

# Factors Influencing Investment in the Mining Sector in Kenya: A Case Study of Base Titanium in Kwale, County

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**Abstract:** *The economy of a country is measured by the Gross Domestic Product which is basically the Market value of the final goods produced by the economy during a given period. Investment involves commitment of funds to long term assets that would yield benefits in future. The process of exchanging capital for an asset that is expected to produce earnings at a later time is also called investment. It increases an economy's capacity to produce; it is therefore a factor that contributes to economic growth. Countries with a higher per capita GDP (the GDP divided by the population) have high standards of living and vice versa. The overall objective of this research is to investigate the factors that influence investment in the mining sector in Kenya. This is because mining in Kenya contributes about 1% (one percent) to the country's GDP despite the potential in the sector. Statistics show that the mining sector production in Kenya is way below its potential. The real potential predicted by analysts should be close to 10 % (ten percent) of the GDP. The research largely dwells on the factors for production that is land, labor, capital and entrepreneurship and how they impact on investment in the mining sector in Kenya. It also assesses the country's risks that influence investment in the mining sector. The research design will be descriptive design that will demonstrate relationships and associations between the variables, which will be used to make some conclusions, linkages and recommendations. The target population will be investors in sub sectors in the mining sector in the country. The researcher used Base Titanium Ltd employee register, maintained by the organization's Human Resource and administration division to come up with a sampling frame containing a total of 164 members. The study used stratified random sampling with a sample of 49. The data collected was processed and analyzed using SPSS version 20.0. The findings were presented using frequency tables and percentages. Based on the findings of this study, the following conclusions were drawn. The results reveal that labour related issues, capital investment decision and country's risk have significant and positive effects on investment in mining, while land tenure administration and entrepreneurship have insignificant effects on investment in mining in Kenya. These findings indicate that the existing land tenure administration and entrepreneurship capabilities are not suitable for investment in mining in Kenya.*

**Keywords:** Labor Related Issues, Land Tenure Administration, Capital Investment Decisions, Mining Sector in Kenya

## 1. Introduction

### 1.1 Background of the Study

Throughout history different periods have been characterized by names associated with minerals, for example, the Stone Age, the copper age, the Bronze Age, the Iron Age the coal age etc. These periods could be summarized as below: Stone age-period-30,000 to 4000 BC; Copper age- period- began 3000 BC; Bronze Age-period- began 2500 BC; Iron Age-period- began 1000 BC; Coal age-period-began AD 1600; Oil age-period-Began AD 1875 and Information age-period-Began AD 1960.

Economics can be defined as a science that studies the nature and causes of natural wealth. (Adam Smith 2005). Economics is a study of how individuals, households firms and nations maximize gains from limited resources i.e. optimizing an allocation of available resources to achieve the given ends (Dwivedi 2006). Micro-economics examines basic elements in the economy, including individual agents and markets, (prices, demand, supply) their interactions and the outcomes of the interactions.

The factors for production also called resources for use in an investment can be classified as land (natural resources), labor, capital and entrepreneurship, while the factors for payments are land prices, wages, returns and profits. In economics,

specifically the production function revolves around the efficient utilization of the factors of production for what is technically feasible in terms of the factors of payment (Regan, 2008).

The process of exchanging capital for an asset that is expected to produce earnings at a later time is called investment. An investor refrains from consumption in the present in hopes of a greater return in the future. Investment may be influenced by rates of interest, with the rate of investment rising as interest rates fall, but other factors more difficult to measure may also be important.-for example, the business community's expectations about demand, supply and profit, technical changes in production methods and expected relative costs of labor and capital. Investment cannot occur without funding also called capital. Investment therefore increases an economy's capacity to produce; it is therefore a factor that contributes to economic growth (Regan, 2008).

Investment involves commitment of funds to long term assets that would yield benefits in future. There are two aspects of investments. First is the evaluation of the prospective profitability of new investments. This calls for cost of capital which is the measure of a cut off rate against which the prospective return can be compared.

