

Effects of the New Mining Law Legislative Regime on Investment in the South African
Export Coal Industry

Research Report

by

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Foreword

My interest in the field of mining law and this study stems from my employment in the mining industry over the past fifteen years as a legal adviser to a number of multinational mining companies. My exposure in this regard has made me acutely aware of the importance and impact of the mining law regulatory environment of a country in attracting investment. This has become even more important in context of the global business environment and the competition between countries in attracting investment to their local mining industries which leads to various benefits including increased employment, greater foreign exchange earnings and ultimately the development and prosperity of a country and its people.

This research report could not have been possible without the patience and understanding of my family and friends as well as the cooperation of the persons interviewed. Acknowledgement is also due to my study leader Professor PJ Nieuwenhuizen for his insights and guidance.

Declaration

I declare that “Effects of the New Mining Law Legislative Regime on Investment in the South African Export Coal Industry” is my original work and that all the sources I have used or quoted have been indicated and acknowledged as complete references, and has not been submitted for degree purposes previously.

Name

Date

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Abstract

The object of this research paper is to examine and evaluate the effects and the repercussions of the new mining legislation introduced on 1 May 2004 on South Africa's attractiveness as a venue for foreign investment with specific reference to the country's coal export industry being a significant earner of foreign earnings. This research compares the following research proposition which was developed from the conceptual framework with the data obtained from the semi-structured interviews: The new mining law regime which came into force on 1 May 2004, has negatively affected the attractiveness of South Africa as a venue for investment for the companies currently operating in the South African export coal industry, in relation to the yield and risk pertaining to future investments as compared to other countries competing for investment. The case study type of research methodology was utilised availing itself of an examination of all relevant literature as well as obtaining data on the issues envisaged by means of a questionnaire and interviews of people knowledgeable about the industry and its environment. The research was limited to Ingwe Collieries Ltd, Xstrata South Africa (Pty) Ltd and Sasol Mining (Pty) Ltd, which companies collectively mine and process sixty percent of the coal exported through the Richards Bay Coal Terminal. An analysis of the data obtained through the semi-structured interviews with the respondents indicates that the new mining law regime which came into force on 1 May 2004 has negatively affected the attractiveness of South Africa as a venue for investment for the relevant respondent companies currently operating in the export coal industry in relation to the risk and yield pertaining to future investments as compared to other countries competing for such investment. The conclusion can be drawn that South Africa has become less attractive to investors as a venue for investment in the export coal industry and that the new Act has discouraged such investment since its promulgation on 1 May 2004. Indications are that such investment has been redirected to other countries presenting similar coal resource mining and export opportunities

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Chapter 1

Hypothesis and Method of Investigation

1.1 Hypothesis

The objective of this research paper is to examine and evaluate the effects on investment in the South African coal export industry of the new mining legislative regime introduced by the Mineral and Petroleum Resources Development Act 28 of 2002, which came into operation on 1 May 2004.

South Africa has recently undergone a rather dramatic legislative revision of its mining law regime. The change in the legislative regime has brought about a fundamental revision of the concept of security of tenure in respect of rights to mineral resources and the international competitiveness of the South African mining law regime. The Mineral and Petroleum Resources Development Act 28 of 2002 came into operation on 1 May 2004 and repealed the previous common law regime (relating to the acquisition, retention, timing of the exercise of entitlements and transfer of mineral rights) as well as the Minerals Act 50 of 1991, which combined for a high degree of security and continuity of tenure for mining enterprises based on a system of privately held property rights.

The mining law regime which applied prior to 1 May 2004 in terms of the repealed Minerals Act 50 of 1991 was a two tier system founded in the common law of private ownership of property (including the rights to minerals) combined with a legislative licensing system. The holder of the privately held rights to a mineral was at liberty, driven only by market forces, to exercise and enjoy the mineral rights, or to grant a lease of the right to prospect or mine to investors or to alienate and transfer the mineral rights to investors.

Conversion from exploration rights to mining rights usually occurred by exercising an option in a prospecting contract granted by the private holder of the rights to a mineral, thereby securing the mineral rights for the investor or a mineral lease conferring the right to mine. There was little, if any, State intervention and no insecurity with regard to continuity of tenure of mineral rights. This system preserved

the continuity of tenure from a prospecting phase to a mining phase. Mineral rights could be acquired from private owners by negotiation in accordance with the law of contract, were registerable in public deeds offices, could be mortgaged to finance mining projects, usually endured for the economic life of mine and were constitutionally protected against expropriation by the State. The exercise of such rights was subject to the acquisition of mining and prospecting licences or permits from the State in accordance with the Minerals Act 50 of 1991. These licences regulated prospecting for and mining of minerals in an optimal, orderly and environmentally sustainable manner. The State was obliged to grant such licences if the applicants held the common law mineral rights and complied with the relevant criteria pertaining to the optimal exploitation and utilisation of minerals, health and safety, surface protection and the rehabilitation of the environment.

The new regime as provided for in the Mineral and Petroleum Resources Development Act 28 of 2002 embodies a diminished form of security and continuity of tenure when compared with the former regime which it replaced. Security and continuity of tenure in the Mineral and Petroleum Resources Development Act 28 of 2002 are to a large extent based on the discretions of administrative regulators in relation to the requisite socio-economic transformation objectives of government such as the Broad Based Socio-Economic Empowerment Charter requirements. These include amongst other minimum requirements relating to the transfer of ownership in the relevant mines to historically disadvantaged South Africans as well as other socio-economic transformation targets. The new Act does not adopt the aspect of granting mining rights in perpetuity or for the life of the mine but limits itself to a maximum fixed initial period with rights of renewal for further maximum fixed period. The Act does not provide security of tenure for all existing rights and the effect of the Mineral and Petroleum Resources Development Act 28 of 2002 is therefore to bring about an expropriation of some of the former rights conferred under the previous regime. Administrative decisions taken in terms of the Act are not subject to judicial appeal or international arbitration. New rights may not be ceded, transferred, let, sublet, assigned, alienated, or otherwise disposed of, or encumbered by mortgage without the consent of the Minister. Old order rights can not be ceded, transferred, let, sublet, assigned, alienated, or otherwise disposed of, or encumbered by mortgage until they are converted to new order rights. Subsequent to such conversion, Ministerial consent must be obtained. Holders of the new rights into

which a pre-existing old right has been converted, must continuously and actively conduct operations in accordance with the relevant work programme. Under the former regime, the timing of prospecting and mining activities was not regulated. Unlike the case in regard to rights under the previous regime where the State did not hold the vast majority of the mineral rights, State royalties are payable in respect of all new prospecting and mining rights with the exception of exploration rights. The terms and conditions of the new rights cannot be amended or varied without the consent of the Minister. Old order rights in terms of the previous regime were consensual in nature and could be varied by the parties thereto. While old order rights were not subject to requirements in regard to broad based socio-economic empowerment, the holding of new rights requires the holder to further the objects of empowerment and comply with a prescribed social and labour plan. This amongst others entails the transfer of up to 26% of the equity of the mining company to historically disadvantaged persons at considerable cost to the holder of the right as most historically disadvantaged South African companies or individuals generally do not have access to capital to pay therefore.

Investment in the minerals industry has specific features which differentiate it from most other industries of economic activity. These include amongst others the risks inherent in the mineral exploration phase, high capital-intensity and long-term involvement, growing international competition and specific political, operational and economic risks such as the threat of nationalization, changes in demand emanating from technological innovations and exchange rate fluctuations.

In recent decades, foreign direct investment by mining multinational enterprises has been the dominant source of development projects in many developing countries, inclusive of South Africa. Research has shown that a country's international competitive advantage in the mining industry in attracting foreign direct investment from mining multinational enterprises can be improved or impaired by legislation and government policy. Security and continuity of tenure of rights to mineral resources is a major variable in the risk evaluation by investors as to preferring one country above another.

Security of tenure as it relates to the right to mine a mineral, has traditionally been described as a reasonable entitlement to extraction rights following a successful

exploration phase. Security of mineral tenure seen in a narrow sense refers to the legal entitlement of a person or enterprise to mine after successful exploration. The mineral and mining laws of a country may grant the prospector an automatic right to mine, grant it a preferent claim to obtain the right to mine or allow the regulator a discretion to grant the right to mine to the prospector. Each of these alternative regulatory actions will determine whether the mining legislative regime of a country is seen as either providing security of mineral tenure or not. The trend in developing countries has been to recognise the competitive advantage of a mining law regime which promotes security of mineral tenure and thus reduces discretionary grants by government agencies thereby providing multinational mining enterprises with a more or less automatic right to obtain a mining right.

Lately, it has also been recognised that security of mineral tenure can be understood in a wider context, namely, the security and durability of a right granted to a person or enterprise to implement different states of the mining sequence. Realising this, the World Bank, in its mining policy guidelines, suggests that in order to provide proper security of tenure, a mining law regime should ensure that a mineral title, once granted, cannot be suspended or revoked except on specified grounds clearly set out by legislation. The relevant legislative code should provide for reasonable assurances guaranteeing the continuity of mining operations over the life of the mine.

This research has as an objective to ascertain whether the aforementioned weakening of security of tenure brought about by the recent changes to South Africa's mining law legislation has in fact had a negative impact on the investment risk perceptions of multinational mining enterprises in the export coal industry and consequently detracted from South Africa's potential as a competitor for foreign investment.

This research will be restricted to the following objective:

To examine and evaluate the effects and the repercussions of the new mining legislation introduced on 1 May 2004 on South Africa's attractiveness as a venue for foreign investment with specific reference to the country's coal export industry being a significant earner of foreign exchange.

The study may be of assistance in determining whether the existing body of research, which indicates that the weaker form of security of tenure such as that imposed by Government in terms of the new legislative regime applicable to the South African mining industry, will negatively impact on the investment decisions of multinational mining enterprises and consequently prove detrimental to South Africa's competitive position in relation other developing countries in the mining industry, is confirmed by this research study.

Based on the data collected from the companies studied, the most negatively perceived aspects of the current mining law regime can be identified. Recommendations can then be made regarding the legislative amendments to the mining law regime in order for South Africa as a nation state to retain or enhance its international competitive advantage in the mining industry.

Based on the data collected from the companies studied the research findings of researchers with regard to suggested modifications to modern foreign direct investment theory pertaining to mining, can be compared with the prevailing reality in the South African export coal mining industry.

1.2 Method of investigation

As indicated under the hypothesis the objective of this research is to examine and evaluate the effects and the repercussions of the new mining legislation introduced on 1 May 2004 on South Africa's attractiveness as a venue for foreign investment with specific reference to the country's coal export industry being a significant earner of foreign exchange.

The research methodology employed in this investigation, namely the case study methodology entails mainly examining all relevant literature as well as obtaining data on the issues envisaged by the questionnaire and the interviewing of people knowledgeable about the industry and its environment.

The research is limited to Ingwe Collieries Limited, Xstrata South Africa (Pty) Limited and Sasol Mining (Pty) Limited, three of the companies responsible for mining and processing 60 percent of the coal exported through the Richards Bay Coal Terminal.

The three companies collectively hold sixty percent of the shares in the terminal entitling them to export a maximum of 43.61 million tons of the 72 million tons per annum capacity of the terminal. The balance of the coal exported through this terminal is produced by various other companies which are mostly locally based with the exception of Anglo Coal.

The only other coal export terminals which are accessible to company's producing export quality coal in South Africa are located in Durban, with a capacity of between one and two million tons per annum while a similar amount of coal passes through the Maputo terminal in Mozambique (Barker, 2000).

Richards Bay Coal Terminal Company Ltd is a company established and funded by the relevant shareholders to operate the largest export coal terminal in the world. Established in 1976 with an original capacity of 12 million tons per annum, it has grown into an advanced 24-hour operation exporting more than 68 million tons of coal a year to buyers around the world. The terminal's shareholders collectively control 49 coal mines located in KwaZulu Natal and the Mpumalanga provinces. Richards Bay Coal Terminal shares a strong co-operative relationship with the Spoornet division of Transnet Ltd, which laid the 560 kilometre railway line linking the coal mines to the port, and with National Ports Authority, which coordinates the arrival and departure of more than 700 ships per annum (Barker, 2000). A Phase V expansion of the terminal is planned to commence towards the end of 2007 and will take 27 months to complete. Throughput capacity at the terminal will be increased from 72 Mt/annum to 92 Mt/a. The additional export tonnage capacity will be made available to common users on application. (Richards Bay Coal Terminal Company Ltd, 2006).

Access to the terminal for purpose of exporting coal is currently restricted to the shareholders reflected in the table below.

Table 1: Richards Bay Coal Terminal shareholders and export coal entitlements

Richards Bay Coal Terminal Company Ltd shareholders	Annual maximum export tonnage
Ingwe Collieries Ltd	26.96 Mt (million tons)
Anglo Operations Ltd	19.78 Mt
Xstrata South Africa (Pty) Ltd	15.05 Mt
Total Coal South Africa (Pty) Ltd	4.09 Mt
Sasol Mining (Pty) Ltd	3.60 Mt
Kanga Coal (Pty) Ltd	1.65 Mt
Eyesizwe Coal (Pty) Ltd	0.87 Mt
Total tonnage per annum	72 Mt

Source: Richards Bay Coal Terminal Company Ltd, 2006: no page

The factual aspects of the former and the new mining law regimes are examined in chapter two. The literature concerning the modern concept of security of tenure and theory of foreign direct investment is examined in chapter three. Chapter four deals with the methodology followed by an analysis of the data obtained by means of the questionnaires and interviews in chapter five. The findings and recommendations are summarised in chapter six.

Chapter 2

Comparison between the Old and the New South African Mineral Law Regimes

2.1 Introduction

The object of this chapter is to examine and compare the factual aspects of the former and the new mining law regimes specifically in context of the modern concept of security of tenure and investment which are more comprehensively discussed in chapter three.

2.2 The Advent of the Mineral and Petroleum Resources Development Act 28 of 2002

On 1 May 2004 with the coming into force of the Mineral and Petroleum Resources Development Act 28 of 2002, South Africa changed its mineral rights system from a privately orientated system to a state orientated mining law system (Dale et al, 2005).

The former privately orientated system was based on a minimalist approach to State control and intervention. This philosophy as previously applied in South Africa, produced a highly successful and vibrant minerals economy which was internationally competitive (Dale, 1996). This system was based on the policy that State regulation is neither necessary nor desirable for the optimal exploitation of minerals. Market forces entail a self regulating compulsion of turning the rights to the relevant mineral, which have been acquired at a vast expense by the investor, to account as soon as possible. There were no minimum expenditure commitments, minimum work commitments, obligatory relinquishments of rights, filing of mining work plans and budgets required by the State in terms of the former Minerals Act, 1991 (Dale, 1996). A licensing system was applicable to ensure that the objectives of the optimal utilisation of minerals, health and safety, surface protection and rehabilitation, were complied with (Kaplan & Dale, 1993).

The post 1 May 2004 mining law regime runs counter to the philosophy of the reduction of State interference and deregulation by requiring minimum expenditure commitments, minimum work commitments, obligatory relinquishments of rights, the

filing of mining work plans and budgets as well as the payment of royalties to the State. The rights to prospect and mine must be acquired from the State (Dale, 1996).

Systems based on private ownership of mineral rights are objectively considered to have merit on better achievement of security of tenure than is possible in systems based on State ownership of mineral rights (Dale, 1996). Privately orientated mineral rights systems achieve desirable objectives for investors such as facilitating the acquisition of prospecting rights, the elimination of corruption in such acquisition, avoidance of discretions in the allocation of rights, security and continuity of tenure, minimise State intervention and streamline administrative procedures (Dale, 1996).

2.3 Criteria providing the framework of comparison

In order to compare and contrast the factual aspects of the former Minerals Act 50 of 1991 read together with the common law, which constituted the applicable South African mining law regime until 1 May 2004, and Mineral and Petroleum Resources Development Act 28 of 2002, which repealed the aforementioned mining law regime, the compliance of both regimes with the various criteria identified as being important in determining whether a favourable and internationally competitive investment environment exists, are examined. These criteria relate to the various aspects of security of tenure and the theory of foreign direct investment, which are discussed in chapter three.

The eighth preamble of the Mineral and Petroleum Resources Development Act 28 of 2002 reaffirms the State's commitment to guaranteeing security of tenure in respect of prospecting and mining operations and the ninth preamble emphasises the need to create an internationally competitive and efficient administrative and regulatory regime (Badenhorst, Mostert, Carnelly, Stein & Van Rooyen, 2004). Whether a mining law regime will be internationally competitive and succeed in attracting foreign investment depends on the degree to which such regime does not violate the identified investment criteria relating to prospecting and mining internationally.

Specific attention is given to the following criteria identified as important in determining whether a favourable investment environment exists (Johnson, 1990;

Otto, 1992; World Bank, 1992; Dale, 1996; Bastida, 2001; Cawood, 2004; Dale et al, 2005):

- (a) State sovereignty and custodianship;
- (b) The nature, registerability, transferability and bondability of the rights;
- (c) The nature of the administrative discretion in decision-making concerning prospecting and mining rights;
- (d) Further aspects of security and continuity of tenure;
- (e) Right to administrative appeal, judicial review and judicial appeal;
- (f) Aspects related to the environment, land use, and aboriginal claims;
- (g) Financial aspects;
- (h) The fate of existing rights;
- (j) Clear statement of rights and obligations; and
- (k) Delays in the processing of applications for rights.

2.3.1 State sovereignty and custodianship

The mining law regime which applied prior to 1 May 2004 in terms of the repealed Minerals Act 50 of 1991 was founded in the common law of private ownership of property combined with a legislative licensing system (Kaplan & Dale, 1993). The holder of the privately held rights to a mineral was at liberty, driven only by market forces, to exercise and enjoy the mineral rights, or to grant a lease of the right to prospect or mine to investors or to alienate and transfer them to investors, which is currently the case in other industries such as agriculture and commerce (Dale, 1996).

Conversion from exploration rights to mining rights occurred purely in a private context i.e. usually by exercising an option in a prospecting contract granted by the private holder of the rights to a mineral thereby securing the mineral rights for the investor or a mineral lease conferring the right to mine for an agreed period (Badenhorst, 1999).

There was little, if any, State intervention and no insecurity with regard to continuity of tenure. This system preserved the continuity of tenure from a prospecting phase to a mining phase (Dale, 1996). Mineral rights had to be acquired from private owners by negotiation in accordance with the law of contract (Badenhorst, 1999). The exercise

of such rights was subject to the acquisition mining licences and prospecting permits from the State in accordance with the Minerals Act 50 of 1991, which licences regulated prospecting for and mining of minerals in an optimal, orderly and environmentally sustainable manner (Badenhorst, 1999). In terms of this two tier system the relevant right were acquired from the private mineral rights holder and a licence to exercise such right was acquired from the State (Kaplan & Dale, 1993).

The Mineral and Petroleum Resources Development Act 28 of 2002 cites as one of its objects the recognition of the internationally accepted right of the State to exercise sovereignty over all mineral resources within that State's jurisdiction (Dale et al, 2005). This principle is found in several United Nations General Assembly Resolutions. While the concept of sovereignty in public international law is a matter between States rather than one between a particular State and its subjects and although international instruments such as general assembly resolutions are not automatically binding on States, internationally most countries have adopted a system whereby the minerals, mineral rights or rights to mine are vested in or controlled or administered by the State (Bastida, 2001).

