

**Factors influencing exploration investment decisions in
the diamond industry in South Africa**

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**Thesis presented in partial fulfilment for the degree of Master of
Business Administration to the Faculty of Commerce, Law, and
Management, University of the Witwatersrand**

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DECLARATION

I, Nivesh Nagar, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in fulfilment of the requirements for the degree of Master of Business Administration at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.



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ABSTRACT

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Investment decisions are in general complex in nature, with the investor having to acknowledge, review and analyse several factors prior to making a sound investment decision. The diamond mining industry has seen significant challenges and faces the prospect of a widening demand and supply gap in its medium- and long-term future. Investment decisions within the industry are becoming more challenging with multinational companies requiring ensuring investment decisions are met with the utmost rigor to provide a significant return to the shareholder and ensure sustainability of these decisions over the longer term.

The study recognised the state of the diamond industry and the real threat that will arise as a result of the widening demand and supply gap, that may only be narrowed through the addition of sustainable resources to increase the supply prospects in the future.

This study focused on the decision to investment in exploration activities in the diamond industry, and the consideration of which factors are of greatest significance to the decision to commence exploration activities in a country.

The study found that political, economic and legislative factors are paramount to influencing exploration investment decisions, with the five most significant factors identified as: absence of legislation, enforcement of legislation, government stability, protection of legal system, risk of nationalization within a list of twenty-six factors.

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To the All Mighty for with your guidance, faith and strength, endless possibility exists.

The MBA provides an opportunity to gain knowledge and academic experience, which is intensified through the engagement of a variety of individuals from different facets of life whom have made the experience well worth the effort. Having contracted a rare disease (Guillain-Barre syndrome) in 2014 and this turning chronic (Chronic inflammatory demyelinating polyneuropathy) in 2016 I have been faced with numerous challenges on the journey to completion of this post graduate qualification. As my battle to improve my health continues, I would like to acknowledge those family members, friends, colleagues and medical professionals who support me on this journey to recovery and a sustainable lifestyle with the disease.

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1 INTRODUCTION TO THE RESEARCH

1.1 Background and context

More generally, this research evaluates the factors influencing exploration investment decisions in the diamond industry, with focus on investment in emerging economies.

1.1.1 The mining industry's contribution to emerging economies

The term emerging financial markets was first used by the International Finance Corporation (IFC) of the World Bank and referred to a set of countries which had begun to calculate stock market indexes (Bruner, Conroy, Li, O'Halloran, & Lleras, 2003). Bruner et al. (2003) considered, as defined by Standard & Poor's in their 2000 report "The S&P Emerging Market Indices: Methodology", a market as emerging if it meets at least one of the following criteria:

- It is a low-, lower-middle, or upper-middle-income economy as defined by the World Bank; and
- Its investable market capitalization is low relative to its most recent GDP figures (Bruner et al., 2003).

The term emerging markets includes countries such as India, South Africa, Botswana and Angola. These countries have all historically had and continue to develop significant mining industries. The World Bank in its report 'Emerging Players in Global Mining' stated that the growth in emerging market mining production exceeded that of the advance economies in almost every commodity (Humphreys, 2009).

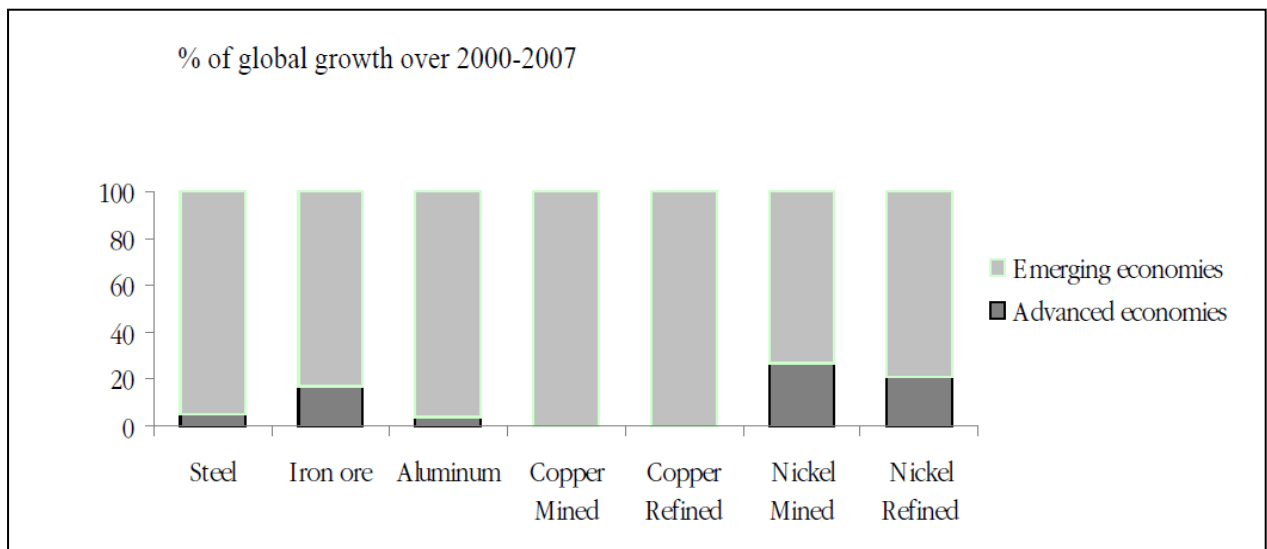


Figure 1: Mine and Metal Production 2000 – 2007 (Humphreys, 2009)

The ‘Emerging Player in Global Mining’ report by the Word Bank stated:

“The emerging economies currently count among the world’s largest producer of iron ore (Brazil), the largest producer of aluminium (China), the largest producer of copper (Chile), the largest producer of silver (Peru), the largest producer of gold (China), the largest producer of platinum (South Africa), and the largest producer of diamonds (Botswana)”, (Humphreys, 2009).

Later in 2012 the International Council on Minerals and Metals in their report on trends in the mining and metals industry stated that the “most important mining countries in terms of mineral production are now emerging economies, often found south of the equator” (ICMM, 2012). The report further stated that “largest mines are now to be found in developing countries” (ICMM, 2012). This was presented by the global mining activity in 2011 as per figure 2, which highlights the higher mining investment in regions such as Asia, Africa and South America.

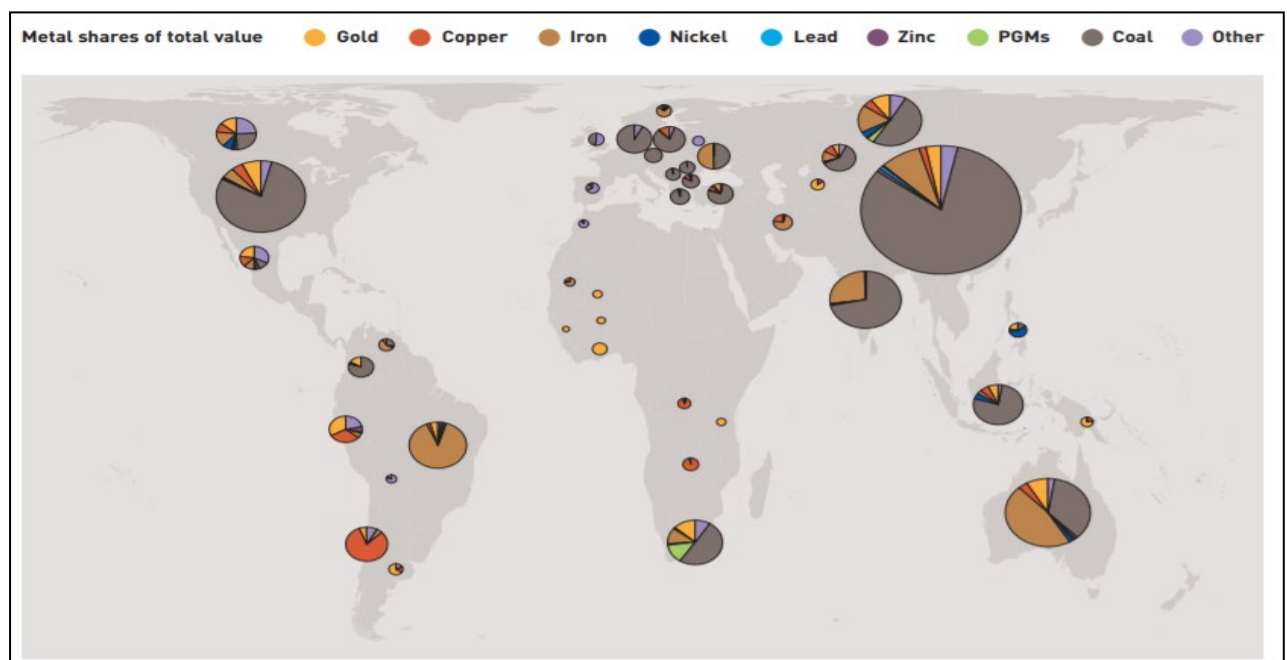


Figure 2: Global Mining Activity (Source: International Council of Minerals and Metals, Trends in the mining and metals industry, 2012)

The 2014 report “Mine 2014, Realigning expectations” identified the 2013 year to be a challenging year for the global industry with decreasing commodity prices across all commodities (PriceWaterhouseCoopers, 2014).

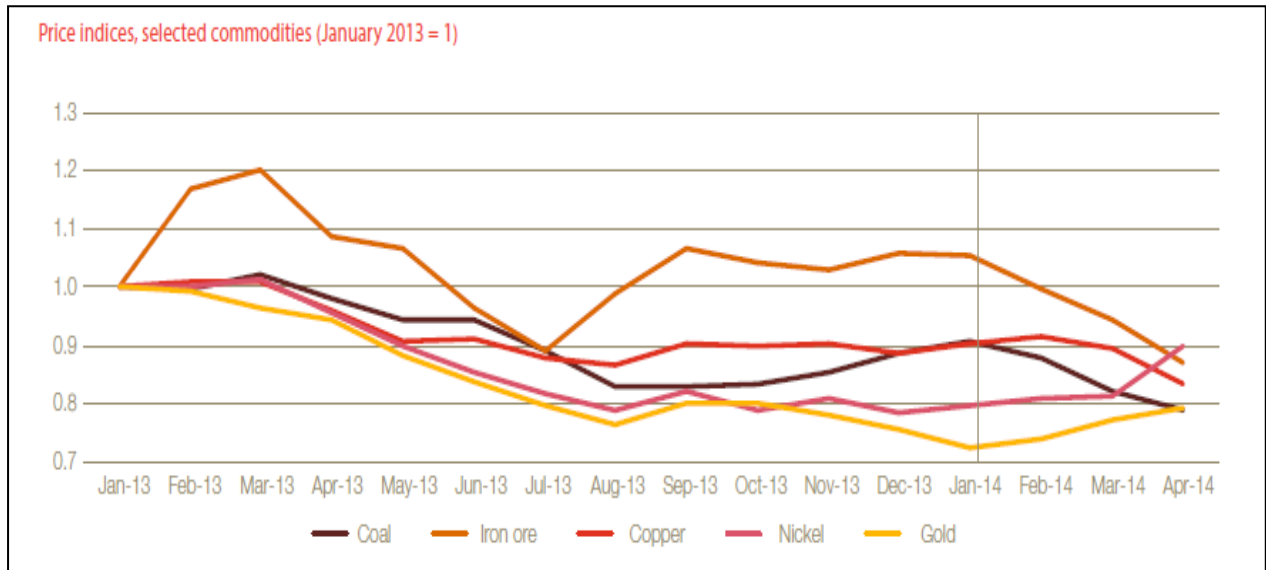


Figure 3: Declining commodity prices in 2013 (PriceWaterhouseCoopers, 2014)

The PriceWaterhouseCoopers (2014) Mine 2014 report, on the global mining industry, illustrated the trend of emerging markets increasing their participation in the mining industry .

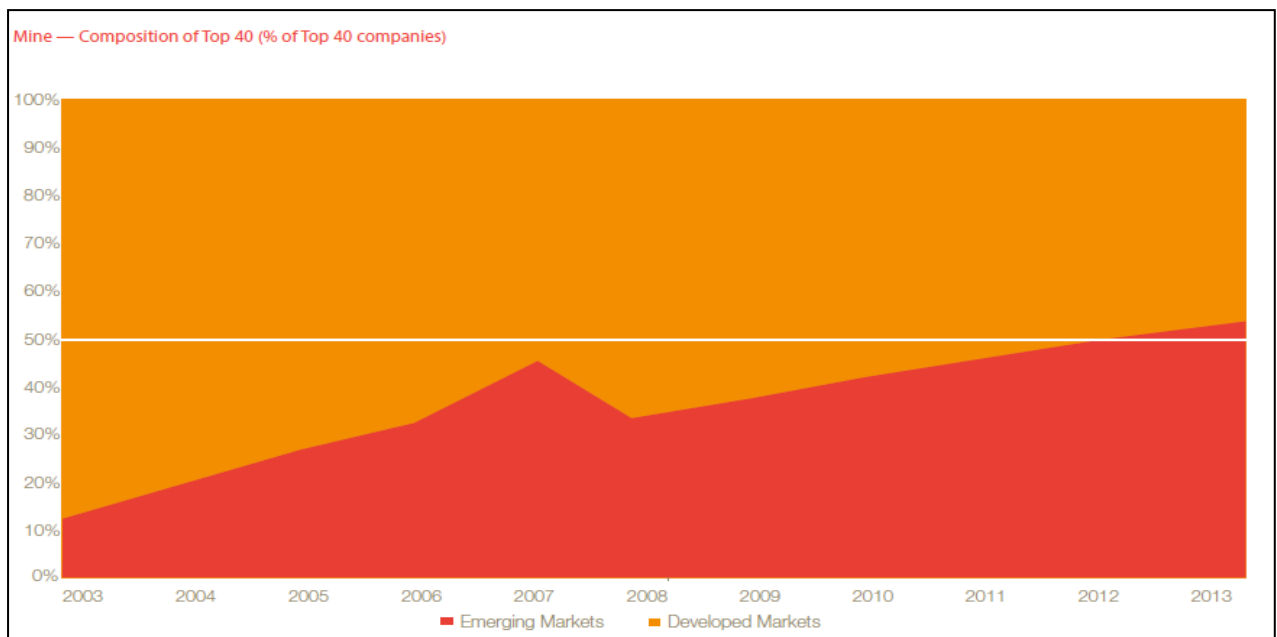


Figure 4: Trend of emerging markets participation in mining industry (PriceWaterhouseCoopers, 2014)

The International Monetary Fund (IMF) revised its forecast of global Gross Domestic Product (GDP) growth rates in 2013 and despite the revised forecast the outlook for the emerging markets remained strong and supported longer-term growth in the mining industry (PriceWaterhouseCoopers, 2014).

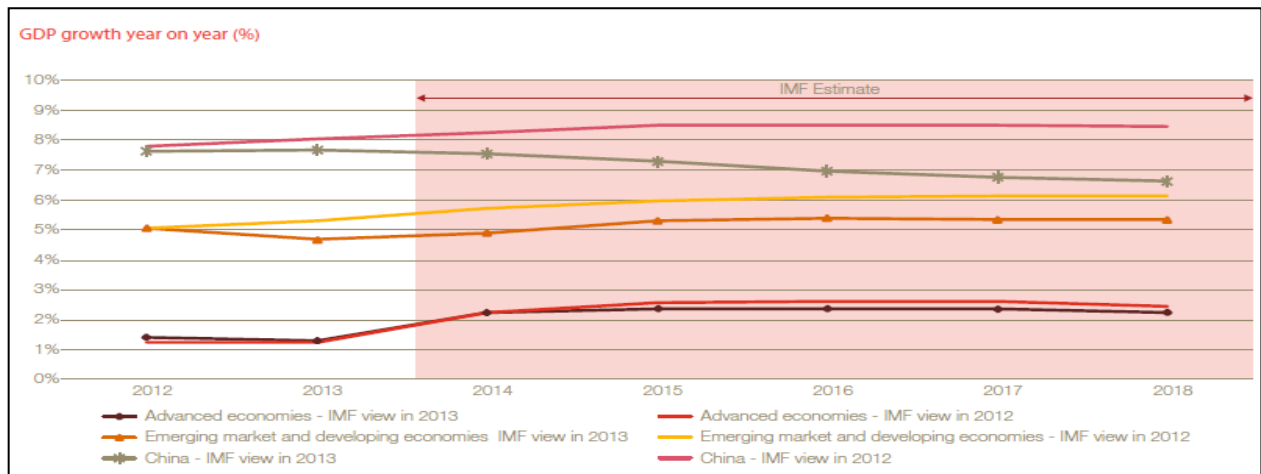


Figure 5: IMF forecasted GDP growth rates (PriceWaterhouseCoopers, 2014)

The world economic outlook displayed some degree of optimism in the global GDP outlook with emerging market economies continue to be a focal point in growing the global economy with the mining industry being a significant contributor to the GDP of emerging markets (PriceWaterhouseCoopers, 2014). The contribution to new mineral reserves that have been added by these economies had also displayed a high level of significance (PriceWaterhouseCoopers, 2014).

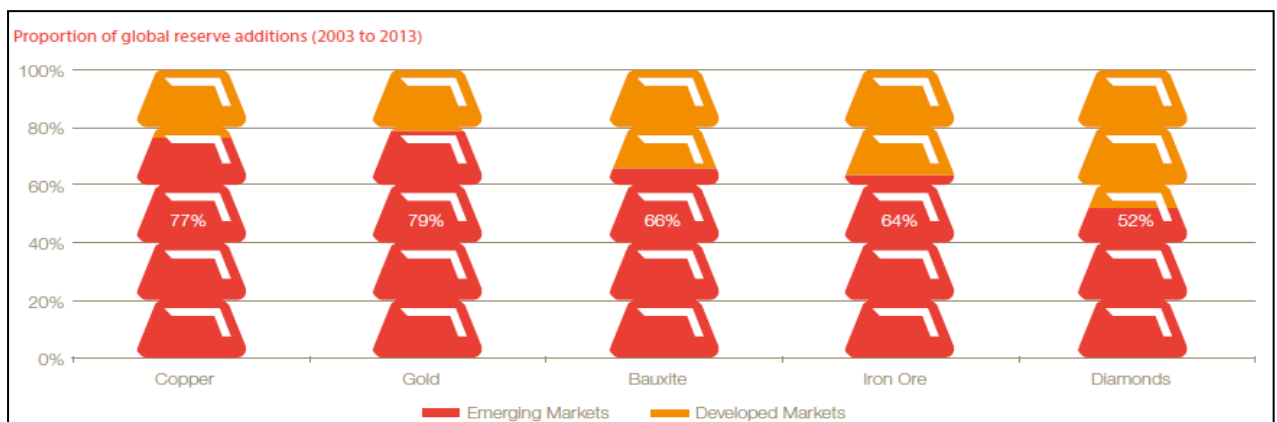


Figure 6: Additions to global reserves 2003 – 2013 (PriceWaterhouseCoopers, 2014)

These additions are a clear indication of the potential mineral resource prospectively in these regions that may create potential investment opportunities for mining and exploration companies. The challenge lies in that these regions are plagued with complexity due to the political, legal and business differences that exist (PriceWaterhouseCoopers, 2014). The ‘Emerging Player in Global Mining’ report provided insight into the global exploration spend stating that at the beginning of the last decade, emerging economies accounted for forty percent of the global exploration spend (Humphreys, 2009).

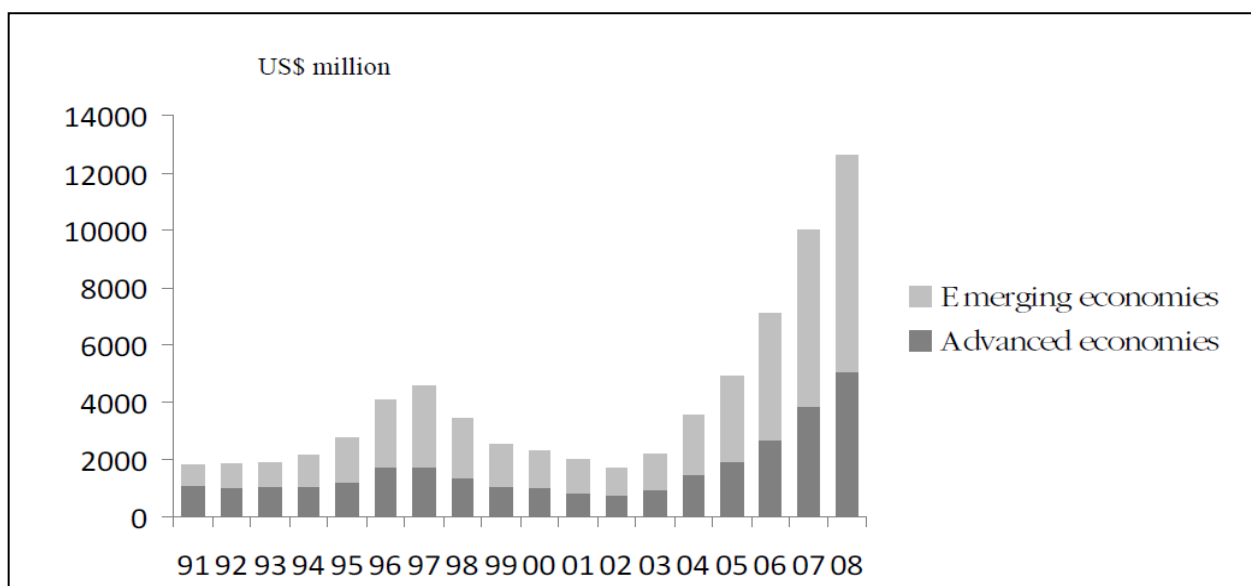


Figure 7: Industry exploration expenditure by region (Humphreys, 2009)

S&P Global Market Intelligence published an article in 2017 stating that “despite these improving conditions, the persistence of the downturn has continued to force some mining companies to halt spending or to leave the mineral exploration sector altogether, presenting a 40% drop in the number of active explorers between 2012 and 2017” (Ferguson, 2017).

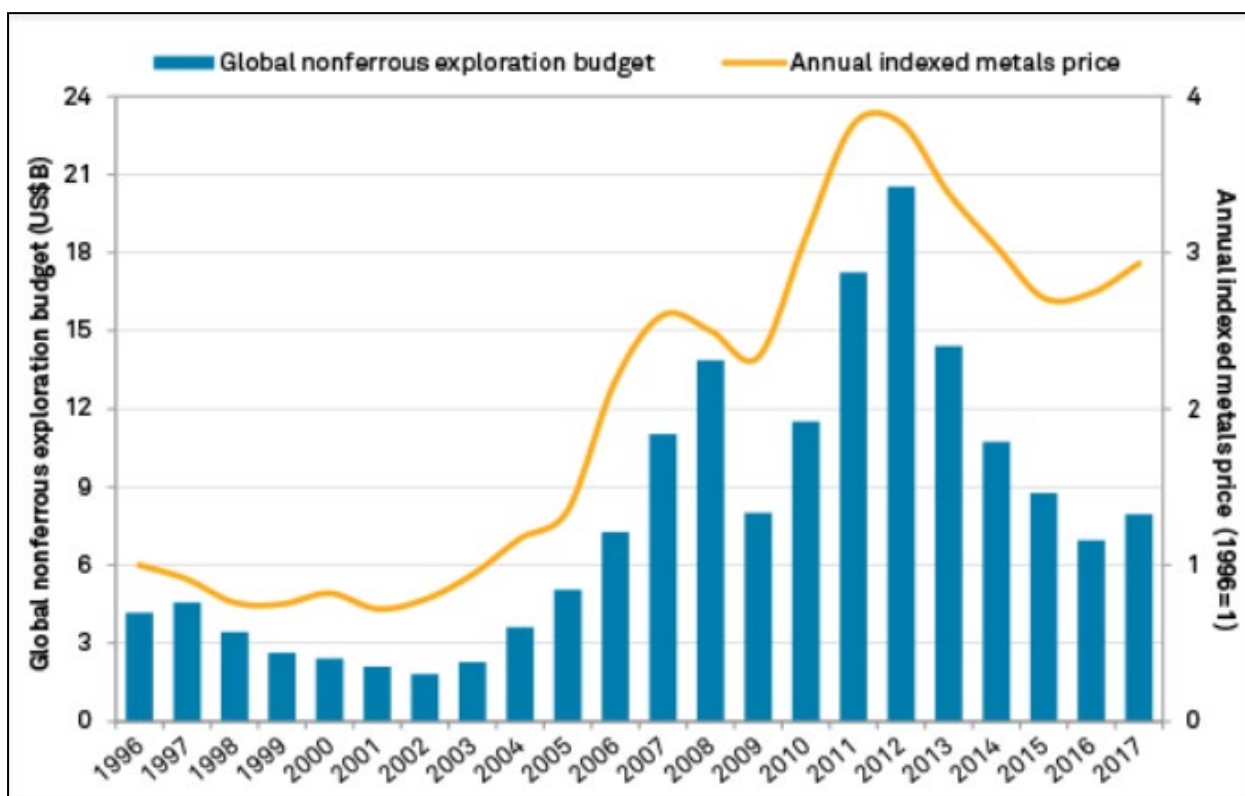


Figure 8: Annual nonferrous exploration budgets, 1996-2017 (Source: S&P Global Market Intelligence)

ErnestandYoung (2013) in their report, 'Mining in rapid-growth economies', stated as researched by the Colorado School of Mines, that it takes 500–1,000 grassroots exploration projects to identify 100 targets on which advanced exploration activities may be conducted (ErnestandYoung, 2013). The report states, as per the Mineral Council of Australia, that of these 100 targets an estimated 10 would turn into development projects, with only one of the ten having the potential to be developed into a mine (ErnestandYoung, 2013).

