries like Sudan and Kenya have been fully established. This has strengthened the regional market network between the countries and also created an opportunity to increase FDI. In 1995, Ethiopia's road network including gravel roads stood at less than 23 000 km. The road network grew to over 49 000 km in 2010 and in 2016 it reached 110 000 km (National Planning Commission, 2016). The government planned to reach the total road length of 220 000 km by the end of GTP II.

A rail network has also been established to connect markets within Ethiopia with other regions and the viability of regional routes is under consideration (National Planning Commission, 2016). The Ababa-Djibouti railway is expected to start transporting goods in January 2019 which will assist in reducing delays and congestion in Djibouti port (Sisay, 2018). Attention has been given to the minerals sector as well whereby portion of the network will be geared towards the facilitation of exports such as the exports of potash via Tadjoura port (Amdetsion, 2015).

Generating and expanding hydroelectricity was also a key in attracting mining FDI. The country also exports electricity to Kenya from the Omo river hydro-electric dam (Amdetsion, 2015). In 2002, Ethiopia's power generating capacity was as little as 500 megawatts (MW) and since then over six hydroelectric dams have been completed and the power generation stood at around 5 000 MW (Ministry of Finance and Economic Cooperation, 2017).

The project to construct over 6 000 MW hydroelectricity at Grand Ethiopian Renaissance Dam (GERD) is underway and the project is 65% complete. This project is the largest single hydroelectric project in the world, since the Chinese Three Gorges dam, and it will assist the mineral sector and other sectors with low cost electricity (Christianson, 2017). However, the construction of GERD is facing political and financial challenges. The dam is constructed on the Blue Nile River which has caused disputes between Ethiopia, Sudan and Egypt. Sudan and Egypt rely on the dam for freshwater resources. Therefore, the success of GERD project lies on the negotiations between the three countries to ensure that all parties benefit. In the case of Sudan, the dam project offer new opportunity in terms of electricity supply. However, for Egypt there are no opportunities that will be derived from the dam (Global Times, 2019)

Due to financial challenges to complete the dam, Ethiopia has signed a deal with China Gezhouba Group Company and Voith Hydro Shanghai. These deals will assist in accelerating the construction of the project once the disputes have been resolved. The completion of the dam will ensure that the country meet domestic electricity demand and also produce a significant surplus of power for export (Global Times, 2019)

The government's support has been recognised by companies exploring for Potash in the Danakil Depression. The government has formed an infrastructure committee which comprises of the minister of transport, water resources and mines, in order to effectively engage with the companies and understand infrastructure requirements needed to operate effectively. Thus far the government has already built a network of

tarred roads from the Danakil region to the city of Makele, which is about 130 km, in order to assist the setup of potash companies in the area (Mining Review, 2017).

The government has also awarded a contract to construct a final stretch of the road that will be used to transport potash material to Djibouti railway, as well as the road from the Danakil region to the proposed new Port of Tadjoura (Mining Technology, 2018). The road has been constructed with a bearing capacity of 78 tons as opposed to the national standard of 58 tons (Tibebu, 2017).

The Ethiopian Electric Power Association is also in the process of installing and improving electricity in the area. Since electricity in the country is generated by hydroelectric systems, the companies admitted that the industrial tariff for power is extremely low. Companies are planning to use solution mining to mine potash, hence the importance of water to ensure success of the project. As such, the government has assisted the companies by providing them with information from their historical boreholes to assist in establishing a water programme (Mining Review, 2017).

The Geological Survey of Ethiopia is in the process of setting up a laboratory with necessary equipment and professional manpower so that it can be recognised by the International Standards Organisation for testing potash for mineral exploration. The Danakil Depression lies across the border of Ethiopia and Eritrea and the two countries were involved in war which has claimed many lives (Yara International, 2017). The companies conducting exploration in this area have admitted that the government has ensured high security throughout the exploration phases even though there were incidents of attacks from the Eritreans. The country has recently made peace with Eritrea after 20 years of war, the peace pact will benefit the mining

companies which export minerals (tax free) by using the Red Sea ports in Assab and in Massawa as an alternative to the Djibouti port (Otieno, 2018).