The Mineral and Petroleum Resources Development Act 28 of 2002 expressly provides that mineral resources are the common heritage of all the people of South Africa and that the State is the custodian of those resources for the benefit of all South Africans. As custodian, the State, acting through the Minister of Minerals and Energy, may grant prospecting and mining rights. In consultation with the Minister of Finance, the Minister of Minerals and Energy may levy consideration (otherwise referred to as "state royalties") in terms of further legislation (Dale et al, 2005). It is accordingly submitted that the State's sovereignty and custodianship of South African mineral resources in terms of the Mineral and Petroleum Resources Development Act 28 of 2002 has brought about a fundamental change in a system previously based on private ownership of mineral rights to one where the State now owns and controls such rights (Dale et al, 2005). The essential difference in regard to security of tenure between a state licensing system as compared with a privately orientated mineral right system is that the former is a one tier system of licenses only whereas the latter is a two tier system, postulated on the acquisition of the private rights in property coupled by the additional acquisition by the holder of such rights of a licence to exercise such rights (Dale, 1996).

Although the submission can justifiably be made that security of tenure is weakened by the State's sovereignty and custodianship of South Africa's mineral resources when compared with former regime based on private ownership of minerals, it must be born in mind that the vast majority of countries in the world have adopted a system whereby the minerals, mineral rights or rights to mine are vested in or controlled or administered by the State (Dale, 1996; Bastida, 2001; Dale et al, 2005).

2.3.2 The nature, registerability, transferability and bondability of the rights

2.3.2.1 Nature of prospecting, mining and other rights

The mining law regime which applied prior to 1 May 2004 in terms of the repealed Minerals Act 50 of 1991 was founded in the common law of private ownership of property combined with a legislative licensing system (Badenhorst, 1999). Mineral rights when registered in accordance with the Deeds Registries Act of 1937, constituted real rights in property (Badenhorst, 1999). Such rights were not merely licences but rights analogous to servitudes or easements of property which were freely transferable (Dale, 1996). The holder of the privately held rights to a mineral could freely exercise and enjoy the mineral rights, or to grant a lease of the right to prospect or mine to investors or to alienate and transfer them to investors (Dale, 1996). In terms of the common law, ownership of the unmined minerals remained with the freehold owner of the property concerned and only passed to the mineral rights holder suspensively on the mining thereof (Frankin & Kaplan, 1982; Badenhorst, 1999).

As real rights, the common law mineral rights enjoyed the protection afforded in the property clause of the Constitution of the Republic of South Africa 1996 (Dale, 1996). As constitutionally protected limited real rights in property, individuals or companies could freely acquire, hold and dispose of mineral rights and such mineral right holders could only be deprived of them in accordance with a law and that their expropriation pursuant to such law could only be for public purposes subject to the payment of just and equitable compensation (Chaskalson, 1993; Badenhorst et al, 2004).

While the State has not expressly in the Mineral and Petroleum Resources Development Act 28 of 2002 reserved for itself ownership of mineral resources, or even the right to prospect or mine, it is empowered to grant such rights to others. It may accordingly be argued that the State must by necessary implication have reserved for itself the right to prospect and mine (Dale et al, 2005).

All previous prospecting, mining and mineral rights which existed under the previous common law regime and the repealed Minerals Act 50 of 1991, whether common law or statutory, will cease to exist and will be deregistered within a short transitional period after commencement of the Mineral and Petroleum Resources Development Act 28 of 2002 (Dale et al, 2005).

The forms of prospecting rights and mining rights provided for in the Mineral and Petroleum Resources Development Act 28 of 2002 are expressly described as limited real rights in respect of the mineral and the land to which such rights relate. It is submitted that this description is preferable to the provision of merely permits or licences, which are founded in administrative law, whereas the reference to rights adds a property and possibly contractual law overlay to what would otherwise be a purely administrative instrument (Dale et al 2005). This feature has found favour with investors in Chile, where the mining code similarly provides for the resultant prospecting and mining rights to be rights in property (Bastida, 2001).

Prospecting rights and mining rights provided for in the Mineral and Petroleum Resources Development Act 28 of 2002 will be granted administratively rather than judicially (Dale et al, 2005). A grant of such rights will not confer on the holder of the right ownership of the unmined minerals but could confer suspensive ownership i.e. ownership of the mineral passes suspensively to the holder of the mining right upon the mining actually occurring (Dale et al, 2005).

While the Mineral and Petroleum Resources Development Act 28 of 2002 does not allow for the negotiation of individual mineral agreements with investors as is the case in other internationally competitive countries, there is some scope for negotiation with the State of the terms and conditions which will be embodied in the new prospecting and mining rights (Dale et al, 2005). Although such agreements may allow for flexibility, they are likely to deviate from the principle of equality of treatment

achieved through the pre-existence of standard terms and conditions which prevent the favouring of particular applicants. This may also detract from the objective decision-making process (Dale et al, 2005).

Licences of the nature conferred in terms of the Mineral and Petroleum Resources Development Act 28 of 2002 are also arguably property in accordance with the Constitution of the Republic of South Africa 1996 opposed to the mineral rights which existed in terms of the previous regime, these new order rights have inherent limitations of duration, non-renewability, cancellation on breach and termination for numerous reasons (Chaskalson, 1993; Dale et al, 2005).

2.3.2.2 Registerability of the rights

In terms of the former regime based on the common law and Minerals Act 50 of 1991, mineral rights and leases thereof could be registered in the Deeds Offices and Mining Titles office and enjoyed protection as rights in property under the Constitution of the Republic of South Africa (Badenhorst, 1999). They accordingly could not be expropriated by the State without the payment of compensation (Dale, 1996).

Various benefits of registration of rights pertaining to prospecting and mining have been identified in South African case law over the years, registration having been a feature of South African law since the nineteenth century. So, for example, it was held that for a right to constitute a real right binding on third parties there must be registration, and that a real right dates from its registration only (Franklin & Kaplan, 1982).

Registration was also seen as a matter of the utmost importance in South Africa where grants deal with mineral substances of great value. Additionally, a registration system affords public access to rights in that searches of the registers and accompanying diagrams will reveal whether a third party has already been granted prospecting or mining rights in respect of the relevant mineral over the relevant land. The system that has been used at both the Deeds Offices and the Mining Titles Office, relying on the land-survey legislation that has existed from time to time, is a cadastral system, i.e. a system relying on survey diagrams and, in some instances at the Mining Titles Office, on coordinated sketch plans (Kaplan & Dale, 1993).

Together with the classification of prospecting rights and mining rights as real rights in land, the Mineral and Petroleum Resources Development Act 28 of 2002 also provides for their compulsory registration at the Mining Titles Office, and stipulates that any transfer, cession, letting, subletting, alienation, encumbrance by mortgage or variation thereof must also be so registered (Dale et al, 2005).

As a result of the gradual disappearance of the old forms of rights in terms of the transitional provisions of the Mineral and Petroleum Resources Development Act 28 of 2002 resulting in the deregistration of all such old rights at the Deeds Offices and the Mining Titles Office, it will be possible to construct a new system allowing easy access for the purpose of identifying the areas where new rights have been granted and exist from time to time and areas which are free of such rights and hence available for new applicants (Dale et al, 2005).

The Mineral and Petroleum Resources Development Act 28 of 2002, however, does not make provision for registration of the reconnaissance permissions, retention permits and mining permits which may be issued in terms of it (Dale et al, 2005).

A reconnaissance permission granted in terms of in the Mineral and Petroleum Resources Development Act 28 of 2002 entitles the holder thereof to search for a mineral by means of geological, geophysical and photogeological surveys as well as remote sensing techniques but not by prospecting or exploration operations which disturb the surface of the earth. A reconnaissance permit is only valid for a two year period and is not renewable or transferable (Dale et al, 2005).

A retention permit in the Mineral and Petroleum Resources Development Act 28 of 2002 to can be applied for by the holder of prospecting right who has successfully completed the prospecting activities together with a favourable feasibility study and after studying the market concludes that the mining of the mineral in question would be unfavourable due to the prevailing market conditions. The Minister may grant a retention permit for a period which does not exceed three years and it is not renewable or transferable (Dale et al, 2005).

A mining permit may only be issued by the Minister if the mineral in question can be mined during a two year period and the mining area does not exceed 1.5 hectares in extent. It is not renewable or transferable but may with the Minister's consent be mortgaged for purposes of funding the mining project in question (Dale et al, 2005). It is however submitted that a mortgage of such right is a non sequitur as it is impossible for the secured creditor to foreclose on the debt by means of an execution sale as the permit may not be transferred to a third party (Dale et al, 2005).

2.3.2.3 Transferability of rights

In terms of the former mining rights regime which was based on the common law and the Minerals Act 50 of 1991, privately held mineral rights could without state interference be freely transferred, leased or sub-leased at the discretion of holder and in accordance with the terms of the relevant contract as negotiated between the parties (Kaplan & Dale, 1992).

The Mineral and Petroleum Resources Development Act 28 of 2002 recognises the international trend toward permitting the transferring, letting and subletting of prospecting and mining rights. In line with comparable mining codes, such dealings may not occur without ministerial consent. However, provision is made that such consent must be given if the transferee, lessee or sub-lessee is capable of complying with the conditions of the right and satisfies the requirements of a new applicant for such right. Similarly, controlling interests in holders (except listed companies) of rights may not be dealt with without such consent. Unlike the case in some jurisdictions, no exemption from such consent is provided for in respect of intra-group dealings or dealings among holders (such as joint ventures) of existing undivided shares in the relevant right. Reconnaissance permissions, retention permits and mining permits are not transferable. This is likely to result in complications when mines are sold as going concerns and when groups are restructured (Dale et al, 2005).

It is not possible to cede, transfer, let, sublet, assign, or alienate old order prospecting or mining rights which remain in force in terms of the transitional provisions of the Mineral and Petroleum Resources Development Act 28 of 2002, until such time as the rights have been converted into new order rights (Badenhorst

et al, 2004). The controlling interest in the companies holding such old order rights may however be freely dealt with until the time of conversion thereof (Badenhorst et al, 2004).

2.3.2.4 The bondability of rights

In terms of the former mineral rights regime which was based on the common law and the Minerals Act 50 of 1991, privately held mineral rights could be freely bonded in favour of any person who could on default of the holder foreclose on the right and sell the same to a third party in order to recover the debt (Kaplan & Dale, 1993).

The facility that the registration of rights provides for the registration of bonds over prospecting and mining rights, has been stressed our courts where members of the judiciary have pointed out that the main objects of the registration of bonds are to preserve evidence as to the property hypothecated and the amount of the debt secured and to afford public notice that such property is encumbered to that extent. The ability to register mortgages over prospecting and mining rights is of vital importance to financial institutions as potential lenders. This is as applicable to foreign borrowers and lenders as it is to local borrowers and lenders and is particularly important to the successful entry of historically disadvantaged persons into the industry (Dale et al, 2005).

The Mineral and Petroleum Resources Development Act 28 of 2002 provides for the encumbrance of prospecting and mining rights by mortgage bonds. It states that ministerial consent to mortgage a prospecting or mining right is not required in the case of security sought in order to secure a loan or guarantee for project funding or financing by a bank or other approved financial institution if the mortgagee agrees in writing that any sale in execution or other disposal pursuant to foreclosure of the mortgage will be subject to ministerial consent (Dale et al, 2005).

The provisions with regard to the mortgage and encumbrance of rights contained in section 11 of the Mineral and Petroleum Resources Development Act 28 of 2002 fall to be read with the provisions contained in section 56, dealing with the lapsing of rights. This provision, in so far as it is relevant to the present context, is to the effect that a right lapses when:

- (a) it expires;
- (b) its holder is deceased and there are no successors in title;
- (c) the company or close corporation holding the right is deregistered without ministerial consent to transfer the right;
- (d) the holder is liquidated or sequestrated, save in the case of a mortgage of the nature mentioned above;
- (e) the right is cancelled on breach; or
- (f) the right is abandoned.

Before cancelling or suspending a right, the Minister must notify the mortgagee of the Minister's intention to cancel or suspend the right, so that the mortgagee has an opportunity to intervene. In instances other than cancellation, suspension, liquidation or sequestration, however, this lapsing provision does not safeguard or preserve the rights of the mortgagee with the result that the mortgagee has no opportunity to intervene. Bonds which are not for project funding or financing, or which are in favour of a party (such as a vendor financier) who is not a bank or financial institution, require ministerial consent and do not enjoy protection from the lapsing of the underlying right on liquidation or sequestration of the holder of the right (Dale et al, 2005).

Although the Mineral and Petroleum Resources Development Act 28 of 2002 stipulates that a mining permit may, with ministerial consent, be mortgaged for project funding or financing, such permits may not, in terms of the same provision, be transferred, so that it is not possible to foreclose on the right (Dale et al, 2005).

2.3.3 The nature of administrative discretion in decision-making concerning prospecting and mining rights

The mining law regime which applied prior to 1 May 2004 in terms of the repealed Minerals Act 50 of 1991 was founded in the common law of private ownership of property combined with a legislative licensing system (Kaplan & Dale, 1992). The holder of the privately held rights to a mineral was at liberty, driven only by market forces, to exercise and enjoy the mineral rights, or to grant a lease of the right to prospect or mine to investors or to alienate and transfer them to investors, as is

currently the case in other industries such as agriculture and commerce (Dale, 1996). Conversion from exploration rights to mining rights occurred purely in a private context i.e. by exercising an option in a prospecting contract granted by the private holder of the rights to a mineral thereby securing the mineral rights for the investor or a mineral lease conferring the right to mine (Kaplan & Dale, 1993). There was no State intervention by way of administrative discretions relating to the acquisition of the common law mineral rights and no insecurity with regard to continuity of tenure. This system preserved the continuity of tenure from a prospecting phase to a mining phase. Mineral rights had to be acquired from private owners by negotiation in accordance with the law of contract (Dale, 1996; Chamber of Mines of South Africa, 2001).

The exercise of the common law prospecting and mining rights was subject to the acquisition mining authorisations and prospecting rights from the State in accordance with the Minerals Act 50 of 1991, which licences regulated prospecting for and mining of minerals in an optimal, orderly and environmentally sustainable manner. On acquisition of the relevant mineral rights from the private mineral rights holder, a licence to exercise such right had to be acquired from the State (Kaplan & Dale, 1993). Prior to the granting of a prospecting permit or mining licence the State had to be satisfied with regard to criteria relating to the optimal exploitation and utilisation of minerals, health and safety, surface protection and rehabilitation. If the common law mineral rights holder could satisfy these criteria, the State authorities were obliged to grant the licence (Kaplan & Dale, 1993). No minimum expenditure, minimum work commitment, minimum production requirements or other similar forms of state interference ever existed in South Africa in terms of the mining laws applicable until 1 May 2004 when the Mineral and Petroleum Resources Development Act 28 of 2002 came into operation (Dale, 1996; Chamber of Mines of South Africa, 2001).

Mining authorisations and prospecting permits granted in terms of the former Minerals Act, 1991 could be suspended or cancelled if the relevant criteria were not complied with. Renewals of prospecting permits and mining authorisations could be refused if the initial conditions of grant had been contravened and a criminal prosecution could ensue (Kaplan & Dale, 1993).

There was however no insecurity of tenure caused by administrative discretions with regard to the acquisition or transfer of the common law mineral rights, nor the acquisition of a prospecting permit or mining licence necessary to exercise the common law mineral rights, nor in the conversion of prospecting permits into mining licences (Dale, 1996; Chamber of Mines of South Africa, 2001).

Beginning with the mining code reform in Chile, a tendency has developed in some countries towards an automatic system of granting, renewing and converting rights, dependent not on administrative decision-making but on the payment of predetermined escalating fees. This system has found favour with investors (Bastida, 2001). The Mineral and Petroleum Resources Development Act 28 of 2002, however, does not embody this system but relies instead on administrative decision-making. The constitutional imperative to introduce legislative measures to redress the results of past racial imbalances and to advance historically disadvantaged persons is the likely reason for this feature of the Mineral and Petroleum Resources Development Act 28 of 2002, neither of which would be possible in a decision-free system (Dale et al, 2005).

The Mineral and Petroleum Resources Development Act 28 of 2002, does provide that administrative processes must be conducted or administrative decisions taken within a reasonable time and in accordance with the principles of lawfulness, reasonableness and procedural fairness, and that these decisions must be given in writing and accompanied by written reasons (Dale et al, 2002). The Mineral and Petroleum Resources Development Act 28 of 2002 also cross-refers to the South African legislation that codifies administrative law in South Africa, but stops short of provisions in the legislation of other countries to the effect that applications must be decided within a stipulated period failing which the application is deemed to have been granted (Dale et al, 2005).

The question of whether State custodianship of mineral resources will be perceived as investor-friendly depends to a large extent on the degree to which administrative discretion in the making of relevant administrative decisions concerning, by way of example, the granting of rights and cancellation on non-performance, is circumscribed (Chamber of Mines of South Africa, 2001; Dale et al, 2005).

The most important consideration in administrative decisions, namely whether to grant, renew, or cancel rights, is the degree to which administrative discretion is circumscribed by reference to stipulated objective criteria (Bastida, 2001). Insofar as applications for rights, permits and permissions, and for their renewal, are concerned, the Mineral and Petroleum Resources Development Act 28 of 2002 provides for compulsory granting or compulsory refusal by reference to stipulated criteria. Some of these criteria are the normal objective ones relating to financial and technical resources and ability, optimality, work programme, environmental, health and safety considerations, and non-contravention of relevant provisions of the Mineral and Petroleum Resources Development Act 28 of 2002. Objectivity in regard to these factors may be further enhanced once the code of good practice for the minerals industry, which is to be developed within five years of commencement of the Mineral and Petroleum Resources Development Act 28 of 2002, is published (Dale et al, 2005).

In assessing the nature of the discretion vested in the Minister, it is important to ascertain whether the act of establishing whether the stipulated criteria for the granting of a right permit or permission in terms of the Mineral and Petroleum Resources Development Act 28 of 2002 are present does not in itself vest the Minister with discretion. Although the requirements are objectively determinable, it may be argued that the judgement the Minister needs to exercise in determining the presence of those criteria amounts to nothing more than discretion (Dale et al, 2005). This can be illustrated by an example. One of the decisions that must be taken before the Minister must grant a mining right is whether the mineral in respect of which the application is made can be mined optimally in accordance with the mining work programme. A mining work programme is defined as a planned programme to be followed in order to mine a mineral resource optimally. Clearly the wording implies a judgement as to whether the mining-work plan that was lodged would, if followed, result in optimal mining (Dale et al, 2005).

Dale et al (2005) submit that, notwithstanding the fact that the Minister must make a decision about the possibility of the optimal mining of the mineral in respect of the application was made, the wording of the legislature makes it clear that the question remains an objective one rather than a subjective one.

In summary, although the Minister may exercise his or her judgement in determining whether the jurisdictional facts required for the grant a right permit or permission are present, the Minister's view in this regard can be challenged and tested objectively by a court of law. Accepting that it is not possible in a modern society to write legislation which is devoid of at least some discretionary power, Dale et al (2005) conclude that the very narrow and limited discretion granted to the Minister in most of the provisions of the Mineral and Petroleum Resources Development Act 28 of 2002 is well circumscribed and challengeable on objective grounds. In their view the legislature has in general limited the administrative discretion applicable to the decision-making process by circumscribing those decision-making criteria through reference to stipulated objective criteria.

Dale et al (2005) however caution that there are also several provisions in the Mineral and Petroleum Resources Development Act 28 of 2002 which, in effect, introduce discretionary decision-making in such a manner that it may detract from the investor- friendliness of the Mineral and Petroleum Resources Development Act 28 of 2002:

- (a) In the case of prospecting rights and retention permits, additional grounds for compulsory refusal are if the granting will result in an exclusionary act, prevent fair competition, or result in concentration of the mineral resources under the control of the applicant. These concepts are vague and content needs to be given to them by judicial interpretation.
- (b) A discretionary feature of applications for prospecting rights is that the Minister may, having regard to the type of mineral concerned and to the extent of the project, request the applicant to expand opportunities for historically disadvantaged persons.
- (c) Insofar as applications for mining rights are concerned, the additional requirement of a "prescribed social and labour plan" is introduced by section 23(1) (a) of the Mineral and Petroleum Resources Development Act 28 of 2002. The content of the social and labour plan has been prescribed but the formulation of the requirements of the social and labour plans unfortunately suffers from lack of clarity.
- (d) It is a requirement for the granting of a mining right that such granting expand the opportunities of historically disadvantaged persons in accordance with the broad-based socio-economic empowerment charter developed by the Minister.