The industry outlook as presented by industry reports together with the outlook for emerging markets remains optimistic. The identified shift of mining investments to emerging markets has displayed a steady upward trend over recent years. The industry reports identify that the recent economic climate has presented challenges, together with the low rate of turning greenfield projects into sustainable mines will require mining companies to be cautious in terms of where their next investment decision lies, ensuring investment decisions are well thought through and robust with regard to the influence of the macro-economic factors that may exist in the particular country of interest.

1.1.2 Diamond Mining Supply Challenges

The diamond mining industry has its production concentrated within emerging economies as these are the regions with the largest kimberlite rich geology. In 2014 Bain and Company reported the split of diamond mining production showing more than 50% of production from emerging countries such as South Africa, Botswana, Angola, DRC, Russia (classified as developing economy at the time) (Bain and Company, 2014).

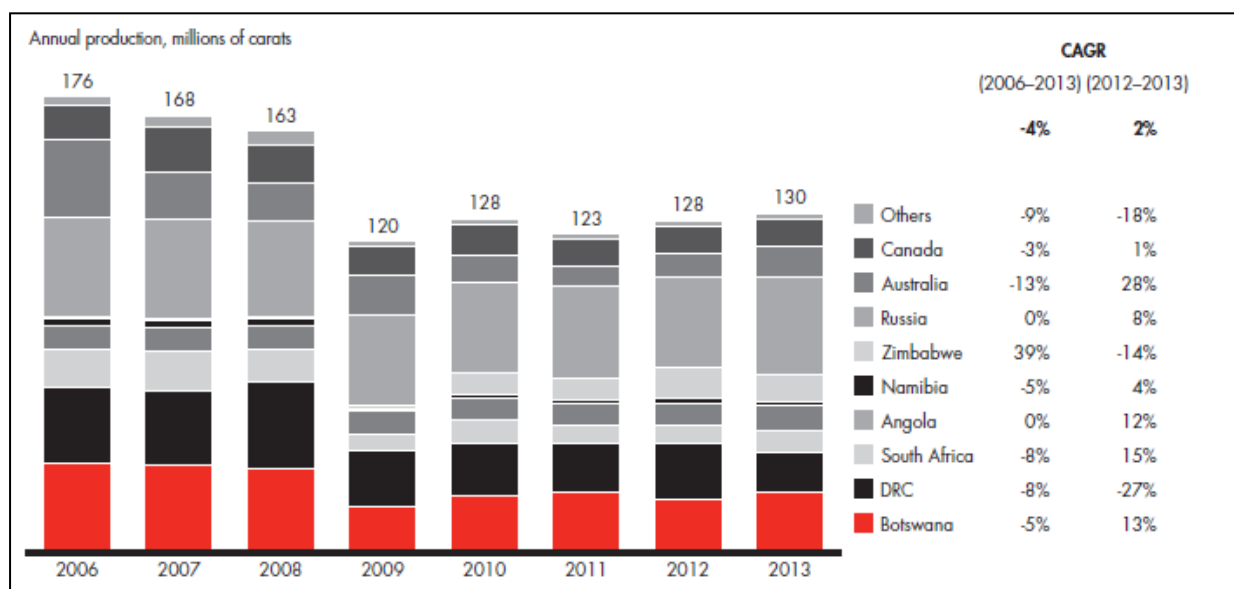


Figure 9: Production volume in 2006 - 2013 (Source: Bain and Company, 2014)

By 2017 the production dynamics had changed with Russia taking a more prominent position in diamond production, however emerging economy countries such as South Africa, Botswana, Angola and the DRC remaining as some of the key contributors to global rough diamond production (Bain and Company, 2017).

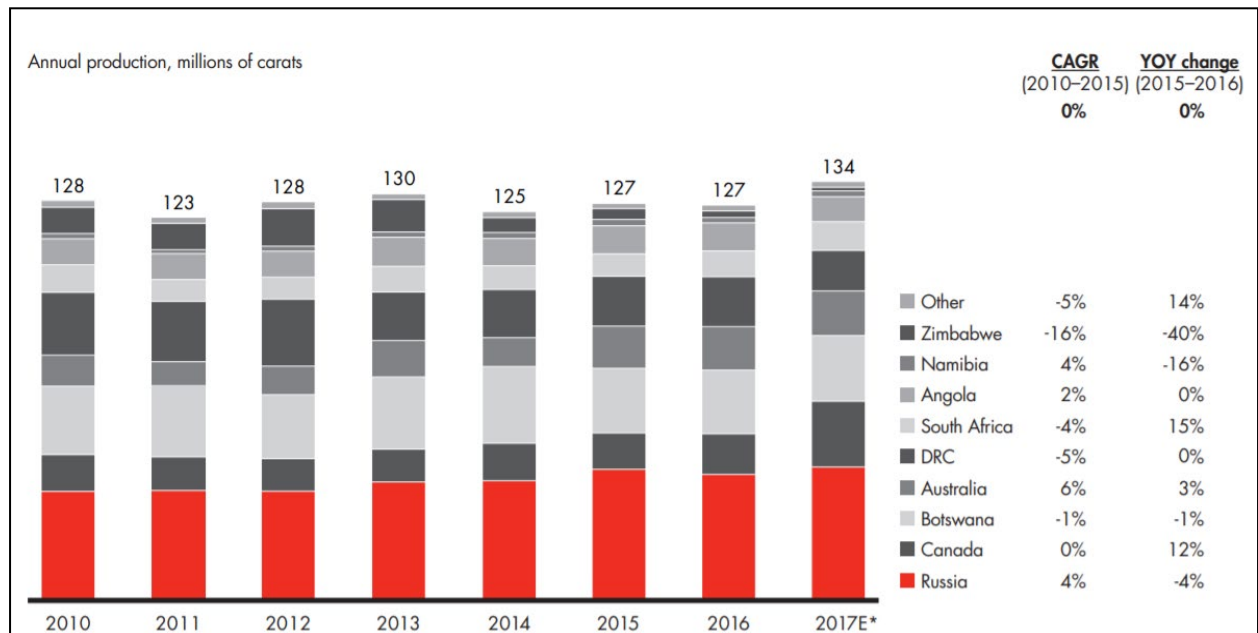


Figure 10: Production volume in 2010 - 2017 (Source: Bain and Company, 2014)

There was a change to the CAGR (compounded annual growth rate) between the period 2012-2013 and 2010-2015 with the reduction of CAGR from 2% to 0%, demonstrating that the annual growth in total production had reduced (Bain and Company, 2017). Bain and Company (2014) noted “further stress to the supply-demand balance for polished diamonds is the growing demand for diamond jewellery, which is expected to outstrip supply by a considerable margin in the long term” (Bain and Company, 2014, p. 28). By 2017, the demand growth was project to reach an annual rate of approximately between 1% to 4% (to 2030), with the supply growth over the same period projected to be between 0% to 1% (Bain and Company, 2017). With the mining industry’s contribution to emerging economies and the decrease in rough diamond production in countries aside from Russia and Canada, other regions would need to seek to engage into diamond exploration programmes to identify potential opportunities to add to their rough diamond supply.

1.1.3 External Environment Analysis

Organisations operate in a dynamic and changing environment across a multitude of regions and geographies. The International Council on Minerals and Metals in their report on trends in the mining and metals industry in 2012 identified that mining operations in six resource rich emerging economy countries (Brazil, Chile, Peru, South Africa, Zambia, DRC) had increased in the early 2000’s (ICMM,

2012). The location of mining operations had shown change through the decades with an increase trend to operations located in developing economies (ICMM, 2012). Developing economies are perceived to attract a higher degree of risk versus developed more stable economies. Risk would exist in the macro-economic paradigm and cover aspects such as political, economic and financial risk (Topal, 2016). When considering risk within a country, a decrease in the level of economic and political risk would positively affect the foreign direct investment inflows for that country (Topal, 2016). Lamech and Saeed (2003) found that “that despite the decline in private investment in developing countries, international investors remain guardedly interested in these markets and would prefer to see adequate cash flows in a sector before making serious commitments to it”(Lamech & Saeed, 2003, p. 3). An understanding of the factors within the macroeconomic environment of a country can contribute to the increase understanding of the country risk. “One of the most important elements of strategic management and planning of the company’s activity is the analysis of its external environment”(Shtal et al., 2018, p. 14). Babatunde and Adebisi (2012) found a relationship existing between strategic environmental scanning and organizational performance, such that strategic environmental scanning leads to more effective organizational performance (Babatunde & Adebisi, 2012). Numerous analysis frameworks are available to organisations to consider for the analysis of the external environment including ones such as the SWOT analysis, PEST analysis, GRID analysis, SCAN analysis (Shtal et al., 2018). Muscalu, Iancu, and Halmaghi (2016) concluded that “the most important external factors that affect the organization's work environment are those that designate the environment: demographic, economic, technical and technological, sociocultural, political, legal, natural and internationally”(Muscalu et al., 2016, p. 138). Thus, the benefit of such an external environment analysis resides in an increased understanding of the regions in which an organisation may operate.

1.2 Research Conceptualisation

1.2.1 The research problem statement

The main problem which the report seeks to address is:

- to identify the factors which influence a company’s decision to invest in the exploration for new diamond prospective opportunities in developing economies such as South Africa given the current economic climate,

This aims to improve the understanding regarding exploration investment decisions in terms of which of the factors have the most significance to the investment decision. The research assumes that equal mineral prospectivity exist in the countries of interest, with focus levied on the macro economic and social factors that exist in country.

The first sub-problem is to examine the global diamond industry and to identify the need for diamond exploration activity.

The second sub-problem is to analyse the factors that influence the decision to invest in diamond prospective countries such as South Africa, Botswana, Angola and India (developing/emerging economies).

1.2.2 The research purpose (aim and objectives) statement

The purpose of this research is to identify the factors that influence decision making with regards to investment opportunities and the decision to invest in exploration activities in diamond prospective countries.

The research aims to identify these factors and the influence they have when companies consider investing in exploration activities which could lead to the discovery of new prospective diamond mines and to assist the decision-making process on whether to enter a specific country.

1.2.3 The research question as well as where applicable accompanying research propositions

1.2.3.1 Question 1: Is there a need to conduct diamond exploration?

The diamond market is driven by demand and supply fundamentals, which are best captured by industry reports on the global demand and supply in the industry. Through these reports there is an intrinsic ability to understand whether there exists a growing gap between diamond demand and supply. This will in turn enable the understanding of the need for exploration investment in the diamond mining industry.

Proposition

Despite challenging economic environments, there exists a need for diamond exploration in order to add new reserves ensuring there is long term supply of the precious stone.

1.2.3.2 Question 2: What are the key factors to consider when making the decision to invest in diamond exploration activities?

The external environment in which companies operate continues to change, posing challenges to the strategic decisions that an organisation is required to make. “The management need to thoroughly and strategically scan the environment at which it operates before commencement of operation and also periodically scan the environment when the operation has begun” (Babatunde & Adebisi, 2012, p. 33). In order to do this, the environment in which mining companies operate can be analysed using a PESTLE (political, economic, social, technological, environmental and legal factors) framework. A. Gupta (2013) found that the PESTEL analysis is a dynamic tool that has been extensively used for the evaluation of the external business environment (A. Gupta, 2013). This research utilises the

PESTLE framework to understand the political, economic, social, technological, environmental and legal factors that would need to be considered for investment decisions.

Proposition

There exist factors such as political, economic, social, technological, legislative and environmental factors that contribute to the investment decision of multinational companies to invest in exploration activities in the search for new prospective diamond mines.

1.3 Delimitations and assumption of the research study

- The research will be delimited to the diamond mining industry. The factors that influence investment decision making and are unique to other minerals and resource industries will be excluded from the research.
- This study of the financing available to mining companies will be limited to the financing available in the diamond mining industry and exclude all other funding mechanisms available to other industries.
- This study of factors that influence investment decision making will be limited to specific diamond prospective countries. Although factors influencing investment decisions globally will be analysed the main focus will be emerging markets in particular South African, Botswana, Angolan and Indian investment context.
- This research assumes that any country considered for diamond exploration is already deemed geological prospective, and focuses on the political, economic, social, legislative, technological and environmental factors that may influence the investment decision.

1.4 Significance of the study

Ernest and Young in their report on 'Mining in rapid growth economies' stated that due to the rising demand for minerals, rapid growth economies have witnessed an incremental increase in exploration spend (Ernest and Young, 2013). This growth in exploration spend in rapid growth economies is indicative of these economies being the focal point for mining companies as they search for new resources to increase their current supply portfolio. Investing in exploration activities will result in mining companies promoting foreign direct investment (FDI) into mineral prospective countries. Asiedu (2002) stated in his research on the determinants of foreign direct investment to developing countries that FDI will bring with it employment, managerial skills and technology (Asiedu, 2002). Agencies such as the World Bank have considered FDI as one of the most effective tools to be used in the global fight against poverty (Asiedu & Lien, 2011).

The challenge for mining companies resides in the decision of which country to invest in. Despite geological prospectively of mineral resources, given equally prospective resources, mining companies would need to consider a range of factors prior to making the decision to invest in mining exploration programs in a particular country. Jara (2017) concluded that geological potential is not the sole determinant of long-term mining competitiveness. Jara further went on to state “that both the geological climate and the investment climate, are crucial to explain the attractiveness of countries for mining investments”(Jara, 2017, p. 19). Vivoda (2017) supported this view concluding that “while the presence of deposits is a necessary requirement to attract investment, it is not a sufficient condition”(Vivoda, 2017, p. 30). Asiedu (2002) stated in research that factors such as security of property rights, freedom to exchange, market regulations, legal structures, government actions and military interference should be consider when entering developing countries(Asiedu, 2002).

The significance of the research is highlighted through examples of challenging exploration projects, one of which is the Rino Tinto Bunder Project (a diamond exploration project in India) which was cancelled after the company had spent US\$90million over a period of 14 years (Krishna N. Das, 2016). The company cited cash conservation as the reason for cancelled, however The Financial Times is quoted stating “mining companies have often been dismayed by the slow pace of approvals in the India, as well as by court decisions that have affected investments”(Wilson, 2016). Amoatey, Famiyeh, and Andoh (2017) focused on the understanding the mining sector in Ghana and found that there is a direct link between the mining project sustainability and the risk assessment performed in a country’s mining sector, highlighting the need to understand the factors that may impact the risk in a country’s mining sector (Amoatey et al., 2017).

Given the challenging economic climate in which mining companies operate, the decision to enter new territories needs to be met with a rigorous review of the macro-economic environment of the region, together with the ability of a company to deliver a feasible mine and thereafter effectively manage a mining operation within the selected country. As an example previous literature has highlighted that crime, corruption and cost of labour are major foreign direct investment determinants in South Africa (Masipa, 2018). This study will utilise the broad factors of PESTLE (political, economic, social, technological, legislative and environmental), and expand on these with specific reference to factors affecting exploration and mining investment decisions. For example Biswas (2002) in his article on the determinants of foreign direct investment, states that the theoretical implication suggest that better infrastructure, low wage, longer duration of a regime, and an environment with secured property and contractual rights are capable of attracting investors to a country (Biswas, 2002). These factors typically

impact on the risk associated with mineral exploration and development (Park & Matunhire, 2011). Park and Matunhire (2011) classified these factors into three main groups of risk namely, technical, political and economic.

This research aimed to understand and thereafter list the factors that influence the investment decision to undertake exploration activities in diamond prospective countries. The factors can then be used to improve the evaluation of the decision to enter new or existing territories for diamond exploration.

The research will provide guidance to the mining industry, specifically the diamond mining industry through providing detailed information on the factors that are to be considered prior to entering a country for investment purposes. Companies within the diamond mining industry may utilise the research to improve their decision making and re-align their long-term investment strategies

1.5 Preface to the research report

To this end, the report has six chapters. Following this introductory chapter, Chapter 2 provides a literature review covering the problem, the past studies, the explanatory framework and the conceptual framework. Chapter 3 discusses the research strategy, design, procedures, reliability and validity measures as well as limitations. Chapter 4 and Chapter presents and discusses the findings, respectively, to interrogating our research questions while Chapter 6 summarises and concludes the research.

1.6 Definition of key terms and concepts

Table 1: Glossary of Definitions

Term	Definitions
Demand	“A schedule showing the amounts of a good or service that buyers (or a buyer) wish to purchase at various prices during some time period” (J Janse Van Rensburg, 2011).
Total Demand	“The demand schedule or the demand curve of all buyers of a good or service; also called market demand” (J Janse Van Rensburg, 2011).
Supply	“A schedule showing the amounts of a good or service that sellers (or a seller) will offer at various prices during some period” (J Janse Van Rensburg, 2011).
Total Supply	“The supply schedule or the supply curve of all sellers of a good or service; also called market supply” (J Janse Van Rensburg, 2011).
GDP	“Gross Domestic Product is the total market value of all the final goods and services produced annually within the boundaries of a country, whether by the country or foreign-supplied resources” (J Janse Van Rensburg, 2011).
Economic Growth	“(1) An outward shift in the production possibilities curves that results from an increase in resource suppliers or quality or improvement in technology; (2) an increase of real output (gross domestic product) or real output per capita” (J Janse Van Rensburg, 2011).
Company Tax	“A tax levied on the net income (accounting profit) of companies” (J Janse Van Rensburg, 2011).
CPI	“Consumer Price Index is an index that measures the prices of a fixed ‘market basket’ of some 300 goods and services bought by a ‘typical’ consumer” (J Janse Van Rensburg, 2011).
Deflation	“A decline in the economy’s price level” (J Janse Van Rensburg, 2011).
Disinflation	“A reduction in the rate of inflation” (J Janse Van Rensburg, 2011).
Inflation	“A rise in general level of prices in an economy” (J Janse Van Rensburg, 2011).
Law of Demand	“The principle that, other things equal, an increase in a product’s price will reduce the quantity of it demanded, and conversely for a decrease in price” (J Janse Van Rensburg, 2011).

Law of Supply	“The principle that, other things equal, an increase in the price of a product will increase the quantity of it supplied, and conversely for a decrease in price” (J Janse Van Rensburg, 2011).
USD	United States Dollar
PPP	“Purchasing Power Parity (PPP) is a theory of exchange rate determination. It asserts (in the most common form) that the exchange rate change between two currencies over any period of time is determined by the change in the two countries’ relative price level. Because the theory singles out price level changes as the overriding determination of exchange rate movement it has also been called “inflation theory of exchange rates”” (Dornbusch, 1985).
Factors	In the context of this research the term ‘factors’ refer to a specific macro-economic item that would influence an investment decision.
PESTLE	Political, Economic, Socio-Cultural, Technological, Legal and Environmental
Demand Shock	“The sudden and transitory disruption of prices caused by an unexpected, market shifting event that changes the perception of demand and supply dynamics of a good or service. Government monetary intervention, major legislation, natural disasters, disruptive technologies are known to contribute to demand shock” (BusinessDictionary, 2015).
Investment Decisions	In the context of this research ‘investment decisions’ refer to decisions that may be made by diamond mining companies to provide resources for mineral exploration within the mining industry.
Exploration	In the context of this research ‘exploration’ refers to mineral exploration for the search of potential ‘ore’ bodies that may be mined for the extraction of diamonds or other minerals and metals.

1.7 Assumptions

The accuracy and completeness of this research together with the model for investment decision making is dependent on the quality of input from the various parties engaged together with the case studies analysed during the research. It is assumed that the respondents involved in this research have adequate knowledge and experience of the global diamond industry. In addition, it is assumed that the literature reviewed for the completion of this research accurately reflected the state of affairs in the selected countries which this study has focused on.

Economic and market related information was sourced from credible consultancy companies and institutions. It is assumed that the information sourced was accurate and free from bias.

2 LITERATURE REVIEW

2.1 Introduction

This chapter has three broad objectives; namely to understand the research problem, to identify the knowledge gap, and to develop a framework for interpreting the research findings. Specifically, in Section 2.1, we detail the research problem. In Section 2.2, we review literature on studies that have attempted a similar study or research. With information arising from Section 2.2, we identify and detail qualitative attributes or quantitative variables that are key to this research in Section 2.3 as well as a framework that we will use to interpret our research findings in Section 2.4.

2.2 Research problem analysis - Analysis of the global diamond industry

Industry analysis reflects the demand for diamond jewellery has continued a growth trajectory over the last century, with demand growth expected to continue (Bain and Company, 2014). Should the diamond industry have no new top tier deposits put into production the industry might be challenged in meeting the demand requirements for the precious stone. This research utilised diamond industry reports to develop an insight into the current environment and the forecasted environment of the future. Following on the understanding of the environment, the study reflected on literature to identify the key factors that should be considered when analysing the external environment within which mining companies operate. The study will allow diamond mining and exploration companies to strategically analyse the factors influencing the decision to enter new territories in which mineral prospectively exists.

The literature reviewed aimed to provide an overview of the current global diamond mining industry. The diamond industry can be broken down into three main areas namely:

- Upstream – Mining and exploration operations
- Midstream – Cutting, polishing and rough diamond sales operations
- Downstream – Diamond retail sales

The International Council of Mining and Metals (ICMM) in their report ‘The role of mining in national economies’, published in October 2012, stated that the mining industry has been a major force in the world economy (ICMM, 2012). The ICMM together with Oxford Policy Management (OPM) developed a primary index that has allowed for the rating of countries by the importance of mining and metals within each national economy. The index was termed the Mining Contribution Index (MCI).

The MCI provided a reasonable approximation of the relative importance of mining and metals to each national economy (ICMM, 2012). The MCI index is reflective in Figure 7, indicating that the mining industry contributes significantly to global GDP.

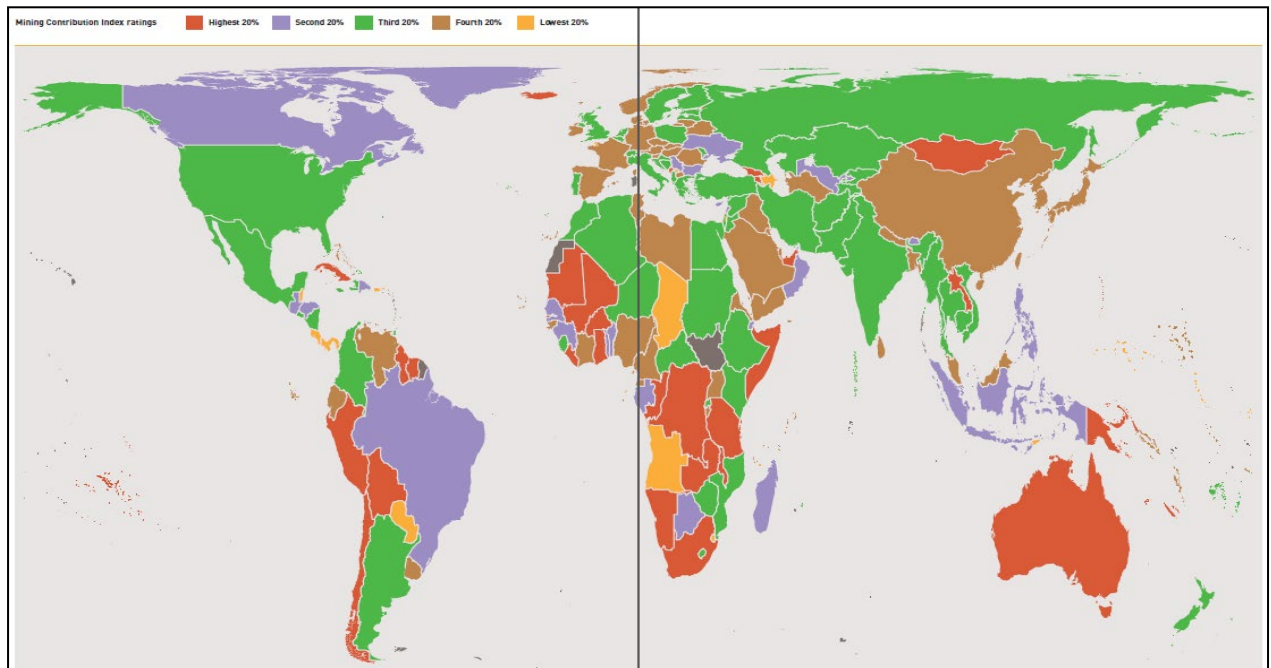


Figure 11: Role of mining in national economies, International Council of Mining and Metal (ICMM) report ‘The role of mining in national economies’ (2014, p. 10 and 11)

2.2.1 Upstream – Mining and Exploration

The supply of diamonds is dependent on the ability of mining companies to produce and mine rough diamonds. McKinsey&Company (2014, p. 4) stated in their report “Perspectives on the diamond industry” that given the lack of recent economically viable discoveries, rough production is to remain relatively constant over the next ten years and post 2025, when a number of mines are scheduled to go out of production, production will start to decline (McKinsey&Company, 2014, p. 4).