Investment appraisal techniques can be categorized into two: Discounted criteria i.e. this one takes into account time value of money and include: Net present value (NPV); internal rate

of return (IRR) and Profitability index (PI) and the Non-discounted criteria. These are traditional techniques which do not take into account time value of money and include: Payback period (PBP) and Accounting rate of return (ARR) (Dwivedi 2006).

Investors need maximum amount of output possible given a specified amount of inputs. Investors also need the minimum amount of inputs required to produce a specified level of output. This calls for opportunity cost in which the value of the next best viable alternative is foregone. Economic growth is typically concerned with growth in the level of production in a nation, region or the world, while economic development reflects change in production, institutions and often social and political frameworks (Regan, 2008).

The economy of a country is measured by the GDP which is basically the market value of the final goods produced by the economy during a given period. World economic super powers: United states of America- GDP 16,724 billion US dollars; China-GDP 8,939 US billion dollars; Japan-GDP 5,007 US billion dollars; Germany- GDP 3,593 US billion dollars; France –GDP 2,739 US billion dollars; UK-GDP US 2,649 billion dollars; Brazil- GDP US 2,190 billion dollars; Russia-GDP US 2,118 billion dollars; Italy-GDP US 2,070 billion dollars; Canada-GDP US 1,825 billion dollars; India-GDP US 1,758 billion dollars (Bende-Nabende 2002)

The per capita GDP is the country's GDP divided by the number of population. Countries with higher per capita GDP have high standards of living. Another indicator of a country's economic development or standard of living is the human development index, usually computed by the UNDP. It is based on the life expectancy, education levels, and average standard of living measured by per capita GDP. Other quality of life indicators are infant mortality, and calorie supply (Dwivedi 2006).

A project is a temporary endeavor designed to produce a unique product or a result. The project should have a defined beginning and end. The constraints of a project are budget, time, quality and scope. A project should lead to a beneficial change while meeting unique goals and objectives. The project cycle has five phases, namely, the initiation phase, planning and design phase, the execution phase, monitoring and control and the closure phase (Regan, 2008).

At the initiation phase, the business requirements are identified and fulfilled. At this stage the feasibility study and analysis is done. This involves acquisition of project baseline data and evaluation of expected results. The risk elements are analyzed and how they will impact on the project or investment. How the investment compares with alternative capital uses, using methods such as internal rate of return (IRR) or the net present value (NPV). Using data from the user requirements then one can build the business case justification. For example for this case one question would be why use money on a mining investment in Kenya and not any alternative altogether (Bond & Meghir 2004).

A project charter is prepared at this stage and the project team is assembled and an understanding reached with all

stakeholders. The project charter helps the project team to focus on controlling the scope creep and therefore effectively manage resources and ultimately the project. The project charter defines the problem statement and scope, the project goals and estimated benefits and their relationship to business objectives, the milestones and approvals.

## 1.2 Research Objectives

- 1) To analyze the effects of land tenure administration on investment in mining sector in Kenya.
- 2) To evaluate the effects of labor related issues on investment in the mining sector in Kenya.
- 3) To assess the effects of capital investment decisions on investment in the mining sector in Kenya.
- 4) To examine the effects of entrepreneurship on investment in the mining sector in Kenya.
- 5) To investigate whether the country's risk influence

## 2. Literature Review

### 2.1 Eclectic Theory

Dunning (1988) developed the eclectic paradigm, which also became known as the Ownership, Location, Internalization (OLI) model. Dunning (1988) described the Eclectic Model as "drawing on several strands of economic theory in order to provide a framework by which it was possible to identify and evaluate the significant factors influencing both the initial act of foreign production as well as the growth of such production". The OLI eclectic framework consists of three distinct sets of variables - ownership, location and internalization - that firms will draw upon when selecting their entry mode. Ownership advantages are concerned with asset power, the degree of control and the management of risks that firms need to consider when making foreign investment decisions. These scholars hold that strategy is generic and largely determined by the environment, thus resulting in more strategic homogeneity. This would contradict the RBV model which sees diverse strategies emanating from inherent firm level competitive advantage. Dunning (1988) argues that the size of the firm positively influences the entry mode. Larger firms with larger resources are able to absorb the initial cost of internationalization and will opt for a higher degree of control such as being wholly owned rather than developing partnerships.