Again, because of lack of clarity in the drafting of those charters, the interpretation of the requirements adds an element of uncertainty which effectively introduces a discretionary component, both in regard to applications for new rights (whether by holders of unused old rights in terms of the transitional provisions or by de novo applicants) and during conversions of used old order mining rights in terms of the transitional provisions.

- (e) An additional factor which the Minister may (but is not obliged) take into account when deciding to grant an application for a mining right is, having regard to the nature of the mineral, local beneficiation. This introduces a discretionary element into the decision-making process.
- (f) A further aspect which is left to administrative discretion is that of the terms and conditions to be included in prospecting rights or mining rights. Since no provision is made for standard terms and conditions, it is left to the parties to agree to the terms and conditions of the right or permit. The existence of a subjective requirement to reach agreement is inconsistent with the existence of a discretion circumscribed by reference to stipulated objective criteria.

2.3.4 Duration and renewability of rights

Insofar as aspects of duration, renewability and continuity are concerned the mining law regime which applied prior to 1 May 2004 in terms of the repealed Minerals Act 50 of 1991 was founded in the common law of private ownership of property combined with a legislative licensing system (Kaplan & Dale, 1992). Where the common mineral rights were held by the investor per se they continued in perpetuity and renewals did not apply. If the investor had negotiated a mineral lease with the holder, such investor had the right to mine for the duration of the relevant lease. Mineral leases often contained options for subsequent renewals of the initial period on a basis as agreed privately between the parties (Chamber of Mines of South Africa, 2001). Registered mineral rights and leases thereof were binding real rights which were enforceable against the relevant parties per se, any third parties and the State (Kaplan & Dale, 1993).

Mining authorisations and prospecting permits in terms of the former Minerals Act 50 of 1991 were normally granted for the period applied for by the investor, provided such investor held title to the common law rights to the mineral concerned (Kaplan &

Dale, 1993). If the investor had the written consent of the mineral rights holder to prospect and mine in terms of a prospecting contract or lease, the prospecting permit or mining authorisation would be granted for the corresponding period of such prospecting contract or lease (Kaplan & Dale, 1993). Mining licences were usually granted for life of mine or for the period until the mineral could no longer be mined economically (Kaplan & Dale, 1993). Such permits and authorisations could only be suspended or cancelled if the relevant criteria pertaining to optimal exploitation, health and safety and surface protection and environmental rehabilitation were not complied with (Badenhorst, 1999). Renewals of prospecting permits and mining authorisations could be refused if the initial conditions of grant had been contravened and a criminal prosecution could ensue (Kaplan & Dale, 1993). However no minimum expenditure, minimum work commitment, minimum production requirement or other similar form of state interference existed in terms of the common law or legislation applicable until 1 May 2004, when the Mineral and Petroleum Resources Development Act 28 of 2002 came into operation (Dale, 1996).

Insofar as aspects of duration, renewability and continuity are concerned, investors are likely to find the Mineral and Petroleum Resources Development Act 28 of 2002 consistent with international investor requirements and with comparative provisions in international mining codes (Dale et al, 2005). The possibility of only one renewal of a prospecting right restricts the Minister's powers even when the facts dictate otherwise. Furthermore, given the duration of existing mining operations in South Africa, a life-of-mine duration of mining rights would have been a more attractive feature. This could have been offered to investors instead of a maximum period as is the norm in international mining codes (Chamber of Mines of South Africa, 2001; Dale, et al, 2005).

Regarding duration and renewability, the periods provided for in terms of the Mineral and Petroleum Resources Development Act 28 of 2002 are as follows:

- (a) for prospecting rights, an initial period not exceeding five years with one renewal not exceeding three years;
- (b) for retention permits, an initial period not exceeding three years with one renewal not exceeding two years;

- (c) for mining rights, an initial period not exceeding thirty years with unlimited renewals each not exceeding thirty years (Badenhorst et al, 2004).

The mining work programme contemplated in s 23(1) (a) of the Mineral and Petroleum Resources Development Act 28 of 2002 and the resultant mining area for which the mining right is granted could encompass an area larger than that which could be mined during the initial period, since the right to renew would otherwise be meaningless (Dale et al, 2005).

2.3.5 Continuity and the cancellation of rights

In accordance with the mining law regime which applied prior to 1 May 2004 in terms of the repealed Minerals Act 50 of 1991 and founded in the common law of private ownership of property, conversion from exploration rights to mining rights occurred purely in a private context i.e. by exercising an option in a prospecting contract granted by the private holder of the rights to a mineral thereby securing the mineral rights for the investor or a mineral lease conferring the right to mine (Badenhorst,1999). There was no State intervention and no insecurity with regard to continuity of tenure. This system preserved the continuity of tenure from a prospecting phase to a mining phase. Mineral rights had to be acquired from private owners by negotiation in accordance with the law of contract. The exercise of such rights was subject to the acquisition mining authorisations and prospecting permits in accordance with the former Minerals Act 50 of 1991, which licences the State was obliged to grant provided the investor complied with certain criteria which regulated prospecting for and mining of minerals in an optimal, orderly and environmentally sustainable manner (Dale, 1996).

Continuity in accordance with the Mineral and Petroleum Resources Development Act 28 of 2002 is preserved from prospecting to retention or mining and from retention to mining, in that the holder of a prospecting right has the exclusive right to apply for and be granted a mining right. The further mining or retention right application may however be subject to the Ministerial discretions regarding empowerment participation and the prescribed social and labour plan as described above (Dale et al, 2005). Only the holder of a prospecting right can be granted a

retention permit, and the holder of a retention permit has the exclusive right to be granted a mining right (Dale et al, 2005).

Continuity is further achieved during applications for renewals in that a prospecting or mining right in respect of which an application for renewal has been lodged, remains in force until the application has been granted or refused (Dale et al, 2005).

Continuity is also assured by provisions contained in the Mineral and Petroleum Resources Development Act 28 of 2002 to the effect that an application for a right will not be accepted if another person holds a prospecting right, mining right, mining permit or retention permit for the mineral and land in respect of which such application is made (Dale et al, 2005).

Furthermore, recognition is given to the fact that it may not be possible for the holder of a prospecting right, who has completed prospecting and a feasibility study, to proceed to mining in circumstances where mining would be uneconomical because of prevailing market conditions. In such circumstances a retention permit may be issued, but the initial and renewal periods are very short and the holder must submit six-monthly reports justifying the continued holding of the permit (Dale et al, 2005).

The provision in the Mineral and Petroleum Resources Development Act 28 of 2002 for suspension or cancellation of rights, permits and permissions conforms to international requirements in specifying the criteria for suspension and cancellation and in requiring notice and affording the holder an opportunity to remedy the non compliance (Badenhorst et al, 2004; Dale et al, 2005). While the Minister is further empowered to suspend or cancel mining rights in cases of non-optimal mining, the wording expressly ties the concept of optimality to the mining work programme, thus circumscribing the concept of optimality (Dale et al, 2005).

Although the Minister is empowered to expropriate land and rights in land, provision is made for payment of compensation. This provision falls to be read with the constitutional protection of property rights which appears in section 25 of the Constitution of the Republic of South Africa, 1996 (Badenhorst et al, 2004).

2.3.6 Right to administrative appeal, judicial review and judicial appeal

The mining law regime which applied prior to 1 May 2004 in terms of the repealed Minerals Act 50 of 1991, was founded in the common law of private ownership of property and the remedies of administrative appeal, judicial review and judicial appeal of decisions by the state authorities was in most cases, accordingly not relevant to the acquisition of prospecting and mining rights. In cases where the State and its organs were the registered holders of the mineral rights, the rights to judicial review in respect of the decisions by the State and its organs was preserved in accordance with the right to fair administrative action as contained in the Constitution of the Republic of South Africa, 1996 and further embodied in the Promotion of Administrative Justice Act, 2000 (Dale, 1996).

The right of appeal or recourse to international arbitration is internationally regarded as a facet of security of tenure (Bastida, 2001). In accordance with international agreements with concluded various foreign states such as the Agreement Between the Governments of the Republic of South Africa and the United Kingdom for the Promotion and Protection of Investments dated 20 September 2004 and Protocol dated 25 November 1997, investors from the United Kingdom have the right to market value compensation in the event of the expropriation of rights, including common law mineral rights. Such right is enforceable by international arbitration (Dale et al, 1996).

The Mineral and Petroleum Resources Development Act 28 of 2002 provides for internal appeals from decisions of the Regional Manager to the Director-General and from decisions of the Director-General to the Minister, and cross-refers to the Promotion of Administrative Justice Act, 2000, which confers rights of judicial review, the Mineral and Petroleum Resources Development Act 28 of 2002 does not contain the right of judicial appeal (Dale et al, 2005). It also does not adopt the system applicable in some countries, which system operates either wholly or partially on the basis of judicial adjudication (Bastida, 2001). The absence in the Mineral and Petroleum Resources Development Act 28 of 2002 of a provision for international arbitration is consistent with the Act's assertion of State sovereignty over mineral resources (Dale et al, 2005).

2.3.7 Aspects related to the environment, land use, and aboriginal claims

Aspects related to the environment, land use, and aboriginal claims can also affect security of tenure (Bastida, 2001).

The Mineral and Petroleum Resources Development Act 28 of 2002 gives effect to the environmental rights embodied in section 24 of the Constitution of the Republic of South Africa by ensuring that mineral resources are developed in an orderly and ecologically sustainable manner while promoting justifiable economic and social development (Dale et al, 2005).

Environmental considerations permeate the application process for prospecting rights and mining right and no prospecting or mining may commence without the existence of an approved environmental management programme or plan (Dale et al, 2005). The position was the much the same in accordance with the former Minerals Act 50 of 1991 which regulated the exercise of the common law mineral rights by an investor intending to prospect or mine (Kaplan & Dale, 1993).

However, in order not to delay the process, the Mineral and Petroleum Resources Development Act 28 of 2002 provides that an environmental management programme must be approved within 120 days of lodgement and that other affected State departments must be requested to comment within 60 days of request (Dale et al, 2005). This is an improvement on the former Minerals Act of 1991 which did not prescribe time periods for the approval of environmental management programmes (Kaplan & Dale, 1993).

Financial provision must be made for the rehabilitation or management of negative environmental impacts in terms of the new regime (Badenhorst et al, 2004). As in the prior Minerals Act 50 of 1991, provision is made for the holder of a right to remain liable until a closure certificate is issued (Badenhorst et al, 2003) A beneficial innovation is that such liabilities may be transferred by the Minister, on application of the holder of the right, to a qualified person (Dale et al, 2004). The Minister is empowered to use State funds for the prevention of pollution and environmental degradation (Dale et al, 2005).

The Mineral and Petroleum Resources Development Act 28 of 2002 requires an environmental management programme, in respect of mining rights, and an environmental management plan (intended to contain less stringent requirements than would an environmental management programme) in respect of prospecting rights and in respect of the small-scale mining permits, to be provided for in specific circumstances (Badenhorst et al, 2004).

Holders of rights or permits under the Mineral and Petroleum Resources Development Act 28 of 2002 are responsible for environmental damage, pollution and ecological degradation caused inside and outside their areas by the relevant operations and directors of companies are jointly and severally liable for unacceptable negative impacts caused by the company they represent or represented (Dale et al, 2005).

Under the mining law regime which applied prior to 1 May 2004 in terms of the repealed Minerals Act 50 of 1991 and the common law of private ownership of property, mining activities generally had predominance over other land uses (Kaplan & Dale, 1993). Similarly, Mineral and Petroleum Resources Development Act 28 of 2002 provides that the holders of prospecting or mining rights are entitled to a right of entry with respect to their employees and to bring onto the relevant land plant, machinery and equipment and may build, construct and lay down any surface, underground or sub-marine infrastructure which may be required for purposes of prospecting or mining (Dale et al, 2005).

The Mineral and Petroleum Resources Development Act 28 of 2002 further empowers the Minister to intervene in the case of surface use which is contrary to mineral development, empowers the Regional Manager to broker an agreement in respect of compensation for surface use, and ultimately empowers the Minister to expropriate land or rights in land for prospecting and mining operations (Dale et al, 2005). This is consistent with the position in terms of the former Minerals Act 50 of 1991 (Kaplan & Dale, 1993).

The topic of aboriginal claims is not dealt with in the Mineral and Petroleum Resources Development Act 28 of 2002 because there is separate legislation dealing with restitution of land to persons dispossessed of it through racially motivated

legislation (Dale et al, 2005). This is consistent with the position in terms of the former Minerals Act 50 of 1991 (Kaplan & Dale, 1993). The Mineral and Petroleum Resources Development Act 28 of 2002 makes provision whereby royalties payable to communities under the old common law regime will remain payable to and receivable by such communities notwithstanding the cessation of existence of the old forms of existing rights held by such communities. The Minister is further empowered to facilitate assistance to historically disadvantaged persons conducting prospecting and mining operations. The Mineral and Petroleum Resources Development Act 28 of 2002 makes provision for a community wishing to obtain the preferent right to prospect for or mine any mineral and land registered or to be registered in its name, to apply to the Minister for such preferent right (Dale et al, 2005).

The environmental provisions embodied in the Mineral and Petroleum Resources Development Act 28 of 2002 are not substantially different to those contained in the former Minerals Act, 1991 and it is accordingly submitted that they advance security of tenure by providing specific time periods and greater clarity in this regard. The position with regard to aboriginal land claims remains unchanged (Kaplan & Dale, 1993).

2.3.8 Financial aspects of the Mineral and Petroleum Resources Development Act 28 of 2002 and associated Legislation

Comparative studies have emphasised the need, if a country wishes to attract mineral investment, for an investor-friendly fiscal and financial regime in respect of prospecting and mining. The competitiveness of a country's minerals industry is largely based on costs to mining multinational enterprises of production, including the costs of public policies as regulatory requirements, royalties, income taxes and tariffs (Bastida, 2001). Transaction costs have been defined as the costs of all market transactions including search and information costs, bargaining and decision costs and policing and enforcement costs (Coase, 1998).

In South Africa general taxation of mining companies is dealt with in the general income tax legislation, not in mining legislation. This has remained largely unchanged by the regime embodied in the Mineral and Petroleum Resources Development Act

28 of 2002. Various other related fiscal relaxations regarding transfer duty, value-added tax and capital gains tax have been enacted (Badenhorst et al, 2004).

In terms of the former regime in accordance with the common law, royalty payments were only applicable in cases of leases of mineral rights. These royalties were commercially negotiated by the parties. No royalties applied in cases where the investor had acquired and held the mineral rights (Kaplan & Dale, 1993).

The Mineral and Petroleum Resources Development Act 28 of 2002 obliges holders of prospecting rights and mining rights to pay State royalties in respect of minerals removed and disposed of during prospecting and in respect of minerals mined. Such royalties are dealt with in a separate draft Mineral and Petroleum Royalty Bill, which was first released for public comment in March 2003 and a revised Bill has been published for comment on 11 October 2006 (National Treasury, 2006). The revised Royalty Bill proposes that royalties be levied on published tradable value or, in the absence of such value, on the gross sales value of minerals extracted. The person liable to pay the royalty is the holder of the relevant prospecting rights or mining right (Dale et al, 2005). Liability for the royalty arises on physical delivery or on export. The proposed rates of royalty vary from 0% (for sand and stone), 1% (for high ash coal) and 3% (for low ash coal) through to 6% (for gold) and 8% (for platinum group metals) to 5% (for unpolished natural diamonds). The local beneficiation of mineral resources is also viewed as an important policy objective. Therefore, in an attempt to further encourage the beneficiation of South Africa's minerals, further reductions in royalty rates apply to beneficiated or refined minerals. Since the basis of the royalties is ad valorem rather than profit-based, the possibility of relief for small scale miners is embodied in the draft Bill.

Dale et al (2005) mention that criticism has been levied against the draft Bill because it fails to provide for exemptions from, reductions or remissions of, or set-off against State royalties in, for instance, the following cases :

- (a) where the holder beneficiates locally or conducts beneficiation research. This aspect has been partially addressed in the revised Bill as reduced royalties apply to beneficiated minerals;

- (b) contractual royalties or other existing or future considerations which remain payable to communities or to natural persons who would otherwise suffer hardship or who use the royalties or consideration for social upliftment. The possibility of a double royalty therefore applies; and
- (c) where the holder contributes to rural and local economic development.

Among the objects of the Mineral and Petroleum Resources Development Act 28 of 2002 are the promotion of economic growth and mineral development, advancement of the social and economic welfare of all South Africans, and ensuring that holders of mining rights contribute towards the socio-economic development of the areas in which they are operating. Furthermore, as mentioned above, the Mineral and Petroleum Resources Development Act 28 of 2002 provides that the Minister may facilitate assistance to any historically disadvantaged person conducting prospecting or mining operations. The draft Royalty Bill, however, does not take these aspects into account. It was mooted at an earlier stage that local economic development funds would be established and that part of the State royalties received in terms of the Mineral and Petroleum Resources Development Act 28 of 2002 would be paid into such funds for the benefit of communities or local authorities affected by mining, for purposes of rural and local economic development and social upliftment. The draft Bill, however, does not reflect these ideas, and proposes that the royalties be paid into the National Revenue Fund (Dale et al, 2004).

While old order rights under the previous Minerals Act 50 of 1991 and common law regime were not subject to requirements in regard to empowerment, the holding of new rights requires the holder to further the objects of empowerment in section 2(d) and the holder is required to comply with a prescribed social and labour plan (Dale et al, 2004).

The Mining Charter provides for 26% historically disadvantaged South African ownership of the mining industry assets in ten years. The Scorecard adds a further target of 15% historically disadvantaged South African ownership within five years after 1 May 2004. It is recorded that the transfer of ownership will take place in a transparent manner and for fair market value. The Mining Charter contains a paragraph which indicates that the aforementioned historically disadvantaged South African ownership measures will be applied to the process of conversion of existing

mining rights. A clarification document which was issued by the Department of Minerals and Energy on 14 July 2004 provides that for purposes of the interpretation and application of the Mineral and Petroleum Resources Development Act with regard to privately owned unused old order rights, the empowerment requirement will be a minimum of 26%. It is submitted that such compliance will significantly increase the transaction costs of mining multinational enterprises continuing to operate in South Africa (Dale et al, 2004).

2.3.9 The fate of existing rights: the transitional provisions

The erosion of existing rights necessarily has an adverse impact on security of tenure (Chamber of Mines of South Africa, 2001; Dale et al, 2005). The Mineral and Petroleum Resources Development Act 28 of 2002, in order to achieve its object of asserting State sovereignty and custodianship over mineral resources, will cause existing prospecting and mining rights and authorisations to cease to exist and to be deregistered over a period of approximately five years from its commencement on 1 May 2004 (Dale et al, 2005).

The Mineral and Petroleum Resources Development Act 28 of 2002 provides that holders of existing prospecting rights or mining rights, who hold a prospecting permit or mining authorisation in respect such rights and who are actively conducting prospecting or mining operations on the date of commencement of the Act, will need, within two and five years respectively of the Act's commencement, to convert such rights into the new forms of State prospecting right or State mining right. Should such holders fail to do so, or upon such conversion, the existing rights and authorisations cease to exist and will be deregistered. Holders who are not actively conducting such prospecting or mining operations on the Act's commencement date had one year to apply for the new form of prospecting right or mining right. Again, should they fail to do so, or upon the granting of such rights, the old rights and authorisations will cease to exist (Dale et al, 2005).