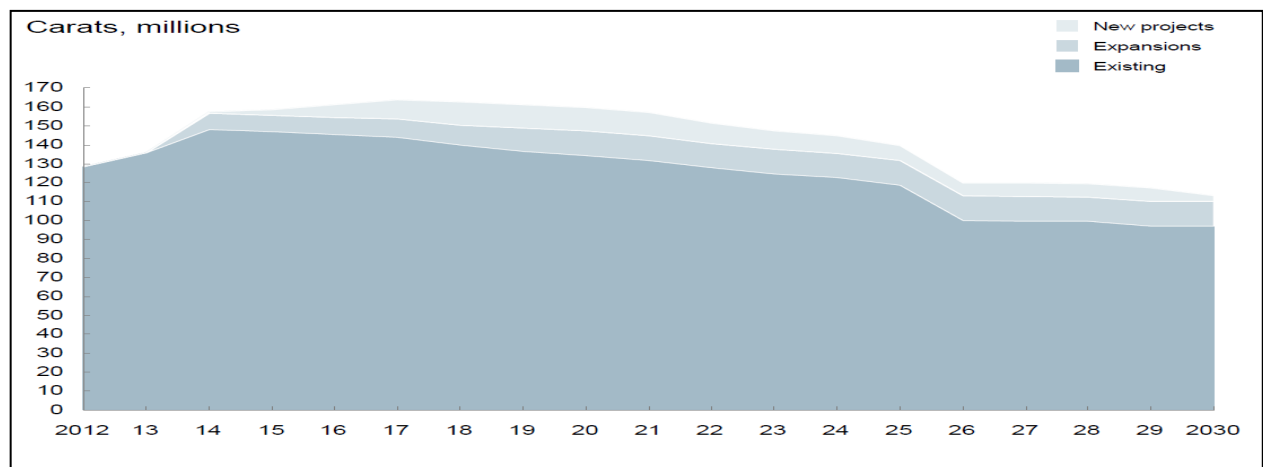


Figure 12: Rough diamond production 2012 – 2030, Perspective on the diamond industry (McKinsey&Company, 2014, p. 4)

Despite the declining production of rough diamonds, the diamond industry is anticipated to grow resulting in the increase in demand for the precious stone, with the first major gap in demand and supply is predicted in 2019 (Bain and Company, 2014, p. 27).

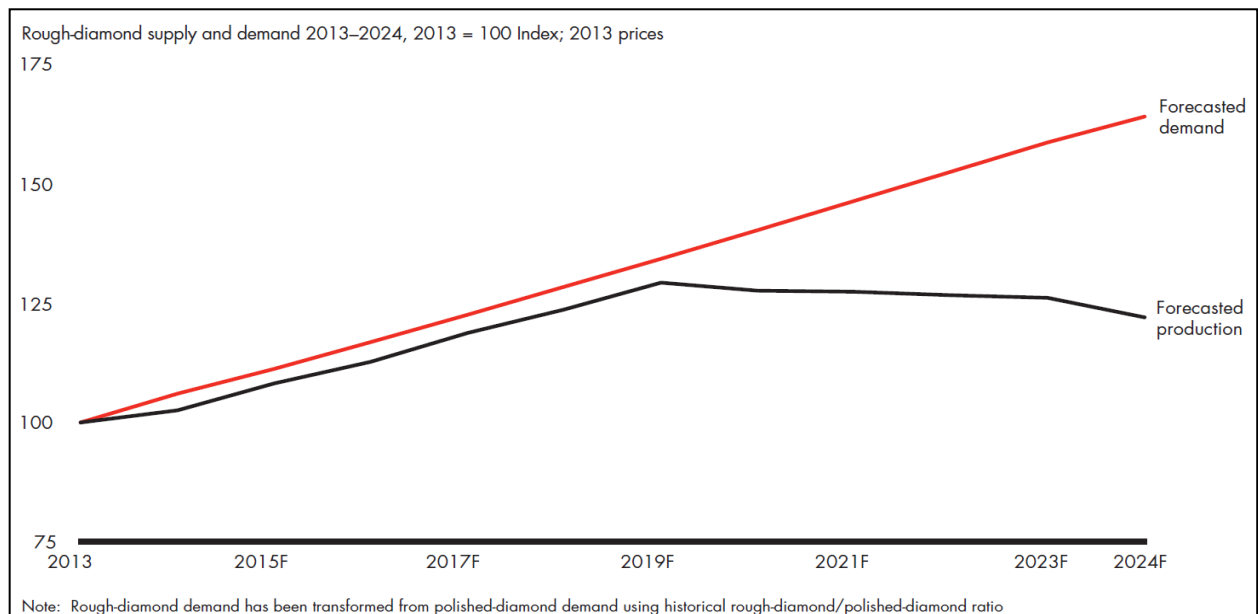


Figure 13: Rough diamond supply and demand 2013 – 2024, Euromonitor; Kimberley Process; IDEX, Tacy Ltd. and Chaim Even-Zohar; publication analysis as stated by Bain and Company (2014, p. 27)

The result of the increasing gap in demand and supply may negatively impact the industry as a whole, with one of the results being the creation of a demand shock in the market. “In the diamond market, unlike the market for oil or coffee, sharp changes in price could mean a longer-term shift in how consumers view diamonds, and how consumers think about the price that they pay” (Spar, 2006, p. 201). Spar (2006, p. 206) stated that excess demand might again alter the sentimental value that people place on diamonds – and even encourage some of them to consider reselling their jewels.

The search for new prospective diamond mines is hence imperative to ensure the prevention of a possible demand shock. New production of rough diamonds will decrease the gap between demand and supplier adding stability to the diamond industry. There has been a trend whereby mid-tier and junior diamond explorers are involved in takeovers, mergers and options agreements that have consolidated exploration areas and projects into fewer hands (Read & Janse, 2009). The challenge faced by the industry is that decreasing amounts of funds have been made available for exploration activities across the mining industry (Metals&Mining, 2014).

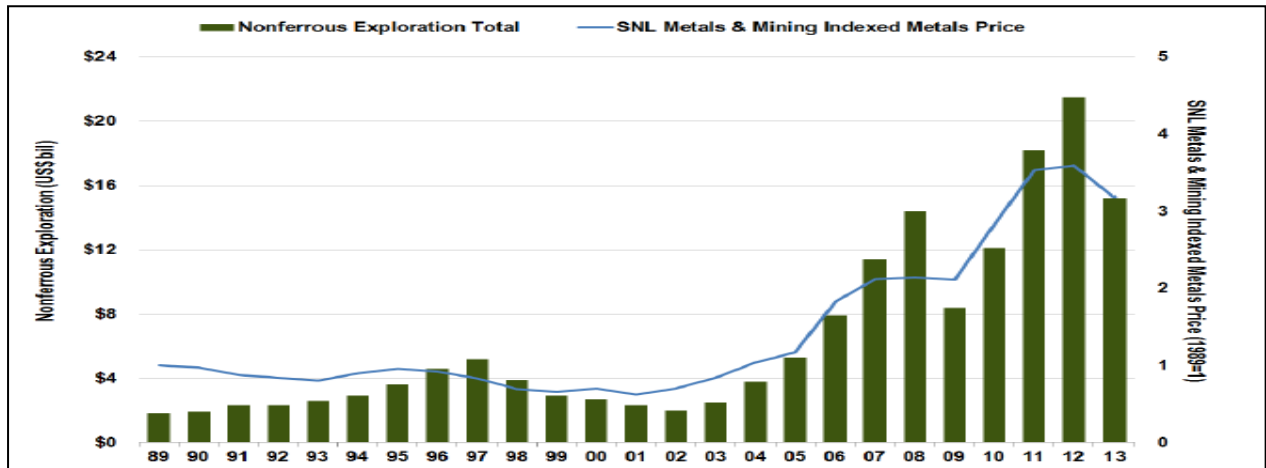


Figure 14: Worldwide exploration spend vs. metal prices, SNL Metals and Mining – Global Exploration Trends (Metals&Mining, 2014)

Exploration to mining projects take a significant amount of time from start to actual production (in excess of ten years before production), this together with the limited financial resources available for exploration activities and the potentially increasing gap between demand and supply, the industry needs to ensure that decisions to enter new countries in the search for prospective diamond mines are met with rigor and are sustainable for the development of long term production environments.

De Beers Group in their Insight Report 2014 stated the global diamond exploration spend by country for 2013 – 2015 as illustrated in Figure 3 (DeBeers, 2014, p. 47).

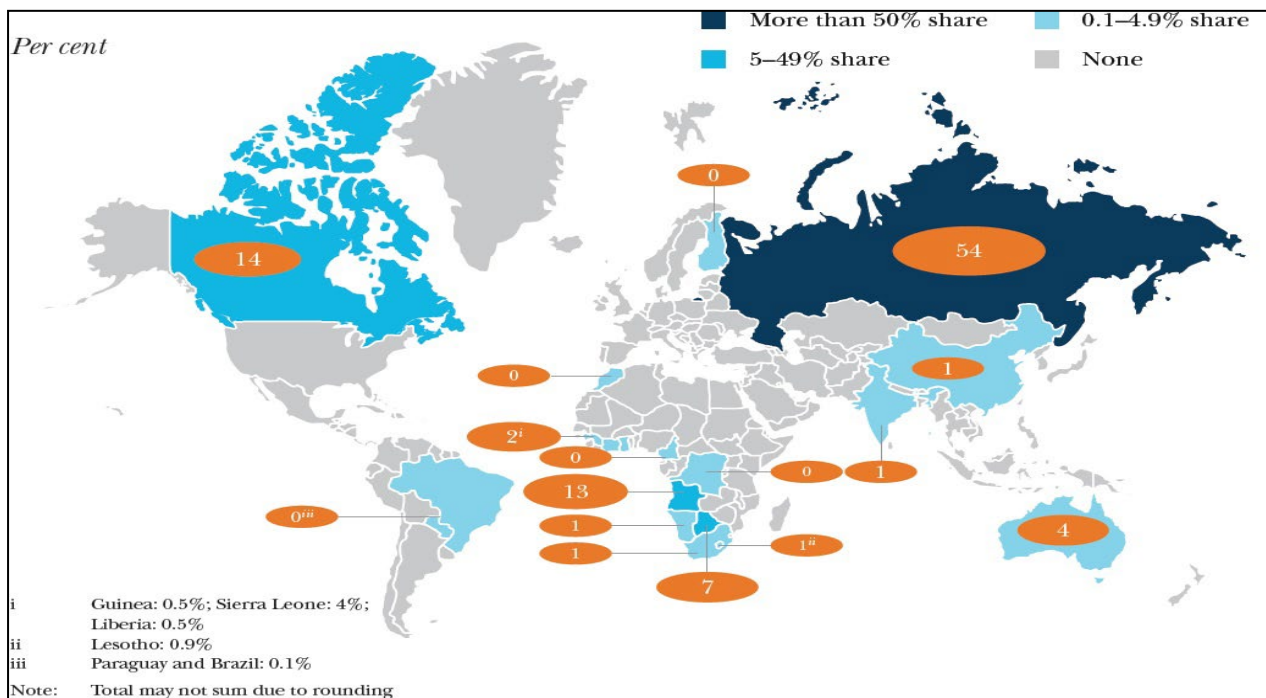


Figure 15: Share of global diamond exploration spend by country 2013 – 2014, De Beers Insight Report 2014 (DeBeers, 2014, p. 47)

This research focused on analysing factors which influence the decision to invest in countries that are prospective for diamond mining, with specific focus on South Africa (1% share of global diamond exploration spend), Botswana (7% share of global diamond exploration spend), Angola (17% share of global diamond exploration spend) and India (1% share of global diamond exploration spend).

2.2.2 Midstream – Polishing, cutting and rough diamond sales

Reavis (2008) stated in the article ‘De Beers’ diamond dilemma’, that the cutting and polishing diamond industry was largely dominated by India whom employed more than one million people and was valued at about USD\$19 billion (Reavis, 2008). Governments in diamond producing countries have adapted to force beneficiation in the polishing, cutting and rough diamond sales industries. Reavis (2008) stated as reported by the New York Times in September 2014 that Namibia had inserted a clause in its new law that permitted the government to force miners to sell a percentage of their diamonds to local polishers. The South African government followed suit by passing the Diamonds Amendment Act establishing a State Diamond Trading Company as well as a diamonds and precious metals regulator (Reavis, 2008). The industry undertook a large shift when the Botswana government, one of the world’s leading diamond producers, entered into an agreement with The De Beers Group, to have all of its rough diamonds sold out of Gaborone (Bain and Company, 2011).

The midstream industry within the diamond mining industry hence has provided for sustainable beneficiation to be created. Governments were able to create industries to support their resource sector. In recent years the cutting and polishing market has swung back to positive growth, with revenues increasing to approximately USD\$22 billion in 2013 (Bain and Company, 2014). The cutting and polishing industry has seen the move of business into lower cost areas such as India and China, with traditional cutting centres in producer countries focusing on the most expensive stones (Bain and Company, 2014).

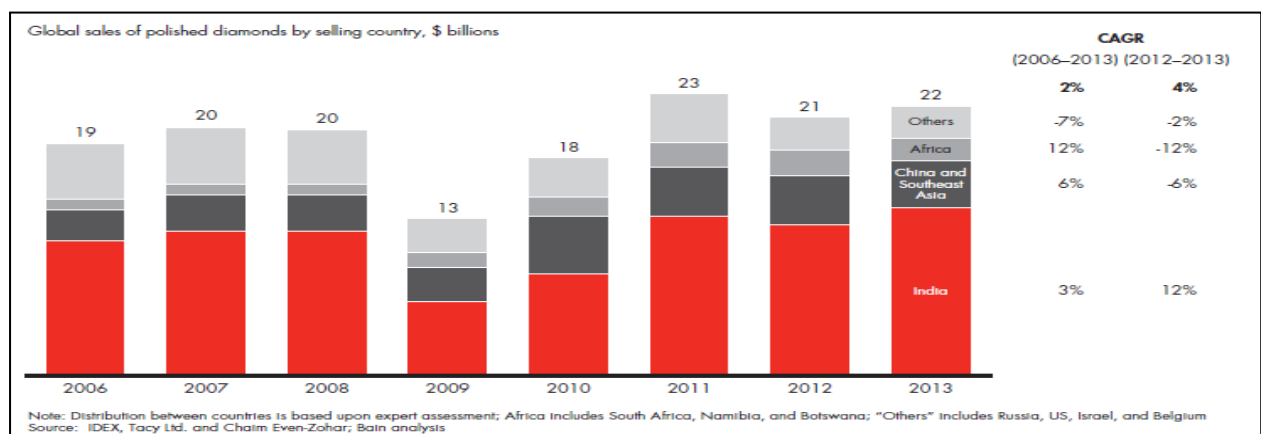


Figure 16: Global sales of polished diamonds by selling country, IDEX, Tacy Ltd. and Chaim Even-Zohar; as stated by Bain and Company (2014, p. 13)

2.2.3 Downstream – Global Customer Demand and Diamond Jewellery

Diamonds are not considered a commodity such as gold and are mostly used for gemstone jewellery (Auer & Schuhmacher, 2013). The price of diamonds is not determined by the market and does not respond rapidly to changes in economic conditions, but are rather wholesale prices (Auer & Schuhmacher, 2013). The drivers of diamond sales include the growth of high net worth individuals (HNWIs) and the luxury goods market, which in the short term is expected to show limited growth.

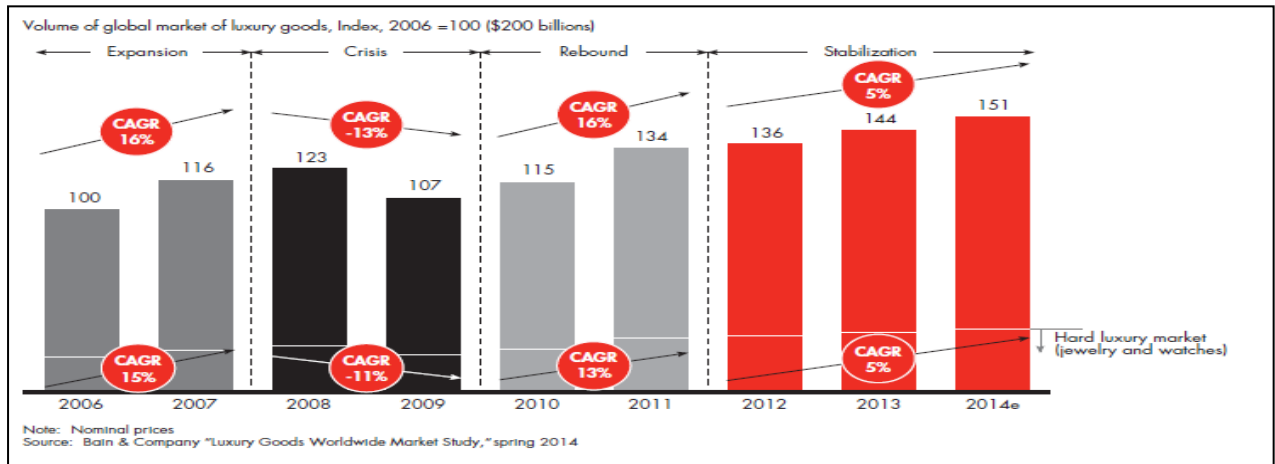


Figure 17: Growth trend for luxury good consumption, (Source: Bain & Company “Luxury Goods Worldwide Market Study spring 2014)

The industry has focused sales mainly in the retail jewellery environment with diamond jewellery been viewed sentimentally by its customers. “Men were encouraged to view diamonds as palpable symbols of love and devotion while women received the message that a diamond ring was an engagement necessity” (Bergensstock & Maskulka, p. 5). In the early years of the industry De Beer’s advertising agency N.W Ayer focused on presenting diamonds as a symbols of status and success to the global customer base. “Their rationale was that diamond purchases and ownership satisfy the complex human needs of love, social belonging, self-esteem and self-actualization” (Bergensstock & Maskulka, p. 6). The twenty first century has continued this trend and perception of diamonds, with an increasing number of purchases being linked to a sentimental value. There has also been an increase in the customer base for the diamond market attributed to the economic growth that has occurred in Asian countries such as India and China.

The retail sales industry has expanded to jewellery with unique marketing on each diamond as a point of differentiation and authenticity of the diamond. Trends have now led to online purchases through auctions as a new era of retailers may seek to explore new avenues. The retail diamond sales environment shows steady growth prospects for the near future.

2.2.4 Future forecast of the diamond industry

“Economic growth is defined as an increase of real output (gross domestic product) or real output per capita” (J Janse Van Rensburg, 2011, p. 570). J Janse Van Rensburg (2011, p. 575) defines gross domestic product (GDP) as the total market value of all the final goods and services produced annually within the boundaries of a country, whether by the country or foreign-supplied resources. Global economic growth is determined by the increase in GDP of the various different countries in the world. The World Bank in its June edition of the Global Economic Prospects Report (2014, p.3), states that Global GDP growth is projected to expand 3.4 percent in 2015 and 3.5 percent in 2016 (WorldBank, 2014). Audit and Consulting firm PricewaterhouseCoopers in their report World in 2050 - The BRICs and beyond: prospects, challenges and opportunities (2013), stated that the world economy is projected to grow at an average rate of just over 3 per cent per annum from 2011 to 2050, doubling in size by 2032 and nearly doubling again by 2050 (PricewaterhouseCoopers, 2013, p. 1). PricewaterhouseCoopers have illustrated this together with the increase in population as represented in Figure 14.

Auer and Schuhmacher (2013) conducted research which concluded that an investment in a diversified diamond portfolio can outperform a diversified stock market investment in a period of generally weak stock markets (Auer & Schuhmacher, 2013). This conclusion provides an alternative view of diamonds, suggesting that they can be held for long-term investment purposes.

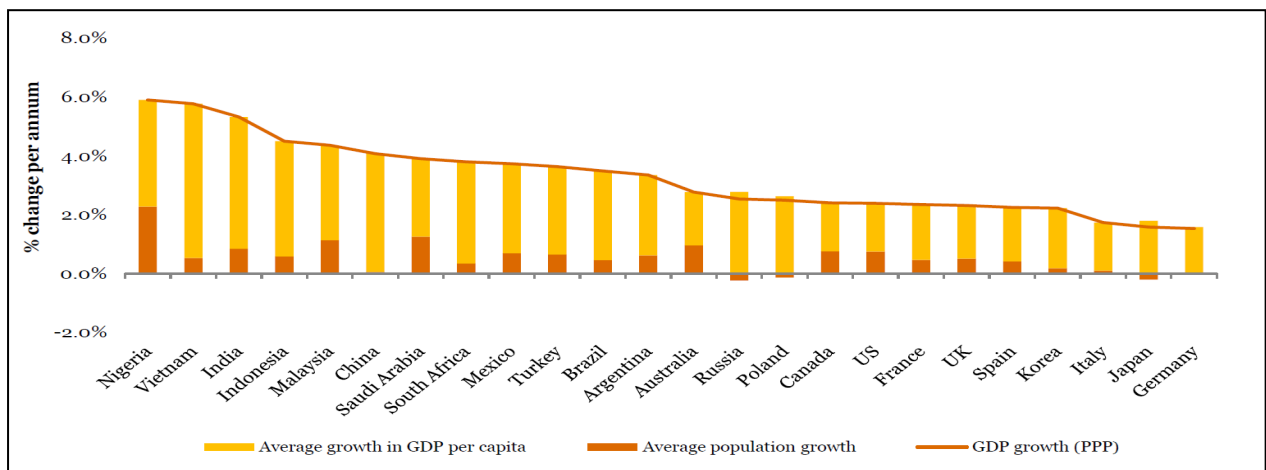


Figure 18: Breakdown of components of average real growth in GDP at PPP (2011 - 2050), World in 2050 (PricewaterhouseCoopers, 2013, p. 1)

The United States, India and China are expected to experience positive growth rates with the three countries combined constituting the major market for the diamond industry (PricewaterhouseCoopers, 2013). Kilalea (2009) illustrated the strength these three markets have on the demand for diamonds in his report “Where will the rough come from, Strategic issues for Diamantaries” at the 2009 Antwerp Diamond Symposium.

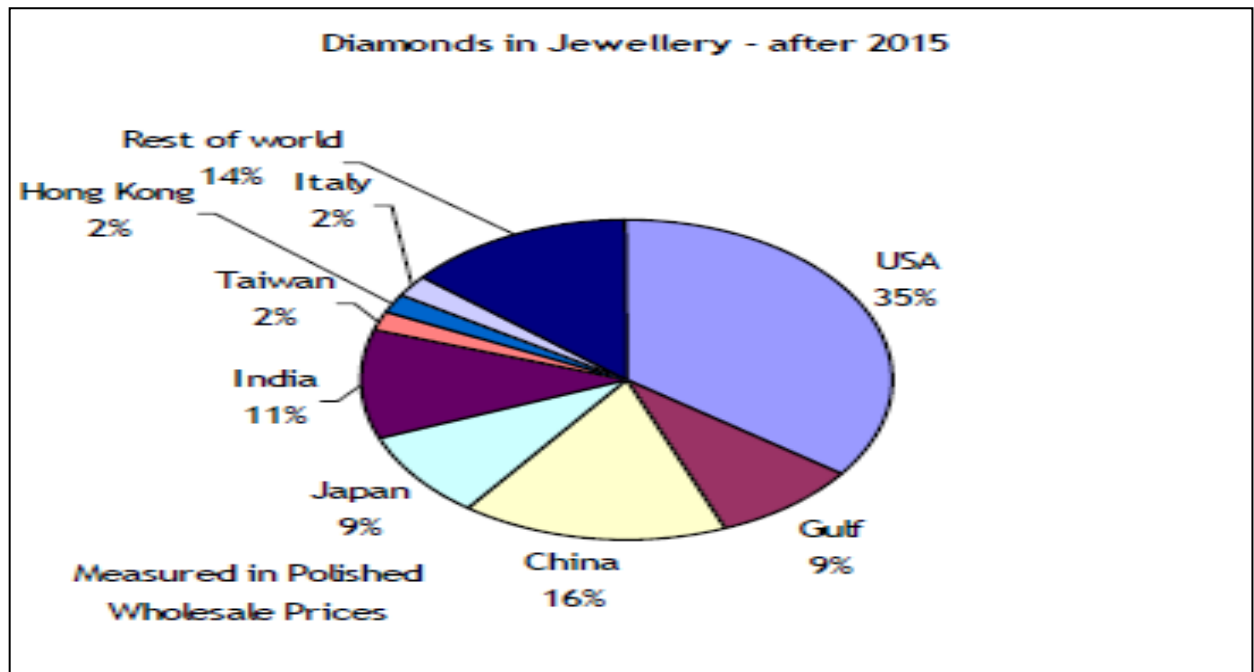


Figure 19: Demand for diamonds in jewellery - after 2015, Where will the rough come from (Kilalea, 2009)

The indications are that although growth may be limited the global economy is expected to grow, contributing to the demand for diamonds within the diamond mining industry (Kilalea, 2009). The global consumer demand for diamond jewellery hit a new all-time high in 2017 reaching US\$82bn, representing a two per cent increase on 2016 (DeBeers, 2018). In 2018 Bain and Company's review of the diamond mining industry recognised that diamond jewellery spending remained stable relative to GDP over the period 2013-2017 (Bain and Company, 2018).