However, Agarwal & Ramaswami (1992) found that firms without international experience will have difficulty managing the problems associated with foreign operations. These firms will overstate the risks associated with a foreign market and understate the returns, thereby making the choice of a lower degree of control or non-entry more probable. For mining firms, the advantages associated with ownership will revolve around the ability of firms to secure additional resources and reserves in order to ensure the long-term security of supply and to dominate markets through scale factors (UNCTAD, 2007). The attempted takeover of Rio Tinto by BHP Billiton in 2008 is an example of mining companies seeking ownership advantages through the control of markets (Regan, 2008).

Ownership advantages and the degree of control are also manifested in the degree of ownership that mining companies are allowed to have in foreign companies. Investment risk, market potential/attractiveness as well as availability and cost of resources are factors that need to be considered under location-specific advantages (Agarwal & Ramaswami; 2002; Terpstra & Yu, 2008; Fedderke & Romm, 2006). In markets with high potential, Agarwal & Ramaswami (2002) cite the potential to develop long-term economies of scale and hence lower marginal cost of production as an attractive attribute that would entice firms to choose a high control mode of entry. The stability of the political, legal and economic factors also mediates the location variable in the Eclectic paradigm.

## 2.2 Land Tenure Administration

In economics land is a factor for production and the corresponding factor for payment for or is the land prices. Mining investment is done on land and therefore land is an integral part that influences investment in the mining sector. Land tenure administration in Kenya has many players, for example, the national land commission, the legal regime about land, and the Constitution of Kenya (2010), the Mining Act and all other relevant policy will have both positive and negative impacts towards investment in the mining sector. These players have valued self-interest that can lead to confusion in management of the land resource; and therefore delaying mining investment all together. Mineral policy by government gives the direction the government wants in order to regulate mineral sector. The mineral policy should balance economic efficiency, Equity administration efficiency and revenue stability. It also provides for the penalty provisions if certain aspects of the policy are not ordered to.

## 2.3 Labour Related Issues

Any project will need staff. Some projects need highly skilled and technical staff. Mining projects need highly skilled technical staff for the successful initiation planning and implementation, monitoring and evaluation and even closure. Salaries and wages are also highly competitive for technical staff and other skilled staff (Bond & Meghir, 2004).

Labor related issues play a vital role in shaping the profit and returns that the investor will eventually get. Labor movement creates a new center of power and employees may listen more to the leaders of the labor movement than their employers that creates confusion to investors.

## 2.4 Capital Investment Decision

This involves the commitment of current funds or capital in long lived assets or projects that will generate returns over a session of years. Capital Budgeting decisions entails planning of capital expenditure in order to achieve long term goals of the firm or investor. The amount of money committed to long lived assets or projects is usually large and it is called capital outlay Potts (2002).

Investment in the mining sector involves commitments of funds or capital to projects that will take many years. Most of the mining projects have a life time of more than five years.

Mining projects involve uncertainties and risks which affect the risk profile of the firm due to fluctuations in the cash flows. The mining investment decisions once taken are almost irreversible and therefore ultimately the best alternative on the use of the capital investment should be considered. Determining the relationship between the changes in the level of investment expenditure and the factors analyzed is a fundamental issue for assessing developmental activity in mining plants. A relatively precise determination of these relationships which describes the importance of individual factors as a formalized function irrespective of their aggregate category (a coal mine, a mining company, the trade, the industrial sector) allows for an objective assessment of prior investment and production activity (Gawlik, 2008).

Therefore while making capital budgeting decisions and especially in the investment in the mining projects, the following factors must be considered namely; The economic life of the mining projects, the availability of the initial capital outlay, the amount and timing of the cash flows, whether there will be need for additional capital requirements, how the mining investment project will impact on the entire firm, how the initial capital outlay will be phased out (Pandey, 2008).

Therefore in capital Budgeting decisions; project evaluation techniques are employed which must take into account the time value for money, it must also consider the cash flows of the investment, and the technique should give decision criteria on which projects are viable economically and those which are not (Pott, 2002).