Transitional provisions of this nature are necessarily contrary to security of tenure (Chamber of Mines of South Africa, 2001). However, the adverse effects of this are ameliorated by the provision of the right to compensation and by the introduction of the above-mentioned conversion process (as opposed to a re-application process) in

the case of existing prospecting and mining operations. As in the case of the automatic, decision-free systems such as that of Chile, greater certainty would have been achieved if provision had been made for the automatic deemed conversion of existing rights into the new form of rights (Bastida, 2001). However, for reasons relating to the empowerment of historically disadvantaged persons the Mineral and Petroleum Resources Development Act 28 of 2002 does not espouse such decision-free philosophy (White Paper on Minerals and Mining Policy for South Africa, 1998). The legislature deemed it necessary that certain specified items (amongst others prospecting and mining work programme, social and labour plans, and undertakings in respect of the empowerment of historically disadvantaged persons) be lodged with it as part of the conversion process (White Paper on Minerals and Mining Policy for South Africa, 1998). These factors of necessity erode automatic conversions of old order to new order rights (Dale et al, 2005).

The transitional provisions of the Mineral and Petroleum Resources Development Act 28 of 2002 also contain other desirable features such as:

- (a) the continuation of prospecting or mining rights which are being utilised while the conversion or application process occurs;
- (b) the transposition of existing mortgage bonds over used prospecting and mining rights onto the new rights;
- (c) the recognition of applications pending at the commencement of the Mineral and Petroleum Resources Development Act 28 of 2002 ;
- (d) the continuation of certain statutory surface use authorisations; and
- (e) the continuation of approved environmental management programmes and certain related exemptions (Dale et al, 2005).

In relation to compensation, the Mineral and Petroleum Resources Development Act 28 of 2002 provides that any person who can prove that his or her property has been expropriated in terms of any provision of the Act may claim compensation from the State. The Mineral and Petroleum Resources Development Act 28 of 2002 therefore, raises the questions of whether the cessation of old rights in terms of the transitional provisions constitute a deprivation or expropriation and whether the old rights constitute property, all within the meaning of the property clause in the Bill of Rights in of the Constitution of the Republic of South Africa, 1996 (Chaskalson , 1994;

Badenhorst et al, 2004). The property clause provides that property may not be expropriated save on payment of compensation, whereas it does not compel payment of compensation on mere deprivation of property. The express inclusion of the right to compensation in the event of a person being able to prove that his or her property has been expropriated in terms of any provision of the Mineral and Petroleum Resources Development Act 28 of 2002 is a beneficial aspect (Dale et al, 2005).

When the Minerals Act 50 of 1991 came into operation on 1 January 2002, it provided that persons mining under the previous common law dispensation were deemed to be holders of prospecting permits or mining authorisations for a two year transitional period (Kaplan & Dale, 1993). The relevant underlying prospecting and mining rights however did not lapse subsequent to the transitional period and the mineral right holders merely had to comply with the criteria necessary for the granting of a prospecting permit or mining authorisation in terms of the Minerals Act 50 of 1991 in order to continue to exercise such rights (Kaplan & Dale, 1993).

2.3.10 Clear statement of rights and obligations

A clear statement of the rights and obligations of holders of rights is desirable to security of tenure (Dale, 1996). The Mineral and Petroleum Resources Development Act 28 of 2002 achieves this by means of a general recital of the rights of holders of prospecting and mining rights, which rights include:

- (a) rights of entry, prospecting and mining, removal and disposal of minerals and the right to carry out incidental activities;
- (b) use (subject to other applicable legislation) of water;
- (c) transfer, letting, mortgaging and amendment (subject to ministerial consent) of rights; and
- (d) a recital of specific additional rights in respect of the exclusivity of renewal and of acquisition of further rights, coupled with obligations in respect of registration, commencement and continuance of operations, compliance with work programme, environmental management programme, social and labour plans, applicable terms and conditions, and payment of fees and royalties (Dale et al, 2005).

Clarity has also emerged, albeit subject to the qualification that the terms could be improved, with better definition of the concepts, regarding empowerment requirements in respect of historically disadvantaged persons as set out in the Broad Based Economic Empowerment Charters (Dale et al, 2005).

2.3.11 Delays in the processing of applications for rights

An aspect of both the time dilemma in mining and the requirement for clear and transparent rules and procedures is related to the need to limit the time period used by the government regulator for granting mineral rights, approving applications and processing key documents. Delays in procedures do impact on uncertainty, no matter how clear, cohesive and, by implication, easy to enforce the rules may be (Otto, 1995).

In terms of the former regime private held mineral rights or leases thereof were acquired by private negotiations. These rights were then transferred by registration in the Deeds Office or Mining Titles office and delays due to government in registering such rights were extremely uncommon (Badenhorst et al, 2004).

With regard to the granting of prospecting rights and mining rights as well as the conversion of old order to new order rights in terms the Mineral and Petroleum Resources Development Act 28 of 2002, industry has complained that government is taking too long and that this is having a negative knock on effect on investment (Rabelo, 2005). The Director- General of the Department of Minerals and Energy has blamed the delays in the processing of applications on the absence of a common interpretation of the Act (Creamer, 1995). Since May 2004 the Department of Minerals and Energy has received 9000 applications, 6000 of which have been for prospecting rights. The latest assessment by government indicates that 93% of these applications were processed within the prescribed timeframes resulting in 7% of applications being delayed. In terms of the Department's plan to facilitate the smooth processing of applications all prospecting right applications will be finalised within a period of six months after being lodged and mining right applications within a year after being lodged (Creamer, 1995).

2.4 Summary

The object of this chapter is to examine the factual aspects of the former and the new mining law regimes specifically in context of the various aspects comprising the modern concept of security of tenure and which encourage or discourage foreign investment.

The mining law regime which applied prior to 1 May 2004 was founded in the common law of private ownership of property combined with a legislative licensing system in terms of which the investor acquiring the privately held rights to a mineral was at liberty, driven only by market forces, to exercise and enjoy the mineral rights, or to grant a lease of the right to prospect or mine to other investors or to alienate and transfer the mineral rights to investors.

Conversion from exploration rights to mining rights occurred by exercising an option in a prospecting contract granted by the private holder of the rights to a mineral, thereby securing the mineral rights for the investor or a mineral lease conferring the right to mine. There was little if any State intervention and no insecurity with regard to continuity of tenure of mineral rights. This system preserved the continuity of tenure from a prospecting phase to a mining phase. Mineral rights could be acquired from private owners by negotiation in accordance with the law of contract, were registered in a public deeds office, could be mortgaged to finance mining projects, usually endured for life of mine and were constitutionally protected against expropriation by the State. The exercise of such rights was subject to the acquisition licenses in accordance with the former Minerals Act 50 of 1991. These licences regulated prospecting for and mining of minerals in an optimal, orderly and environmentally sustainable manner. The State was obliged to grant such licences provided the applicants complied with the relevant criteria pertaining to the optimal exploitation and utilisation of minerals, health and safety, surface protection and the rehabilitation of the environment.

The new regime embodies a diminished form of security and continuity of tenure when compared with the former regime which it replaced. Security and continuity of tenure are largely based on the discretions of administrative regulators in relation to the requisite socio-economic transformation objectives of government such as the

Broad Based Socio-Economic Empowerment Charter requirements. These requirements pertaining to the new order prospecting and mining rights amongst others include minimum requirements regarding the transfer of ownership in mines to historically disadvantaged South Africans and other social transformation targets. The new Act does not adopt the system of granting mining rights in perpetuity or for the life of the mine but limits itself to a maximum fixed initial period with rights of renewal for further maximum fixed period. The new Act does not provide security of tenure for all existing rights and it therefore brings about an expropriation of some of the pre-existing rights conferred under the previous regime. Administrative decisions taken in terms of the Act are not subject to judicial appeal or international arbitration. New rights may not be ceded, transferred, let, sublet, assigned, alienated, or otherwise disposed of, or encumbered by mortgage without the consent of the Minister. Old order rights are not capable of being ceded, transferred, let, sublet, assigned, or alienated prior to the conversion thereof to new order rights. Holders of the new rights into which a pre-existing old right was converted, must continuously and actively conduct operations in accordance with the relevant work programme. Unlike the case in regard to rights under the previous regime where the State did not hold the mineral rights, State royalties are payable in respect of the new prospecting and mining rights. The terms and conditions of the new rights cannot be amended or varied without the consent of the Minister. Old rights in terms of the previous regime were consensual in nature and could be varied by the parties thereto. While old order rights were not subject to requirements in regard to empowerment of historically disadvantaged persons, the holding of new rights requires the holder to further the objects of empowerment and comply with a prescribed social and labour plan. This amongst others entails the transfer of up to 26% of the equity of the mining company to historically disadvantaged persons at considerable cost to the holder as most historically disadvantaged persons generally do not have access to capital to pay therefore.

Chapter 3

Literature Review

3.1 Introduction

The objective of this chapter is to examine and evaluate the literature bearing on the objective of this research paper, namely to study and evaluate the effects on investment in South Africa's coal export industry of the new mining legislation introduced by the Mineral and Petroleum Resources Development Act 28 of 2002 which came into operation on 1 May 2004.

The various aspects included in the concept of security of tenure necessary to attract investment in the mining industry of a country are examined first. Then the classical theories of foreign direct investment are examined in relation to their application in a mining context in order to demonstrate the relevance thereof to the concept of security of tenure in attracting or discouraging investment in the mining industry of a country by increasing or inhibiting the value of a mineral deposit to a specific investor.

3.2 The relevance of security of tenure to the global mining industry

The world's mineral market, it is submitted, is a homogenous competitive entity. A foreign investor, with specialist entrepreneurial expertise and dedicated funding, interested in optimum yields and defined uncertainty and risk, has a relatively free choice defined by the geopolitical location of mineral deposits, physical, human and other infrastructures and certainty of tenure inclusive of a tax regime. All things being equal he will also find himself confronted if not enticed by the competition between countries for investment and its often outspoken spin-offs. Apart from the mineral deposits like petroleum, bauxite and platinum which are relatively geographically concentrated, internationally important mineral deposits such as coal, iron, copper, gold and others do occur on more than one continent and quite often in a few countries. The advent of globalisation, especially as driven by technology, and the need to compete in the global arena for investors compel countries not to be out of step with their regulators, regimes, specifically as such regimes may add to the cost and or yield and or risk of mining ventures. Countries creating favourable legislative-

economic environments may pose a more direct threat to countries doing the opposite. (Hill, 2003). This ambivalent state of affairs will be highlighted by lawsuits in which investors claim compensation for investment losses from an exploitative country in international arbitration proceedings in accordance with international legal undertakings contained in bilateral investment treaties between countries. These treaties protect international investments in minerals and natural resources on the basis that no nationalisation, expropriation or any acts having the nature or consequence thereof will be performed by the country receiving such investment unless for a public purpose in the national interest, without discrimination against the foreign investor and against prompt payment of appropriate compensation (Hill, 2003; Dale et al, 2004). Provision is made of the international arbitration of disputes (Hill, 2003; Dale et al, 2004). By way of example, South Africa has concluded such bilateral investment treaties with capital exporting countries such as Britain, France, Italy, the Swiss Federation, the Russian Federation, Ghana and Nigeria (Dale et al, 2004)

Economic projects which are exposed to high levels of market risk and uncertainty require stable and predictable rules enabling the investor to ensure an adequate and timely return. This is even more apparent in the cyclical and complex world of mining, since the risks involved are not only high but also unique and therefore different from those found in other industries. Risks are spread throughout the life of the project, starting with the uncertainties surrounding the discovery of an economic deposit, followed by the usual obstacles of raising finance for the development of the project, and escalating with the volatility of mineral prices, materials substitution and shifting trends in mineral markets during the operational phase, to name just a few of the principal risks to be considered. Given the long lead time between the identification of an economically viable deposit and the establishment of a mine on the one hand and the slow rate of return of the large sums invested on the other, it is essential that the legal regime of a country does not add to the risks, by providing clear and predictable rules for private investment (World Bank, 1992).

Given favourable geological variables, a legal regime that offers clear-cut rules for the allocation of mineral rights, guarantees mineral tenure throughout the different phases of mining and reduces transaction costs will ensure a competitive advantage over others operating under less favourable external conditions (Bastida, 2001).

Security of tenure has been ranked as one of the most important among the investment decision criteria in a series of surveys of mining companies' investment preferences (Johnson, 1990; Otto, 1992; World Bank, 1992; Eggert, 1997; Bastida, 2001; Etemad & Salmasi, 2002).

In a survey of mineral investment preferences of selected countries in the Asia / Pacific region, the respondent companies ranked security of tenure second during the exploration stages and first in the mining stages, as a decision factor out of sixty possible factors (Otto, 1992). In another survey of major transnational mining companies, more than 50% of respondents listed security of tenure as critical and non-negotiable (Johnson, 1990). An investigation by Etemad and Salmasi (2002) surveyed seventy major mining companies in North America, Australia, Europe, South Africa, Indonesia and Japan. A response rate of 60% was obtained. In relation to a question in the survey pertaining to the importance of factors in formulating contracts concerning mineral projects in developing countries, a list of twenty items was utilised to capture the details and operationalise the question. The right to mine (security of tenure) was ranked first in degree of importance followed by stability in laws, regulation and government policies.

In relation Africa it has been submitted that security and continuity of tenure are essential to attract high risk exploration and development capital, the ability to convert exploration to mining on compliance with predetermined criteria is essential and that the mining right must be secured for a sufficiently long period to make the investment economically viable (World Bank, 1992).

3.3 Concept of security of mineral tenure

The word "tenure" in accordance with the Oxford Dictionary is generally defined as a condition or form of right or title under which property is held. In relation to mining law, mineral tenure comprises the rules and procedures for allocating, maintaining,

transferring and terminating mineral rights and establishes the rights and obligations of the holder (Bastida, 2001).

Security of tenure in relation to mining basically implies that the investor has to be provided with the assurance of being able to economically exploit a mineral deposit prior to committing resources to exploration, or the right to proceed from the exploration to the mining stage. However, in recent years the meaning of the concept has tended to be broadened, to take account of both the uncertainties involved in carrying out a mining project, and the need to do it profitably (Bastida, 2001). This wider interpretation of security of tenure has been described as the modern concept of security of tenure and is the concept which is utilised for purposes of this study.

Typically, security of mineral tenure is defined as a reasonable legal entitlement for extraction rights after successful completion of the exploration phase (Bastida, 2001). A study carried out in 1992 where security of tenure was a main criterion in assessing mineral investment conditions in countries in the Asian-Pacific Region shows that the governments of Malaysia, the Philippines and Thailand, clearly regarded security of tenure as simply a right to mine (Bastida, 2001). In this narrow sense of the meaning of security of tenure, it relates to legal entitlement in the critical transition from discovery to mining. In the mining tenure sequence, the allocation of mining rights upon a successful discovery will display a different set of conditions according to whether they should be automatically assigned to the discoverer, whether the discoverer should have priority regarding mining rights, or whether they should be allocated either to the discoverer or to any other applicant at the government's discretion (Bastida, 2001).

A second issue at the stage of transition from exploration to the establishment of a mine is what conditions should be imposed by the State upon the investor in return for such an entitlement. In a study of emerging mineral laws and agreements conducted in 1986, a guiding principle was identified as the right to a secure and, within reason, long-term title where a substantial investment in a foreign country is assured, with a commitment to a work programme or a development plan. The precise undertakings that are essential to obtaining a secure and long-term title are however not exhaustively identified (Bastida, 2001).

In the early 1980s the links between the exploration permit and the right to mine was not well defined in the mining legislation of developing countries. This has however been attended to in the codes drawn up by the developing countries in the Asia – Pacific region in the last few years (Otto, 1992). Most countries neither automatically grant the right to mine to the founder of a deposit holding an exploration permit, nor do they allow broad discretions to the government at this stage of operations. In most countries rights are only vested in a company after it has met some requirements such as the payment of fees, compliance with certain technical and financial criteria or the approval of feasibility studies, environmental impact assessments and acquisition of the land rights (Otto, 1992). Most current mining laws provide for the submission of development plans under penalty of loss of the right to mine in the event that such plans are not approved or submitted (Bastida, 2001).

The tightening of the conditions pertaining to the right to mine found in many codes, either by means of a right of first priority granted to the founder, the automatic conversion of exploration rights into extraction rights and purely discretionary regimes of allocation of extraction rights, have shifted the boundaries of interpretation of term “security of tenure” from whether the investor should have the right to mine to the conditions under which the right should be allocated, maintained, transferred and terminated. More recent literature appears to consider the legal entitlement to extraction rights as a necessary but not a sufficient condition to define security of tenure (Bastida, 2001).

In general terms, security of tenure in the mineral industry has been defined as the stability of rights granted to implement different phases of the mining sequence. The concern around security of tenure in this wider interpretation of the term comprises not only the transition between discovery to mining, but relates to all the phases of mining, from the acquisition of prospecting or exploration rights through development, to the entire duration of the productive life of a mine (Otto, 1997).

More precisely, it has been argued that legal entitlement to extraction rights constitutes a first phase of the concept. In a second phase, it involves the certainty of rights obtained and the conditions under which they may be revoked or lost in the exploration and mining phase, transferred or mortgaged (Omalu & Zamora, 1999). Consistent with such a broader interpretation of security of tenure, the World Bank

(1992) in its mining policy guidelines for Latin America has stated that a regime of secured tenure ensures that a mineral right, once granted, cannot be suspended or revoked except on specified grounds which are clearly set out by law, and provides reasonable assurances guaranteeing the continuity of operations over the life of the project. An aspect encompassing the continuity of operations is related to the ability to transfer the title to any eligible third party, and to mortgage the title to raise finance. Those aspects are included under the modern concept of security of tenure which also encapsulates guarantees against expropriation (Omalu & Zamora, 1991).

3.4 Elements of security continuity of tenure

Having examined the wider concept of security of tenure, it is important to examine the factors that influence legal certainty in the legal regime which ultimately influences the security of tenure. The following factors embodied in a country's legal regime regulating the mining industry, have an impact on legal certainty.

3.4.1 Ambiguous rules, discretionary procedures and excessive regulation

It has been observed that an important factor bearing on regulatory uncertainty is the existence of ambiguous rules i.e. procedures which are open to discretion and excessive regulation. Clarity and transparency i.e. explicit rules and procedures and the minimisation of discretion are determinants of certainty of rights (World Bank, 1992).

The freeing of applicable rules from excessive bureaucracy is a question that is difficult for government to deal with. On the one hand, some form of public interest is usually involved in regulations and matters requiring government approval. On the other hand, excessive regulations, burdensome procedures and discretionary decision-making constitute obstacles to private investment and increase transaction costs (Bastida, 2001). It has been said that the compromise between the two positions in the context of a legal framework, which is attractive to private investment lies in restricting the intervention of the state bureaucracy to the core of its legitimacy, to reduce corruption and to curtail the administration's powers to delay operations (Bastida, 2001).

3.4.2 Right to challenge administrative decisions of the regulator

It has been argued that the right to challenge discretionary decisions by the regulator in court or through international arbitration is another aspect of security of tenure (Bastida, 2001).

3.4.3 Time allowance for mineral development

Security of tenure is also influenced by the length of time allowed to a company to explore and develop a mine. A prospecting right should allow sufficient time to evaluate the mineral deposit and the mining right should be granted for a sufficient period as may be required to develop an area to make of investors efforts worthwhile, and to reduce uncertainties related to the continuity of operations (Otto, 1995). This security with regard to the continuity of prospecting and mining rights applies to the duration, renewability and the cancellation of such rights by the State (Dale et al, 2005).

3.4.4 Time limitation in processing applications

Another aspect of both the time dilemma in mining and the requirement for clear and transparent rules and procedures is related to the need to limit the time period used by the government regulator for the granting mineral rights, approving applications and processing key documents. Delays in procedures do impact on uncertainty, no matter how clear, cohesive and, by implication, easy to enforce the rules may be (Otto, 1995).