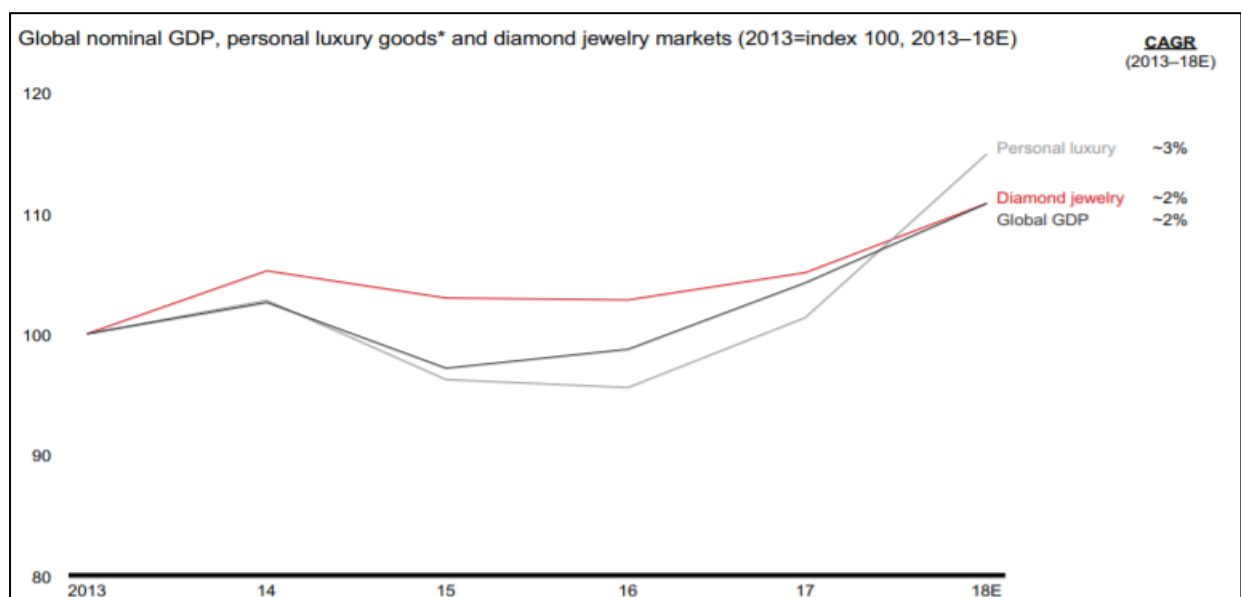


Figure 20: Personal luxury and diamond jewellery spending vs. GDP (Source: Bain and Company, 2018)

2.3 Research knowledge gap analysis - Identify the factors that influence the decision to invest in countries such as South Africa, Botswana, Angola and India

This study focused on the diamond mining industry seeking to identify and understand the factors that influence investment decision making when considering exploring for new potential resources. The literature review addressed the research problems as identified in section 1.3 through the review of the following topics: an analysis of the global diamond industry and a review of the factors that influence the decision to invest in countries such as South Africa, Botswana, Angola and India.

The analysis of the external environment is important for identifying opportunities and threats, and providing opportunities for productive co-operation with other companies (Yüksel, 2012). Yüksel (2012) states in his paper, on ‘developing a multi-criteria decision making model for PESTEL analysis’, as per Eren, 2002 and Ulgen & Mirze, 2007 that the macro environment of a company consists of the political, economic, socio-cultural, technological, legal and ecological factors.

2.3.1 Political factors

Busse and Hefeker (2007) stated that changes in government policy and/or political institutions could affect the investment behaviour of multinational corporations due to the risk premium incorporated in any investment project. Research conducted on 31 developing countries, that highlighted new evidence on determinants of foreign direct investment (FDI) in developing countries, found that the political risk index is statistically significant with the coefficient implying that countries with higher political risk attract less FDI (Singh & Jun, 1995). Further research conducted by Gastanaga, Nugent, and Pashamova (1998) established, that for a sample of 22 developing countries, lower corruption and nationalisation risk levels together with improved contract enforcement were all associated with higher FDI in flows (Gastanaga et al., 1998). This could be disputed by the study conducted by Egger and Winner (2005) which found a positive relation between FDI and corruption, and suggested that factors such as administrative controls and bureaucratic discretion had allowed government officials to partake in the profits from foreign investment. Asif and Majid (2015) stated in research on ‘the role of investment profile, government stability and macro-economic management in determining foreign private investment’ that it was generally believed that the government stability of a host country would have the ability to attract foreign direct investment together with investors having a greater confidence to invest where they found the government is more stable (Asif & Majid, 2015). Further research conducted by (Hyun, 2006) and collaborated by Daude and Stein (2007) concluded that the quality of a host country’s institutions would be one of the more significant factors in attracting foreign direct

investment (Hyun, 2006). Hyun (2006) utilised bureaucracy quality in his research which represented the strength and expertise to govern without any drastic changes in policy or interruptions in government services (Hyun, 2006), this in turn referred to the stability of government. Hyun (2006) presented in his research that government stability had a direct impact on the state of a host countries institutions which in turn if effectively established and efficiently run had a positive impact on foreign private investment. Arbatli (2011a) support the view of the significance of political stability in concluding that political stability appeared to be a critical factor in attracting FDI inflows (Arbatli, 2011a).

Busse and Hefeker (2007) referred to the studies of Harms and Ursprung (2002), Jensen (2003), and Busse (2004) stating that these were found to conclude that multinational corporations were more likely consider investments in countries where there is a democracy. Literature however also provides argument whereby a democratic institution can also hinder FDI inflows. These are prevalent as constraints over elected politicians tend to weaken the oligopolistic or monopolistic positions of multinationals, the prevention of the host government to offer lucrative financial and fiscal incentives, and the avenues which are created though which indigenous businesses can seek protection (Li & Resnick, 2003). While in a democracy may yield improved property rights protection that encourages FDI inflow, studies do not recognize that the central aspects of democratic politics may also attenuate the effect via property rights (Li & Resnick, 2003). Asiedu and Lien (2011) concluded in studies that the effect of democracy on FDI is dependent on the importance the host country places on its natural resource exports. Further to this Asiedu and Lien (2011) stated that a democracy facilitates FDI in countries where there is a low share of natural resources in its total exports, however has a negative effect on FDI in countries where natural resources dominates its exports (Asiedu & Lien, 2011). Biswas (2002) concluded there was evidence of democracy being favourable to investors as it found support in the literature linking economic growth and political factors.

The study conducted by Busse and Hefeker (2007) in a cross-country analysis that covered a period of 20 years identified only three indicators of political risk that are associated with FDI namely; government stability, religious tensions and democratic accountability (Busse & Hefeker, 2007). The results of the study concluded that that in particular government stability, internal and external conflicts, law and order, ethnic tensions, bureaucratic quality and, to a lesser degree, corruption and democratic accountability are important determinants of FDI (Busse & Hefeker, 2007).

Asiedu (2006) identified three measures of political instability as: Coups, which related to the number of forced changes in the top government (Asiedu, 2006); Assassinations which included any politically motivated murder or attempted murder of a high government official (Asiedu, 2006); and revolutions which included any illegal or forced change in the ruling government (Asiedu, 2006).

Bartels, Napolitano, and Tissi (2014) focused on examining the location specific factors influencing FDI in Sub-Saharan Africa utilising exploratory factor analysis and concluded that the stability of the political-economic factors in a specific country was a prime factor for the consideration of foreign direct investment.

Multinational companies that consider investing in diamond exploration should consider particular aspects of the political environment, in particular government stability and the stability of the political-economic in country factors in order to make a feasible decision to invest in new a new prospective country.

2.3.2 Economic factors

FDI will be directed to countries that pay a higher return on capital (Asiedu, 2002). However returns may be difficult to determine and measure in developing countries as they do not have well-functioning capital markets (Asiedu, 2002). In earlier years Schneider and Frey (1985) stated that Dunning (1973) distinguished three sets of influences on foreign direct investment. Dunning (1973) listed these as:

- Market forces such as the size and growth of the market measured by the gross net product of the recipient country (Dunning, 1973);
- Cost factors such as the availability and cost of labour, and the country inflation rates (Dunning, 1973); and
- The investment climate which is measured by the degree of foreign indebtedness of the country and the status of its balance of payments (Dunning, 1973).

This was supported by research conducted by Tsai (1994) who concluded that the state of a countries trade balance affects the inflow of FDI (Tsai, 1994). Tsai (1994) also concluded that the increase in nominal wages deterred FDI with this being more prevalent in the eighties. Research has provided evidence that higher GDP per capita implies improved prospects for FDI (Asiedu, 2002).

FDI can also be determined by the market size and the level of Gross Net Product (GNP) (Singh & Jun, 1995). In addition Singh and Jun (1995) also stated lower relative wage cost to encouraging FDI.

Investors may consider another aspect that relates a country's ability to perform economically, that of its infrastructure. The absence of adequate supporting infrastructure such as telecommunication, transport, power supply, and skilled labour, will discourage foreign investment because it increases transaction costs (Asiedu, 2006). Good infrastructure may increase the productivity of investments and therefore stimulate FDI flows (Asiedu, 2002). Asiedu (2002) points out that both the availability and reliability of infrastructure should be taken into account when measuring infrastructure development, stating that reliability could be expected to have a greater importance. This would be relevant in the current economic climate of South Africa in which power utilities have developed the infrastructure to provide power to remote parts of the country, however they cannot reliably guarantee a continuous source of power supply. Another factor which may contribute to increased FDI is the privatization of inefficient state-owned enterprises (Dupasquier & Osakwe, 2006). This privatization will display the commitment of a country to increase the efficiencies of service delivery, and its ability to increase governance around state-owned assets. Arbatli (2011a) stated in research conducted on 'economic policies and FDI inflows to emerging market economies' that lowering corporate tax rates and tariffs together with a stable exchange rate were considered to be significant pull factors in the determinants of FDI inflows (Arbatli, 2011a).

Gastanaga et al. (1998) identifies other factors, within the economic realm that may impact FDI, such as the depreciation of the host country's currency relative to the currency of the home/investing country as well as the corporate tax rate of the host country (Gastanaga et al., 1998). The benefit of exchange rate effects was researched by Blonigen (2005) who stated that the appreciation of a currency leads to increased wealth for the firm, providing the firm with greater low-cost funds to invest to the counterpart firms in the foreign country that has experienced the devaluation of their currency (Blonigen, 2005).

A country's taxation regime will play a significant part in its ability to attract FDI. The provision of taxation incentives and the adoption of FDI-stimulating policies will increase the country's attractiveness to FDI (Asiedu, 2006). Blonigen (2005) found the effects of tax to be more complicated, stating that multinational companies faced tax rates at different levels both in the host and parent country. Blonigen (2005) stated that policies to deal with double taxation agreements substantially impacted the effect of taxes on a multinational company's incentive to invest in a new country. One aspect of monetary policy that will impact a multi-national company's decision to invest is the local interest rates. "Interest rates exert a significant impact on credit by directly affecting the cost of capital", (Chatterjee, 2002).

Asiedu (2006) stated the definition of economic freedom, per the Heritage Foundation (2004), as “the absence of government coercion or constraint on the production, distribution, or consumption of goods and services beyond the extent necessary for citizen to protect and maintain liberty itself”. The empirical results of the study conducted by Asiedu (2006) indicated that FDI has no direct impact on growth, however economic performance is stronger when economic freedom is high due to the fact that economic freedom makes investments more productive.

Asiedu (2006) argued that the lack of economic freedom can limit a firm’s ability to absorb and internalize new technology from multinational corporations (MNCs) therefor limiting a country’s economic growth. The openness of a country’s economy is often measure by the ratio of trade to GDP (Asiedu, 2002). Asiedu (2002) also stated that in cases where investments are market-seeking, trade restrictions can have a positive impact on FDI. Gastanaga et al. (1998) however concluded that the influence of capital controls on inward FDI was by no means limited to the controls on inward FDI flows themselves. Dumasquier and Osakwe (2006) stated that openness and trade will signal commitment to outward-looking, market-oriented policies, and enhance trading opportunities thereby attracting foreign investors intent on taking advantage of the new trading opportunities (Dumasquier & Osakwe, 2006)..

African countries such as Botswana and Angola are today highly dependent on diamonds and oil respectively. FDI allows for such countries to consider diversification into alternative resources to restrict the dependencies on single commodities (Dumasquier & Osakwe, 2006). Such diversification can increase the economic output of economies and create new avenues for job creation and expansion.

2.3.3 Social factors

The global mining industry expands across a multitude of countries, contributing various percentages to the local GDP’s of countries. Major players in the industry such as Anglo America, Rio Tinto, BHP Billiton and others have all adopted a more sustainable approach to mining in their various countries of operation. De Vries and Petersen (2009) in their article ‘Conceptualising Sustainable Development’ described sustainable development to be the quest for developing and sustaining qualities of life. Their reason for this consideration of sustainable development was stated as “it encompasses the subjective and objective dimensions of human well-being” (De Vries & Petersen, 2009). Ihlen and Roper (2014) in their article ‘Corporate Reports on Sustainability and Sustainable Development: We have arrived’, stated as per Baker, 2005 that the concept of sustainable development, for its part, shifts focus to

society (Baker, 2005). Mining companies today considering investing into new geographies have to consider the social impact of their investment, as well as plan for future sustainable development for the communities in which they chose to operate. In certain countries governments have legislated local development as a requirement. Some examples of this include the Labour Plan in South Africa, Mineral Development Fund in Papua New Guinea and Impact Benefit Agreement in Canada all of which are legally binding instruments that make it obligatory for mining companies to take up local development works in their respective mining project areas (Daizy & Das, 2013). Governments in these countries have taken the comprehensive view of sustainable development with the mining industry and included dimensions such as local stakeholder engagement, socio economic development in mining project areas and transparency of communication to stakeholders (Daizy & Das, 2013). Daizy and Das (2013) identify three key social impacts of the mining industry, namely occupational health and safety, human rights and resettlement and rehabilitation.

HIV/AIDS is a virus/epidemic which has large social impacts, particularly, in developing countries such as Botswana, India, South Africa and Angola. The ex-post impact of HIV/AIDS has resulted in lower productivity and a significant need for improved public health infrastructure (Auty & Mikesell, 1998). Investment into such countries needs to take cognisance of the HIV/AIDS epidemic for two reasons namely, the risk that this may pose on the available work force and the social responsibility investment required for ensuring a strong and healthy workforce.

“The ability to transform non-renewable natural capital into other forms of productive wealth is the key to successful economic development of resource-rich economies”, (Auty & Mikesell, 1998).

Mining companies considering investment in new countries may also want to consider how they are able to benefit local suppliers. This could be done through backward and forward integration. Certain countries might have legislated social change drivers. For example South Africa has the Black Economic Empowerment (BEE) requirements which companies need to comply with. With particular reference to the diamond mining industry there were changes to legislation such as the Namibian legislation which was changed to force miners to sell a percentage of their diamonds to local polishers and the South African Diamond Amendment Act which meant producers were hit with duties on the export of rough diamonds (Reavis, 2008). Perhaps the most significant was the move of the De Beers Diamond Trading Company (DTC) from London to Botswana in 2013, whereby De Beers signed a ten year agreement with the newly created De Beers Diamond Trading Company Botswana to whom it would sell all locally produced diamonds (Reavis, 2008). These legislative changes and trade agreements are aimed at benefiting the local industries, creating employment, and improving the social status of the general population by creating opportunities.

2.3.4 Technological factors

Technology in the mining industry will not be a major determinant of attracting FDI, mostly due to globalisation and the ability of companies to source mining technologies from around the globe and import these to the country it is operating either exploration or mining activities (Moran, 2012). Multinational companies should however consider the import restrictions and tariffs that a particular country might have on mining equipment (Moran, 2012). High tariffs may deter the import of highly effective foreign equipment and result in exploration or mining projects lacking the technological features in may require for delivering success (Moran, 2012). Technological factors that will stem from the current lack of infrastructure in emerging markets, will stem from the lack of telecommunication networks (Dupasquier & Osakwe, 2006). Mining operations tend to be located in remote locations away from large city centres. The lack of infrastructure in these areas might be significant and lead to increased transactional cost for an exploration or mining operation (Dupasquier & Osakwe, 2006).

2.3.5 Legislative factors

When considering investment decisions to enter a new country, investors often consider the absence of laws or the lack of enforcement of the law, rather than the particular countries legal system (Czinkota & Skuba, 2014). However there might also be a number of laws within the legislation of a particular country that will affect the company's ability to enter and succeed in a market (Czinkota & Skuba, 2014). "The existence of no regulations may cause international firms to shy away from a market of ungoverned space", (Czinkota & Skuba, 2014).

Multinational companies listed on large stock exchanges comply with anti-corrupt practices, and despite the presence of a functioning legal system, corrupt practices that take place in the public and private sectors often disadvantage these firms (Czinkota & Skuba, 2014). Czinkota and Skuba (2014) concluded that the lower risk environments will be countries that provide more protection, predictability, continuity and transparency from their legal systems.

Countries might have strong legislation, however in many African countries for example it is difficult to understand specific aspects of government policies, partly due to the high frequency of government changes as well as policy changes and the lack of transparency in macroeconomic policy (Dupasquier & Osakwe, 2006).

The mineral exploration environment would be largely project based, with the sustainability of projects dependent on the successful delivery of potential mineral indicators. The labour force required to conduct such exploration activities would be largely contract based dependent on the project. Hence a

country's specific labour laws, and the flexibility associated with hired labour will play a significant role in considering whether to invest in exploration activities in a particular country.

Mining companies are faced with a particular legislative challenge in that when considering undertaking exploration activities, they require the legislation to ensure the security of the exploration to mining licence. Hence the legislation requires protecting their security to tenure. Whilst legislation is a key factor in the decision to invest in new countries, multinational companies need to consider factors such as the frequency of change to mineral rights regulation and the country's ability to maintain a stable mining environment. One should also place a significant value on the rule of law, versus merely having a robust legislation in place.

2.3.6 Environmental factors

Mining operations are widely known for their impact on the natural environment. "The impacts of a mining operation commence with exploration activities, extend through extraction and processing of minerals, and may continue well beyond post closure of the operation", (Daizy & Das, 2013). Daizy and Das (2013) identified three key environmental issues for the mining industry namely, waste generation, natural resource depletion, and GHG emissions. Daizy and Das (2013) states "that in comparison with other sectors, the potential social and environmental issues associated with mining and mineral processing operations are both significant and complex to manage".

Some mining companies are committed to best practice standards which have certain implications that ensure the development of sound social and environmental policies (Cragg, Pearson, & Cooney, 1995). Despite the cost associated with the implementation of best practice standards, companies who do adopt these could be considered leaders in their industry. By adopting these best practices a company makes an ethical stance with regards to the manner in which it chooses to operate. Adopting such an ethical stance requires that the company balances a variety of stakeholder values as important in their own right (Cragg et al., 1995).

Mining companies considering entering into new geographies need to bear in mind the environmental regulations of that specific country, and the environmental impact that both the exploration and mining activities will have. The cost associated with these will vary depending on location. For example, the cost associated with maintaining the environment for a mining operation in Canada's northern ice and snow surrounded territories, will be significantly different to that of an operation near Gaborone in Botswana.

2.4 Qualitative attributes key to the research

The industry analyses support the need for diamond exploration in order to add new reserves ensuring there is long term supply for the precious stone to meet the current projected demand forecast. The need for diamond exploration in turn requires a robust understanding of the factors to consider when making diamond exploration decisions to invest in a particular country ensuring that the investment decision is sustainable.

The current outlook for the demand for diamonds remains driven by growth in countries such as the United States of America, India and China. The forecasted demand for diamonds will out way the supply, with the earliest indication of a gap occurring in 2019. The resultant demand shock that may be triggered will have a substantially negative impact, throughout the pipeline on the industry as a whole. The current economic environment remains challenging for all producers, and the exploration spend has entered into a cycle of reductions. The industry is challenged with adding new reserves to the current portfolio, with limited funding available to identify and explore prospective geographical regions.

“With the increasing importance of key emerging markets, which have both enormous market potential and high barriers to investment, many companies tolerate imperfect investment conditions in the near term in the hope of significant rewards in the long term”, (Czinkota & Skuba, 2014). This however does increase the risk of an investment into emerging markets. The PESTLE analysis helped identify broad factors each of which have specific areas of consideration that need to be applied when a multinational company considers investment into new foreign countries. These areas of consideration may be recognised as those that influence investment decision making. Hence mining companies, considering investing in countries such as South Africa would need to give consideration to these factors in order to make the decision with regards to the initial investment in exploration activities and thereafter the ability to operate sustainable mining operations in the long-term.

2.5 Framework(s) for interpreting research findings

The PESTLE model is a strategic framework that has be utilised by businesses to analyse the external factors impacting their businesses (Khalid & Rahman). Investment decisions are required to consider the external factors to the business, enabling decision makers to review these factors and make an informed decision to invest or not to invest. This research required to understand external environment challenges faced by an organisation in order to first identify which are the critical factors and thereafter understand why these would be important to investment decision making. Khalid (2019) and Rastogi

(2016) utilised the same PESTLE framework in their papers “Conceptual Model for the External Factors Affecting Project Performance Using PESTLE Factors” and “the PESTLE technique—a tool to identify external risks in construction projects” respectively. Khalid (2019) concluded that “the PESTLE technique will be a key component of any organization in moving towards achieving best practices in order to overcome performance problems with regarding to projects” (Khalid, pg. 297). Rastogi (2016) concluded that “the PESTLE Technique can help clarify why and which is needed in identifying potential options to mitigate external risks” (Rastogi, pg. 298).

The PESTLE analysis provides a broad framework which may be utilised by companies when making investment decisions, however companies are not limited to these and may expand on them depending on their particular industry and the environment in which they operate. Yüksel (2012) considers other factors such as environmental protection, environmental health, transparency, and accountability in his research on a PESTLE analysis. In addition Yüksel (2012) recognises one of the basic functions of PESTLE is that it provides data and information that will enable the company to predict situations and circumstances that it might encounter in future. Diamond mining companies will be required to consider the external factors as identified by PESTLE, when considering whether to invest in exploration activities in a particular country. It is difficult or impossible for companies to control direct external factors (Yüksel, 2012), and hence the decision to invest in new countries needs to be met with rigor and sound analysis.

Yüksel (2012) provides two basic functions for a company as follows:

- Identification of the environment within which the company operates; and
- Providing of data and information that will enable the company to predict situations and circumstances that it might encounter in future (Yüksel, 2012).

This study utilises the factors of the PESTLE framework as critical focus areas and elaborates on the factors that should be considered for a decision to invest in exploration activities in countries such as South Africa, India, Angola and Botswana with the view that the investment decision could lead to a sustainable diamond mining operation.

The research identifies factors such as political, economic, social, technological, legislative and environmental factors that contribute to the investment decision of multinational companies to invest in exploration activities in the search for new prospective diamond mines. According to the research the following factors were identified with the various PESTLE factors:

Political

- Existence of Democracy
- Levels of Corruption
- Risk of Nationalization
- Length of Term of Presidential Office
- Government Stability

Economic

- Cost of Labour
- Foreign Exchange Risk
- Economics Freedom
- Local Interest Rates
- Status of Current Infrastructure
- Rate of Inflation

Social

- Community Development
- Local Stakeholder Engagement
- HIV/AIDS Epidemic
- Local Beneficiation

Technological

- Accessibility to Technology
- Telecommunications Network Infrastructure
- Import Restrictions on Technology

Legislative

- Absence of Legislation
- Enforcement of Legislation
- Transparency of Legal System
- Protection of Legal System
- Continuity of Legal System

Environmental

- Environment Regulation
- Rehabilitation Timeframes
- Degree of Environmental Impact

2.6 Conclusion of Literature Review

Behre Dolbear Mineral Industry Advisors have compiled annual risk assessments in the global mining industry since 1999. In 2014 Behre Dolbear released a survey of countries for mining investment based on 25 countries and ranked each of these based on 7 criteria as follows (Dolbear, 2014):

- the country's economic system;
- the country's political system;
- the degree of social issues affecting mining in the country;
- delays in receiving permits due to bureaucratic and other issues;
- the degree of corruption prevalent in the country;
- the stability of the country's currency;
- the competitiveness of the country's tax policy (Dolbear, 2014).