## 2.5 Entrepreneurship

Entrepreneurship is the process of starting a business or an organization. The entrepreneur develops a business model, acquires the human and other resources and is fully responsible for its success or failure. The factors for payment for the entrepreneur are profits. Therefore just like any other investor the entrepreneur in the mining business is looking for profits. Businesses are built on the principles of demand and supply. Demand stands for the quality of goods or services that consumers are willing to buy at a given price. As demand increases prices also increase. The determinants of demand are tastes and preferences, income, expectations, number of demands related products such as compliments and substitutes. Supply on the other hand is the quantity of goods that can be supplied at a given price. Supply increases as price decreases.

Determinants of supply are number of suppliers, technology, expectations, inputs cost and barriers to trade whether legal, financial government or control over a vital resource. The entrepreneur is normally focused on the profits and may disregard the rights of other stakeholders, like right to a clear environment, issues of occupational safety and health, labor issues like paternal and annual leave and therefore ending up in confrontation with the effected stakeholders.

## 2.6 Country's Risk

Country's risks in investment refer to the degree of uncertainty that exists about the Occurrence of a future planned event. Certainty refers to a situation where there is only one outcome

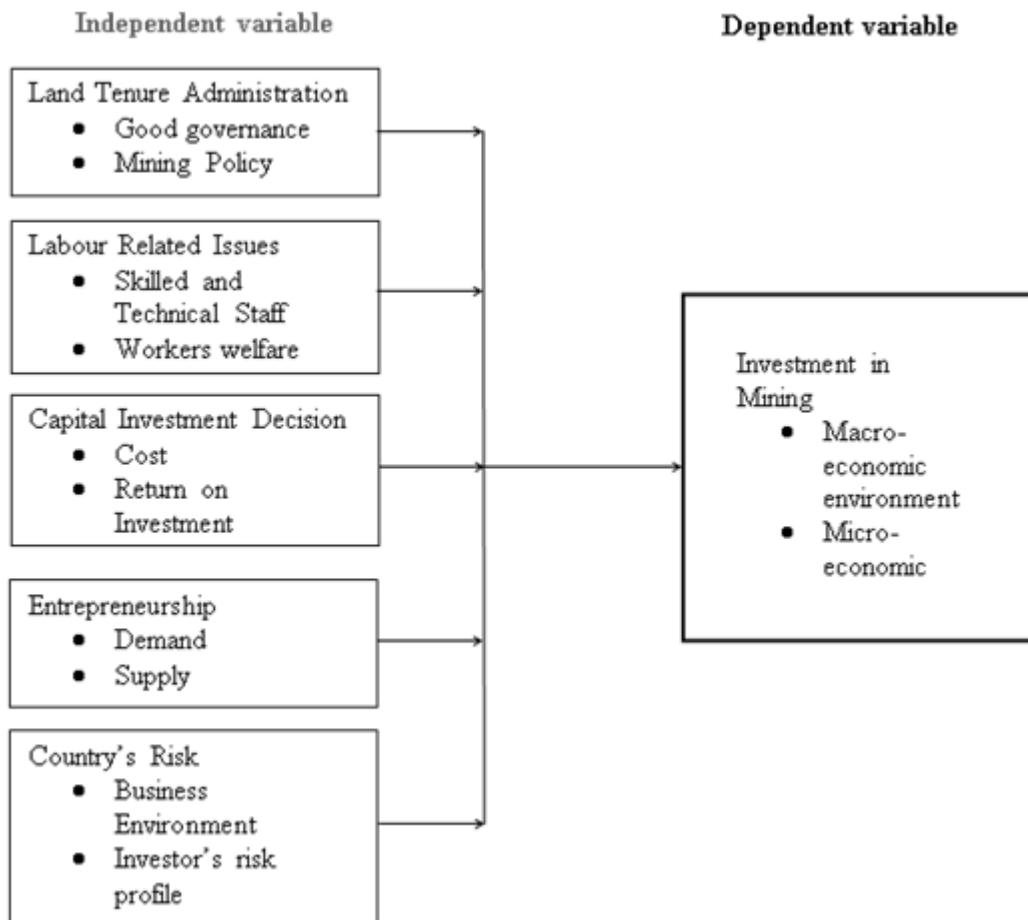
to a decision and this outcome is known precisely. Risk refers to a situation where there is more than one possible outcome to a decision and the probability of each specific outcome is known or can be estimated. Risk requires that the decision maker know all the possible outcomes of the decision and have some idea of the probability of each outcomes occurrence. Risk can be measured using the standard deviation.