3.4.5 Time allowance: the need for retention rights

The debate regarding the relative security of tenure of mining operations has changed in more recent years to account for the uncertainties involved in carrying out large scale mineral development prospects. Under such an approach, the investor should have the right to retain the mining rights even if he is unable to develop the deposit temporarily due to unfavourable market conditions, lack of finance or any other reason. In the case of ongoing operations which must be shut down or abandoned for economic reasons, the investor should have such retention right. This

could be combined with a periodic review of the decisions by the regulating authorities, and may also include pre-emptive rights if another developer is keen to proceed with operations (Bastida, 2001).

3.4.6 The nature of mineral rights in privately orientated and state owned systems

Systems based on private ownership of mineral rights are objectively considered to have merit on better achievement of security of tenure than is possible in systems based on State ownership of mineral rights (Dale, 1996). Privately orientated mineral rights systems achieve desirable objectives for investors such as facilitating the acquisition of prospecting rights, the elimination of corruption in such acquisition, avoidance of discretions in the allocation of rights, security and continuity of tenure, minimise State intervention and streamline administrative procedures (Dale, 1996).

3.4.7 Registerability, transferability and bondability of the rights

An aspect encompassing the continuity of operations is related to the ability to transfer the title to any eligible third party, and to mortgage the title to raise finance. Those aspects are included under the modern concept of security of tenure which also encapsulates guarantees against expropriation (Omalu & Zamora, 1991). It is submitted that systems which allow for the registration of prospecting and mining rights in a public office are facilitative the rights to transfer, mortgage and obtain compensation from the State in the case of expropriation (Dale et al, 2005).

3.4.8 Financial aspects of the prospecting and mining regime

Comparative studies have emphasised the need, if a country wishes to attract mineral investment, for an investor-friendly fiscal and financial regime in respect of prospecting and mining (Bastida, 2001). The competitiveness of a country's minerals industry is largely based on costs to investors of production, including the costs of public policies as regulatory requirements, royalties, income taxes and tariffs (Bastida, 2001). Transaction costs have been defined as the costs of all market transactions including search and information costs, bargaining and decision costs and policing and enforcement costs (Coase, 1998). It is submitted that certainty with

regard to the calculation and forecasting of transaction costs is an aspect of the modern concept of security of tenure (Dale et al, 2005).

3.4.9 The fate of existing rights: the transitional provisions

The erosion of existing rights in the transitional phase between an old and new mineral law regime necessarily has an adverse impact on security of tenure (Dale et al, 2005).

3.4.10 Environmental and socio-economic responsibilities

Despite efforts by authorities charged with promoting mining development to enhance security of mineral tenure in many regimes around the world, opposing socio-economic and environmental concerns have pulled in opposite directions. The imperatives of sustainable development requires from governments to ensure appropriate land use, care for the environment both during mining and after closure and to ensure that the impact on local communities be limited or, at least, that the benefits of mining be shared by local communities. The major challenge for a legislature is to achieve a balance between the security of tenure sought by those who wish to invest large amounts of money in the risky business of exploration and mining and the equally compelling governmental imperative to protect the environment and ensure that development enriches the lives of those affected by the activities (Bastida, 2001).

3.5 Review of relevant foreign direct investment theories and adaptation of the modern theory for foreign direct investment to mining

It is necessary to review and evolution of the classical theories of foreign direct investment and the adaptation thereof to mining the in order to place the concept of security of tenure and this research in an appropriate context.

3.5.1 Monopolistic advantage theory of foreign direct investment

Hymer (1976) in his theory stated that foreign direct investment occurs mainly in the case of industries operating in a market form typified as monopolistic competition i.e. availing themselves of product differentiation as their competitive forum. A small number of dominant firms hold advantages not available to others, including local firms. Such advantages comprise economies of scale, superior technology, or superior knowledge in marketing, management as well as easy access to sources of finance. Foreign direct investment is the result of these product, factor and market-related imperfections. Companies which are in a position to easily take advantage of these imperfections to develop and maintain advantages, utilise such advantages to further enhance their operations globally.

Caves (1982) added to Hymer's theory by indicating that superior knowledge per se was sufficient for an investing firm to produce differentially superior products leading to some measure of control over the price and an advantage over competing firms. Access to sources of cheaper capital may also give a dominant firm a cost advantage over other firms.

3.5.2 Application of monopolistic advantage theory to mining industry

The conditions for multinational enterprises to develop a relative advantage over local firms present themselves in the mining industry of developing countries. A limited number of firms are usually involved in such mining industry and these firms have access to superior input factors, inclusive of technology, sources of finance as well as access to and some control over international markets. It is these firm-specific advantages that give the dominant mining multinational enterprises a differential advantage over local and other firms. Replication of the same advantages in several locations globally allows mining multinational enterprises the economies of scale to enhance their market power (Etemad & Salmasi, 2002).

Despite their relatively superior local knowledge, local firms are usually inferior to multinational enterprises on other components of firm-specific advantages relevant to mining. In the case of mining, such firm-specific advantages alone cannot necessarily lead to a successful operation. Local firms, by definition, have location-specific

advantages including local presence, access to and local knowledge of mineral resources and links to local government that may serve as a basis for creating their own differential advantage, which may give them a basis to compete (Etemad & Salmasi, 2002).

3.5.3 Oligopolistic reaction theory of foreign direct investment

Knickerbocker's (1973) theory postulates that in oligopolistic industries, competitors react to each other's moves, and imitate each other to reduce the risk of being out-competed. This theory is based on two findings. Firstly, the tendency of firms in a number of industries to cluster their direct investments in foreign countries together. This is described as a "herding-type of behaviour". Secondly, most companies in the forefront of international expansion are typically in industries dominated by oligopolies. The objective of these two observations was to demonstrate a relationship between the clustering together of foreign investments and the desire of oligopolists to react to the moves of rivals.

3.5.4 Application of monopolistic advantage theory to mining

In the case of mining, both of the conditions relating to herding-type behaviour and oligopolist competitors are satisfied when a foreign firm independently, or in a joint venture with local firms, establishes a successful local operation. The success of the first operation has a signalling effect to competitors indicating that the inherent risks are manageable. This signalling effect, after the first foreign based operation achieves success, compels others into the herd like oligopolistic reaction behaviour in order to restore the old equilibrium. As a direct result, competing foreign firms will hurry to copy the leader and invest in the foreign jurisdiction before the scale of the operations of a competitor, for example, can serve as an entry barrier (Etemad & Salmasi, 2002).

For most mineral commodities, a relatively small number of mining multinational enterprises based in the industrial countries dominate the industry through the control of the important stages in both the supply chain and the marketing of minerals, at least in industrial countries, if not worldwide (United Nations, 1993). Etemad & Salmasi (2002) conclude that the aforementioned findings substantiate the requisite

theoretical conditions under which mining multinational enterprises do operate oligopolistically, taking advantage of market imperfections and further influence market conditions to enhance their own firm-specific advantages and create barriers of entry for others.

3.5.5 Internalisation theory of foreign direct investment

The theory of internalisation was proposed by Buckley and Casson (1976) and elaborated on by Rugman (1979) and others. Market imperfections, which are factors which inhibit markets from working perfectly, make it difficult for firms to licence their own marketing and management know-how. Mining multinational enterprises are assumed to have a controlling effect on their own internal markets and resources, including technological, managerial and marketing know-how. When mining multinational enterprises expand into international markets, they can potentially earn additional profits in their own “internal” markets (i.e. their network of associate - subsidiaries and affiliates), where their relatively superior resources and assets (i.e. superior technology or managerial ability), can be further leveraged.

Mining multinational enterprises will resist transferring their firm-specific advantages to non-affiliated firms through contractual or licensing agreements, for the following reasons:

- a) this may result in the mining multinational enterprises giving away its competitive advantage i.e. its technological and managerial know-how which are firm-specific advantages, to potential foreign competitors;
- b) the contractual or licensing agreement does not always provide the mining multinational enterprises with effective control over their operational and managerial decisions under the foreign jurisdiction. Such control may be necessary to profitably exploit its know-how advantages;
- c) the mining multinational enterprise’s management and marketing knowledge or know –how may not be readily transferable to a third party (requiring higher costs and/or adaptations); and
- d) transfer to a third party/agent over which the mining multinational enterprises has less than full managerial and operational control may compromise the mining multinational enterprise’s firm-specific advantages, leading to a bigger cumulative long-term loss than the short-term benefits.

In response to the above risks and other potential costs, the theory of internalization poses that mining multinational enterprises internalise their capabilities. Internalisation allows for replication, further development and exploitation of firm-specific advantages within the mining multinational enterprise's internal markets in a virtuous cycle and without the risks of long-term dissipation or losses.

3.5.6 Eclectic theory of foreign direct investment

Dunning (1973; 1977; 1980; 1988) added to the internalization theory by including location-specific advantages and explaining how these factors influence the nature and direction of foreign direct investment. Location-specific advantages refer to advantages accruing to a mining multinational enterprise due to the use of resource endowments or assets tied to a particular foreign location, such as high grade mineral deposits. Location-specific advantages can be valuable when combined with the firm's own specific expertise and assets ("firm-specific advantages") to improve the profitability of an investment in a country. Dunning accepts the internalisation theory arguments that market imperfections make it difficult for a firm to licence its own unique assets and that internalisation can magnify a firm's advantages and lead to differentially higher real and potential market power compared to other competitors. When firm-specific advantages, such as technology and management and marketing know-how, are combined with the location-specific advantages, business' viability and profitability can be further improved.

3.5.7 Adaptation of the Eclectic theory for foreign direct investment to mining

Although the Eclectic theory provides the most encompassing explanation of foreign direct investment, there are several challenges in applying it to mining. Dunning acknowledges his theory's heavy dependence on three pillars, namely firm-specific advantages, location-specific advantages and internalisation. The theory does not clearly specify their interdependencies and the conditions under which the three pillars combine to support foreign direct investment decisions or the circumstances under which these pillars may not combine synergistically (Etemad & Salmasi, 2002).

Regarding the adaptation of the Eclectic theory of foreign direct investment to the mining industry it is useful to consider the example of a simple foreign direct investment decision by a typical mining multinational enterprise as characterized by Dunning's first two pillars of the Eclectic Theory (Etemad & Salmasi, 2002):

The main characteristics of firm-specific advantages are:

- a) they are specific to the firm and not a specific country i.e. management and marketing know-how, technology, people, knowledge, culture, etc.;
- b) they are mobile and can be deployed anywhere; and
- c) they separate a particular firm from others in the industry.

The choice and the extent of deploying a combination of factors from the firm's broad portfolio of such factors i.e. skills, expertise, proprietary knowledge, rights, etc. in a location is an internal decision. The firm does not need to secure external rights or obtain licenses prior to taking a decision to deploy its firm-specific advantages. All rights and authorization required for empowering the firm to deploy any or all aspects of its firm-specific advantages are, by definition, within the firm's internal decision-making domain. The operating unit in a foreign country may have to appropriate them but that would still be a matter which is internal to the firm (Etemad & Salmasi, 2002).

Three aspects distinguish location-specific advantages from firm-specific advantages:

- a) they are specific to a given location. In the case of the mining industry, mines, mineral resources and all advantages associated with them, are only available at the specific mining site or resource location. Firm-specific advantages are mobile and location-specific advantages are not;
- b) such location-specific advantages are under the control of the authorities with jurisdiction over the location (e.g., the government authorities, landowners, mining or prospecting license or right holders, etc.) under consideration;

- c) an entity intending to utilize the benefits of a particular location must secure authorization from the appropriate authorities in order to exploit the specific mineral resource. This suggests a relation, if not a dependence, between the location-specific advantages and the firm-specific advantages or alternatively between the two principal players in charge.

Authorization to prospect or exploit a mineral is not issued automatically to all applicants. Certain preconditions must usually be met, and a set of operating restrictions and conditions (which are attached to, or imposed on the investor) must also be met. An example of such authorization is “the right to prospect or the right to mine, the length of tenure and other policies conducive to mineral investment” in the case of the mining industry which is also referred to as the “local authorisation moderator” (Etemad & Salmasi, 2002).

The country’s government or the local authority in charge of the specific location-specific advantage, may call for a bid by other companies, offer a time-sensitive authorization (e.g., the right to mine in a confined geographical location for a certain limited period shorter than the life of the relevant resource) with certain limitations, impose environmental conditions and even favour certain firms based on their particular set of firm-specific expertise or ownership by local persons as a part of the preconditions.

Without the relevant authorisation, the particular location-specific advantage is of no use to the firm, regardless of the objective or potential market value of the resource or the associated advantage that the firm can produce from that location-specific advantage in conjunction with its own firm-specific advantages.

Furthermore, the restrictions imposed by authorities may make the location-specific advantage less valuable than calculated previously (i.e. conditional access and imposition of relatively high transactional costs on the potential operator). Such impositions may, for example, favour a local firm with relatively lower firm-specific advantages than the typical mining multinational enterprises. The intrinsic value of a location-specific advantage, and its evaluation and usefulness to a particular mining multinational enterprise, regardless of the strength of its own firm-specific advantages, is dependent both on the location-specific resource and the local

authority's policy, which fall mostly outside of the control of the mining multinational enterprise.

The local authority's knowledge of a mining multinational enterprise's firm-specific advantages, in terms of the firm's ability, potency, efficiency, among others, may predispose it towards a more or less favourable authorization, thereby impacting the attainable value of the location-specific resource. The decision is not a joint one (between the mining multinational enterprise and the local authority). However, when mining multinational enterprises are required to provide the necessary information on its firm-specific advantages to the local authority, this will necessarily link the location-specific advantages to the firm-specific advantages which may expose the firm-specific advantages to a potentially higher dissipation risks than otherwise. Therefore, most mining foreign direct investment exposes an investor's firm-specific advantages to risks unforeseen by the theory, which may violate the independence of the three pillars and in particular internalisation as a principal pillar of the theory (Etemad & Salmasi, 2002).

Theoretically, a specific value can be attributed by an investor for the combined firm-specific advantages and location-specific advantages for a given firm at a given location. This should logically serve as the basis to guide that firm's decision to submit a bid or make application to invest and operate, or to withdraw from further investment. The critical point is that the attributed value is not the absolute value of the location-specific advantage (such as a very rich mineral deposit which can be mined extremely economically through a firm's firm-specific advantages) that allows the firm to decide in favour or against operating in that location. Instead it is the nature of the authorization to prospect or mine controlled by the local or national authorities, which modulates the attributed value, and determines the realizable value of the resource. This realizable value of a resource should in fact be viewed as the basis for location-specific advantage. It is the magnitude of this modulation factor ranging from highly positive (e.g., set of incentives increasing the absolute value of the resource such as privately owned mineral rights) to highly negative (e.g., high transactional cost, risks, and disincentives reducing the absolute value of the resource) that determines the realisable value of the location-specific advantages combined with the firm-specific advantages for a specific location (Etemad & Salmasi, 2002).

3.6 Research by Etemad and Salmasi

Etemad and Salmasi's (2002) investigation surveyed seventy major mining companies in North America, Australia, Europe, South Africa, Indonesia and Japan and a response rate of 60% was obtained. They concluded the following implications for mining investment decisions and operations:

"First, in a mining investment decision, not only should the value of the resource (i.e., the LSA [location-specific advantage]) be assessed objectively, but also the nature of local authority's treatment of that resource must be included in the evaluation. A critical distinction for the case of the mining industry is that, the local authorities behave as if they own the resources, act as a partner in the venture, and are entitled to at least participate, if not make joint decisions. Their decisions moderate the value of local resources and local assets as if they were indeed an active partner in the mining investment decision. This fact is not recognized in the modern foreign direct investment theories... This adds a new dimension and transforms most foreign direct investment theories to a set of interactive decisions between the local mining authority and the MME [mining multinational enterprise]. Therefore, the local authority's relatively positive or negative actions can easily impact the eventual outcome. They can range from being further empowering and enticing to hindering and discouraging to MME [mining multinational enterprise] decisions...Second, the nature and the potency of local authorization may also depend on the nature of the MME's [mining multinational enterprise] actual or perceived profile with respect to a given location-specific resource. A more co-operative and conciliatory MME [mining multinational enterprise], for example, may receive a higher multiplier than a less co-operative/sympathetic MME [mining multinational enterprise] for the same resource. Accordingly, such a MME [mining multinational enterprise] with a relatively inferior FSA [firm-specific advantage] (e.g., technology) may receive a higher multiplier than its counterpart with superior FSA [firm-specific advantages]..."(Entemad & Salmasi, 2002:7-8).

A question which arises from the above quotation is how and why developing Country governments should increase the efficacy of their authorisation to prospect or mine to allow for higher exploitation of their mineral resources? In light of the

transparency of operations and the abundance of information in the context of a global business environment, countries with less competitive location-specific advantages will be ignored by investors. Mainly due to the secondary and tertiary value-adding activities, the opportunity costs of such glanced-over resources will quickly rise to a much higher value than the actual value of the resource. It is theoretically possible that the reform of a mining code, fiscal regime and foreign investment policies may even provide for direct subsidies attached to a particular location-specific resource to ensure the accrual of other value-adding benefits that a mining multinational enterprise's operation, based on the corresponding location-specific advantage, can generate (Etemad & Salmasi, 2002).

The reform of the country's mining code in accordance with the aspects comprising security and continuity of tenure for mining multinational enterprises can be achieved as most developing countries had done in the late 1980s and 1990s. Moreover, the moderating character of a country's mining code can further enhance or inhibit the value of the location-specific advantage. Conversely, the related critical question for mining multinational enterprise is whether or not "reforms" are in fact enhancing or still inhibiting, relative to other opportunities (Etemad & Salmasi, 2002).

3.7 Integration of the theory of foreign direct investment and security of tenure

Etemad and Salmasi's (2002) study concerning the modern theory of foreign direct investment as adapted to the mining industry concludes that it is the or nature of the authorization to prospect or mine, length of tenure and other policies conducive to mineral investment as controlled by the local or national authorities (i.e. the mining code of a country), which modulates the attributed value of a mineral resources and determines the realizable value thereof to a specific investor. It is the magnitude of this modulation factor ranging from highly positive (e.g., set of incentives increasing the absolute value of the resource such as long term security and continuity of tenure of mineral rights) to highly negative (e.g., high transactional cost, risks, and disincentives reducing the absolute value of the resource) that determines the realisable value of a mineral deposit to a potential investor.

Security of tenure has consistently been ranked as one of the most important among the investment decision criteria in a series of surveys of mining companies'

investment preferences (Johnson, 1990; Otto, 1992; World Bank, 1992; Eggert, 1997; Bastida, 2001; Etemad and Salmasi, 2002). In this regard the World Bank (1992) has concluded that security and continuity of tenure are essential to attract high risk exploration and development capital to a country. The extent to which a country's mining code complies with the aspects identified as being included in the modern concept of security and continuity of tenure ultimately determines whether a particular investment opportunity is economically viable to potential investors (World Bank, 1992).

3.8 Summary

The objective of this chapter is an examination and evaluation of the literature relevant to study and evaluation of the effects on investment in South Africa's coal export industry of the new mining legislation. The various aspects included in the concept of security of tenure necessary for investment in the mining industry of country are examined first. Then the classical theories of foreign direct investment are examined and applied in a mining context.

Potential investors are confronted if not enticed by the competition between countries for investment in the global mining industry. The advent of globalisation and the need to compete in the global arena for investors, induce countries not to be out of step with their regulators, regimes, specifically as such regimes may add to the cost and or yield and or risk of mining ventures. Countries creating favourable legislative- economic environments may pose a more direct threat to countries doing the opposite. Economic projects in the mining industry are exposed to high levels of market risk and uncertainty and require stable and predictable rules enabling the investor to ensure an adequate and timely return. Given economically viable geological prospects, a legal regime that offers clear-cut rules for the allocation of mineral rights, guarantees mineral tenure throughout all the phases of mining and reduces transaction costs will gain a competitive advantage over others that leave more room for uncertainty in these areas.