The results of the 2014 Behre Dolbear survey of countries for mining investment in illustrated in Figure 16 below:

2014 RANKING OF COUNTRIES				
Rank	Country	2014 Rating	2013 Rating	Difference
1	Canada	61.6	54.3	7.3
2	Australia	60.3	56.3	4.0
3	United States	54.6	41.7	12.9
4	Chile	54.1	51.0	3.1
5	Mexico	46.0	43.1	2.9
6	Brazil	42.6	45.6	-3.0
7	Peru	42.3	35.9	6.4
8	Botswana	41.6	36.8	4.8
9	Namibia	38.6	33.6	5.0
10	Ghana	38.2	36.0	2.2
11	Colombia	37.7	40.5	-2.8
12	Zambia	35.0	26.1	8.9
13	Tanzania	34.2	31.9	2.3
14	South Africa	33.9	24.4	9.5
15	Philippines	32.9	30.4	2.5
16	China	29.7	28.7	1.0
17	India	28.5	27.8	0.7
18	Indonesia	28.1	27.5	0.6
19	Kazakhstan	28.1	20.9	7.2
20	Argentina	24.8	29.0	-4.2
21	Papua New Guinea	23.1	21.0	2.1
22	Mozambique	22.9	32.0	-9.1
23	Mongolia	21.5	26.9	-5.4
24	Russia	20.1	17.1	3.0
25	D.R. Congo	18.7	17.7	1.0

Figure 21: Behre Dolbear - Countries for mineral investment (Dolbear, 2014)

Botswana ranks higher than both South Africa and India in the survey, with Angola not featuring as part of the research conducted. This research only provided one such view of a list of countries for possible investment into diamond exploration. Multinational companies would be required to make informed decisions at a given point in time, considering the range of external factors and whether or not to pursue investment into a particular country.

The literature review identified the need for exploration activities in the diamond mining industry given the demand and supply mechanics of the product going forward. Furthermore, the literature review identified factors, utilising the PESTLE framework that would impact the decision of multinational companies to invest in new countries. Lastly the literature review critiques the PESTLE framework as being an independent measurement and evaluation of the factors, not reflecting the real situation whereby there may be interdependencies between the factors as well as the factors not having an equal influence on potential investment decisions.

The following three propositions were derived from the literature review:

2.6.1 Research Proposition 1:

Despite the funding constraints in the economic environment, there exists a need for diamond exploration in order to add new reserves ensuring there is long term supply for the precious stone to meet the current projected demand forecast.

2.6.2 Research Proposition 2:

There exist factors such as political, economic, social, technological, legislative and environmental (PESTLE analysis) factors that contribute to the investment decision of multinational companies to invest in exploration activities in the search for new prospective diamond mines.

3 RESEARCH METHODOLOGY

In Section 1.2.3, we have posed two questions that this research report intended to answer—that is, ‘Is there a need to conduct diamond exploration?’ and ‘What are the key factors to consider when making the decision to invest in diamond exploration activities?’ We have since reviewed literature and developed an interpretative as well as conceptual framework that guided the choices of techniques which were used. This chapter identifies and describes the research approach, design as well as procedure and methods that were employed in this research to collect, process, and analyse empirical evidence. Broadly, it has three objectives; namely, to identify and describe the research strategy (Section 3.1), the research design (Section 3.2), as well as the procedure and methods (Section 3.3). The chapter also describes the reliability and validity measures (Section 3.4) that this research applies to make it credible as well as the technical and administrative limitations of the choices we make (Section 3.5).

3.1 Research Strategy

The research strategy is aimed at addressing the questions and propositions that were identified from the literature review. Research strategy refers to the “general orientation of the conduct for the research” (Bryman, 2012, p. 35). The strategies that have been considered are based on the data that is available for collection and analysis. These strategies are dependent on whether we intended to have a deductive testing of theory or an inductive testing of theory. This may take the form of review of amounts of data of one or more of the identified variables of interest to measure variables in a numeric way or take the form of reviewing the characteristics of variables that may not be able to be quantified in a numerical manner (Leedy & Ormrod, 2014). In addition, the strategies may be combined in a single form by applying a hybrid of approached. There are three main research strategies namely, qualitative, quantitative and mixed methods.

Based on the literature review conducted in section 2, this research undertook to utilise a qualitative research strategy in order to answer the research questions posed in chapter one. Quantitative research would “emphasise on the quantification in the collection and analysis of data that entails a deductive approach to the relationship between theory and research, in which the accent is placed on testing theories” (Bryman, 2012, p. 36). It involves trying “to measure variables in some numerical way using commonly accepted measures of the physical world or carefully designed measure of psychological characteristics or behaviours (e.g. test, questionnaires, rating scales)” (Leedy & Ormrod, 2014, p. 97). Qualitative research would “emphasis on words rather than quantification in the collection of data and

that predominately emphasises an inductive approach to the relationship between theory and research, in which the emphasis is placed on the generation of theories (Bryman, 2012, p. 36)". It involves "looking at characteristics, or qualities, that cannot be entirely reduced to numerical values" (Leedy & Ormrod, 2014, p. 97). Leedy and Ormrod (2014, p. 97) further stated that qualitative research "typically aims to examine the many nuances and complexities of a particular phenomenon". The mixed method approach has its origins as early as 1959, and is a technique that is less well known when compared to the quantitative or qualitative strategies, involving the collection and analysing of both these forms of data in one study (Creswell, 2013). Creswell (2013) continued to describe this approach as one in which the researcher tends to base knowledge claims on pragmatic grounds (e.g., consequence-orientated, problem centered and pluralistic). The mixed method approach noted the following disadvantages:

- the additional time required to ensure both appropriate and accurate quantitative and qualitative data can be obtained; and
- the additional mathematical rigor that would be required to ensure adequate quantitative factors will be applied to the PESTLE factors identified.

This research utilised a qualitative research strategy in order to address the research problem. The research has been based on understanding the diamond mining industry and the need to find new sustainable diamond mines. The research aimed to identify the factors influencing exploration investment decisions. The research aimed to provide decision makers with key factors to consider when entering diamond exploration focused investments. The understanding of the factors that influence investment decision making required a qualitative approach in the evaluation of the factors identified as well as an understanding of the views of participants to ascertain the importance of the factors. The views of industry experts were critically important in understanding the factors that remain relevant in the external environment. The PESTLE analysis framework allowed for the identification of the factors most influential to diamond investment decision making, and the views of experts facilitated which of these are remain important and valid in the external environment. The reason for the qualitative approach as the research aimed to describe, explain, explore and interpret finding to build a theory of what factors should be considered for investment decision making with specific reference to diamond exploration in South Africa. The data that was conducted will also be informative from a small group (with specific industry knowledge) and was analysed through inductive reasoning. To support the qualitative approach the list of PESTLE factors identified through research was ranked by participants using a Likert scale. This list allowed for factors to be ranked in terms of their level of importance to the investment decision. Likert scales are considered to be common for ratings formats for surveys allowing respondents to rank quality from high to low (Allen & Seaman, 2007). The initial data collected

with the use of the list utilised ordinal data in which a ranking of data is possible but no measure of distance is possible (Allen & Seaman, 2007).

In 2013 Christian Wernz, Hui Zhang and Kongkiti Phusavat conducted research on the “international study of technology investment decisions at hospitals”, with the aim of “understanding how organisation and country level factors influence hospital investment behaviour”(Zhang & Bartol, 2010, p. 568). They selective a qualitative approached and chose to conduct semi-structure group interviews with the relevant stakeholders as an approach. The interviewing of a diverse group of interviewees had allowed for the data and investigator triangulation, contributing to the increase of validity and reliability. Questions used in the interview were developed from the literature review conducted. This approached allowed for key insights from the interviews to be extracted and written up. Through adopting this approach they were able to “shows how, in addition, country level factors – in particular healthcare system and cultural aspects – affect hospital decision-making behaviour”(Zhang & Bartol, 2010, p. 568). Using the same approach in this research, we benefited from the identification of factors from literature, the ranking of the factors by participants and the interview data shared during the discussions. The triangulation allowed for a robust conclusion to be derived and collaborated.

3.2 Research Design

The qualitative approach however incorporated both primary and secondary data analysis. Primary data analysis refers to the analysis of data collected and analysed directly by the researcher (Bryman, 2012). The study collected data by means of semi structured interviews conducted with individuals of adequate knowledge and background on the subject matter of FDI (foreign direct investment), mining in general, and the diamond mining industry. The interviews were complimented by a list representing the factors influencing investing decision making, as identified by the literature review, and encourage participants to provide their views on the factors influencing exploration investment decisions in the diamond mining industry. The list allowed for factors to be ranked in terms of their level of importance to the investment decision. The list utilised Likert scales to gather data for analyses. The data analysis that followed the data collection, required further specific analytical work to be concluded. Industry experts enabled the increased understanding into FDI, together with which factors were more critical for investment consideration then others. The industry experts were carefully selected due to their knowledge of the diamond mining industry.

The secondary data analysis refers to the analysis of data by researchers who have not been involved in the collection of the data (Bryman, 2012). In the case of this study, secondary data analysis was provided

by industry reports, country specific data, case studies and FDI specific literature. In order to gather this secondary data an exploratory study was conducted that entailed an extensive literature review which provided insight into the need for diamond exploration activities, the factors influencing exploration investment decisions in emerging countries such as India, Botswana, South Africa and Angola. The extensive literature review identified factors from the PESTLE framework, and within each PESTLE factor identified key drivers of investment decision making, allowing for the critical analysis of the information obtained. Case studies relevant to FDI were reviewed to allow examination of a particular instances in a great deal of depth, rather than looking at multiple instances superficially (Rule & John, 2011). Utilising a few cases that were relevant allowed for the understanding of the impact of FDI decisions, and those factors that influence multi-nationals to pursue investment opportunities in emerging countries.

The information and data gathered from both primary and secondary sources of information through the semi structured interviews, literature review, industry reports, country reports and case studies were used to identify the top five factors influencing exploration investment decisions in the diamond industry.

As highlight in section 3.1 the research conducted by Christian Wernz, Hui Zhang and Kongkiti Phusavat on the “international study of technology investment decisions at hospitals”, with the aim of “understanding how organisation and country level factors influence hospital investment behaviour”(Zhang & Bartol, 2010, p. 568) adopted a similar approach. The approached allowed for factors to be identified and key questions to be derived benefit the research to focus the interviews on specific areas that would provide the correct data to be analysis. There are a wide range of factors that may influence investment decision, and these may be limited to a certain number that are specific to mining exploration investments, hence this approach benefited the research to be focused, and when interview was conducted to be detailed and specific.

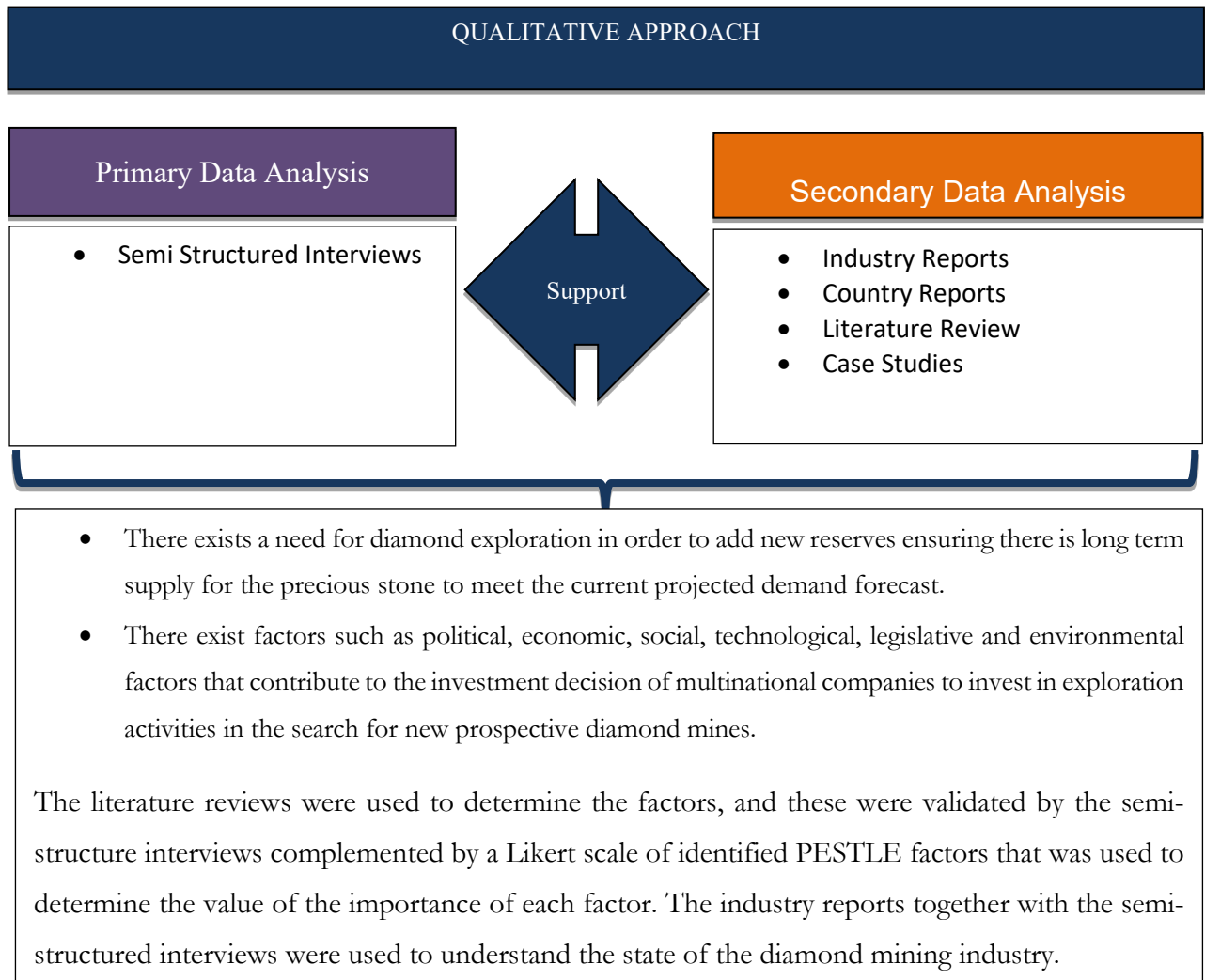


Figure 22: Research design adopted

3.3 Research procedure and methods

This section documents the actual procedure and the methods employed in this research to collect, collate, process, and analyse empirical evidence. Broadly, we detail the data and information collection instruments (Section 3.3.1), the target population and sampling of respondents (Section 3.3.2), the ethical considerations during the research process (Section 3.3.3), data and information collection process and storage (Section 3.3.4), data and information processing and analysis (Section 3.3.5) as well as the background description of the respondents who provided empirical evidence for this research study (Section 3.3.6).

3.3.1 Research data and information collection instrument

In term of solving the research problem identified the research needed to identify and utilise tools for measuring the observations that support our research strategy. These tools are termed collection instruments. “Measurement instruments provide a basis on which the entire research is based”(Leedy

& Ormrod, 2014). The tools are aimed at collection of data (numeric and or textual or imaged based), either through representative, large samples or informative small samples via the use of standardised instruments and loosely structured non standardised interviews (Leedy & Ormrod, 2014). There are two types of research instruments namely observation schedule and interview schedule. This research undertook the use of the interview schedule.

Individual semi-structured interviews were conducted with each of the key respondents. Semi-structures interviews were simple conversations in which the researcher knew what they wanted to enquire about and had a set of questions to ask which provided adequate coverage of the subject matter (Fylan, 2005). The topic under research is complex and integrated. Hence the semi-structured interviews provided a versatile means of collecting data, and allowed for a deeper understanding of the research propositions through the exploring of contradiction with participants (Fylan, 2005). The review of the PESTLE factors and ranking thereof the level of importance of the factors.

The article highlight in section 3.1 compiled by Christian Wernz, Hui Zhang and Kongkiti Phusavat on the “international study of technology investment decisions at hospitals”, with the aim of “understanding how organisation and country level factors influence hospital investment behaviour”(Zhang & Bartol, 2010, p. 568) adopted a similar approach where this helped the journal generate in depth analysis of the view of individuals/groups regarding the aim of the research. The one difference is that the interviews here were conducted in groups versus individually, however were able to collect specific knowledge from the selected experts. This research adopted individual interviews in order to benefit from the specific view of industry experts.

The literature review allowed for the identification of issues specific to each factor of the PESTLE framework. These specific factors were made available for review and evaluation by the key respondents. To supplement the interviews each key respondent completed a ranking of the factors as identified by the literature and as represent by Figure 18.

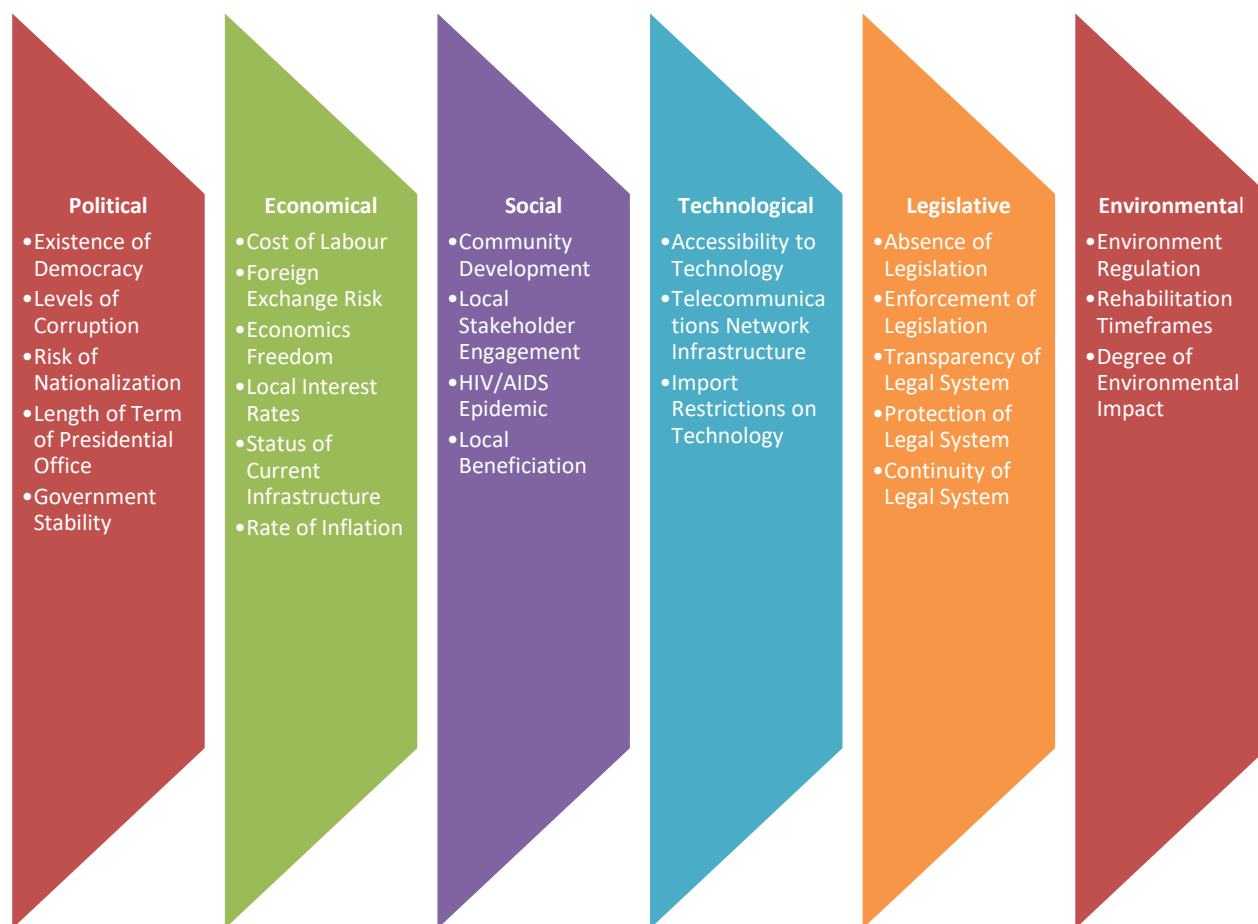


Figure 23: Factor influencing investment decision as identified by the PESTLE framework

3.3.2 Research Target population and selection of respondents

3.3.2.1 Research Target Population

Bryman (2012, p. 716) defined population as “the universe of units from which a sample is to be selected”. The population from which a sample was taken are individuals who were subject matter experts on foreign direct investment, mineral exploration and the diamond mining industry. Karimi and Komendantova (2017) in their article on ‘understanding experts’ view and risk perceptions on carbon capture and storage in three European countries’ adopted a similar approach. They utilised a “group of experts with sufficient knowledge about carbon capture and storage”(Karimi & Komendantova, 2017). This research targeted a population with the appropriate knowledge base. The same approach had been adopted in this research with the benefit of having the appropriate people as participants. These were people within the mining industry who had more knowledge of the research topic than people in other industries or fields of work.

3.3.2.2 Sampling or selecting respondents from the target population

The process of selecting entities for qualitative research may include selecting of “people, text materials and audio-visual records” for analysis is called sampling of the targeted population” (Bryman, 2012).

The research problem and sub problems identified required a specific knowledge base to be addressed. Purposive sampling was the technique utilised in which semi structured interviews were conducted. Purposive sampling is “essentially to do with the selection of units (which may be people, organisations, documents, departments and so on), with direct reference to the research questions being asked” (Bryman, 2012). Purposive sampling does present itself with the risk that the researcher is left to exercise judgment on the informants reliability and competency (Tongco, 2007). Tongco (2007) however concluded that purposive sampling is both practical and efficient when used properly and can be as effective, or even more efficient than random sampling (Tongco, 2007).

The interview candidates held extensive knowledge and experience in either foreign direct investment, mineral exploration, and /or the diamond mining industry. The disclosure of each respondent has been kept confidential.

3.3.3 Ethical considerations when collecting research data

As the study uses human beings for input, gaining data from a select group of knowledgeable industry experts, close consideration should be given to the ethical considerations of the research. Leedy and Ormrod (2014, p. 106) stated that “most ethical issues in research fall into one of four categories: protection from harm, voluntary and informed participation, right to privacy and honesty with professional colleagues. In the case of this report ethical issues in two specific areas may cause issue.

The researcher was a finance professional who has worked within the diamond industry for thirteen years spending most of this time in the exploration business unit of a large diamond mining company. Having worked and travelled across exploration projects in Chile, Angola, India, Botswana and South Africa. He held an interest in the field of diamond exploration, with the aim to improve the understanding of factors that may influence the decision to invest in exploration activities. In conducting the research, the researcher had clearly defined his research objective using literature to support the identification of factors that has been analysed. The interviews which were conducted were done using knowledgeable diamond industry experts. All interviews conducted were done at the free will of the participants. Each participant had received a letter indicating the intent of the research and its purpose thereafter obtaining their verbal consent for the interview. The issues of right to privacy and honesty with professional colleagues have been upheld.

Right to Privacy

The research needed to respect the privacy of participants. Each of the participants names have been kept private and confidential and are referred to as key respondents (A-G) in the research. “Under no circumstances should a research report be presented in such a way that other people become aware of how a particular participant has responded or behaved”(Leedy & Ormrod, 2014). All files that are saved have been saved under the naming convention as “Key Respondent (A-G)”. All recording of interviews has been saved on a secure location which is password protected.

Honesty with Professional Colleagues

Each of the participants interviews have been recorded and thereafter transcribed into this research to keep the authenticity of commentary provided. The excel list containing the Likert scale of factors has been saved and files have been password protected to ensure no data is adjusted. The comments and discussions provided by the participants have been presented as stated with no deception of the findings.

3.3.4 Research data and information collection process

Initially a draft list of the factors influencing investment decisions was constructed using the PESTLE framework and a literature review on the factors that influence the decision to invest in countries such as South Africa, Botswana, Angola and India as a foundation.

These initial factors identified by the literature review were distributed to the key respondents discussed in 3.3.2. Thereafter semi-structured interviews were conducted with each respondent together with each participant completing a Likert scale based on the factor identified.

Each discussion with the key respondents focused around the following key points:

- Future investment requirements in the diamond mining industry;
- Factors that influence the decision to invest in diamond prospective countries such as South Africa, Botswana, Angola and India;

Interviews took place in person, where this was not possible alternative means of video and telephone calls were utilised. Information was shared via email. Interview candidates were provided with the literature review prior to the interview and were informed as to the intent of the research. Sufficient time was provided between the dissemination of this information and the actual interview. The researcher obtained consent from the candidate with regard to the recording of interviews, to ensure that all information was transcribed correctly for interpretation. The Likert scales were emailed to each candidate and their basis of completion discussed in the interview. These were Excel based and

submitted on locked excel spreadsheets. Once the list was received they were transfer to one excel file to be analysed. Karimi and Komendantova (2017) conducted semi-structured interview with experts where the questions were subjective addressing all the interviews equally. This enabled the researchers to collect information to “understand the concerns typical to a certain group of stakeholders”(Karimi & Komendantova, 2017). (N. Gupta, Fischer, van der Lans, & Frewer, 2012) who aimed to understand the “factors influencing societal response of nanotechnology” adopted an approach of face to face interviews which were recorded with the verbal consent of the participants. This had the benefit to facilitate further review post the interview. The same data collection process has been followed in this research report, which will benefit the research from being able to review the in-depth conversations post the interview.