To develop the mining sector successfully, skills development and education is critical. The government has established the mining engineering programme at Unity University which received accreditation in 2012 (Assefa and Bienen, 2012). By the end of GTP II, the government has planned to increase the number of Technical and Vocational Education Training institution from 1329 to 1778 (National Planning Commission, 2016).

After the two states of emergency, the government compensated private investors for damages caused by the protestors (Horne, 2017). In the same month, the cabinet was reshuffled including new appointments of senior economic policymakers and the Prime Minister. The new cabinet has substantially intensified the implementation of GTP II policies by introducing the modern Public-Private Partnerships legal framework and governance reform. As a result, the NBE managed to assist mining projects by awarding them with loans (IMF, 2018). In 2016 and 2017 fiscal year, the bulk of loans went to the mining sector and utilities accounted for 32% of total credit (IMF, 2018).

In October 2017, the government devalued the Ethiopian currency to address the exchange rate overvaluation which was exerting financial pressure on exporting companies. According to the IMF (2018), the real effective exchange rate was overvalued by about 20% during 2016 and 2017 which resulted in foreign exchange shortages. The government has planned to maintain a flexible exchange rate to preserve competitiveness and facilitate export diversification (IMF, 2018). The devaluation of the currency was a necessary means to keep inflation low, and retain

foreign investment. The inflation that spiral out of control increases costs and diminishes profit margins, therefore discourages foreign investment.

Ethiopia partnered with Canada in 2003 to develop critical sectors including the mining sector. Canada is one of the G8 countries, and the most developed economic actor in global economy. Combined with the successful mining sector in Canada, the partnership offers more advantage to Ethiopia. The reason being that the partnership promotes potential Ethiopian companies looking to export products to Canada, it also introduces them to possible Canadian partners (MINEAfrica, 2017). This partnership also provides opportunities of knowledge and skills transfer by Canadian experts and technological crossovers. With regard to investment to boost the Ethiopian economy, the major target of Canadian investment in Ethiopia is the mining sector, and by the end of 2017, 13 Canadian companies were engaged in exploration with registered capital of \$6.5 million (MINEAfrica, 2017).

The majority of foreign investors in Ethiopia emphasised that corruption is minimal compared to other African countries and they did not pay bribes to the EIC (Addis Standard, 2018). With regards to slow communications, the Ethio Telecom is planning on partially privatising the company (US Embassies, 2018). The duty and quota free access into the US and European markets offers Ethiopian investors a good opportunity for profitable investment (Ministry of Finance, 2017).

#### **5.4. Summary**

Ethiopian government has identified the mineral sector as an investment opportunity that will result in a higher GDP and boost economic growth. Although there are challenges that are still unresolved, like the ethnic tensions and political unrest,

government is still taking steps to protect foreign investors' interests. The influx of FDI has led to economic growth where communities have been developed, jobs have been created and the GDP per capita has increased for the impoverished citizens.

Political unrest in Ethiopia has also led to the devaluation of the local currency, which was necessitated by the rising inflation. Chronic and acute foreign exchange shortages are a far more serious challenge. Companies often face long lead-times importing goods and dispatching exports due to logistical bottlenecks, high land-transportation costs, and bureaucratic delays.

The potential metallic minerals found in the Northern belt of the country include primary and placer gold and base metals. In the Western part of the belt also shows the deposit of gold, platinum, iron and base metals deposits. Lastly the Southern belt has the potential of minerals such as the gold, nickel, tantalum and chromite. In the Southern belt, that is where the largest gold mine in the country Lega Dembi is located.

The other industrial mineral which is becoming an attractive factor for FDI development is limestone since the country focused on construction development. The main drawback in the industry is related to the lack of skilled citizens and this has resulted in investors outsourcing employees. The local citizens did not take this well and this resulted in demonstrations and looting. As a result of the above, government intervened and implemented policies aimed at addressing the problems that arose from FDI. The Mining and Income Tax Proclamations No. 53/1993 (amended in 1996 (23/1996) and 2016 as No. 979/2016): was put in place to provide

for a regulatory framework to promote investment in mineral exploration and production in Ethiopia.

As a result of the conducive fiscal and legislative environment, participation from both foreign and local investors in exploration and mining has increased substantially. The total investment injected into the economy by the private sector reached \$1 billion in 2009. The 95% of the investment for mineral development emanated from FDI. Skills enhancement and development was also one of the objectives set out in the mining policy draft which assist the government in prioritising the Ethiopian nationals when qualified candidates are available.