Security of tenure has consistently been ranked as one of the most important among the investment decision criteria in a series of surveys of mining companies' investment preferences. The various aspects comprising the modern concept of security of tenure include:

- clear and transparent rules and procedures together with the minimisation of administrative discretion are determinants of certainty of rights;
- the right to challenge discretionary decisions by the regulator in court or through international arbitration;
- the length of time allowed to a company to explore and develop a mine. This security with regard to the continuity of prospecting and mining rights applies to the duration, renewability and the cancellation of such rights by the State;
- the need to limit the time period used by government for the granting mineral rights, approving applications and processing key documents;
- the investor should have the right to retain the mining rights even if he is unable to develop the deposit temporarily due to unfavourable market conditions, lack of finance or any other reason;
- systems based on private ownership of mineral rights are objectively considered to have merit on better achievement of security of tenure than is possible in systems based on State ownership of mineral rights;
- the ability to transfer title, and to mortgage such title to raise finance. These aspects are included under the modern concept of security of tenure which also encapsulates guarantees against expropriation.
- certainty with regard to the calculation and predictability of transaction costs (defined as the costs of all market transactions including search and information costs, bargaining and decision costs and policing and enforcement costs) is an aspect of the modern concept of security of tenure;
- certainty with regard to the fate of existing rights in a transitional phase between an old and new legislative code. The erosion of existing rights in the transitional phase between an old and new mineral law regime necessarily has an adverse impact on security of tenure.
- the achievement of a legislative balance between the security of tenure sought by investors intending to invest large amounts of money in the risky business of exploration and mining and the equally compelling governmental

imperative to protect the environment and ensure that development enriches the lives of those affected by the activities.

Although modern theory of foreign direct investment is well suited for mining it is in need of modification in order to explain the specific complexities. The Eclectic theory of foreign direct investment refers to location-specific advantages accruing to an investing firm due to the use of resource endowments or assets tied to a particular foreign location. These location specific advantages are combined with the firm's own specific expertise and assets to improve the profitability of an investment. When these firm-specific advantages are combined with location-specific advantages, a business' viability and profitability can be enhanced by internalisation. Internalisation theory refers to the leveraging by a multinational enterprise of its own resources, managing and marketing know-how when expanding into international markets (instead of exporting its products or entering into a licensing agreement with a foreign company).

The nature of the authorization to prospect or mine, the length of tenure and other policies conducive to mineral investment as controlled by the local or national authorities (i.e. the mining code of a country), modulates the value attributed to a specific resource and determines the realizable value of a mineral resource to a specific investor. It is the magnitude of this modulation factor ranging from highly positive (e.g., set of incentives increasing the absolute value of the resource such as long term security and continuity of tenure of mineral rights) to highly negative (e.g., high transactional cost, risks, and disincentives reducing the absolute value of the resource) that determines the realisable value of a mineral deposit for a potential investor.

The aspects included modern concept of security and continuity of tenure which have been examined above, ultimately determine whether a particular investment opportunity is economically viable to potential investors. The compliance of a country's mining code with the relevant aspects of security of tenure is an indicator of the extent to which it which investment in the minerals sector is encouraged or discouraged.

Chapter 4

Methodology

4.1 Introduction

As explained in chapter 1, the objective of this research is to examine and evaluate the effects and the repercussions of the new mining legislation introduced on 1 May 2004 on South Africa's attractiveness as a venue for foreign investment with specific reference to the country's coal export industry being a significant earner of foreign exchange.

In order to determine and evaluate this question, a multiple case study methodology was deemed to be most appropriate.

This chapter is divided into two parts. The first considers the nature of the case study methodology, with specific emphasis on its strengths and limitations. In the second part, the research design and method of collecting the data obtained are discussed.

4.2 Case Study Research

Yin (1989: 13) explains that "as a research strategy, the case study is used in many settings, inclusive of:

- Policy, political science, and public administration research;
- Community psychology and sociology;
- Organizational and management studies;
- City and regional planning research, such as studies on plans, neighbourhoods, or public agencies, and
- The conduct of a large proportion of dissertations and theses in the social sciences.

Despite its extensive use, the case study research strategy has for long been stereotyped as “...a weak sibling among social science methods” (Yin, 1989: 10). Criticisms of this type of research include amongst others a lack of precision, quantification, objectivity and rigour. It has been regarded in the past as only appropriate for the exploratory stages of an investigation. However, following the work of researchers such as Yin (1989) and Eisenhardt (1989) on case study methodology, the case study is now being accepted alongside other research methodologies such as the experiment, survey, archival analysis and history.

Yin (1989: 23) defines the case study as “...an empirical inquiry that investigates contemporary phenomenon within its real life context ... in which multiple sources of evidence are use.” He explains that it is especially relevant when the boundaries between the phenomena and their context are not clearly evident. Eisenhardt (1989) emphasises the use of the case study research methodology in studying the dynamics within single settings.

Although there are similarities between grounded theory research and case study research, an important difference centres on the use of theory. Yin (1989) emphasises the importance of theory development prior to data collection as an essential step in doing case studies. This contrasts with grounded theory research where theory development evolves from data collection and analyses. Both methods, however, stressed that researchers have to compare theory and data, iterating toward a theory which closely exemplifies the data (Eisenhardt, 1989).

Yin (1989:16) identifies three conditions that determine the selection of a research methodology. The conditions are (a) the type of research question posed, (b) the extent of control an investigator has over actual behavioural events, and (c) the degree of focus on contemporary as opposed to historical events. Table 4.1 displays these three conditions and shows how each is related to the five major research strategies.

Table 4.1: Relevant situations for different research methodologies

Methodology	Form of research Question	Requires control over behavioural events?	Focuses on contemporary events?
Experiment	How, why	Yes	Yes
Survey	Who, what, where, how many, how much	No	Yes
Archival Analysis	Who, what, where, how many, how much	No	Yes/No
History	How, why	No	No
Case Study	How, why	No	Yes

Source: Yin (1989:13)

Yin (1989:13) contends that case studies are the preferred methodology when ‘how’ or ‘why’ questions are being posed, i.e. when the investigator has little control if any over events, and when the focus is on a contemporary phenomenon within some real-life context. Eisenhardt (1989) observes that the case study is the most appropriate research strategy when little is known about the phenomenon or when current perspectives seem inadequate.

The unique strength of case study research lies in its ability to deal with a variety of evidence, allowing an investigation to retain the holistic characteristics of real-life events (Yin, 1989). This strength makes case study research the most appropriate method for capturing the complexity of organisational phenomena (Yin, 1989). This method of research is also regarded to be especially suitable for generating novel empirically valid and testable theories through the affiliation between data and theory (Eisenhardt, 1989).

The potential for generalisation, which is traded for institutional detail and in-depth understanding, is the most significant limitation of the case study research method. This is illustrated by Yin (1989) when he states the frequently asked question: “How can you generalize from a single case?”. Yin (1989) debates that the aim of the case

study is to expand theoretical propositions. Although case studies may not always be as applicable to all populations, the goal should be to generalise theories rather than enumerate frequencies.

A second concern on the appropriateness of case study research has been the possibility of dubious evidence or biased views influencing the findings and conclusions of researchers (Yin, 1989). While bias can also enter alternative research strategies, the problem is potentially more crucial in case study research. Various methods, however, exist that can be used to minimise these concerns (Yin, 1989).

A third frequent complaint about case studies is the long time it takes to research and read the massive, often unreadable documents that are generated in the process. Yin (1989) explains that the historical way of doing case study research substantiates this complaint, but that it could be done differently, reducing lengthy narratives.

4.3 Research design

Yin (1989, 28) defines the purpose of a research design as the logical sequence that connects the empirical data to a study's initial research questions and, ultimately, to its conclusions. He further identifies five components of a research design that are especially important:

1. the research questions;
2. the study's propositions or conceptual framework;
3. the unit(s) of analysis;
4. data collection; and
5. data analysis.

The objective of this research is to examine and evaluate the effects and the repercussions of the new mining legislation introduced on 1 May 2004 on South Africa's attractiveness as a venue for foreign investment with specific reference to the country's coal export industry being a significant earner of foreign exchange. The research question is set out below.

Research Question:

To what extent has the new mining law regime which came into force on 1 May 2004, affected the attractiveness of South Africa as a venue for investment to the companies operating in the export coal industry, in relation to the yield and risk of future investments compared to other countries competing for investment?

The units of analysis, as referred to in chapter 1, are three of companies exporting approximately 60 percent of the coal produced via the Richards Bay Coal Terminal, namely Xstrata South Africa (Pty) Ltd, Ingwe Collieries Ltd and Sasol Mining (Pty) Ltd.

Yin (1989) points out that the role of theory development, prior to collection of any case study data, has been overlooked in the traditional way of doing case studies and is partly responsible for any limitations historically attributed to case study research methods.

In this research, the conceptual framework is based on:

- a) the comparison between the old and the new South African mining laws as discussed in chapter 2,
- b) the relevant aspects of the modern concept of security of tenure utilised for purposes of making the aforementioned comparison; and
- c) the examination of and research findings concerning the modern theory of foreign direct investment as adapted to the mining industry, which is discussed in chapter 3.

Etemad and Salmasi's (2002) research concludes, assuming a very rich mineral deposit which is highly economical to exploit by a firm through its specific competencies, that it is the nature of the authorization to prospect or mine, the length of tenure and other policies as controlled by the local or national authorities (i.e. the mining code of a country), which modulates the value attributed to a mineral resource by a mining multinational company and determines the realizable value thereof. It is the magnitude of this modulating factor ranging from highly positive to highly negative that determines the realisable value of a specific mineral deposit to a potential investor. The criteria relating to the various aspects of the modern concept of security

of tenure identified and discussed in chapter 3, are important in determining a favourable and internationally competitive investment environment exists in the South African export coal industry. The extent to which South Africa's new mining code violates these criteria as discussed in chapter 2, negatively modulates the risks and investment yield of local mineral deposits and determines the realisable value thereof as compared with similar deposits in competing countries. This conceptual framework is used as a point of departure in answering the research question.

The above conceptual framework is used as a template with which the results of the case study are compared. The proposed research proposition, developed from the theoretical study that was conducted in chapter 3, which is used as a conceptual framework is shown below.

Proposed research proposition

The new mining law regime which came into force on 1 May 2004, has negatively affected the attractiveness of South Africa as a venue for investment for the companies currently operating in the South African export coal industry, in relation to the yield and risk pertaining to future investments as compared to other countries competing for investment.

The case study research method's unique strength is in its ability to deal with a full variety of evidence and information (Yin, 1989). The sources of experimental evidence utilised in this study, can be categorised as semi-structured interviews, company documentation, external documentation, media coverage and direct observation.

This research focuses on in depth personal interviews, using a semi-structured questionnaire, which were conducted with appropriate officials of the three companies, namely Xstrata South Africa (Pty) Ltd, Ingwe Collieries Ltd and Sasol Mining (Pty) Ltd.

The questionnaire which was utilised for purposes of conducting the semi-structured interviews is attached. The design of the questionnaire followed the following steps prior to the research. Firstly the factors relating to the modern concept of security of tenure which has been ranked as one of the most important among the investment decision criteria in a series of international surveys of the investment preferences of mining companies, formed the basis of the questionnaire. These criteria are applied in relation to the relevant provisions of the Mineral and Petroleum Resources Development Act 28 of 2002 in order to formulate the questions relevant to the proposed research proposition. A distinction was drawn between the questions in relation to future investment in respect of existing mining operations, which were acquired under the former mining law regime, and new prospecting and mining operations, to be established in terms of the Mineral and Petroleum Resources Development Act 28 of 2002. The instrument was subsequently discussed with colleagues of the researcher, who are senior mining executives knowledgeable about the research topic.

Interviews with appropriate officials representing the aforementioned companies were difficult to obtain due to the sensitivity of the current relationships between the companies per se who are competitors in the global export coal industry, and between the respective companies and the Department of Minerals and Energy, which is responsible for the implementation of the Mineral and Petroleum Resources Development Act 28 of 2002. A number of officials representing the coal division of Anglo Operations Ltd, which is the holder of the second largest share of the export entitlement in Richards Bay Coal Terminal Company Ltd, were approached by the researcher to participate in the study but the necessary approval from the board of directors could not be obtained. The respondents were previously known to the researcher due to the researcher being an employee of Xstrata South Africa (Pty) Ltd and having had previous business dealings with the respondents from Ingwe Coal Ltd and Sasol Mining (Pty) Ltd. Confidentiality undertakings were provided by the researcher in all instances and the intent of the study throughout is to prevent the release of privileged information.

Although not documented in a formal way, direct observation as a source of evidence should be included resulting from the fact that the researcher has been employed in the Department of Minerals and Energy and in a legal advisory position in the private

sector of the mining industry since January 1992. Special care has, however, been taken by the researcher to remain objective throughout the research project.

Copies of the research questionnaire, inclusive of a covering letter stating the purpose of the research and providing an undertaking to keep sensitive information confidential, were sent to the respondents by e-mail prior to the personal interviews being conducted. All data obtained through the semi-structured interviews, which were all personally conducted by the researcher with the individual respondents, was documented in the separate questionnaires administered to each respondent. Comments by recipients regarding the reasons for their responses to the relevant questions, where applicable, are dealt with in chapter 6, which pertains to the results of the research.

4.4 Summary

The objective of this research is to examine the effects and repercussions of the new mining legislations on South Africa's attractiveness for foreign investment with specific reference to the country's export coal industry being a significant earner of foreign exchange.

The research question is to what extent has the new mining law regime which came into force on 1 May 2004, affected the attractiveness of South Africa as a venue for investment to the companies operating in the export coal industry, in relation to the yield and risk of future investments compared to other countries competing for investment?

In order to determine and evaluate this question a multiple case study of methodology was deemed to be most appropriate. The units of analysis are three of the companies mining and producing approximately 60% of the coal exported via the Richards Bay Coal Terminal namely Xstrata South Africa (Pty) Ltd, Ingwe Collieries Ltd and Sasol Mining (Pty) Ltd. The conceptual framework is based on the comparison between the old and new mining laws as discussed in chapter two, the relevant aspects of the modern aspects of security of tenure and the research of findings concerning modern theory of foreign direct investments as adapting to the

mining industry. This conceptual framework is used as a template in which the results of the case study will be compared with the above research proposition.

Chapter 5

Data Analysis

5.1 Introduction

As explained in chapter 1, the objective of this research is to examine and evaluate the effects and the repercussions of the new mining legislation introduced on 1 May 2004 on South Africa's attractiveness as a venue for foreign investment with specific reference to the country's coal export industry being a significant earner of foreign exchange.

In order to determine and evaluate this question, a multiple case study methodology as discussed in chapter 4 was deemed to be most appropriate in relation to the following research proposition:

The new mining law regime which came into force on 1 May 2004, has negatively affected the attractiveness of South Africa as a venue for investment for the companies currently operating in the South African export coal industry, in relation to the yield and risk pertaining to future investments as compared to other countries competing for investment.

This chapter is divided into two parts. The first considers the nature of data analysis, with specific emphasis on the relevant analytical techniques. In the second part the research results are discussed.

5.2 Data analysis

"Data analysis consists of examining, categorizing, tabulating, or otherwise recombining the evidence, to address the initial proposition of a study" (Yin, 1989:105).

Every case study investigation should start with a general analytic strategy – yielding priorities for what to analyse and why. Within this strategy, three dominant analytical techniques should be used: pattern-matching, explanation-building, and time-series analysis (Yin, 1989).

According to Yin (1989), the more preferred strategy to follow is that of determining the theoretical propositions that originally led to the case study. The original objectives and design of the case study were presumably based on such propositions, which in turn resulted in a set of research questions, reviews of relevant literature, and new insights. Without such a strategy, the case study analysis will proceed with difficulty.

Internal validity is a concern only for causal or explanatory studies, where the research is trying to determine whether event x led to event y. If it is incorrectly concluded that there is a causal relationship between the two without knowing that some third factor may actually have caused y, the research design would have failed to deal with the threat to internal validity. A second concern over internal validity is the problem of making presumptions or inferences. A case study involves an inference each time an event could not be directly observed. The research will presume that a particular event resulted from some earlier occurrence, based on an interview or some other type of documentary evidence. Pattern-matching, explanation-building, and time-series analysis are three ways in which to address internal validity. The first part of this chapter covers these three specific analytical techniques (Yin, 1989).

Yin (1989) argues that one of the most desirable strategies is the use of a pattern-matching logic. This involves comparing an empirically based pattern or proposition with a predicted pattern or patterns. If the experimental pattern corresponds with one of the proposed predictions, the result can help case study to strengthen its internal validity. If the results are as predicted, one can draw solid conclusions from the study, while if the results failed to show the entire pattern as predicted, the initial proposition would have to be questioned.

Explanation-building is a special type of pattern-matching. With explanation-building the goal is to analyse the case study data by building an explanation about the case. Yin (1989) defines it as follows: "to explain a phenomenon is to stipulate a set of causal links about it". In most studies, he continues, the links may be complex and difficult to measure in any precise manner. Explanation-building mostly occurs in narrative form with the better case studies reflecting some theoretical significant

propositions resulting from a series of iterations. In a multiple-case study, one goal is to build a general explanation that fits each of the individual cases. Explanation-building does, however, have some potential problems. As the iterative process progresses a researcher may, for instance, slowly begin to drift away from the original topic of investigation (Yin, 1989).

Time-series analysis is directly analogous to that conducted in experiments and quasi-experiments. Especially relevant to case studies, this analysis demonstrates that a certain sequence or 'time-series' consisting of a number of conditions is necessary for a proposition to occur. The hypothesis being that if one or more of the conditions are not current, the proposition will not follow (Yin, 1989).

Finally, by strengthening the internal validity of a research design, the causal relationship of events can be distinguished from fictitious relationships.

5.3 Research findings

The companies researched are all involved in local active exploration, mine development and the processing of coal for export via their shareholding in the Richards Bay Coal Terminal Company Ltd (BHP Billiton, 2006; Sasol Ltd, 2006; Xstrata, 2006). As discussed in chapter 1 the Richards Bay Coal Terminal Company Ltd is in the process of expanding from a 72 to a 92 million ton per annum capacity in order to accommodate additional export coal production by existing shareholders and other common users. Port capacity is therefore no longer a constraint to future investment opportunities in the South African export coal industry (Richards Bay Coal Terminal Company Ltd, 2006).

Ingwe Collieries Limited and Xstrata South Africa (Pty) Ltd have London based parent companies which have other investments in the export coal industry in Australia, South America and Indonesia (BHP Billiton, 2006; Xstrata, 2006).

Two of the respondents interviewed are executive directors of their companies, both with international mining experience in establishing and managing the mining operations of multinational mining enterprises relating to coal, gold and iron ore in Australia, Indonesia, South Africa, South America, Canada, Papua New Guinea and

the United States of America. A third respondent holds the position of projects director in his company and has international experience in coal prospects and mining projects in South America and Africa. The remaining two respondents are senior executive managers in the legal, prospecting and mining rights departments of their respective companies with experience in the acquisition of prospecting and mining rights in South Africa and other African countries. The average work experience of the respondents in the mining industry is approximately 20 years. This aspect adds to the reliability of this research.

The first question in the research questionnaire was:

How does your company perceive the change from a system of private ownership of mineral rights to one of State sovereignty and custodianship of mineral rights as impacting on future investment decisions?