3.3.5 Research data and information processing and analysis

3.3.5.1 Research data and information processing

Bryman (2012, p. 565) stated that “one of the main challenges with qualitative research is that it very rapidly generates a large, cumbersome data-base because of its reliance on prose in the form of such media as field notes, interview transcripts, or documents”. The information collated from the interviews were used for analysis. The data was reviewed with the literature to verify the factors that influence exploration investment decisions in the diamond industry.

The data collected from the interviews was saved on voice files and in an excel workbook for analysis. These may be made available upon request, however are considered confidential to protect participants identities. The research data was approached with openness regardless of the meanings that emerged (Hycner, 1985). Each interview was transcribed for the specific responses provided. The interviews were reviewed more than once to ensure the full context of the interview was understood as a whole (Hycner, 1985). Thereafter the researcher addressed the data in line with the research propositions that have been raised. This was a key process whereby data was broken down into component parts (Bryman, 2012). The relevant issues within the factors were identified in the interview and data relating to these noted in order to established the importance these factors had on exploration investment decisions. These factors were then recognised as the most significant to an investment decision and are validated by the research conducted.

3.3.5.2 Research data and information analysis

Research analysis is the approach adopted to understand the value of the data collected (Leedy & Ormrod, 2014). As discussed in 3.3.5.1 qualitative research can end up generating significant amount

of data. Research analysis is the review and unpacking of this data to a format that is usable for the research (Leedy & Ormrod, 2014). Qualitative research has different methods of analysing data. These include the methods of case study, ethnography, phenomenological study, grounded theory and content analysis (Leedy & Ormrod, 2014).

This research adopted a grounded theory approach in that it intended to derive a theory from the collection and analysis of data. This collection was done through semi-structured interviews. The approach had been to utilise the information from the literature review and thereafter construct a list of factors that will influence investment decision making in diamond exploration. This information was then used to facilitate informal interviews with industry experts who discussed their view on the subject matter. These discussions were reviewed to understand and access each individual respondents' key considerations for investment decision making through the coding of data into categories and indenting themes in relation to the information identified by literature. From this analysis the research has been able to ascertain whether the factors identified by literature and the views of industry experts were aligned, narrowing down the critical factors to a list of ten. (Zhang & Bartol, 2010, p. 568) adopted a similar approach where this enabled the research to collaborate and extend on the finding in literature with the interview conducted with industry experts enabling them to conclude the on 'how organisation and country level factors influence hospital investment'.

3.3.6 Description of the research respondents

Key Respondent A	Technical Services Senior Manager with the diamond mining industry, leading teams providing technical services to the exploration business units across the globe +25 years' experience
Key Respondent B	Executive Member of leading mining company responsible for exploration activities +25 years' experience
Key Respondent C	Technical Support Lead and Business Planning advisor to the Group Head of Exploration services for leading mining company 15-20 years' experience

Key Respondent D	Senior Finance Professional with accountability for exploration specific decision making in diamond mining company 15-20 years' experience
Key Respondent E	Senior Finance Professional with focus on corporate finance decision making in the mining industry +25 years' experience
Key Respondent F	Senior Project Lead in the diamond mining industry focusing on large project investment decisions +25 years' experience
Key Respondent G	Senior Risk Professional in the mining industry, focusing on governance and risk. 15-20 years' experience
Key Respondent H	Senior Human Resource professional focusing on exploration business units within the mining industry +25 years' experience
Key Respondent I	Technical Services Senior Manager with the diamond mining industry, leading teams providing laboratory services to the exploration business +25 years' experience
Key Respondent J	Senior Technical Expert focusing on supply and demand fundamentals in the diamond mining industry 15-20 years' experience
Key Respondent K	Ex Executive Member of leading mining company responsible for exploration activities +25 years' experience
Key Respondent L	Senior Finance Professional with representation on boards and governance structures in leading mining company 15-20 years' experience

3.4 Research Strengths – reliability and validity measure applied

3.4.1 Research weaknesses – technical and administrative limitations

Key respondents were selected ensuring that a high level of knowledge was present on the subject matter to enable the input to be content rich and relevant to the study. The interviews allowed for the establishment of the need for diamond exploration as well as which factors were critical for each participant to investment decision making. These were however verified with literature and case studies relevant to the subject matter. The factors that influence exploration investment decisions in the diamond industry were reviewed in line with literature that relates to the determinants of foreign direct investment, with specific focus on the mining and mineral industry in emerging market environments.

3.4.2 Research strengths - Validity and reliability measures applied

3.4.2.1 External validity

External validity concerns itself with the question of whether the results from this study can be generalised beyond the specific research context in which it was conducted (Bryman, 2012). The literature review used a wide range of literature in the field of foreign direct investment with specific focus on emerging/developing markets of which South Africa is consider to be a part of. Bryman (2012) also refers to external validity as the degree to which findings can be generalised across social settings. Given that the industry in question is focused on diamond mining, the ability for this research to be generalised for other industries is limited.

3.4.2.2 Internal validity

Internal validity concerns itself with the question of whether a finding that incorporates a causal relationship between two or more variables is sound (Bryman, 2012). Bryman (2012) also refers to internal validity as to whether there is a good match between the researchers' observations and the theoretical ideas they have developed. The study relied on an extensive literature to identify factors using a PESTLE analysis of factors which influenced exploration investment decisions in the diamond industry.

3.4.2.3 Reliability

Bryman (2012) defines reliability as the degree to which a measure or concept is stable. Bryman (2012) goes on to split reliability into external and internal reliability. External reliability referring to the degree by which the study can be replicated (Bryman, 2012), and internal reliability referring to the case in which there is more than one observer, whether members of the research team agree about what they see or hear (Bryman, 2012).

Despite the interviews being semi structured, the broad concepts they identified were identical for each interview. The tone and language of the interview was conducted in the same manner as to ensure consistency was maintained between the interviews. The key information from interviews was transcribed for use in the development of the results which were validated against literature in order to increase the reliability of the research. This approach ensured reliability and would lead another researcher to establish similar cause and effect linkages between the factors identified for the diamond industry.

4 PRESENTATION OF RESULTS

4.1 Introduction

The publication of detailed industry reports by leading consulting companies together with reports issued by a leading diamond company facilitated the basis of the understanding for the economics of the diamond mining industry. The outlook of the industry was sighted in these reports and provided insight into the medium- and long-term view of both the supply and demand aspects associated with the industry. The opinions obtained from interviews conducted allowed further insight industry expert views regarding the diamond mining industry.

The literature review findings identified key factors that influence investment decisions with focus on emerging market countries. The factors were identified in line with the PESTLE (Political, Economic, Social, Technological, Legislative and Environmental) framework. The opinions obtained through the research interviews conducted were used to verify and support the factors identified in the literature review. The interviews were further enhanced as respondents were required to rank the factors which then provided their professional view on the level of importance of each factor identified.

4.2 Demographic profile of respondents

Interviews were conducted with senior officials, who partake or have had significant influence in investment decision making of selected organisations with focus on the diamond mining industry. Industry specialists from a leading multinational diamond mining company in the financial, technical, human resources and exploration departments formed core expert opinion regarding the need for investment in the diamond mining industry, together with providing insight into the level of importance of factors that influence exploration investment decision making. A risk-based opinion was obtained from a mining industry expert in a leadership role within a leading multinational diversified mining company. All interviewed candidates held senior leadership roles within the company which they were employed.

As a result of focusing the research on the diamond mining industry, variances between the planned and conducted interviews were noted. Interview candidates were limited to those who had enough diamond mining expertise and held senior leadership positions with influence into investment decision making. The research focused on understanding the factors identified through literature and the practical knowledge of those who influence investment decisions within the diamond mining industry, and hence candidates whom lacked specific knowledge of the industry were not a key focus of the research.

4.3 The need for diamond exploration in order to add new reserves ensuring there is long term supply for the precious stone

Industry reports have identified a significant gap in the demand and supply for diamonds sighted as early as 2019. These reports provide evidence of the potential investment requirements needed by the industry to act upon this forecasted gap.

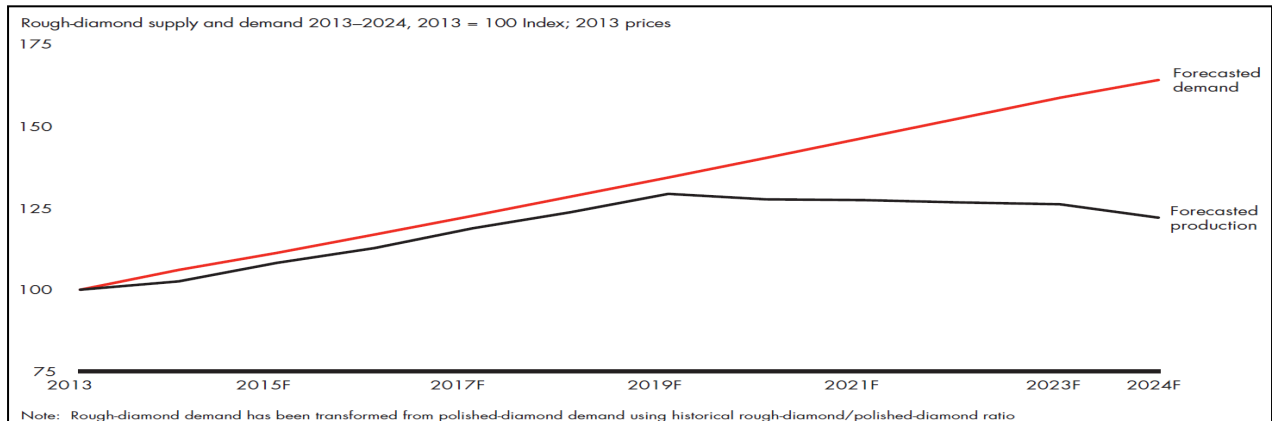


Figure 24: Rough diamond supply and demand 2013 – 2024, Euromonitor; Kimberley Process; IDEX, Tacy Ltd. and Chaim Even-Zohar; publication analysis as stated by Bain and Company (2014, p. 27)

The trends have continued to be displayed through the years as these industry analyses have progressed.

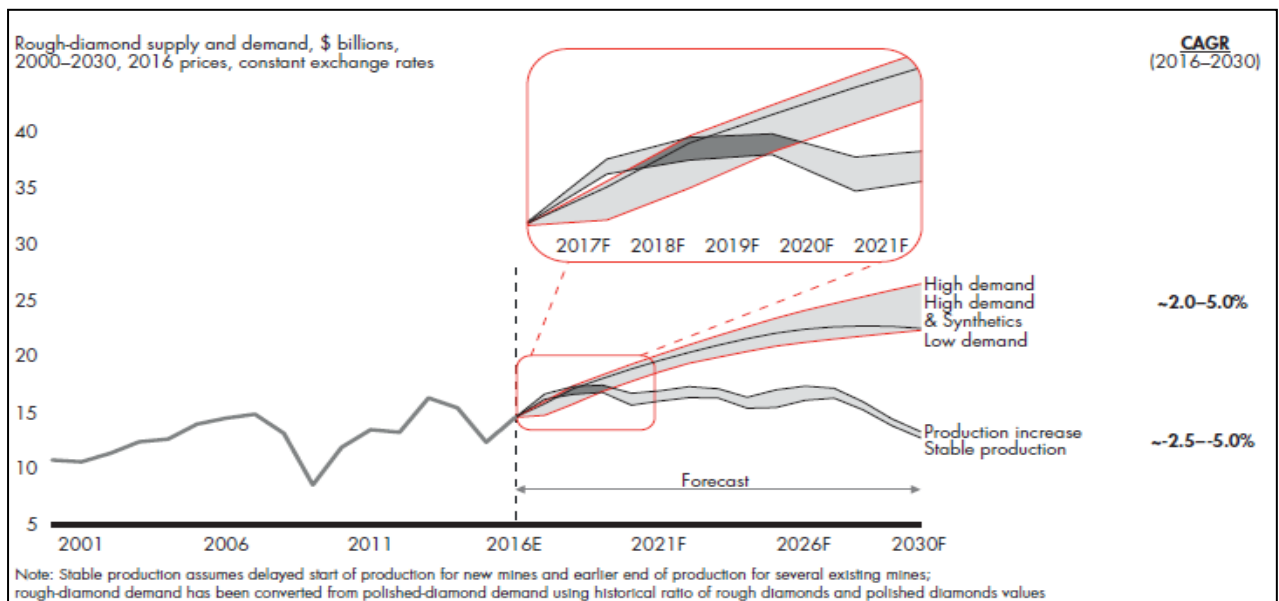


Figure 25: Rough diamond supply and demand gap, Euromonitor; Kimberley Process; EIU, Bain analysis as stated by Bain and Company (2016b, p. 37)

Semi structured interviews were conducted with diamond industry experts to obtain their opinions on the need for diamond exploration in order to add new reserves ensuring there is a long term supply for the precious stone to meet the current projected demand forecast. Interviews focused on two significant points:

- The future investment requirements in the diamond mining industry (supply constraints); and
- The demand curve and its long-term forecast

The outcome of the interviews with regards to the above two discussion points have been presented in Table 2 with reference made to the specific time in the interview for the comment reflected in the table of each key respondent.

Table 2: Interview Matrix - future investment requirements, the demand curve forecast

Discussion Point Respondents	The future investment requirements in the diamond mining industry (supply constraints)	The demand curve and its long term forecast
Key Respondent A	‘The demand and supply curve seems to be there for a long time, and seems to be moving out all the time. May it be as it be I do think there will be a supply demand gap, it might be in two or three years, it might be later on, but in terms of the horizon we looking at for exploration decisions I think in eight or ten years, I could definitely see a gap developing there, so I think it would be a positive in that yes we need to invest in exploration...’ (Key Respondent A: 7:45)	‘....scenario analysis is one of the key things we need to look at. When you do scenario analysis you take ten or fifteen years and look at what the future will look like at that moment. Rather than taking today and extrapolate liners to determine the future, you create scenarios and say that in ten years’ time this is what the world will look like, and this is not necessarily liner. There are so many other factors effecting demand, such as the role of synthetics, the role of bringing old diamonds back into the mainstream, the role of millennials - are they going to look for other investment opportunities. It is impossible to do a liner extrapolation, but you can get a better understanding of what the future will look like through scenario analysis...’ (Key Respondent A: 11:15)
Key Respondent B	‘There is a lot complexity around which the company would position itself. Do we need to do exploration? Yes absolutely because there are new deposits to be found but it always has to fit in with the company’s risk appetite...’ (Key Respondent B: 5:10)	‘I feel the supply demand gap is real I think it's not as simple as that though because there's always new markets and new and shifting trends in terms of driving diamond demand. I think it would be naive to think to plan only for the natural diamonds going forward as it is. I would question the demand side, how accurate is the demand side and maybe it will get higher if the product is rarer.’ (Key Respondent B: 4:26)

Discussion Point Respondents	The future investment requirements in the diamond mining industry (supply constraints)	The demand curve and its long term forecast
Key Respondent C	‘How accurate is the drop of in supply? There is a number of things that are fringe and that is how you fill that gap. The gap will never really exist as there will never be a shortage of diamonds, in other words where the supply is more than you can provide. What will happen is the price will change, so the gap is a financial gap and not a carat gap. As the carats get less the price of the carats get higher and the price comes back to the demand. What you will experience if you have a shortage is that the price will start increasing over time, as the supply drops of the price will increase to meet the demand. The challenge for the industry is can we afford that as there is an element of elasticity. You can’t always push price as the only outcome of how to fill that gap, and there is a need to fill it will product as well.’ (Key Respondent C: 4:26)	‘I think the supply and demand gap is real, because the supply is peaking in 2018, as early as that, and then it starts dropping off and then rapidly dropping off after that and the demand is very much correlated to world GDP growth, so as long as the world economy keeps growing the demand will grow.’ (Key Respondent C: 3:26)
Key Respondent D	‘The supply and demand balance or imbalance must be a factor. My experience is that traditionally we have oversold the gap between supply and demand, it’s never turned out to be like that. How often have we not had diamonds to sell? It is more the other way around where we have had stock.’ (Key Respondent D: 9:10)	‘Predicting the demand curve is near mission impossible. Historically, maybe more than a decade back and further you find that there was a lot more alignment between forecast demand and reality. We’ve seen something very different the last five to ten years, we have seen the volatility cycles more significant and the frequency of them more often. The consumer these days is a lot more demanding, requires a lot more flexibility and if you think of diamonds compete with a lot more luxury products, travel, luxury bags, watches, etc., and the competition for other luxury products is reinventing itself so often so quickly the consumers have an opportunity and options for other things. By that vary external demand for other products puts the demand on diamonds more volatile.’ (Key Respondent D: 12:31)

Discussion Point Respondents	The future investment requirements in the diamond mining industry (supply constraints)	The demand curve and its long term forecast
Key Respondent E	'I think that in terms of supply constraints and the need for investment going forward, I think that absolutely you have identified that from 2020 onwards there is sort of a growing gap between supply and demand. That is a very important factor in that there needs to be further investment in the diamond industry, but that needs to be coupled with what is the demand side of the diamond industry going forward.' (Key Respondent E: 4:30)	'I think the demand side of the industry needs a bit of work around it because it has always been driven of historical factors. Going forward in terms of the new age with millennials and even what the next generation of people will be, whether diamonds will be relevant or not or as relevant, is something we would need better clarity and better understanding to drive demand. Going forward there needs to be more work on demand.' (Key Respondent E: 5:13)
Key Respondent F	'Exploration globally for mining companies is becoming more of a problem. It is getting more expensive, the sites are getting more remote which is driving up the cost exponentially. We are facing a greater resource nationalisation risk. The commodities aren't doing well to start with and in general I think there is going to be some cutting back on exploration or at least prioritising exploration with some kind of tool.' (Key Respondent F: 7:23)	'...if we look at past modelling we should already be in a supply and demand gap and we are not seeing that. I think any modelling around the supply and demand gap makes one fundamental mistake, it is not a mistake that was apparent to us before, but has become apparent to us in the last three or four years. It is assuming that jewellery purchase are not discretionary. What none of the models take into account is that one carat is not the same as another carat. So what we starting to see now is that there is a shift in the distribution around the size of diamond jewellery. (Key Respondent F: 12:34)
Key Respondent H	'I think the issue is if you take a company like 'company A' in terms of where it comes from and its history the size of the organisation as it used to be a couple decades ago to its current presence in a country like South Africa it does indicate to you that its significance in terms of the national economy is getting smaller. So from a pure business perspective as to the existence of an organisation and the longevity of an organisation if there is no exploration it has no future. That's a simple fact.' (Key Respondent H: 5:46)	No comment

Discussion Point Respondents	The future investment requirements in the diamond mining industry (supply constraints)	The demand curve and its long term forecast
Key Respondent I	‘We have been working with our mineral resource management teams to look from a long term planning perspective on diamonds and diamond demand. We are certainly seeing that there will be continued demand for diamonds. I think that there is a threat from synthetics, but natural diamonds are still going to be in demand. When we plot out where our production is coming from, even with the large mines in ‘country A’, it’s very clear that maybe not as early as 2020, but certainly in the late 2020’s and early 2030’s there is going to be a very big demand supply gap and we know we are going to be looking at what is going to fill that, well it’s only going to be filled by another tier one deposit, something that’s going to have more than a twenty year life of mine it’s and going to generate a lot of revenue. We can either fill that gap through finding new mines or acquisitions.’ (Key Respondent I: 7:03)	‘I think you have to look at where the demand is coming from and what it is for. So you might see, and it depends on world economic trends, that you might see that the demand for half carat cut stones which would be the ones that are a first purchase maybe that continues to grow but then what does the demand do for larger stones do, and that depends on politics. If people are getting richer in America because of Trump, are they now able to afford more of the larger stones. So I think you have to break down the demand curve into the different streams and then what we also need to look at is the recycling of diamonds.... So we need to look at the demand for that, the demand for synthetics and the demand for different streams.’ (Key Respondent I: 10:31)
Key Respondent J	The supply side is completely reliant on the demand side. Mines are getting more expensive, they are getting deeper, the unit cost are going up, the cost of capital is going up and the returns are becoming less and less favourable in the existing mines. (Key Respondent J: 16:42)	The reality is that we can’t even think about supply without the demand issues. I don’t necessarily agree that we don’t have a view, or we don’t have a good understanding of the long demand for diamonds, in fact I disagree quite strongly with that, I think that we have a great long term view. I think in year there is volatility and in the short term there is volatility, so there is always a question as to where do we start these projections from. The long term projections are also as good as the underlying basis of them, and the underlying basis for them is how these main markets of diamond consumption grow from a GDP perspective. So if the world’s assumptions around China, Japan, India or the US are fundamentally wrong then we don’t have a great view because the correlation between GDP growth and diamond demand in all the markets aside from Japan is one to one. (Key Respondent J: 8:08)

Discussion Point Respondents	The future investment requirements in the diamond mining industry (supply constraints)	The demand curve and its long term forecast
Key Respondent K	‘On the supply and demand side everything points to the fact that supply is waning and demand will increase.’ (Key Respondent K: 5:14) ‘The simple look at supply and demand saying what is in the ground, what is being discovered, what new production is being bought online against a fairly historic projection of the demand curve, the supply and demand curve definitely widens and exploration is there to fill the gap.’ (Key Respondent K: 8:29)	‘...we need to have look at world of synthetics’ (Key Respondent K: 5:14) ‘There is the hopeful demand curve, then there is the demand curve that looks at the culture of millennials, the new age people and whether or not they will have the same processes as we have currently. Is the engagement ring going to continue to be as important? Less and less people get married, people get married later in life, and that all changes the demand curve, not only from overall from volume but in terms of the quality of the good as well. A lot of things on the demand side that need to be taken into consideration than simply projecting growth forward on the current parameters versus future potential parameters.’ (Key Respondent K: 6:19)
Key Respondent L	‘If you look at the mining industry, it’s not like the manufacturing industry whereby we manufacture bowls out of plastic, you have a finite life, and if you run through that, at the end of it, and you can’t source it anywhere else. So if you don’t find anything now you not going to have a future. So in order to find it, and we know if we find it now and it is not a quick process we see the first carat in ten years’ time that is a long lead time and a lot of capital invested. I personally think that you need to run through an exploration process, where you do it is a totally different question, but do you need to do it – I would say yes I think you really need to do, because if you don’t this is the end of it...’ (Key Respondent L: 5:54) ‘Do I believe there is a gap between supply and demand, I think there probably is, to what extent I am not sure...’ (Key Respondent L: 10:09)	‘I think you have to analyse who is your consumer. I think there is a different sentiment by generation x. So I think the profile of the consumer going forward and the spending power behind it is going to change and the patterns are going to change. I don’t think we sit with the same profile of customer’. (Key Respondent L: 8:11)

4.4 There exist factors such as political, economic, social, technological, legislative and environmental factors that contribute to the investment decision to invest in the search for new prospective diamond mines

The extensive literature review conducted identified critical factors that multinational companies should consider when making an investment decision. The literature review was conducted utilising a structured approach with the PESTLE (political, economic, social, technological, legislative and environmental) framework core to identifying these factors.

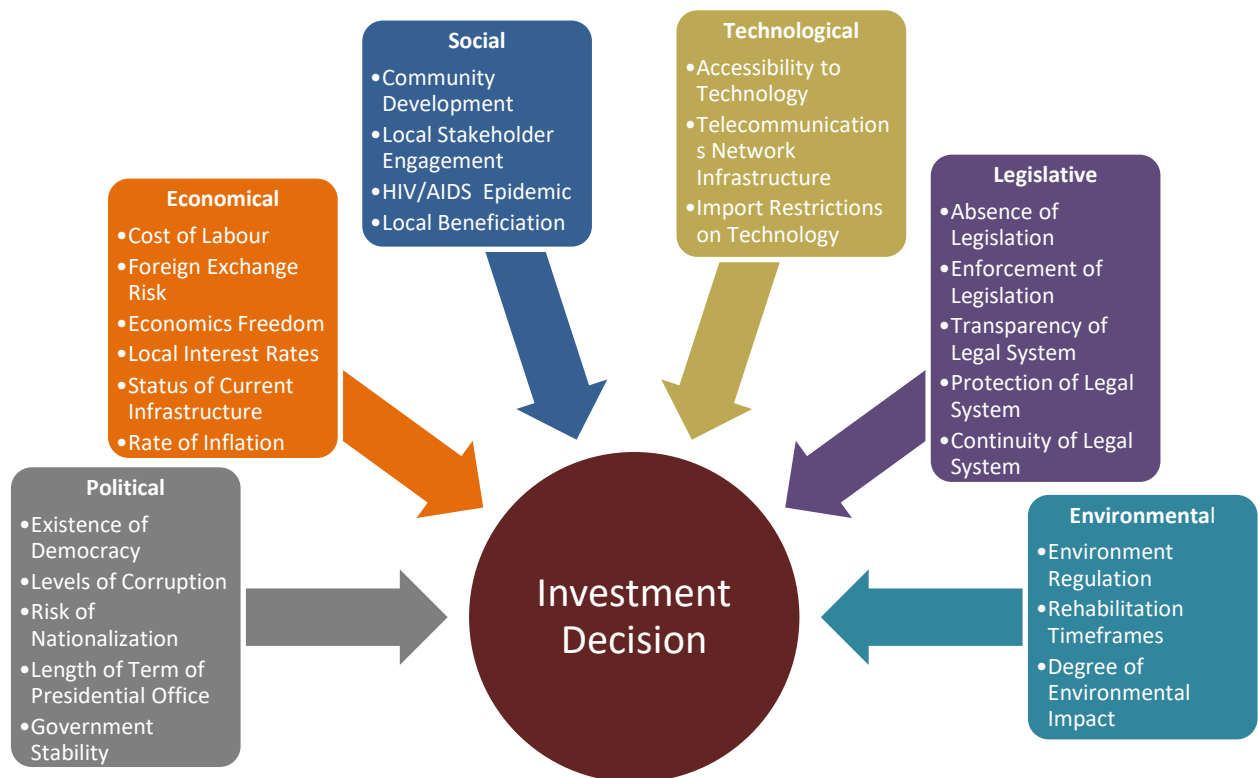


Figure 26: PESTEL factors influencing investments decisions

Semi structure interviews were conducted which supported the findings of the literature review. The interviews focused on factors that influence the decision to invest in diamond prospective countries such as South Africa, Botswana, Angola and India (all considered emerging markets). The outcome of the interviews has been presented in Table 3.