Ethiopia requires significant inflows of foreign resources to meet its GTP II targets. As such, the government has put maximum effort to transform the sector in a way that it can reach the set targets. Infrastructure development is a major obstacle to FDI in Ethiopia. One thing that investors appreciate about Ethiopia despite all the challenges is low levels of corruption.

## **Chapter 6: Analysis on Ethiopian FDI and the Mineral Sector**

### **6.1. Analysis of key performance indicators in Ethiopia**

The diversification of the economy from the agricultural sector has made mining one of the important sectors to the economy of Ethiopia. The introduction of the policy reforms post 1991 brought about economic transformation due to an improved investment environment that encouraged foreign investment. To support the private and foreign investors operating in Ethiopia the EIC, as the institutional framework to support FDI, offered incentives such as tax breaks, duty concession and guarantee repatriation of profits.

The decision to introduce economic growth objectives through the GTP I and II programmes has brought a positive trend in economic growth and an increase in FDI. Table 6.1 summarises the benefits as a result of change in political regime due to policy reforms and the introduction of GTP plans. A notable increase can be seen from both activities, with FDI increasing from \$221 million in 2010 to \$3.6 billion in 2017, placing Ethiopia as the second largest recipient of FDI in East Africa in 2017.

The growth rate increased from negative 8.9% in 1991 to 10.4% in 2017, making Ethiopia the fastest growing economy in the world. Bilateral and multilateral investment agreements with other countries offered benefits to foreign investors because of protection against expropriation and nationalisation, as well as easy market access for export and import.

Table 6. 1: Comparison of activities

Activity	2010	2017
Poverty reduction	55.30%	33.50%
Industry sector GDP contribution	9%	23%
GDP per capita	\$377	\$783
Inflation	33.70%	8%
Annual GDP (From 1991)	\$9143 Million	\$ 80562 Million
Growth rate (From 1991)	-8.90%	10.40%
FDI	\$221 Million	\$3.6 Billion
FDI stock	\$ 3.9Billion	\$18 Billion

Source: (Statista, 2018; World Investment Report, 2018 and Trading Economics, 2018)

## 6.2. Analysis of mining FDI

Ethiopian regions benefiting from the FDI inflow are: Oromia, Amhara and Addis Ababa attracting most of the FDI projects and capital. This is due to progressive infrastructural development in those regions. Foreign investors showed little to no interest in other regions despite the government's effort to offer attractive incentives. The Ethiopian government needs to understand that investors are looking for projects that enable them to make profits. It is therefore imperative for infrastructure in the regions to be progressive in order to attract foreign investors.

With regard to the mineral sector's attractiveness in Ethiopia, the geological mapping has proven that Ethiopia has an abundance of mineral resources which offers great opportunities to investors. The opening up of the mining sector post 1991 to private investors has given both domestic and foreign investors an opportunity to invest in Ethiopian mineral sector. Attractive and competitive mining investment proclamations were also formulated to attract FDI. Incentives offered in the mining sector have also added to the benefit of attracting FDI. In addition, the government's aim to develop

the mining sector, identified in GTP I and II as a priority sector, has brought in an accumulation of about \$3.5 billion in FDI in the past five years. The Exploration development projects also increased substantially and gold is considered as the largest potential mineral earner for mining investment in Ethiopia.

Table 6.2 shows the mining GTP goals for 2024, when comparing with 2017 actuals, it can be seen that the industry still has a long way to go. The contribution of mining to GDP in 2017 was 0.8% as compared to the 10% goal of 2024, this shows that the mining sector is not growing. Referring to Figure 5.16 (on page 101 of the report) shows that the mining sector has been experiencing declining export earnings and in 2017 fiscal year, the exporting earnings were \$167 million. This means that from 2010 to 2017, export earnings declined by 73%. A continuation of this significantly negative trend will make it almost impossible for the country to reach its 2024 target.

Table 6.2: Long term 2024 goals for the mining sector.