With regard to existing mining operations which were acquired under the former mineral law regime, three of the respondents replied that the investment decisions of their companies are negatively affected. Reasons given include projects for the expansion of existing mining operations being put on hold due to the uncertainties pertaining to conversion to new order mining rights. Two of the respondents replied that the change has no impact on investment decisions of their companies as the Department of Minerals and Energy has no powers in terms of the Mineral and Petroleum Resources Development Act to refuse an application for conversion of old order mining rights to new order rights.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, four of the respondents replied that investment decisions are negatively impacted. Reasons given include uncertainty regarding the interpretation of the requirements the new Act and the Broad Based Socio-Economic Empowerment Charter. One respondent replied that there would be no impact on the investment of his company due to the new act being consistent with the position in other competing countries.

The second question in the research questionnaire was:

How has the transferability of rights in terms of the Mineral and Petroleum Resources Development Act (now subject to ministerial consent), impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, all of the respondents replied that investment decisions are negatively affected. Reasons given include the limitation on the transactional freedom of companies and the inability to transfer interests in such rights to historically disadvantage persons or empowered companies.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include uncertainty regarding the manner in which the Minister of Minerals and Energy will exercise the discretion with regard to the necessary consent for transfer of prospecting and mining rights.

The third question in the research questionnaire was:

How has the change with regard to the bondability (as security for debt) of prospecting and mining rights impacted on your company's investment decisions with regard to existing and new rights? This relates *inter alia* to the lapsing of rights on liquidation of the holder and ministerial consent required for execution sales in other instances. Reconnaissance permissions and retention permits cannot be mortgaged.

With regard to existing mining operations which were acquired under the former mineral law regime, four of the respondents replied that investment decisions are not impacted. Reasons given are that the companies in question did not need to bond existing rights in order to obtain access to funding. One respondent replied that investment decisions of his company are negatively affected. The reason given is the inability to vendor finance equity sales to historically disadvantaged persons.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the inability or extreme difficulty to vendor finance equity sales to historically disadvantaged persons where

the vendor acquires a bond over the historically disadvantage person's share of the prospecting or mining right. Commercial transactions regarding prospecting and mining rights have become very difficult to conclude.

The fourth question in the research questionnaire was:

How have the administrative discretions which apply to the granting, retention, renewal of new prospecting and mining rights and the conversion of old to new order rights impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime all of the respondents replied that investment decisions are negatively impacted. Reasons given include the uncertainty with regard to how the discretions to be applied in relation to the conversion to new order rights by the relevant officials, will be exercised.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the uncertainty with regard to how the discretions which are to be applied by the relevant officials, will be exercised. This concurs with a media report that all the companies in the industry are in the process of converting their old order prospecting and mining rights to new order rights in terms of the Mineral and Petroleum Resources Development Act 28 of 2002. This process has resulted in protracted negotiations and in certain instances litigation against the State, as a result of differing interpretations pertaining to the obligations on the respective companies in accordance with the Charter on Broad Based Socio-Economic Empowerment (Creamer, 2006).

The fifth question in the research questionnaire was:

How does your company perceive the rights to retention of rights from a prospecting to a mining phase, the renewal of prospecting or mining rights, the ability to acquire retention permits as well the Minister's powers to cancel or suspend rights and permits, to have impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, four of the respondents replied that investment decisions are negatively impacted. Reasons given include the uncertainty with regard to the broad based socio-economic empowerment requirements for conversion from old to new order mining rights. This relates to the retention of such old order rights subsequent to the transitional period provided for conversion. One respondent replied that the investment decisions of his company were not impacted. The reason provided was that the Department of Minerals and Energy is not empowered to refuse an application for conversion and that the question in effect only arises post conversion. Assuming the high quality and competency of the judiciary to review incorrect decisions by administrators, the relevant provisions of the new Act will have no impact on the investment decisions of his company.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, four of the respondents replied that investment decisions are negatively impacted. Reasons given include the uncertainty with regard to the interpretation of the new Act and Broad Based Socio-Economic Development Charter relating to the empowerment of historically disadvantaged persons and social development obligations. One respondent replied that the investment decisions of his company were not impacted. The reason provided was that assuming the high quality and competency of the judiciary to review incorrect decisions by administrators, the relevant provisions of the new Act will have no impact on the investment decisions of this company.

The sixth question in the research questionnaire was:

How does your company perceive the aspects related to the increased legal obligations and costs pertaining to environment management, land use and dealing with aboriginal claims to have impacted on your company's investment decisions?

With regard to existing mining operations which were acquired under the former mineral law regime, four of the respondents replied that investment decisions are not impacted. Reasons given are that the increased legal obligations and costs are in alignment with those in other countries. One respondent replied that the investment decisions of his company were negatively impacted. The reason provided was the

increased legal compliance costs and uncertainty with regard to mine closure and water treatment costs

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, four of the respondents replied that investment decisions are not impacted. Reasons given are that the increased legal obligations and costs being in alignment with those in other countries. One respondent replied that the investment decisions of his company were negatively impacted. The reason provided was the increased legal compliance costs and uncertainty with regard to mine closure and water treatment costs

The seventh question in the research questionnaire was:

How does your company perceive the financial aspects (including costs of production, including the costs of public policies as regulatory requirements, royalties, income taxes, tariffs, search and information costs, bargaining and decision costs and policing and enforcement costs) to have impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the increased costs of selling up to 26% of the assets of mining companies for conversion purposes to historically disadvantage South African companies who may be unable to pay market value therefor. All respondents replied that the costs pertaining to investments in South Africa will be significantly higher than under the previous legal regime.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the increased costs of selling up to 26% of the assets for conversion to historically disadvantage South African companies who may be unable to pay market value therefor. All respondents replied that the costs pertaining to investments in South Africa will be significantly higher than under the previous legal regime.

The eighth question in the research questionnaire was:

How does your company perceive its ability to retain existing rights and convert the same into new order rights in terms of the transitional provisions of the new Act to have impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, three of the respondents replied that investment decisions are negatively impacted. Reasons given include uncertainty with regard to the timing of the conversion of old order mining rights and the unpredictable costs of selling 15% to 26% of the company's equity as required for conversion to an historically disadvantaged South African company who may be unable to pay market value therefore and the other requirements of the charter. Two of the respondents replied that the investment decisions of their companies would not be impacted. Reasons given include the fact that the authorities do not have the power to refuse an application for conversion of an existing mining right.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include uncertainty with regard to the unpredictable costs of selling 26% of the company's assets or shares as required for conversion from a prospecting right to a mining right to an historically disadvantaged South African company who may be unable to pay market value therefor and the other requirements of the charter. Certainty with regard to outcomes and costs was listed by all respondents as a prerequisite for new investments.

The ninth question in the research questionnaire was:

How does your company perceive the clarity with regard to rights and obligations in terms of the provisions of the new Act have impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the uncertainty with regard to the

different interpretations of the new Act held by the respective companies and senior officials in the Department of Minerals and Energy.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the uncertainty with regard to the different interpretations of the new Act held by the respective companies and the senior officials in the Department of Minerals and Energy.

The tenth question in the research questionnaire was:

How does your company perceive the administrative delay with regard to the processing of applications for conversions, prospecting and mining rights in terms of the provisions of the new Act have impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the fact that investment decisions are dependant on certain and predictable outcomes. The uncertainty with regard to the different interpretations of the new Act held by the respective companies and the officials in the Department of Minerals and Energy is severely prejudicing investment decisions.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the fact that investment decisions are dependant on certain and predictable outcomes. The uncertainty with regard to the different interpretations of the new Act held by the respective companies and the officials in the Department of Minerals and Energy is prejudicing investment decisions.

One respondent commented to the researcher that according to information at his disposal, the South African minerals industry has lost out to approximately 20%-30% of investment in the global mining industry since the publication of the Mineral and Petroleum Resources Development Act in late 2002. The same percentage of loss of

investment can be extrapolated to the South African export coal mining industry, according to the respondent. The uncertainty regarding differing interpretations of the provisions of the Mineral and Petroleum Resources Development Act by the company's in the South African export coal industry and senior officials the Department of Minerals and Energy is a major factor in this regard.

5.4 Summary

The general replies and comments (with the exception of environmental social and land claims aspects, which are on par with other countries internationally) received from all respondents in relation to the above questions and the impact of the new Act on South Africa's attractiveness has a venue for investment in the export coal sector, indicate that the Mineral and Petroleum Resources Development Act has had a negative impact on the investment decisions of their companies and made South Africa a less attractive as a venue for investment when compared to other opportunities globally. One respondent commented to the researcher that according to information at his disposal, the South African minerals industry has lost out to approximately 20%-30% of investment in the global mining industry since the publication of the Mineral and Petroleum Resources Development Act in late 2002. The same percentage of loss of investment can be extrapolated to the South African export coal mining industry, according to the respondent. The uncertainty regarding differing interpretations of the provisions of the Mineral and Petroleum Resources Development Act by the company's in the South African export coal industry and senior officials the Department of Minerals and Energy is a major factor in this regard.

Chapter 6

Conclusions & Findings

6.1 Introduction

The object of this chapter is to draw conclusions and findings in relation to the research objective referred to below.

To examine and evaluate the effects and the repercussions of the new mining legislation introduced on 1 May 2004 on South Africa's attractiveness as a venue for foreign investment with specific reference to the country's coal export industry being a significant earner of foreign exchange.

The first part of this chapter compares the proposed research proposition which was developed from the conceptual framework as discussed in chapter four with the data obtained from the semi-structured interviews as discussed in chapter five. The purpose of this pattern matching will be to establish the degree of internal validity of the study. Conclusions will then be drawn. The second part of this chapter deals with recommendations and some final remarks.

6.2 Research findings and conclusions

The following proposed research proposition was developed from the conceptual framework as discussed in chapter four.

The new mining law regime which came into force on 1 May 2004, has negatively affected the attractiveness of South Africa as a venue for investment for the companies currently operating in the South African export coal industry, in relation to the yield and risk pertaining to future investments as compared to other countries competing for investment.

An analysis of the data obtained through the semi-structured interviews referred to in chapter five supports the conclusion that the new mining law regime which came into force on 1 May 2004 has negatively affected the attractiveness as a venue for investment for the respondent companies currently operating in the export coal industry in relation to the risk and yield pertaining to future investments as compared to other countries competing for investment. The data obtained from the respondents on the various aspects relating to the modern concept of security of tenure in relation to the relevant provisions of the new Act through the questionnaire and general observations, indicates that the investment decisions of the respondent companies is negatively impacted by the new Act.

One respondent commented to the researcher that according to information at his disposal, the South African minerals industry has lost out to approximately 20%-30% of investment in the global mining industry since the publication of the Mineral and Petroleum Resources Development Act in late 2002. According to the respondent same percentage can be extrapolated to the South African export coal mining industry.

From the above, the conclusion can be drawn that South Africa has become less attractive to investors as a venue for investment in the export coal industry and that the Act has discouraged such investment since coming into operation on 1 May 2004. Indications are that investments by multinational mining companies have been redirected to other countries presenting similar coal resource opportunities.

6.3 Recommendations

The findings of the study confirm that the existing body of research, which indicates that the weaker form of security of tenure such as that imposed by Government in terms of the new legislative regime currently applicable to the South African mining industry, has negatively impacted on the investment decisions of multinational mining enterprises and consequently proved to be detrimental to South Africa's competitive position in relation other developing countries in the mining industry.

The findings of the study support the research conducted by Etemad and Salmasi's (2002) concerning the modern theory of foreign direct investment as adapted to the

mining industry which concludes that it is the or nature of the authorization to prospect or mine as controlled by the local or national authorities (the right to mine, length of tenure and other policies conducive to mineral development i.e. the mining code of a country), which modulates the value attributed by investors to a mineral resource and determines the realizable value thereof to a specific investor. It is the magnitude of this modulation factor ranging from highly positive (e.g., set of incentives increasing the absolute value of the resource such as long term security and continuity of tenure of mineral rights) to highly negative (e.g., high transactional cost, risks, and disincentives reducing the absolute value of the resource) that determines the realisable value of a mineral deposit to a potential investor. It is further submitted that further research be conducted regarding the theory of internalisation and the impact of the requirements regarding the sale of up to 25% of the equity in mining assets thereon.

It is recommended that the necessary legislative amendments to the new mining law regime be effected in order to bring the South African regime into alignment with the various aspects of security of tenure which are regarded by mining multinational companies as the most important criteria in making investment decisions internationally (dealt with in chapter two and three of this study). The divergent interpretations of the relevant provisions of the Mineral and Petroleum Resources Development Act between senior officials within the Department of Minerals and Energy is of particular concern in this regard. This legislative and interpretational alignment is required in order for South Africa as a nation state to retain or enhance its international competitive advantage in the coal mining industry. In South Africa opposing socio-economic and environmental concerns however pull in opposite directions. The imperative of sustainable development requires from government to ensure appropriate land use, care for the environment both during mining and after closure and to ensure that the impact on local communities be limited and that the benefits of mining be shared by local communities and previously disadvantaged persons. The major challenge for a legislature is to achieve a balance between the security of tenure sought multinational companies who are able to invest large amounts of money in the risky business of exploration and mining and the equally compelling governmental imperative to protect the environment and ensure that mineral development enriches the lives of those affected by the activities.

Chapter 7

Article to be submitted for publication in the South African Business Review.

Title of article:

Effects of the New Mining Law Legislative Regime on Investment in the South African
Export Coal Industry

Effects of the New Mining Law Legislative Regime on Investment in the South African Export Coal Industry

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Abstract

The object of this research paper is to examine and evaluate the effects and the repercussions of the new mining legislation introduced on 1 May 2004 on South Africa's attractiveness as a venue for foreign investment with specific reference to the country's coal export industry being a significant earner of foreign exchange. The following research proposition which was developed from the conceptual framework is compared with the data obtained from the semi-structured interviews: The new mining law regime which came into force on 1 May 2004, has negatively affected the attractiveness of South Africa as a venue for investment for the companies currently operating in the South African export coal industry, in relation to the yield and risk pertaining to future investments as compared to other countries competing for investment. The case study type of research methodology was utilised availing itself of examining all relevant literature as well as obtaining data on the issues envisaged by means of a questionnaire and interviews of people knowledgeable about the industry and its environment. The research was limited to three companies which mine and process sixty percent of the coal exported through the Richards Bay Coal Terminal. An analysis of the data obtained through the semi-structured interviews with the respondents indicates that the new mining law regime which came into force on 1 May 2004 has negatively affected the attractiveness of South Africa as a venue for investment for the respondent companies currently operating in the export coal industry in relation to the risk and yield pertaining to future investments as compared to other countries competing for such investment. Indications are that such investments have been redirected to other countries presenting similar coal resource mining and export opportunities

Introduction

South Africa has recently undergone a rather dramatic legislative revision of its mining law regime. The change in the legislative regime has brought about a fundamental revision of the concept of security of tenure in respect of rights to mineral resources which impacts on the international competitiveness of the South African mining law regime.

In recent decades, foreign direct investment by mining multinational enterprises has been the dominant source of mineral development projects in many developing countries, inclusive of South Africa (Dale 1996:235). Research has shown that a country's international competitive advantage in the mining industry in attracting foreign direct investment from mining multinational enterprises can be improved or impaired by legislation and government policy. Security and continuity of tenure of rights to mineral resources is a major variable in the risk evaluation by investors as to preferring one country above another (Bastida 2001: 72).

This paper examines and evaluates the effects and the repercussions of the Mineral and Petroleum Resources Development Act 22 Of 2002 which came into operation 1 May 2004 on South Africa's attractiveness as a venue for foreign investment with specific reference to the country's coal export industry being a significant earner of foreign exchange.

Objective of the research

This research paper has as an objective to ascertain whether the diminished security of tenure brought about by the recent changes to South Africa's mining law legislation as embodied in the Mineral and Petroleum Resources Development Act 22 Of 2002 has in fact had a negative impact on the investment risk perceptions of multinational mining enterprises in the export coal industry and consequently detracted from South Africa's potential as a competitor for foreign investment.

The research was restricted to the following objective:

To examine and evaluate the effects and the repercussions of the new mining legislation introduced on 1 May 2004 on South Africa's attractiveness as a venue for foreign investment with specific reference to the country's coal export industry being a significant earner of foreign exchange.

The study is of assistance in determining whether the existing body of research, which indicates that the weaker form of security of tenure such as that imposed by Government in terms of the new legislative regime applicable to the South African mining industry, will negatively impact on the investment decisions of multinational mining enterprises and consequently prove detrimental to South Africa's competitive position in relation other developing countries in the mining industry, is confirmed by this research study.

Based on the data collected from the respondent companies studied the research findings of researchers with regard to suggested modifications to modern foreign direct investment theory pertaining to mining, can be compared with the prevailing reality in the South African export coal mining industry.

Conceptual framework of research

In this research, the conceptual framework is based on:

- a comparison between the old and the new South African mining laws,
- the relevant aspects of the modern concept of security of tenure utilised for purposes of making the aforementioned comparison; and
- an examination of the research findings concerning the modern theory of foreign direct investment as adapted to the mining industry.

A comparison between the old and the new South African mining laws

The Mineral and Petroleum Resources Development Act 28 of 2002 came into operation on 1 May 2004 and repealed the previous common law regime (relating to the acquisition, retention, timing of the exercise of entitlements and transfer of mineral rights) as well as the Minerals Act 50 of 1991, which combined for a high degree of security and continuity of tenure for mining enterprises based on a system of privately held property rights (Dale 1996: 298-305; Dale et al 2005).

The mining law regime which applied prior to 1 May 2004 in terms of the repealed Minerals Act 50 of 1991 was a two tier system founded in the common law of private ownership of property (including the rights to minerals) combined with a legislative licensing system (Kaplan & Dale 1992). The holder of the privately held rights to a mineral was at liberty, driven only by market forces, to exercise and enjoy the mineral rights, or to grant a lease of

the right to prospect or mine to investors or to alienate and transfer the mineral rights to investors. This system encompassed the following (Dale 1996: 298-305):

- Conversion from exploration rights to mining rights usually occurred by exercising an option in a prospecting contract granted by the private holder of the rights to a mineral, thereby securing the mineral rights for the investor or a mineral lease conferring the right to mine. There was little, if any, State intervention and no insecurity with regard to continuity of tenure of mineral rights. This system preserved the continuity of tenure from a prospecting phase to a mining phase.
- Mineral rights could be acquired from private owners by negotiation in accordance with the law of contract, were registerable in public deeds offices, could be mortgaged to finance mining projects, usually endured for the economic life of mine and were constitutionally protected against expropriation by the State.
- The exercise of the common law rights to prospect and mine was subject to the acquisition of mining and prospecting licences or permits from the State in accordance with the Minerals Act 50 of 1991. These licences regulated prospecting for and mining of minerals in an optimal, orderly and environmentally sustainable manner. The State was obliged to grant such licences if the applicants held the common law mineral rights and complied with the relevant criteria pertaining to the optimal exploitation and utilisation of minerals, health and safety, surface protection and the rehabilitation of the environment.

The new regime as provided for in the Mineral and Petroleum Resources Development Act 28 of 2002 embodies a diminished form of security and continuity of tenure when compared with the former regime which it replaced. This new system encompasses the following (Dale 1996: 298-305; Dale et al 2005):

- Security and continuity of tenure in the Mineral and Petroleum Resources Development Act 28 of 2002 are to a large extent based on the discretions of administrative regulators in relation to the requisite socio-economic transformation objectives of government such as the Broad Based Socio-Economic Empowerment Charter requirements. These include amongst other minimum requirements relating to the transfer of ownership in the relevant mines to historically disadvantaged South Africans as well as other socio-economic transformation targets.