Table 3: Interview Matrix - factors that influence the decision to invest in diamond prospective countries

Discussion Point Respondents	The factors that influence the decision to invest in diamond prospective countries such as South Africa, Botswana, Angola and India
Key Respondent A	‘Your investment has to be safe, number one. If your investment is not safe in the longer run, it does not help how good your mine is. If your investment is not safe in terms of legislation. So do you have security of tenure? Or is there history in the country that tenure is terminated? We have seen in many country where it has been said that the mine does not belong to you anymore and we will take over or we will take over part of it or where the taxes are increased significantly year to year based on the profits. In terms of safety of your investment, there are a number of factors that are absolutely crucial. Those are how do you safe guard your investment in terms of legislation, in terms of all the other factors to make sure you get the return in the long term, because you making an investment decision today but the return is only seen in ten or fifteen years. So do you have an environment where you are sure you going to get your money back in the long term? In terms of making an investment decision that is your number one concern. Then you will need to look at all the other things in terms of whether it is legislation, environmental, people or technology and all the other issues that become in play. Obviously democracy and all the issues going around democracy and labour, those are key things as well. We need to have good labour and good labour relationships going into the future. It will be beneficial to have positive political will from the government, in terms of investing there, in terms of attracting investment, in terms of making it easy for investors to develop the resource, whether its tax breaks, whether it is support in getting expertise and knowledge in. Infrastructure is very important, you need to have good infrastructure, good communications. You need to have an environment where people can work safely and where you don’t have to worry about the safety of your people all the time.’ (Key Respondent A: 15:48)
Key Respondent B	‘I think rule of law is huge. You have to have rule of law in order to protect your business interest and your people, you can’t execute without either. So rule of law, then it would be your commercial framework, you have to be able to make money. Under rule of law I would include security of tenure, labour law, etc.. Is there a legal framework in place to allow you to play by the rules and follow through if the rules are broken? Have you got recourse? So rule of law is huge, then your commercial framework – can you make money, which is tied to your political stability. So how diluted will your returns be based on the mineral legislation. What is you return on investment going to be, and how diluted will it be.’ (Key Respondent B: 08:50) ‘Access to skills in country, because often the labour law won’t allow you to bring in too many expats, and if you don’t have a critical mass of people to do the work at the level you want it done, you really going to struggle.’ (Key Respondent B: 10:03)

Discussion Point Respondents	The factors that influence the decision to invest in diamond prospective countries such as South Africa, Botswana, Angola and India
Key Respondent C	‘Our decisions are usually based on three broad criteria, the one is prospectively – what’s the chances that you find something decent, the second is security of tenure – if you find something decent would you be able to own it and mine it, the third one is economic – if you find something decent and you own and mine it are you going to make money out of it. Those are the three broad categories.’ (Key Respondent C: 00:03) ‘....it’s having the right legislation in place, having the stability around that legislation because you can have it in place but it changes two years to something else. The third one is the execution of that legislation, do people actually apply that legislation.’ (Key Respondent C: 01:53)
Key Respondent D	‘Clearly all PESTLE factors should be considered, and depending on where you are, in which country some of them weigh more than others. To me the diamond industry is very different to the rest of the mining industry. We are not a commodity and that’s a critical point here. We have influence over a lot of the outcomes of the diamond industry, because a significant part of what we do is marketing. I jotted down three things that I as a shareholder would consider in a particular company when considering investing in diamond exploration. Clearly it depends on how far you are in the pipeline of exploration and your intelligence to determine where you are going to go, but potential payback for me has become absolutely critical given all these other factors like political, potential nationalisation, etc.. The shorter the payback the more attractive the decision makers and shareholders are going to be. Then also the short or medium term, maybe long term, company cash flow profile would play a significant part. The other point is that the supply and demand balance or imbalance must be a factor.’ (Key Respondent D: 5:50) ‘I think there are at a high level for me only two factors and that is the economical, and particularly the cost of labour, and political.’ (Key Respondent D: 20:12)
Key Respondent E	‘I think probably the most key thing for me, and it’s a bigger challenge in the mining industry going forward, people are going to talk less and less around internal rates of return and net present value, it’s going to be all about payback. So how can you deliver a project that gives you payback in the quickest time possible because then you are de-risking the project.’ (Key Respondent E: 11:38) ‘For me the factors influencing where you invest going forward, probably the first thing is rule of law, do you have a solid stable rule of law, coupled with impartial judiciary. So you are going to invest there and that’s going to give you your security of tenure in there, there is not going to be the volatility of changing. Rule of law, security of tenure and a firm strong judiciary are key in the first part before we go into a country. Out of that will come what is the exchange control regulations like, what is the tax laws around that, what is the mining laws around that, but I think if you can’t get past the one or two you won’t even dive further into that.’ (Key Respondent E: 13:21)

Discussion Point Respondents	The factors that influence the decision to invest in diamond prospective countries such as South Africa, Botswana, Angola and India
Key Respondent F	‘I think generically if I was considering at an investment I would typically look at, and if it’s going to be a long term investment, I would look at my level of return, my sustainability of that return and the risk around not getting that return. So specifically the risk area is who do I invest with and where do I invest. If you start taking about an exploration conversation it would, from a risk perspective I would consider things like security of tenure, legal framework, legal certainty, the rule of law in country, the experience of other multinationals would have had in that space...’ (Key Respondent F: 18:39) ‘It’s really about for me from a political perspective whether we can operated in the country and not compromise our principles around good corporate governance, bribery and business integrity. The sustainability for me of that investment is this likely to a place that I am likely to be for a long time, or am I just going to build or invest and then flip that investment to somebody else...’ (Key Respondent F: 20:15) ‘Then quantum and here things like tax regimes and royalty regimes start become very important. You don’t want the tax law to change every year and milk my investment.’ (Key Respondent F: 21:34)
Key Respondent G	‘Understanding mining as it is today is very fascinating, so wherever I put my money I need some sort of security, and the first thing I would look a t is the political stability of a country.’ (Key Respondent G: 2:18) ‘No matter how resource rich the country is the political instability will not allow you to take the money out, and give you a bad reputation, firstly from your people being at risk, and the inability to attract partners to assist you in your mining process.’ (Key Respondent G: 3:10) ‘The other thing I would also look a t is the level of maturity of that country in terms of its economic indicators and social indicators.’ (Key Respondent G: 3:49) ‘The other thing is social, how receptive is the country for you to bring your inflow into the country.’ (Key Respondent G: 5:52)

Discussion Point Respondents	The factors that influence the decision to invest in diamond prospective countries such as South Africa, Botswana, Angola and India
Key Respondent H	‘In the first instance its access to a region or an area, the ease of access to that, and that’s generally in terms of your legislative systems, but then more importantly, and where I would focus on more, is around how much disturbance happens in that space if you start working in there. So when you start taking about environment and social systems those are very important.’ (Key Respondent H: 9:37) ‘Your top three would always be number one political, because the political gives you the statutory licence to go into an area and do something, and your relationships with those systems are extremely important. In the same token one needs to make sure the credibility and integrity of the system is maintained. The second part is always going to be in terms of the economic processes, because if they are not in place or are compromised that will detract you as to what the level of difficulty or ease is in penetrating that system. From my perspective particular it’s the social system, and probably the biggest one for me – getting the social licence to operate in that space.’ (Key Respondent H: 12:09)
Key Respondent I	‘So I mean it basically starts with the legislation every time, can you actually get a licence and that’s fundamental.’ (Key Respondent I: 13:07) ‘The second thing is the safety and security of your people.’ (Key Respondent I: 14:22) ‘Then can you guarantee that once you in there, you going to have security of tenure, so it goes back to the legislation again. Is there good legislation, then the second thing is even if there good legislation and your get a piece of ground can you guarantee that the order of governance is such that those laws are being abided by, that once you’ve got those licences you will be able to work practically. So it’s the legislation, then it’s can you guarantee the safety and security of your people, then it is, is that law actually upheld, what is the practice on the ground. So another very important factor is the communities and environments in which you want to operate. The social licence to operate, can you get that realistically in a particular country.’ (Key Respondent I: 15:26)
Key Respondent J	‘I don’t think we can separate exploration from running a full business in a country. We need a full business in that country whether it is trade, labour, infrastructure, basically everything that we going to need to be successful. So the country would need to be one, stable politically, and obviously preferably a democracy, a robust democracy, as it gives a lot more certainty into the future, no sort of individual extreme view would prevail. So a stable country, good democracy which gives you certainty that if we start today, twenty, thirty forty years from now whilst we still be there running a business, that climate will still be attractive in terms of running a business in that country.’ (Key Respondent J: 20:38)

Discussion Point	The factors that influence the decision to invest in diamond prospective countries such as South Africa, Botswana, Angola and India
Respondents	
Key Respondent K	‘The very first thing that Company A will look at in terms of where to explore, it may not make a decision of putting a whole in the ground, but it will definitely make a decision on the amount of money you are prepared to invest – is the state of the nation.’ (Key Respondent K: 17:51) ‘The challenge is to work with the regimes in those countries to create an environment in which large multinational companies can operate.’ (Key Respondent K: 20:02) ‘All of the other in country factors such as is there an educated workforce, is there power, is there roads, is there water, that’s all very secondary.’ (Key Respondent K: 31:52)
Key Respondent L	‘I think the social-political environment is probably one of the most import, because you have to make an investment decision now on the rules based by government and taxes of what you think is going to happen in the next ten or twenty years and beyond that.’ (Key Respondent L: 13:47) If you have an equal mine, or equal prospecting, I would go with the one with the lowest risk on social-economic-political, because that’s a known and you can carry on. I’m sure you would probably look at safely and security, but I will almost see that as a sub section of this. (Key Respondent L: 15:00)

The list (Appendix A – list of factors that influence investment decisions) provided to candidates enabled the ranking of the factors identified by literature in terms of their level of importance to the investment decision. Twelve interviews were conducted with industry experts, and ten participants provided rankings. The data from the ten were then used to determine which of these factors displayed the highest level of significance. The rankings were provided on a scale of one to five, with five representing the highest level of significance. The mode and average for these were then calculated. Using the mode of the data set, the factors that noted the most data points recording “very significant” were as follows:

- Absence of Legislation
- Enforcement of Legislation
- Existence of Democracy
- Government Stability
- Protection of Legal System
- Risk of Nationalization

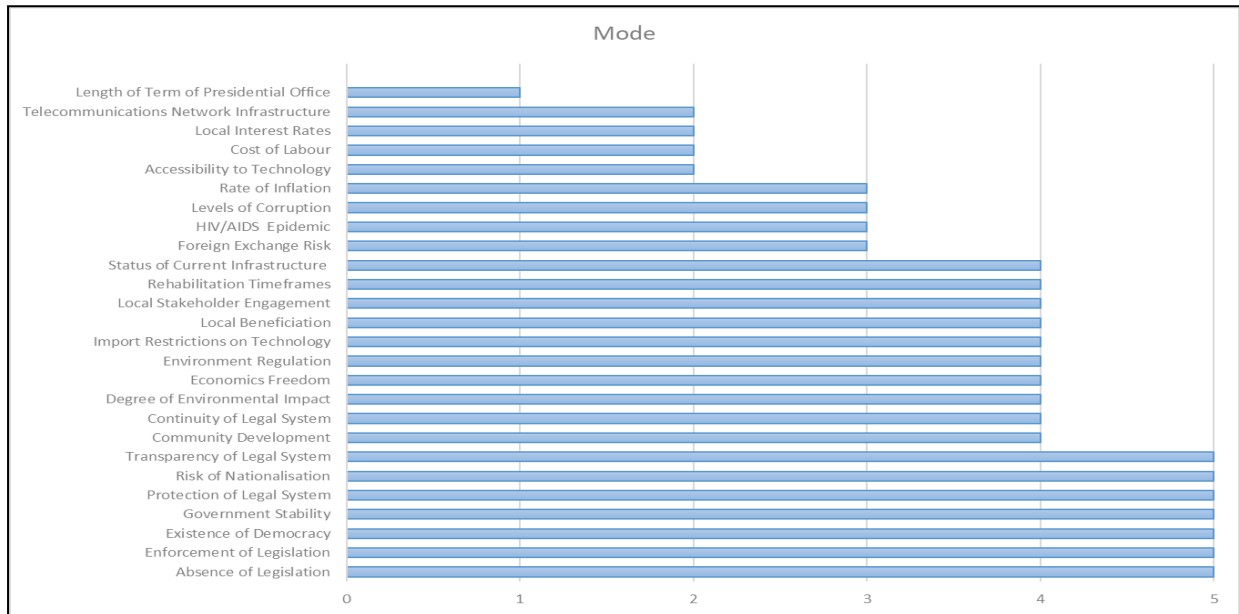


Figure 27: Mode for dataset of PESTLE factors identified as ranked by key respondents

Using the average of the data set, the factors that noted the highest (above 4.5) average ranking were as follows:

- Protection of Legal System
- Enforcement of Legislation
- Government Stability
- Transparency of Legal System
- Risk of Nationalisation
- Absence of Legislation

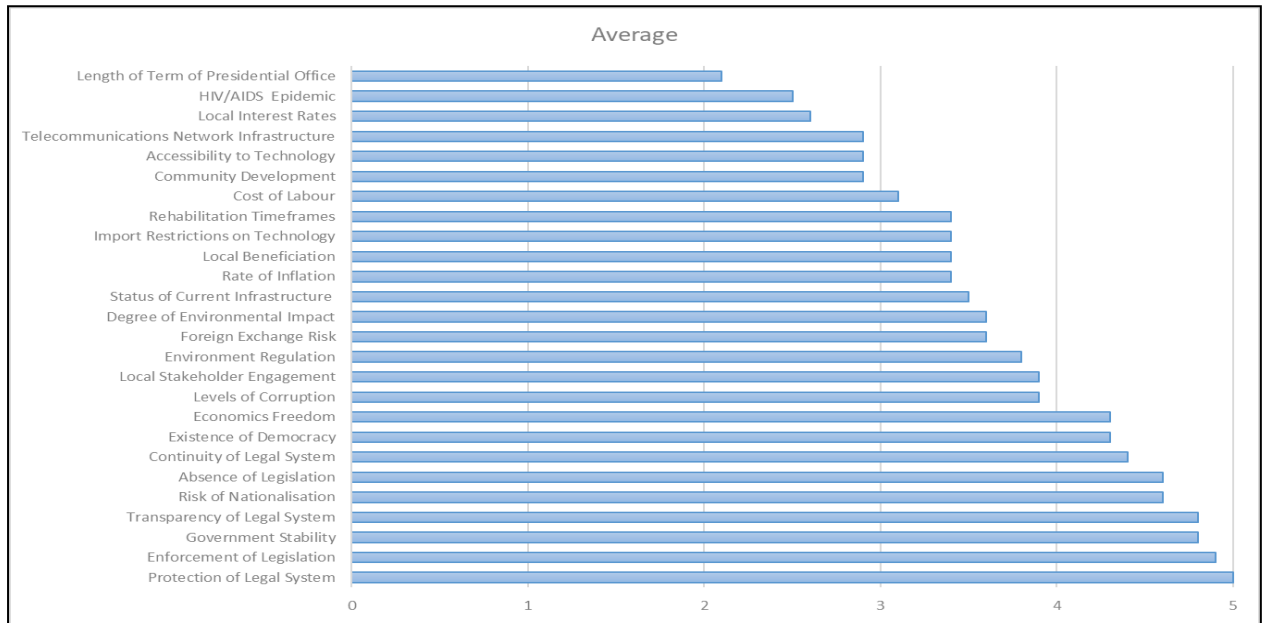


Figure 28: Average for dataset of PESTLE factors identified as ranked by key respondents

Plotting the mean and average rankings onto a single chart has been presented below:

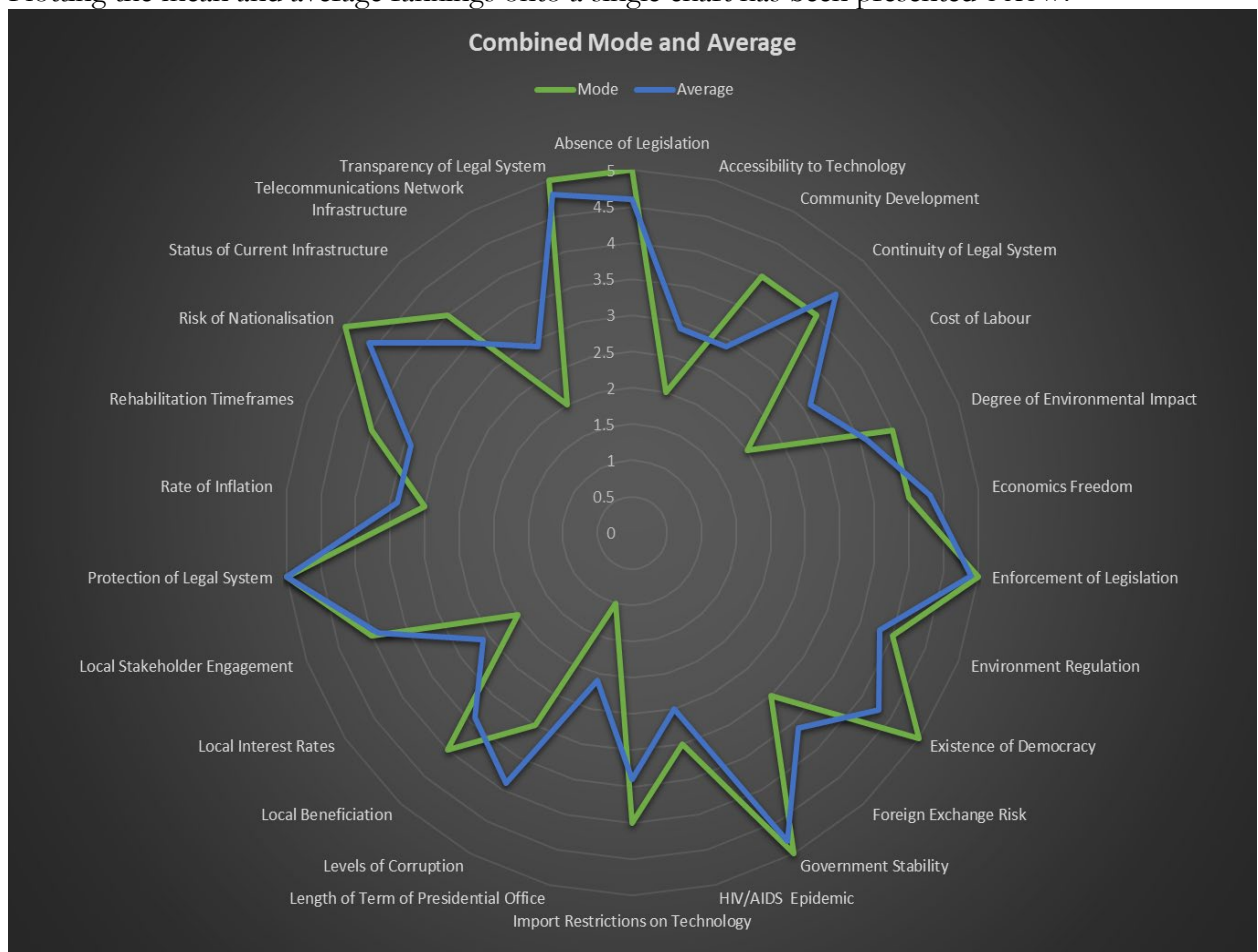


Figure 29: Mode and Average for dataset of PESTLE factors identified as ranked by key respondents

The factors which are common across the mean and average are:

- Absence of Legislation
- Enforcement of Legislation
- Government Stability
- Protection of Legal System
- Risk of Nationalization

4.5 Summary of the results

The decision to invest in diamond prospective countries for companies to execute exploration programmes is marked with a significant degree of risk. Companies are required to make decisions on where to invest the limited amount of funds they have available for exploration programmes bearing in mind the degree of risk that exist within the countries they wish to invest in. The limited funding for exploration activities increases the need for the decision to go in country to be marked with a significant degree of rigor and thought.

The PESTLE framework allowed for the key factors to be identified which included the following:

- Existence of Democracy
- Levels of Corruption
- Risk of Nationalization
- Length of Term of Presidential Office
- Government Stability
- Cost of Labour
- Foreign Exchange Risk
- Economics Freedom
- Local Interest Rates
- Status of Current Infrastructure
- Rate of Inflation
- Community Development
- Local Stakeholder Engagement
- HIV/AIDS Epidemic
- Local Beneficiation
- Accessibility to Technology

- Telecommunications Network Infrastructure
- Import Restrictions on Technology
- Absence of Legislation
- Enforcement of Legislation
- Transparency of Legal System
- Protection of Legal System
- Continuity of Legal System
- Environment Regulation
- Rehabilitation Timeframes
- Degree of Environmental Impact

The interviews conducted validated that these factors are critical to the decision to invest in exploration activities in a country. These are the factors that need to be considered to make an adequate and sustainable decision to invest in exploration activities. The ranking provided context into the five factors which have been ranked as the highest contributors to the investment decision. These are namely:

- Absence of Legislation
- Enforcement of Legislation
- Government Stability
- Protection of Legal System
- Risk of Nationalization

The interviews highlighted that companies should focus on the state and maturity of the above factors as consideration in their decision to invest in exploration activities. This will enable companies to make decisions on a structured model and should any factor progress or regress the resultant impact can be understood. It was evident from the semi structured interviews that the investment decision and the progressive decision to continue exploration activities can be met with increased structure and rigor, which can facilitate a sustainable record of decision making over time.

5 DISCUSSION OF THE RESULTS

5.1 Introduction

This chapter provides a detailed understanding to the results presented in Chapter 4. The discussion of the results also attempts to provide a view of the factors listed to further exploration investment decision making.

5.2 Demographic profile of respondents

5.2.1 Diamond Mining Specialists

The companies who operate in the diamond mining industry are limited to a few key producers whom operate in both the exploration and mining facets of the industry (Bain and Company, 2016b).

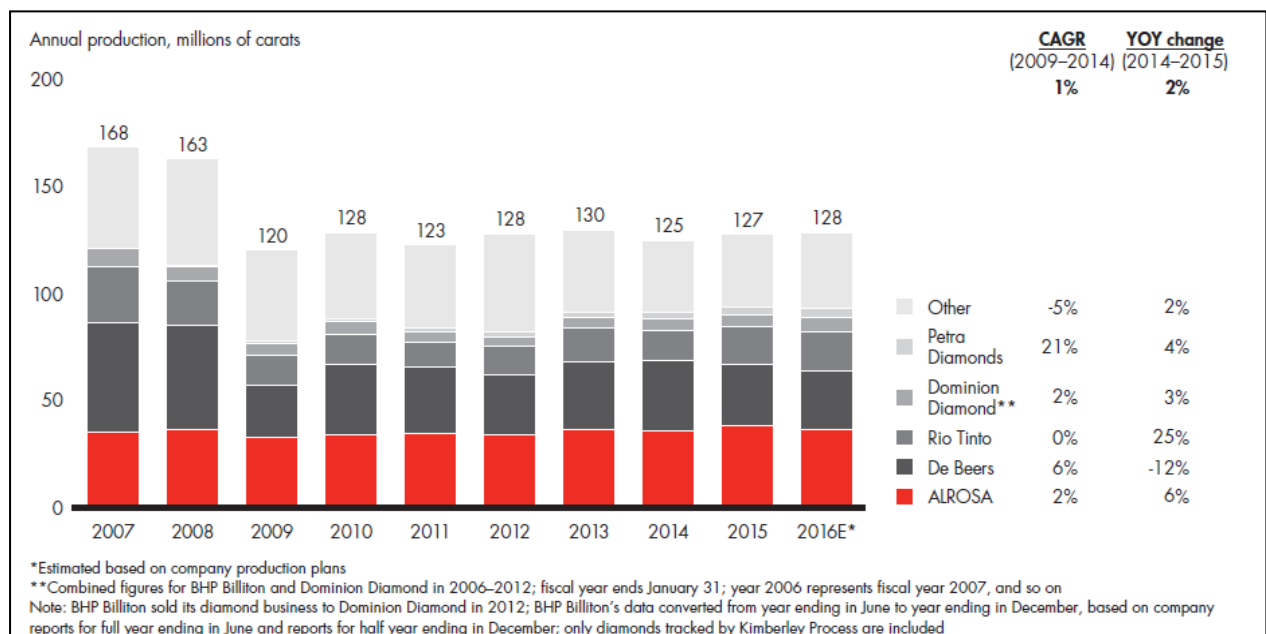


Figure 30: The combined output of the top 5 producers held steady as stated by Bain and Company (2016b, p. 10)

The top five diamond producers produce in excess of 70% of the world's rough diamond production (Bain and Company, 2016a). The interviews noted the strong knowledge base of experts and key decision makers at senior management levels of these companies, will have significant knowledge about the industry demand and supply mechanics, together with the challenges and risks that need to be considered in diamond exploration investment decision making.