Most managers or business people faced with alternative projects of equal expected value of profit but different coefficient of variation or risk will generally prefer the less risky. These types of investors are called risk averse. Those who

choose the more risky projects are called risk seekers or takers. There are those who are indifferent to risk they are neutral.

Therefore the investing in a country depends on changes in the business environment that may adversely affect operating profits or the value of assets in a country. Financial factors such as currency controls, devaluation or regulatory changes or stability factors such as mass riots, civil wars and other potential events contribute to company's operational risk (Bende-Nabende, 2002).

**2.7 Conceptual Framework**



**Figure 1: Conceptual Framework**

**Research Methodology**

**3.1 Research Design**

Polit and Hungler (2009) describe research design as a blue print or outline, for conducting the study in such a way there will be control exercised over the factors that could interfere with the validity of the research results. Burns and Grove (2009) states that designing a study help in the way they will used to obtain the intended results, thus increasing chances of obtaining information that could be associated with the real situation. The researcher used was descriptive design for the purpose of developing theory, making judgment, identifying problems, determining what others in similar situations are

doing. The design was chosen to meet the objectives of the study namely: factors that influence investment in the mining sector in Kenya. Bickman and Rog (2008) suggest that descriptive studies answer the questions what is , what was, why, or how and when, but quantitative and qualitative data can be collected using the design such data collected can be organized into graphs and charts to aid the leader in understanding the distribution of the data.

**3.2 Population of the Study**

Population is the total group that share similar characteristics that the study seeks to understand (Mugenda & Mugenda 2013). The population of the study also called the research



population is a large collection of individuals or objects that is the main focus of a scientific question. The target population for a survey is the entire set of units for which the survey data are to be used to make inferences. The target population was 164 permanent professional employees of Base Titanium Ltd (Base Titanium Ltd 2015). The population distribution is parented in table 1.

**Table 1:** Population of the study

Category	Number of Staff
Top Managers	13
Senior Professionals	21
Professionals	85
Trainees	45
<b>Total</b>	<b>164</b>

Source: Base Titanium Ltd. 2015

### 3.3 Sampling Frame and Procedure

Mugenda and Mugenda (2013) define a sampling frame as a list, directory or index of cases from which a representative sample can be selected. The researcher used Base Titanium Ltd employee register, maintained by the organization's Human Resource and administration division to come up with a sampling frame containing a total of 164 members.

Sampling technique refers to the procedure of selecting the subjects or cases to be included in the sample. The technique can be either probability-based or non-probability based i.e. deliberate (Sekaran, 2008). According to Kothari and Garg (2014), a probability-based sampling technique is considered as the best technique of selecting a representative sample i.e. due to its use of random sampling. This because, according to Kothari and Garg (2014), random sampling ensures the law of Statistical Regularity, which states that "if on average the sample chosen is a random one, the sample will have the same composition and characteristics as the universe".

The study used stratified random sampling which is a probability sampling technique in which subjects are selected in such a way that existing subgroups in the population are more or less reproduced in the sample (Mugenda & Mugenda, 2013). The rationale behind the choice of the stratified random sampling technique for this study is the fact that the study's population, from which the sample will be drawn, does not constitute a homogenous group.