Description of Target	2010	2024
1. Contribution of mineral sector to the economy as percentage of GDP	1%	10%
2. Contribution in terms of corporate income tax and royalties to the state's coffers	~ \$19 mln	\$100-500 mln
3. Total export earnings	\$618 mln	\$1.5 bln

Source: Amdetsion (2015)

Despite the increase in mining FDI, the effort to attract private investors by creating attractive yet low incentives, as compared to other mineral rich countries, was amongst the causes of declining export earnings. In 2013 fiscal year, custom duty featured in the top five payments that contributed to the mining earnings. However, the mining investors are exempted from paying custom duties and taxes related to

custom duties. Tax revenues collected from the mining sector also declined by almost 50% from 2013 to 2016.

Gold is the main exporter in Ethiopia, followed by cement. The cement contribution to the export earnings increased by 47% in 2017 fiscal year. However, Gold has been experiencing declining export revenues, and the suspension of the Lega Dembi mining licence contributed severely to the mining sector declining revenues in the 2017 fiscal year. Other factors that contributed to the declining revenues are: shortage of foreign currency, the falling of gold price in international market, contraband of gold trade, shortage of skills and human capital, and social unrest around the mining areas.

The period the government gives investors to commence with exploration and mining is 60 days and 2 years respectively, otherwise the investor loses the mining rights. Between 2004 and 2017 the government cancelled 211 mining and exploration licences and approximately 50 of them were cancelled in 2017 alone. While this time stipulations maybe reasonable in countries with developed mining sector, in Ethiopia they have to be re-evaluated because in most cases mining is located in remote areas, and some areas are still underdeveloped with no or little infrastructure. In reality, planning and developing a mine takes a long time to complete and is often followed by a long lead time of production before profits can be realised. External factors such as commodity price fluctuations can also influence the mining project investment.

In Ethiopia, some investors experienced difficulties in commencing with exploration due to infrastructure challenges and difficulties in obtaining funding. This is some of the reason why some companies failed to meet the exploration period target. In a

nutshell, since the privatisation and encouragement of mining investment in Ethiopia, the number of registered companies, especially foreign companies, has increased but the sector is experiencing a negative growth rate and declining revenues.

Looking at resource rich countries that have successfully develop the mining sector, mining taxes and royalties are very competitive, Ethiopian mining royalties vary from 2% to 7% with 25% income tax. The royalty and tax incentives for other countries are as follows:

- Australia royalties vary from 7% to 15% for coal, and Iron Ore royalties are fixed at a rate of A\$1/t. The income tax of the country is set at 30%;
- In South Africa royalties vary from a minimum of 0.5% to a maximum of 7% depending on the commodity and a 28% income tax is applied;
- In China royalties of 3% and an income tax of 25% is applied.

However, using Australia as an example, despite the higher taxes as compared to other resource rich countries, the mineral sector is still attractive to the FMI and had benefited the economy substantially (PWC, 2018). The mining sector has managed to generate income for both the government and the companies because of the balance created. Stability, long term relationship with stakeholders and communities, sophisticated financial institutions, and infrastructure have increased the country's potential to encourage mining FDI. Innovation and investment in R&D and human capital are some of the added benefits that keep the sector attractive. This means that for Ethiopia, a balance between profitability by shareholders and the government must be regarded so that both parties can realise the mining benefits. The need to attract FMI and grow the economy is important, however the targets set and the

incentives given to the mining investors need to be revised and they need to be competitive when compared with other mineral rich countries. It has been noted that artisanal miners contribute significantly to the mineral export earnings annually. Therefore, there is a compelling need to support and regulate artisanal mining as it is important for job creation, tax revenue and reduction of contraband.

The majority of mining and exploration activities are found in the Oromia, Addis Ababa and Amhara regions. These are the regions with highest number of foreign operational projects. Afar and Tigray regions are some of the regions which are still under development for potash and gold mining. From the challenges stipulated in Chapter 5 page 117, high youth unemployment has threatened the FMI especially in limestone mining due to the youth demanding mines to be transferred to them. These unrests resulted in killings and destructions of infrastructure. These conditions resulted in some foreign mining projects being put on hold due to uncertainties. The youth from the Oromio regions are also demanding benefits from the mines, due to the abundance of mineral resources; this has also led to unrest. Ethnic conflict between the Oromio and Amhara regions is also a threat to FMI as it has resulted in two states of emergency and FDI decline in 2018.