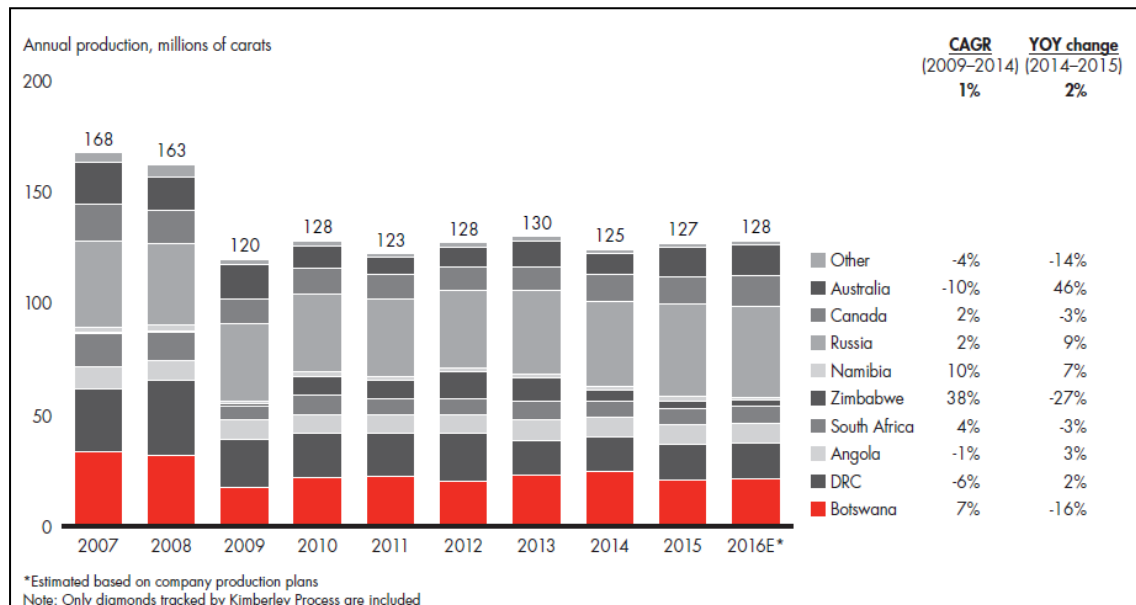


Figure 31: Annual rough diamond production per country as stated by Bain and Company (2016b, p. 9)

Rough diamond production is also limited to specific countries. The interviews noted that key decision makers within these organisations would have significant knowledge and exposure to the countries in which they operate to understand the relevant PESTLE factors at play when considering the challenges and risks associated with investment decisions.

5.2.2 Risk Management Specialist

Nagy and Cenker (2002) defined the internal audit function “as an independent, objective assurance and consulting activity designed to add value and improve an organization's operations”. Key decision makers within the internal audit function may serve on a company’s audit committee and provide expert advice to risk and assurance decisions required to be made by the company. These decision makers in addition perform numerous financial and operational audits, focusing on risks identified by the organisation, with the aim of providing mitigating controls to improve the organisations overall effectiveness. Understanding of in country risks and challenges are of paramount importance to the senior management within an internal audit function.

5.3 Discussion pertaining to Research Question 1

5.3.1 Demand, supply and the need for diamond exploration

The knowledge gap analysis revealed the existence of a forecasted gap in demand and supply for rough diamonds through the analysis of industry reports. The demand for luxury goods noted a high correlation to the GDP growth of countries, and in turn the GDP growth impacted the demand for diamond jewellery. The identified gap in demand and supply has been forecasted by industry analyst to occur as early as 2019. The complexity of the demand forecast was acknowledged through one of the

respondents commenting that “predicting the demand curve is near mission impossible” (Key Respondent D: 12:31), largely due to the increase volatility over the short-term and continuously changing consumer needs. The current demand forecast as presented by industry reports utilised within the industry is a function of the GDP growth in markets that drive diamond jewellery demand. One of the views of respondents noted the need for greater scenario analysis regarding the demand for diamonds, as the recent trends have shown a significant increase in short term volatility and the frequency of this volatility. Respondents noted that increasing the scenario analysis, based on a range of demand outcomes, will assist in improving the long-term forecasts for the industry. One factor highlighted by respondents is that the current consumer has a higher variant of products to choose from, which compete with the purchase of diamonds, and may include technological purchases, the want to spend on travel experience, and the willingness to invest in fixed property as well as their consideration for synthetic diamonds. Respondents noted that factors such as the change in the requirements of a new generation of customers need to be considered. The drivers of such volatility need to be considered to generate various demand scenarios that might occur into the future, to better establish the demand requirements that the industry will be faced with. Such improvements to demand forecast would improve the planning landscape for timing and exploration spend. Respondents agreed that rough diamond supply was declining, and that need for exploration activities to discover and develop more mines to increase supply exists in the current environment. One of the key respondents disagreed with the view that longer term forecast was not well understood, stating that the longer term forecast was underpinned by GDP forecast which has a strong correlation to diamond demand, and that the risk existed only in the short-term. The common underpinning of concern relating to consumer demand was based increase competition to diamond jewellery and an evolving end consumer.

The industry reports noted that the demand and supply gap identified is a monetary gap and not a volume gap. The common theme amongst respondents was that there does exist supply constraints within the diamond mining industry, however the timing of the supply demand gap could vary. One of the respondents noted the challenging environment for exploration activities as risk associated with exploration activity had increased and companies reduced their discretionary spend. There was also acknowledgement of the challenges faced by current mining operations as cost increased and returns for deeper mines, nearing end of life, reduced. The need for exploration as an activity in the diamond mining industry was also acknowledge as there is a limited amount of known resources available, and the identification of new deposits would reduce these limitations. The short-term diamond prices are highly correlated to the demand and supply fundamentals of the industry. The industry report noted that even with the current operations across various countries adding marginally profitable production

into the pipeline, there exist a gap in the long-term supply. This is made evident by rough diamond supply and demand analysis by Bain and Company (2014, p. 27), as presented in Figure 9 in Chapter 2.

5.3.2 Conclusion

The literature review acknowledged that timelines with regards to conducting exploration activity, the actual discovery of a sustainable resource, and the development of a diamond mine to full production may take ten to fifteen years. The identified elements of the demand supply gap and the timeframe from exploration to mining activity together highlight the need for exploration activity to continue today for new resources to be brought into the pipeline to supply the need for rough diamond demand in the future.

The fundamentals in demand and supply point to the need for resources to be added to the current supply portfolio in the longer term. One of the more prominent ways to add resources is through diamond exploration programmes being conducted in areas of resource prospectively. Hence there exist a need for diamond exploration in order to add new reserves ensuring there is long term supply for the precious stone to meet the current projected demand forecast.

5.4 Discussion pertaining to Research Question 2

5.4.1 Factors that contribute to the investment decision of multinational companies to invest in exploration activities

The factors that contribute to the investment decision of multinational companies to invest in exploration activities in the search for new prospective diamond mines were established through the literature review and validated through the interviews held with key respondents.

The literature review identified factors as illustrated in Figure 45.

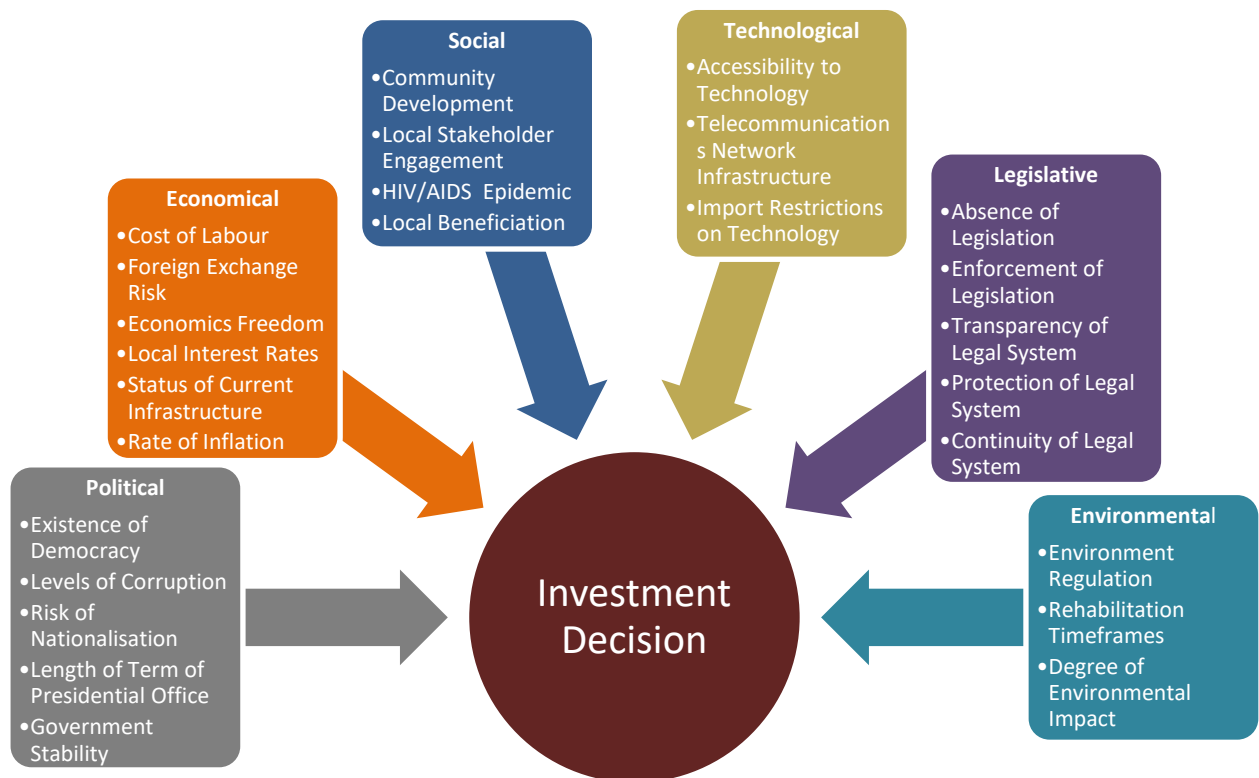


Figure 32: PESTLE factors influencing investment decision making

The interviews with key respondents validated that the above-mentioned factors are critical to the decision to invest in exploration activities in a country. Key respondents noted that the security of tenure to be key to the exploration investment decision. Respondents noted that due to the lengthy timeline associated between the initial exploration investment decision and the successful execution of an exploration programme, and later the development and initial production of a mining operation, it was imperative that governments can guarantee the security of tenure. Key respondents agreed that the security of tenure, would fall within factors such as enforcement, protection and continuity of the legal system. The rule of law was another factor highlighted by the key respondent interviews. This was stated as despite a country having robust legislation in place, it would need to be enforced in order to sustain investment attractiveness. The interviews noted that respondents had a common interpretation that a country with a robust democracy would be increasingly conducive to consider as an investment destination. The safety and security of people also featured prominently on respondents' views of factors to consider, in that a company would not invest in a country where it would risk the safety and security of its employees whom are required to be placed in country to execute an exploration work program. Government stability also featured prominently on the factors to consider for an investment decision, in that the stability of government would be a catalyst for other factors to be in place in the correct propositions to facilitate foreign direct investment into the country.

5.4.2 Factors identified through ranking

The factors identified by literature formed the basis of ranking of factors by the key respondents. These factors represented the qualitative drivers of the investment decision. The ranking of the factors in terms of their determined importance further collaborated the finding of the interviews, in that the legislative factors were the most important factors required to be in place to facilitate the decision to invest in exploration activities. This together with the political factors would be the first consideration given to a country prior to a company making the decision to invest in exploration activities. The top five factors identified by this research are:

- Absence of Legislation
- Enforcement of Legislation
- Government Stability
- Protection of Legal System
- Risk of Nationalization

This research noted that an investment decision would require the country to have a legal system that protects the investment of a company with legislation that is enforced and transparent. No absence of legislation especially in terms of mining and mineral regulations should be noted, with the legislative system displaying signs of continuity with less frequent changes and amendments being made. The government would need to display strong signs of stability established through a well-functioning robust democracy, together with reduced policy framework that supports the nationalization of mineral resources and rather promotes the engagement of local stakeholders. The government's trade policies should also facilitate economic freedom to allow large multinationals to operate.

5.4.3 Comparisons of findings with previous studies

While there have been other studies that have focused on the factors that influence foreign direct investment, these have been paid attend to other industries. Luiz and Charalambous (2009) reviewed the factors that influence foreign direct investment for financial services firms and found that “country governance and political risk; market size and demand conditions; infrastructure considerations; and economic environment/macro-economic performance” were factors that needed to consider when investing in sub-Saharan Africa (Luiz & Charalambous, 2009, p. 316). Despite the industry being different country governance and political risk was considered a key factor to consider. Asiedu (2006) undertook to review foreign direct investment in Africa through understanding the determinants of foreign direct investment. The study concluded that “an efficient legal system and a good investment framework promoted foreign direct investment while corruption and political instability have the opposite effect” (Asiedu, 2006, p. 76). Both Luiz and Asiedu's work are in line with the finds of this

research whereby the critical factors for consideration are absence of legislation, enforcement of legislation, government stability, protection of legal system and risk of nationalization. Further work on foreign direct investment in emerging market by Arbatli (2011b) considered “legal rights, contract enforcement, protection of investor rights together with political stability and the safety of invested capital as possible determinants of foreign direct investment” (Arbatli, 2011b). Arbatli (2011b) went on to conclude that political stability was a critical factor in the attraction of investment, collaborating the view of that government stability as identified in this research as a key factor for investment decision making within the diamond mining industry. With reference to the “enforce of legislation and the protection of the legal system” (Daude & Stein, 2007), proved that institutional quality was a contribute to positive foreign direct investment (Daude & Stein, 2007), specifically stating that “unpredictable policies, excessive regulatory burden, and lack of commitment on the part of the government played a role in deterring foreign direct investment” (Daude & Stein, 2007, p. 341). A contradicting argument was however noted in the work by Tian, Corlett, and Murray (2017) whereby the paper stated a poor correlation between polity stability and foreign direct investment. This was however determined by considering autocratic nations as having increased political stability due to their governments having longer political tenures. Significant work has been concluded on the importance of a functioning democracy in attracting foreign direct investment, and hence the argument provided by Tian et al. (2017) would not suffice to exclude political stability as a critical factor to consider when making investment decisions. It is evident from research the legislative and political factors are the key factors for consideration, supporting this paper’s finding that within these factors the absence of legislation, enforcement of legislation, government stability, protection of legal system and risk of nationalization should be at the forefront of foreign investment making. Give that investment in diamond exploration would be considered a foreign direct investment, these factors can be contextualised as critical within exploration investment decisions.

5.4.4 Conclusion

There exist factors that contribute to the investment decision of multinational companies to invest in exploration activities which can be analysed with the PESTLE framework. Within these factors exist ones that are considered more significant than others, with factors within the political, legislative and economic spheres showing greater importance to the investment decision. The research identified the most important factors which should be considered for exploration investment decisions as absence of legislation, enforcement of legislation, government stability, protection of legal system and risk of nationalization.

6 CONCLUSIONS & RECOMMENDATIONS

6.1 Introduction

This chapter collates the aspects of the research study conducted by providing a summary to the main findings of the research questions posed. The chapter will provide recommendations based on the finding and identify further areas for future research.

6.2 Conclusions of the study

The diamond mining industry has seen significant volatility, in line with the volatility experienced by economies across the world. Global rough diamond demand is determined by the demand for diamond jewellery and positively correlates to the GDP growth of the countries in which the jewellery demand is high with the exception of Japan (Bain and Company, 2011, 2013, 2014, 2016a, 2017, 2018). Through interviews conducted it is understood that the consumer demand for luxury goods has seen increased competition in recent years and diamond jewellery now competes with the purchases of synthetic diamonds, travel experiences and fixed asset purchases to mention a few. Despite the increasing competition, and short-term volatility there remains a strong forecasted demand for diamonds as identified by the industry reports reviewed and validated by the interviews conducted.

The literature review reviewed industry reports which identified the significant challenges faced by the diamond industry in the long term with regards to meeting the demand requirements of the retail diamond market. These reports noted that the current global portfolio of rough diamond producers does not have the capacity to add the required levels of supply into the pipeline to prevent the long-term supply gap. Interviews with industry experts revealed that despite the shift in price, the demand and supply gap in the longer term will widen, and new producing mines need to be added to the supply portfolio in order to prevent the likely hood of a potential demand shock. The supply gap provides significant reasons for diamond mining companies to fund or conduct diamond exploration activity. The need to invest in the discovery of new potential diamonds mines was collaborated through the interviews held with diamond industry experts. The respondents agreed that long-term sustainability of the industry is dependent on the successful addition of new deposits to contribute to the supply of rough diamond production.

Diamond exploration has played a significant role in the diamond mining industry as it has contributed to the discovery of large tier 1 assets over the history of the industry. Industry reports highlight that companies who engage in mineral exploration have seen significant declines in the funds and resources

available to conduct wide spread exploration activities across the globe. The decrease in resources and funding has led to more focused exploration programmes been conducted in a limited number of countries.

The literature review identified key factors to be consider within the political, economic, social, technological, legislative and environmental (PESTLE) framework. Twenty-six key factors were identified by the literature review for consideration to the decision to invest in a country. The interviews conducted supported the findings of the literature review and the resultant feedback from rankings completed by key respondents enhanced the contributions of the interview discussions through quantification of factors highlighting each respondent view on the importance of factors to investment decision making.

The decision of multinational companies to invest in exploration activities in the search for new prospective diamond mines requires significant consideration to be given to factors across the PESTLE framework. Yüksel (2012) criticized the PESTLE model in that it was limited as it did not apply a quantitative approach to measurement and that the factors were evaluated and measured independently. This research ranks the factors as identified by literature through obtaining input from industry experts, further enhancing the results of the interviews and literature findings. Through this the research was able to quantify the level of importance each factor within the PESTLE framework has on the investment decision and generate the top five key factors from a list of twenty-six that may be utilised in future for consideration in the decision to invest in exploration activities in a country. The five most significant factors were identified as: absence of legislation, enforcement of legislation, government stability, protection of legal system, risk of nationalization.

6.3 Recommendations

The research endeavoured to firstly establish the need for diamond exploration in order to add new reserves ensuring there is long term supply for the precious stone to meet the current projected demand forecast, and thereafter identify the factors such as political, economic, social, technological, legislative and environmental factors that contribute to the investment decision of multinational companies to invest in exploration activities in the search for new prospective diamond mines. The recommendation is aimed at companies within the diamond mining industry wanting to invest in South Africa, and the mineral resource departments of governments in South Africa who may utilise the research to improve their decision making and re-align their long-term investment strategies based on the analysis provided.

The following recommendations are made:

- Investment decisions should consider the top five PESTLE factors identified

Despite numerous factors that exist within the PESTLE framework, management and decision makers in multinational companies engaged in diamond exploration activities should focus efforts on understanding the top five factors as identified by the research. These factors have been deemed to be most important to the investment decision and have a significant level of influence on other factors within the framework. Management and decision makers should record the state of these factors at the time of the exploration investment decision as this will serve as a base to monitor these factors going forward.

Companies engaging in diamond exploration activities may utilise the findings and conclusions of this research and consider the inclusion of these outcomes into their internal investment appraisal processes. A company's internal evaluation process may include the analyses of these factors, and further to this the status of the five key factors (absence of legislation, enforcement of legislation, government stability, protection of legal system, risk of nationalization) at the time of investment may be considered for the risk assessment associated with the investment. An analysis into these factors may also influence a risk adjustment to a company's discount rate to be used when considering the net present value (or net present cost) of an exploration project. This may enable greater assurance relating to the incorporation of the qualitative risk assessment into the quantitative financial review of an exploration project. Increasing the assurance of an exploration investment decision has the possibility to ensure that any planned cash spend by companies has been adequately reviewed, and the best possible decision for the cash spend has been made.

In addition to companies, government departments such as the Department of Minerals and Resources or Department of Trade and Industry would be able to utilise the findings and conclusions of this research as practitioners should consider the five key factors identified as areas of focus for investment into their country. In an effort to encourage current and future investment into a country government departments may focus on the status and stability of these five key areas (absence of legislation, enforcement of legislation, government stability, protection of legal system, risk of nationalization) as a priority to attracting investment.

- The continuous review of the state of factors to be considered

Once a decision to invest has been made, management and decision makers should continuously evaluate the state of the factors within a PESTLE framework, shifting their states from that which was in place at the time of initial investment to that which is in place at present. This will enable management and decision makers to see what impact of any change has on the full quantum of factors and the investment decision. This would empower management and decision makers with valuable cognitive information should there be a need to exit and cease exploration activities in a country.

Following on the statements made in the preceding paragraphs, whereby a company may utilise the analysis of the five key factors to facilitate adjustments to its discount rate for the purpose of calculating the net presents values of exploration projects, the review of these factors on a continuous basis may influence the change in risk these factors may contribute, and in turn influence the discount rate as an exploration project progresses. This may enable a company to compare the risk at its initial investment date, to the risk as the project progress as well as compare this risk to risks of other ongoing exploration projects the company may have. Such continuous reviews enable a company to make decisions on whether to continue, pause or stop exploration projects.

As in the case of companies, continuous review of the five key factors will also aid governments in assessing whether a country is regressing or progressing its ability to attract investment. In the case of governments, investor sentiment into the five key areas should be assessed on a continuous basis or when considerable changes occur in the country, such as pre and post a national election. Focusing on the key factors identified will enable government to strengthen what the research has identified as important for consideration to investment decisions.

6.4 Suggestions for further research

The factors influencing exploration investment decisions in the diamond industry and their level of importance, should remain largely static. The relationships between factors should also remain static. Future research could be considered to help understand what the driving forces are that will enable each of the more significant factors identified to shift to its preferred state. This will enable both companies and government to understand what the trigger points would be that will reflect imminent positive change to the current state of these factors. Suggestions for this would be the following:

- Factors that drive government stability in mineral prospective countries

- Factors that drive economic freedom in mineral prospective countries
- Factors that drive strong legislation in mineral prospective countries

In addition to the above research may be conducted to understand what factors would be deemed as important for governments by governments to increase their attractiveness for foreign direct investment. This would allow for the linking of factors which are considered by multinational companies and that considered by governments, in order for governments to focus their efforts on the correct areas of improvement to facilitate long term, sustainable foreign direct investment.

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APPENDIX A – MATRIX OF FACTORS THAT INFLUENCE INVESTMENT DECISIONS

POLITICAL
Existence of Democracy
Levels of Corruption
Risk of Nationalisation
Length of Term of Presidential Office
Government Stability
ECONOMICAL
Cost of Labour
Foreign Exchange Risk
Economics Freedom
Local Interest Rates
Status of Current Infrastructure
Rate of Inflation
SOCIAL
Community Development
Local Stakeholder Engagement
HIV/AIDS Epidemic
Local Beneficiation
TECHNOLOGICAL
Accessibility to Technology
Telecommunications Network Infrastructure
Import Restrictions on Technology
LEGAL
Absence of Legislation
Enforcement of Legislation
Transparency of Legal System
Protection of Legal System
Continuity of Legal System
ENVIRONMENTAL
Environment Regulation
Rehabilitation Timeframes
Degree of Environmental Impact

Figure 33: List of PESTLE factors identified from literature

APPENDIX B – ELECTRONIC DATABASE

The following files have be encrypted on a CD as support of the research findings and analytics.

File Name	File Type	Software Required
Final Data Collection	xlsx	Microsoft Excel
Key Respondent A	wma	Windows Photo Viewer
Key Respondent B	wma	Windows Photo Viewer
Key Respondent C	wma	Windows Photo Viewer
Key Respondent D	wma	Windows Photo Viewer
Key Respondent E	wma	Windows Photo Viewer
Key Respondent F	wma	Windows Photo Viewer
Key Respondent G	wma	Windows Photo Viewer
Key Respondent H	wma	Windows Photo Viewer
Key Respondent I	wma	Windows Photo Viewer
Key Respondent J	wma	Windows Photo Viewer
Key Respondent K	wma	Windows Photo Viewer
Key Respondent L	wma	Windows Photo Viewer
List of Factors Influencing Investment Decisions	xlsx	Microsoft Excel

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