**Table 3:** Land tenure administration on investment in mining

Statement	n	Mean	S.D.
Does land tenure administration influence investment in Mining in Kenya?	49	4.27	.758
Do you think that land tenure administration affects investment in mining?	49	4.24	.804
The devolved units have affected investment in Mining in Kenya?	49	3.84	.921
Environmental procedures influence investment in mining in Kenya?	49	3.53	1.002
Does Kenya have a mining policy?	49	3.59	1.206
Do you think it has influenced investment in mining in Kenya?	49	3.95	1.008
Do you think good governance influences investment in mining?	49	4.55	.765

Most of the respondents strongly agreed that good governance influenced investment in mining as shown by a mean of 4.55. Most of the respondents also agreed that land tenure administration and devolved units affected investments in mining with a mean of 4.27 and 3.84 respectively.

**Table 2:** Sample size

Stratum	Stratum Size in the Population	Stratum Percentage Allocation	Stratum Sample Size
<b>Top Managers</b>	13	30%	4
<b>Senior Professionals</b>	21	30%	6
<b>Professionals</b>	85	30%	26
<b>Trainees</b>	45	30%	13
<b>Total Sample Size</b>	<b>164</b>	<b>30%</b>	<b>49</b>

### 3.4 Data Collection, Analysis and Presentation

Questionnaires can be used for collecting quantitative data according to Kolytaze (2004). Structured questionnaires are best suited for descriptive study as it is easily applied and requires less skill. Questionnaires can also be open ended or closed ended. The open ended questionnaires allow respondents to answer the questions in their own words and provide more details. The Close ended questions are included because they are easy to administer and analyze. (Polit and Hugler, 2003).

The questionnaires were administered or given to respondents by the researcher and then collected later after completion by the respondents. The one-on-one interview was administered by the researcher for data collection. During this step, the questionnaires collected was checked for completeness; edited to detect and correct errors and omissions; their responses coded; and a data matrix prepared in the IBM SPSS Statistics for Windows, Version 20.0 software. Descriptive analysis; mean and standard deviation and inferential analysis; correlation, regression analysis and co-efficient of determination were used in analysis. Results were presented using tables accompanied by discussion.

## 3. Findings Discussion and Recommendations

### 4.1. Land tenure administration on investment in mining

The study sought to investigate the effects of land tenure administration on investment in mining. Table 3 summarizes respondents' level of agreement on how land tenure administration affects investment in mining.

This is reiterated in the Constitution of Kenya (2010) through the mining policy that gives the direction the government wants in order to regulate mineral sector. The mineral policy should balance economic efficiency, Equity administration efficiency and revenue stability. It also provides for the penalty

provisions if certain aspects of the policy are not ordered to.

#### 4.2 Labour Related Issues on Investment in Mining

The study sought to establish the effects of labour related issues on investment in mining. The findings were as presented in table 4.

**Table 4:** Labour related issues on investment in mining

Statement	n	Mean	S.D.
Does labor movement influence or affect investment in mining in Kenya?	49	3.35	1.032
Do you agree that community partnership influences investment in mining in Kenya?	49	3.38	.949
Do you know of any labor laws in Kenya?	49	4.31	.742
Do you think these laws affect investment in mining in Kenya?	49	3.55	1.081
Mining investment requires highly skilled labor force?	49	4.02	.946
Do the skills affect investment in the mining sector in Kenya?	49	3.75	1.101
Does worker welfare activism affect investment in mining in Kenya?	49	3.35	1.062

Most of the respondents agreed that they are aware of the labour laws in Kenya with a mean of 4.31. The respondents are also in agreement that mining investment requires highly skilled labour force and indeed the skills do affect investment in mining, as shown by a mean of 4.02 and 3.75 respectively. This is in line with Bond & Meghir (2004), who stated that any project will need staff. Some projects need highly skilled and technical staff. Mining projects need highly skilled technical staff for the successful initiation planning and implementation, monitoring and evaluation and even closure. Salaries and wages are also highly competitive for technical staff and other skilled staff.

#### 4.3 Capital investment decision on investment in mining

The study sought to establish the effects of capital investment on investment in mining. The findings were as presented in table 5.