The government focused more on attracting private and foreign investors in mining without realising the consequences that may arise if the surrounding communities do not benefit. The mining sector alone cannot reduce unemployment, however, the communities can benefit from horizontal and vertical linkages created by the sector. The world is focusing on innovation and technology, therefore investing in human capital to develop skills will highly assist Ethiopia in the creation meaningful mining jobs and employment within the minerals sector at large. Mining Proclamation does

not state how the mining companies should assist the surrounding communities and in this regards, for community benefits to be realised, the government should become strict and ensure that communities are benefiting from the mining projects around. They can achieve this by either enforcing the social licence to operate which they stipulate how the mines should contribute for community upliftment with clear responsibilities prior to issuing the mining right. This will ensure that both investors and communities benefit from the mineral resources in their respective regions and reduce the social unrest and mine grabbing.

As long as the communities do not see the benefits of mining in their regions, conflict will continue and this will discourage mining projects expansions and further FMI in the country. The lack of capacity to follow up and implement the objectives set by the Ministry of Mines is a problem. Regions such as Tigray are having neither the capacity nor the power to monitor and regulate the mining companies. As such the companies involved in large-scale mining only report to the Ministry of Mines. In most instances issues were realised during community unrest when the damage was already done. For an example, the government suspended few licences due to community unrest that was sparked by mining induced environmental damage. The government is in the process of formulating and implementing an environment rehabilitation policy to counteract the negative impact mining activities bring.

Vast opportunities to invest in the mining sector has been explored with the respective challenges, the government need to deal with the challenges and risks that may threaten the growth of the mining sector.

### **6.3. Summary**

The desire to improve economic conditions by increasing the contribution of the mining sector to the GDP pushed the Ethiopian government to regulate the mining legislations to favour mining FDI. This was done by opening up of mining sector to private investors and identifying the sector as a priority in both GTP I and II. The government also worked on the continuous improvement of the mining legislations, infrastructure, and making incentive attractive to mining investors. This has brought significant improvement in terms of the economic outlook and FDI inflow in the mining sector.

Despite the significant increase in the mining FDI and the number of exploration and mining projects recorded, the sector still contributes less than 1% to the GDP and has shown declining export and tax revenues. Social unrest, attractive yet low incentives, and the suspension of mining licences were amongst the contributors to the decline. The government has not yet been able to resolve the violence that is occurring across the country. This presents a risk and damages to the mining industry and may negatively affect the mining FDI inflow.

Mining is capital intensive and investment into capital intensive venture generally requires the use of high levels of technology that may not be supported locally in the third world country. This lends capital intensive venture to be less responsive to initiatives of job creation in developing countries, in that they have poor linkages within economies of developing countries but strong linkages with developed countries. A remedy to this situation in the case of Ethiopia should have been a decisive policy on local procurement and local content.

## **Chapter 7: Conclusion**

FDI is a cornerstone of economic development in any country. It is imperative that governments of developing countries set up policy framework that boosts a country's attractiveness, and maintain the framework to ensure investors remain confident in investing in the country. Geopolitical uncertainty is amongst the top factors that can deter the FDI inflow, whereas infrastructure development can influence the FDI inflow positively.

In terms of mining FDI, geological attractiveness and security of tenure are key indicators of a country's potential to attract exploration and mining investment. Due to an increased competition in attracting mining FDI, mineral rich countries need to realise that the attractive geology need to be combined with stable and predictive investment policy to increase chances of attracting investments. Risks that can deter the flow of mining investment include political, social and economic risks.

From the findings in Chapter 3, it can be concluded that the higher the risks in investment, the lower the investment attractiveness. However, every investment is associated with risks and each type comes with benefits and disadvantages. Political and economic risks, such as changing policies and imposing higher taxes without notice, have made countries such DRC and Tanzania unattractive for mining investment. Social risks such as social unrest in the mining surrounding communities can also deter mining investments.

Geological attractiveness during the exploration phase was indicated as an important factor to attract FDI, and therefore an exploration investment trend analysis was conducted to give an indication of the investment performance. Base metals boosted

the global 2017 exploration budget due to an increase demand for cobalt and lithium. However, gold still attracts significant explorations funds globally. Some investors tend to overlook countries' risk due to an increase demand of some minerals. For example, DRC is considered as one of the least attractive mining jurisdiction but a quarter of 2017 exploration budget for Africa went to DRC. This was due an increase in demand for cobalt.