**Table 5:** Capital investment decision on investment in mining

Statement	n	Mean	S.D.
Is capital a factor that affects investment in mining in Kenya?	49	4.31	1.075
Are costs considered in investment in mining in Kenya?	49	4.15	.899
Do you think returns on investment affect investment in mining in Kenya?	49	4.21	1.010
Are projects evaluated based on their returns on investment?	49	4.27	.939
Do you think returns are commensurate with investments?	49	3.42	1.069

The respondents agreed that capital is a factor that affects investment in mining as depicted by a mean of 4.31, most of the respondents agreed that the returns on investment influences investment in mining as shown by a mean of 4.21. Costs are also considered in investment in mining as indicated by a mean of 4.15. Determining the relationship between the changes in the level of investment expenditure and the factors analyzed is a fundamental issue for assessing developmental activity in mining plants. A relatively precise determination of these relationships which describes the importance of

individual factors as a formalized function irrespective of their aggregate category allows for an objective assessment of prior investment and production activity (Gawlik, 2008).

#### 4.4 Entrepreneurship on investment in mining

The study sought to establish the effects of entrepreneurship on investment in mining. The findings were presented in table 6.

**Table 6:** Entrepreneurship on investment in mining

Statement	n	Mean	S.D.
Does demand affect investment in mining in Kenya?	49	3.67	1.191
Does supply affect investment in mining in Kenya?	49	3.65	1.158
Do you think the number of mining entities in an area affect investment in mining?	49	3.35	1.158
Do complementary minerals play part in investment in mining in Kenya?	49	3.46	1.031

From the findings indicated in table 6 most of the respondents agreed that demand affects investment in mining with a mean of 3.67. Consequently supply also affects investment in mining as shown with a mean of 3.65; this is so because businesses are built on the principles of demand and supply. Complementary minerals also play part in investment in mining as indicated with a mean of 3.46. This is reiterated by the study on an analysis of water samples from Mikei, Osiri, Masara and Makalda gold mines in Migori to determine the level of heavy metals using the energy dispersive x-ray fluorescence technique (Getaneh and Alemayu 2006; Ogola et al 2006).

This study would therefore assess accumulation of heavy metals in the mine waters in the Migori mining belt and make relevant recommendations to the miners, the local populace and government authorities. From this study it was discovered that the concentration of arsenic, copper, zinc and lead in the Migori mine waters were high and miners should therefore be made aware of the alternative entrepreneurial opportunities.

#### 4.5 Country's risk on investment in mining

The findings on the effects of country's risk on investment in mining were as presented in table 7.

**Table 7:** Country's risk on investment in mining

Statement	n	Mean	S.D.
Are there any risks involved in investing in mining in Kenya?	49	4.10	.951
Is the business environment a factor in investing in mining in Kenya?	49	4.19	.960
Does the investor's risk profile play part in investing in mining in Kenya?	49	3.94	.998
Does a country's stability influence investment in mining in Kenya?	49	4.46	.824
Do you think the risk you take is commensurate to the returns in investment in mining?	49	3.60	1.027

Most respondents strongly agreed that a country's stability influences investment in mining with a mean of 4.46, most respondents also agreed that the business environment is a

factor in investing in mining and that there are risks that are involved in investing in mining as shown in figure 4.11 with a mean of 4.19 and 4.10 respectively. This study is consistent with findings of Bende-Nabende, (2002) in the study investing in a country depends on changes in the business environment that may adversely affect operating profits or the value of assets in a country. Financial factors such as currency controls, devaluation or regulatory changes or stability factors such as mass riots, civil wars and other potential events contribute to company's operational risk.

**4.6 Combine effect of the factors on investment in mining**

Multiple regression analysis was conducted using investment in mining as the dependent variable and the five factors influencing investment in mining: land tenure administration, labor related issues, capital investment decision, and entrepreneurship and country risk as the predicting variables.

**Table 8: Regression Model**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>
1	.682	.465	.441

From the model summary in table 4.13, it is clear that the adjusted R2 was 0.441 indicating that the combination land tenure administration, labour related issues, capital investment decision, entrepreneurship and country risk explained a 44.1% of variation in investment in mining in Kenya.

**Table 9: ANOVA Table**

ANOVA					
Model	Sum of squares	Df	Mean square	F	Sig.
Regression	10.745	5	2.149	3.539	.009
Residual	25.500	42	.607		
<b>Total</b>	<b>36.245</b>	<b>47</b>			

From the ANOVA table 8, it is clear that the overall standard multiple regression model (the model involving land tenure administration, labour related issues, capital investment decision, entrepreneurship and country risk) is significant in predicting how tenure administration, labour related issues, capital investment decision, entrepreneurship and country risk determine investment in mining in Kenya. The regression model achieves a high degree of fit as reflected by an R2 of 0.465 (F = 3.539; P = 0.001<0.05).

**Table 9: Regression Coefficients**

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
Constant	.814	1.208		.674	.504
Land tenure administration	-.075	.214	-.053	-.351	.727
Labour related issues	.350	.146	.337	2.396	.021
Capital investment decision	.345	.179	.291	1.929	.060
Entrepreneurship	-.188	.146	-.196	-1.287	.205
Country's risk	.290	.200	.239	1.450	.154

a. Dependent Variable: Investment in mining

Table 9 presents the regression results on how land tenure administration, labour related issues, capital investment decision, entrepreneurship and country risk influence investment in mining in Kenya. The multiple regression equation was that:  $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \epsilon$ , and the multiple regression equation became:  $Y = 0.814 - 0.075X_1 + 0.350X_2 + 0.345X_3 - 0.188X_4 + 0.290X_5 + \epsilon$ . As depicted in table 4.15, there was a positive and significant effect of labour related issues on investment in mining ( $\beta = 0.337$ ;  $t = 2.396$ ;  $p < 0.05$ ). There was positive and significant effect of capital investment decision on investment in mining ( $\beta = 0.291$ ;  $t = 1.929$ ;  $p < 0.05$ ). There was also a positive and significant effect of country's risk on investment in mining ( $\beta = 0.239$ ;  $t = 1.450$ ;  $p < 0.05$ ). However, there was a negative but insignificant effect of land tenure administration on investment in mining ( $\beta = -0.053$ ;  $t = -3.51$ ;  $p > 0.05$ ). There was also a negative but insignificant effect of entrepreneurship on investment in mining ( $\beta = -0.196$ ;  $t = -1.287$ ;  $p > 0.05$ ).

Based on the findings of this study, the following conclusions were drawn. The results reveal that labour related issues, capital investment decision and country's risk have significant and positive effects on investment in mining, while land tenure administration and entrepreneurship have insignificant effects on investment in mining in Kenya. These findings indicate that the existing land tenure administration and entrepreneurship capabilities are not suitable for investment in mining in Kenya.

The following recommendations were made from the findings of the study; the existing land tenure administration and entrepreneurial policies on mining investments should be modified in order to improve value addition in the mining sector. In modifying entrepreneurship the managers should come up with education programs towards mining investments for the communities where they are based so as to build capacity and encourage those owning land with vast minerals to be open to investment opportunities. Managers should find out how market competition and corporate policies could be modified in order to facilitate investment in mining in Kenya. In modifying land tenure administration managers should liaise with the National Land Commission offices on the modalities of how mining policies can be aligned to market needs. Managers should find out why there is disconnect between the mining policy and actual mining activities and why the policy has an adverse effect on mining activities.

Policy makers should find out how land tenure administration and entrepreneurial policies on mining investments could be modified in order to improve investment in the mining sector in Kenya. The Government of Kenya should invest in appropriate technological infrastructure so that the local mining entities' investments can improve. Policy makers should decide on the mechanisms to encourage entrepreneurial acumen with respect to mining activities in Kenya. The government should create linkages through their respective Ministries in order to market the sector in various parts of the world. The government should strengthen inter-sectorial relationships so as to tap into synergies that exist and would lead to growth of investments in the mining sector. Lastly, the Government should ensure that the mining bill 2014 is adopted and implemented fully to create an enabling mining

environment for the local miners in the region.

Further studies need to be carried out to identify industry based challenges that these mining entities face and how best these challenges can be addressed to enhance growth and performance of the sector.

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