In 2017 and 2018, FDI in Ethiopia declined due to social unrest, which resulted in state of emergency. Ethiopia was ranked in the bottom 10 of the least attractive mining jurisdiction in 2018 in the Fraser Institute Report by Green and Stedman. However, in 2018 FDI results by World Investment Report showed that Ethiopia was the top recipient of FDI in East Africa, mainly directed towards mineral exploration and oil and gas. This shows that the perception of risk as shown in Fraser Institute Report might be disregarded by investors when investment decisions are made.

The GTP in Ethiopia is an ambitious initiative with features such as low electricity, infrastructure development and manufacturing. This has attracted foreign investments from countries such as China, Nigeria, SA and Canada. This type of investments are driving Ethiopia's industrial revolution, and should unrest levels decline, they have the potential to make the country a regional economic hub of Eastern Africa.

The mining targets set in GTP I and II together with incentives offered when investing in mining, have also attracted FDI. While incentives are benefiting FDI, Ethiopia on the other hand is experiencing declining revenues due to exemptions on import and export duties, and reduction in VAT, income tax, and royalties. In addition, the contribution of gold that came from the Lega Dembi mine, which has

since then been suspended, contributed towards the 38% decline in export revenue in 2018.

Nonetheless, the decline in gold export revenues is somewhat offset by increasing demand in limestone mining driven by increase demand in cement due to infrastructure development. This has subsequently increase investment in coal mining as coal is used in the manufacturing of cement. Other attractive minerals with potential for growth are potash and iron ore. The attractiveness of mining in Ethiopia would be enhanced by the peace treaty between Ethiopia and Eritrea which would increase export volumes. As it is currently, the only viable export route is via Djibouti port which is far from where other mining activities take place. The ideal economic port would be the Red Sea ports in Eritrea.

While FMI in Ethiopia is important, the country has strong artisanal trade in mining that has to be nurtured and developed. To this effect, currently artisanal mining contributes significantly to the Ethiopian economy and therefore the sector must be developed and protected to ensure safety and growth. However the sector is beset by lack of mining skills and inefficiencies.

Since mining is a newly developed industry in Ethiopia, issues such as lack of skills and lack of infrastructure in mining areas have been a challenge to FMI. The high unemployment rate has resulted in investor's uncertainty due to mine grabs, unrest which led to infrastructural damage and killings. This is further exacerbated by the shortage of skills in the mining industry which caused some companies to hire international experts as opposed to locals. Resource competition and land disputes amongst the ethnic groups have resulted in ethnic conflict which has led to deadly violence and cause insecurities in the regions. A cohesive and inclusive labour plan

needs to be implemented to accommodate local communities when investors work in Ethiopia. Locals are frustrated with the lack of employment opportunities which are sometimes associated with capital intensive ventures such as mines.

The shortage of foreign currency reserves remains a threat to Ethiopian economy. As a result of critical shortage of foreign currency reserves, the export revenues have been impacted due to long lead time when exporting minerals and importing goods. Due to infrastructural development and performance on the export in past years, foreign reserve availability will continue to be a challenge for businesses in Ethiopia. As such, this gives an opportunity to develop local economy to ensure availability of goods.

Ethiopia has to finalise the draft mining policy to increase the mining attractiveness in the country. Ethiopia is left with only one year (2019) to achieve the goals set in GTP I, and II, from the analysis in Chapter 6, the gap between the targets and the actuals in terms of revenues has increased and worsened in 2018. The current policy has aimed at developing a large-scale mining sector. Mining is capital intensive and it usually takes 10 to 15 years to commission a mine from the exploration phase. Therefore looking at the performance of other mines in resource rich countries, Ethiopia may not achieve the target set for the mining sector but can still achieve and realise the benefits of mining in the long term. The government' infrastructural support in the mining areas has assisted in increasing exploration activities from foreign companies in the Danakil and other remote areas.

Overall, Ethiopia has a potential to be one of the significant mining jurisdiction in East Africa, particularly in the production of potash and cement. Subject to fully implementation of plans in GTP I and II, mining has the potential to contribute

significantly to the economy of Ethiopia, may even reach 10% contribution to GDP as envisaged in GTP I.

## Chapter 8: References

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