- The Mineral and Petroleum Resources Development Act 28 of 2002 does not adopt the aspect of granting mining rights in perpetuity or for the life of the mine but limits itself to a maximum fixed initial period with rights of renewal for further maximum fixed period.
- The Mineral and Petroleum Resources Development Act 28 of 2002 does not provide security of tenure for all existing rights and the effect thereof is to bring about an expropriation of some of the former rights conferred under the previous regime.
- Administrative decisions taken in terms of the Mineral and Petroleum Resources Development Act 28 of 2002 are not subject to judicial appeal or international arbitration.
- New rights granted in terms of the Mineral and Petroleum Resources Development Act 28 of 2002 may not be ceded, transferred, let, sublet, assigned, alienated, or otherwise disposed of, or encumbered by mortgage without the consent of the Minister. Old order rights granted in terms of the previous legislation cannot be ceded, transferred, let, sublet, assigned, alienated, or otherwise disposed of, or encumbered by mortgage until they are converted to new order rights. Subsequent to such conversion, Ministerial consent must be obtained.
- Holders of the new rights into which a pre-existing old right has been converted, must continuously and actively conduct operations in accordance with the relevant work programme. Under the former regime, the timing of prospecting and mining activities was not regulated.
- Unlike the case in regard to rights under the previous regime where the State did not hold the vast majority of the mineral rights, State royalties are payable in respect of all new prospecting and mining rights with the exception of exploration rights.
- The terms and conditions of the new rights cannot be amended or varied without the consent of the Minister. Old order rights in terms of the previous regime were consensual in nature and could be varied by the parties thereto.
- While old order rights were not subject to requirements in regard to broad based socio-economic empowerment, the holding of new rights requires the holder to further the objects of empowerment and comply with a prescribed social and labour plan. This amongst others entails the transfer of up to 26% of the equity in the mining company to historically disadvantaged persons at considerable cost to the holder of the right as most historically disadvantaged South African companies or individuals generally do not have access to capital to pay therefore.

The relevant aspects of the modern concept of security of tenure utilised for purposes of making the aforementioned comparison

Security of tenure has been ranked as one of the most important among the investment decision criteria in a series of surveys of mining companies' investment preferences (Johnson 1990; Otto 1992; World Bank 1992; Eggert 1997; Bastida 2001; Etemad & Salmasi 2002). Security of tenure as it relates to the right to mine a mineral has traditionally been described as a reasonable entitlement to extraction rights following a successful exploration phase. Security of mineral tenure seen in a narrow sense refers to the legal entitlement of a person or enterprise to mine after successful exploration. The mineral and mining laws of a country may grant the prospector an automatic right to mine, grant it a preferent claim to obtain the right to mine or allow the regulator the discretion to grant the right to mine to the prospector. Each of these alternative regulatory actions will determine whether the mining legislative regime of a country is seen as either providing security of mineral tenure or not. The trend in developing countries has been to recognise the competitive advantage of a mining law regime which promotes security of mineral tenure and thus reduces discretionary grants by government agencies thereby providing multinational mining enterprises with a more or less automatic right to obtain a mining right. The various aspects comprising this modern concept of security of tenure include (Bastida 2001: 31-43):

- clear and transparent rules and procedures together with the minimisation of administrative discretion are determinants of certainty of rights;
- the right to challenge discretionary decisions by the regulator in court or through international arbitration;
- the length of time allowed to a company to explore and develop a mine. This security with regard to the continuity of prospecting and mining rights applies to the duration, renewability and the cancellation of such rights by the State;
- the need to limit the time period used by government for the granting mineral rights, approving applications and processing key documents;
- the investor should have the right to retain the mining rights even if he is unable to develop the deposit temporarily due to unfavourable market conditions, lack of finance or any other reason;

- systems based on private ownership of mineral rights are objectively considered to have merit on better achievement of security of tenure than is possible in systems based on State ownership of mineral rights;
- the ability to transfer title, and to mortgage such title to raise finance. These aspects are included under the modern concept of security of tenure which also encapsulates guarantees against expropriation;
- certainty with regard to the calculation and predictability of transaction costs (defined as the costs of all market transactions including search and information costs, bargaining and decision costs and policing and enforcement costs) is an aspect of the modern concept of security of tenure;
- certainty with regard to the fate of existing rights in a transitional phase between an old and new legislative code. The erosion of existing rights in the transitional phase between an old and new mineral law regime necessarily has an adverse impact on security of tenure; and
- the achievement of a legislative balance between the security of tenure sought by investors intending to invest large amounts of money in the risky business of exploration and mining and the equally compelling governmental imperative to protect the environment and ensure that development enriches the lives of those affected by the activities.

An examination of the research findings concerning the modern theory of foreign direct investment as adapted to the mining industry.

Although modern theory of foreign direct investment is well suited for mining it is in need of modification in order to explain the specific complexities (Etemad & Salamasi 2001: 116-126). The Eclectic theory of foreign direct investment refers to location-specific advantages accruing to an investing firm due to the use of resource endowments or assets tied to a particular foreign location. These location specific advantages are combined with the firm's own specific expertise and assets to improve the profitability of an investment. When these firm-specific advantages are combined with location-specific advantages, a business' viability and profitability can be enhanced by internalisation. Internalisation theory refers to the leveraging by a multinational enterprise of its own resources, managing and marketing know-how when expanding into international markets (instead of exporting its products or entering into a licensing agreement with a foreign company).

An examination of the latest research findings concerning the modern theory of foreign direct investment as adapted to the mining industry concludes assuming a very rich mineral deposit which is highly economical to exploit by a firm through its specific competencies, that it is the nature of the authorization to prospect or mine, the length of tenure and other policies as controlled by the local or national authorities (i.e. the mining code of a country), which modulate the value attributed to a mineral resource by a mining multinational company and determines the realizable value thereof. t is the magnitude of this modulating factor ranging from highly positive to highly negative that determines the realisable value of a specific mineral deposit to a potential investor (Etemad & Salamasi 2001: 116-126).

Hypothesis investigated

The criteria relating to the various aspects of the modern concept of security of tenure identified and listed above are important in determining a favourable and internationally competitive investment environment exists in the South African export coal industry. The extent to which South Africa's new mining code violates these criteria negatively modulates the risks and investment yield of local mineral deposits and determines the realisable value thereof as compared with similar deposits in competing countries.

The above conceptual framework is used as a template with which the results of the case study are compared. The proposed research proposition, developed from the theoretical study which is used as a conceptual framework, is shown below.

Proposed research proposition

The new mining law regime which came into force on 1 May 2004, has negatively affected the attractiveness of South Africa as a venue for investment for the companies currently operating in the South African export coal industry, in relation to the yield and risk pertaining to future investments as compared to other countries competing for investment.

Research Strategy

The research methodology employed in this research, namely the case study methodology entailed mainly examining all relevant literature as well as obtaining data on the issues envisaged by the questionnaire and the interviewing of people knowledgeable about the industry and its environment.

The research was limited to three of the companies responsible for mining and processing 60 percent of the coal exported through the Richards Bay Coal Terminal. The three companies collectively hold sixty percent of the shares in the terminal entitling them to export a maximum of 43.61 million tons of the 72 million tons per annum capacity of the terminal. The balance of the coal exported through this terminal is produced by various other companies which are mostly locally based.

The only other coal export terminals which are accessible to company's producing export quality coal in South Africa are located in Durban, with a capacity of between one and two million tons per annum while a similar amount of coal passes through the Maputo terminal in Mozambique (Barker 2000).

Richards Bay Coal Terminal Company Ltd is a company established and funded by the relevant shareholders to operate the largest export coal terminal in the world. Established in 1976 with an original capacity of 12 million tons per annum, it has grown into an advanced 24-hour operation exporting more than 68 million tons of coal a year to buyers around the world. The terminal's shareholders collectively control 49 coal mines located in KwaZulu Natal and the Mpumalanga provinces. Richards Bay Coal Terminal shares a strong co-operative relationship with the Spoornet division of Transnet Ltd, which laid the 560 kilometre railway line linking the coal mines to the port, and with National Ports Authority, which coordinates the arrival and departure of more than 700 ships per annum (Barker: 2000). A Phase V expansion of the terminal is planned to commence towards the end of 2007 and will take 27 months to complete. Throughput capacity at the terminal will be increased from 72 Mt/annum to 92 Mt/a. The additional export tonnage capacity will be made available to common users on application. (Richards Bay Coal Terminal Company Ltd, 2006).

A questionnaire was utilised for purposes of conducting the semi-structured interviews. The design of the questionnaire followed the following steps prior to the research. Firstly the factors relating to the modern concept of security of tenure which has been ranked as one of the most important among the investment decision criteria in a series of international surveys of the investment preferences of multinational mining companies, formed the basis of the questionnaire. These criteria are applied in relation to the relevant provisions of the Mineral and Petroleum Resources Development Act 28 of 2002 in order to formulate the questions relevant to the proposed research proposition. A distinction was drawn between the questions

in relation to future investment in respect of existing mining operations, which were acquired under the former mining law regime, and new prospecting and mining operations, to be established in terms of the Mineral and Petroleum Resources Development Act 28 of 2002. The instrument was subsequently discussed with colleagues of the researcher, who are senior mining executives knowledgeable about the research topic.

Interviews with appropriate officials representing the relevant companies were difficult to obtain due to the sensitivity of the current relationships between the companies per se who are competitors in the global export coal industry, and between the respective companies and the Department of Minerals and Energy, which constitutes the State regulator responsible for the implementation of the Mineral and Petroleum Resources Development Act 28 of 2002. A number of officials representing the coal division of a multinational company, which is the holder of the second largest share of the export entitlement in Richards Bay Coal Terminal Company Ltd, were approached by the researcher to participate in the study but the necessary approval from the board of directors could not be obtained. The respondents interviewed were previously known to the researcher due to the researcher being an employee of one of the respondent companies and having had previous business dealings with the respondents from the other two companies. Confidentiality undertakings were provided by the researcher in all instances and the intent of the study throughout is to prevent release of privileged information.

Although not documented in a formal way, direct observation as a source of evidence must be included resulting from the fact that the researcher has been employed in a legal advisory position in the Department of Minerals and Energy and the private sector of the mining industry since January 1992. Special care was, however, taken by the researcher to remain objective throughout the research project.

Copies of the research questionnaire, inclusive of a covering letter stating the purpose of the research and providing an undertaking to keep sensitive information confidential, were sent to the respondents by e-mail prior to the personal interviews being conducted. All data obtained through the semi-structured interviews, which were all personally conducted by the researcher with the individual respondents, was documented in the separate questionnaires administered to each respondent. Comments by recipients regarding the reasons for their responses to the relevant questions, where applicable, were documented.

Research findings

The companies researched are all involved in local active exploration, mine development and the processing of coal for export via their shareholding in the Richards Bay Coal Terminal Company Ltd. Two of the companies have London based parent companies which have other investments in the export coal industry in Australia, South America and Indonesia.

Two of the respondents interviewed are executive directors of their companies, both with international mining experience in establishing and managing the mining operations of multinational mining enterprises relating to coal, gold and iron ore in Australia, Indonesia, South Africa, South America, Canada, Papua New Guinea and the United States of America. A third respondent holds the position of projects director in his company and has international experience in coal prospects and mining projects internationally. The remaining two respondents are senior executive managers in the legal and mining rights departments of their respective companies with experience in the acquisition of prospecting and mining rights in South Africa and internationally. The average work experience of the respondents in the mining industry is approximately 20 years. This aspect adds to the reliability of this research.

The first question in the research questionnaire was:

How does your company perceive the change from a system of private ownership of mineral rights to one of State sovereignty and custodianship of mineral rights as impacting on future investment decisions?

With regard to existing mining operations which were acquired under the former mineral law regime, three of the respondents replied that the investment decisions of their companies are negatively affected. Reasons given include projects for the expansion of existing mining operations being put on hold due to the uncertainties pertaining to conversion to new order mining rights. Two of the respondents replied that the change has no impact on investment decisions of their companies as the Department of Minerals and Energy has no powers in terms of the Mineral and Petroleum Resources Development Act to refuse an application for conversion of old order mining rights to new order rights.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, four of the respondents replied that investment decisions are negatively impacted. Reasons given include uncertainty regarding the interpretation of the

requirements the new Act and the Broad Based socio-economic empowerment charter. One respondent replied that there would be no impact on the investment of his company as a result of the new act being consistent with the position in other competing countries internationally.

The second question in the research questionnaire was:

How has the transferability of rights in terms of the Mineral and Petroleum Resources Development Act (now subject to ministerial consent), impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, all of the respondents replied that investment decisions are negatively affected. Reasons given include the limitation on the transactional freedom of companies and the inability to transfer interests in such rights to historically disadvantaged person empowered companies.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include uncertainty regarding the manner in which the Minister of Minerals and Energy will exercise the discretion with regard to granting the necessary consent for transfer of prospecting and mining rights.

The third question in the research questionnaire was:

How has the change with regard to the bondability (as security for debt) of prospecting and mining rights impacted on your company's investment decisions with regard to existing and new rights (this relates *inter alia* to the lapsing of rights on liquidation of the holder and ministerial consent required for execution sales in other instances. Reconnaissance permissions and retention permits cannot be mortgaged)?

With regard to existing mining operations which were acquired under the former mineral law regime, four of the respondents replied that investment decisions are not impacted. Reasons given are that the companies in question did not need to bond existing rights in order to obtain access to funding. One respondent replied that investment decisions of his company are negatively affected. The reason given is the inability to vendor finance equity sales to historically disadvantaged persons.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the inability or extreme difficulty to vendor finance equity sales to historically disadvantaged persons where the vendor acquires a security over the historically disadvantage person's share of the prospecting or mining rights. Commercial transactions regarding prospecting and mining rights have become very difficult to conclude.

The fourth question in the research questionnaire was:

How have the administrative discretions which apply to the granting, retention, renewal of new prospecting and mining rights and the conversion of old to new order rights and (which are subject to administrative appeal and judicial review) impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the uncertainty with regard to how the administrative discretions are to be applied to the conversion to new order rights by the relevant officials, will be exercised.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the uncertainty with regard to how the administrative discretions, will be exercised. This concurs with a media report that all the companies in the industry are in the process of converting their old order prospecting and mining rights to new order rights in terms of the Mineral and Petroleum Resources Development Act 28 of 2002. This process has resulted in protracted negotiations and in certain instances litigation, with the State as a result of different interpretations pertaining to the obligations on the respective companies in accordance with the Charter on Broad Based Socio-Economic Empowerment (Creamer, 2006).

The fifth question in the research questionnaire was:

How does your company perceive the rights to retain its rights during conversion from a prospecting to a mining phase, the renewal of prospecting or mining rights, the ability to acquire retention permits as well the Minister's powers to cancel or suspend rights and

permits, to have impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, four of the respondents replied that investment decisions are negatively impacted. Reasons given include the uncertainty with regard to the broad based socio-economic empowerment requirements for conversion from old to new order mining rights. This relates to the retention of such old order rights subsequent to the transitional period as provided for in the new Act for conversion to new order rights. One respondent replied that the investment decisions of his company were not impacted. The reason provided was that the Department of Minerals and Energy is not entitled to refuse an application for conversion and that the question in effect only occurs after the conversion to new order rights. Assuming the high quality and competency of the South African judiciary to review incorrect decisions by administrators, the relevant provisions of the new Act will have no impact on the investment decisions of his company.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, four of the respondents replied that investment decisions are negatively impacted. Reasons given include the uncertainty with regard to the interpretation of the new Act and Broad Based Socio-Economic Development Charter relating to historically disadvantage South African empowerment and social development obligations. One respondent replied that the investment decisions of his company were not impacted. The reason provided was that assuming the high quality and competency of the judiciary to review incorrect decisions by administrators, the relevant provisions of the new Act will have no impact on the investment decisions of this company.

The sixth question in the research questionnaire was:

How does your company perceive the aspects related to the increased legal obligations and costs pertaining to environment management, land use and dealing with aboriginal claims to have impacted on your company's investment decisions?

With regard to existing mining operations which were acquired under the former mineral law regime, four of the respondents replied that investment decisions are not impacted. Reasons given are that the increased legal obligations and costs are on par with those in other countries. One respondent replied that the investment decisions of his company were

negatively impacted. The reason provided was the increased legal compliance costs and uncertainty with regard to mine closure and water treatment costs.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, four of the respondents replied that investment decisions are not impacted. Reasons given are that the increased legal obligations and costs are on par with those in other countries. One respondent replied that the investment decisions of his company were negatively impacted. The reason provided was the increased legal compliance costs and uncertainty with regard to mine closure and water treatment costs

The seventh question in the research questionnaire was:

How does your company perceive the financial aspects (costs of production, including the costs of public policies as regulatory requirements, royalties, income taxes, tariffs, search and information costs, bargaining and decision costs and policing and enforcement costs) to have impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the increased costs of selling up to 26% of its equity for purposes of conversion to historically disadvantage South African companies who may be unable to pay market related compensation for such equity. All respondents replied that the costs pertaining to investments in South Africa will be significantly higher.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the increased costs of selling up to 26% of the assets for conversion to historically disadvantage South African companies who are unable to pay for value. All respondents replied that the costs pertaining to new investments in South Africa will be significantly higher.

The eighth question in the research questionnaire was:

How does your company perceive its ability to retain existing rights and convert the same into new order rights in terms of the transitional provisions to have impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, three of the respondents replied that investment decisions are negatively impacted. Reasons given include uncertainty with regard to the timing of the conversion of old order mining rights and the unpredictable costs of selling 15% to 26% of the company's assets or equity as required for conversion to an historically disadvantage South African company who may be unable to pay for value as well and the other requirements of the mining industry charter. Two of the respondents replied that the investment decisions of their companies would not be impacted. Reasons given include the fact that the authorities do not have the power to refuse an application for conversion of an existing mining right.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include uncertainty with regard to the unpredictable costs of selling 26% of the company's assets or equity as required for conversion from a prospecting right to a mining right to a historically disadvantaged South African company who may be unable to pay fair value and the other requirements of the mining industry charter. Certainty with regard to outcomes and costs was listed by all respondents as a prerequisite for new investments.

The ninth question in the research questionnaire was:

How does your company perceive the clarity with regard to rights and obligations in terms of the provisions of the new Act have impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the uncertainty with regard to the different interpretations of the new Act held by the respective companies and the officials in the Department of Minerals and Energy.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the uncertainty with regard to the different interpretations of the new Act held by the respective companies and the officials in the Department of Minerals and Energy.

The tenth question in the research questionnaire was:

How does your company perceive the administrative delay with regard to the processing of applications for conversions as well as new prospecting and mining rights in terms of the provisions of the new Act have impacted on your company's investment decisions with regard to existing and new rights?

With regard to existing mining operations which were acquired under the former mineral law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the fact that investment decisions are usually dependant on certain and predictable outcomes. The uncertainty with regard to the differing interpretations of the new Act held by the respective companies and the officials in the Department of Minerals and Energy is prejudicing such investment decisions.

With regard to new operations or so called green fields mining projects to be acquired in terms of the new mining law regime, all of the respondents replied that investment decisions are negatively impacted. Reasons given include the fact that investment decisions are usually dependant on certain and predictable outcomes. The uncertainty with regard to the differing interpretations of the new Act held by the respective companies and the officials in the Department of Minerals and Energy is prejudicing investment decisions.

The general with the exception of environmental social and land claims aspects, which are perceived to be on par internationally, the replies comments received from all respondents in relation to the above questions and the impact of the new Act on South Africa's attractiveness has a venue for investment in the export coal sector, indicate that the Mineral and Petroleum Resources Development Act has had a negative impact on the investment decisions of their companies and made South Africa less attractive as a venue for investment when compared to other opportunities internationally. One respondent commented to the researcher that according to information at his disposal, the South African minerals industry has lost out to approximately 20% of investment in the global mining industry since the publication of the Mineral and Petroleum Resources Development Act in late 2002. The same percentage of loss of investment can be extrapolated to the South African export coal mining industry according to the respondent. The uncertainty regarding differing interpretations of the provisions of the Mineral and Petroleum Resources Development Act by the respective companies in the South

African export coal industry and the Department of Minerals and Energy is the main cause of this phenomenon.

Research findings and conclusions

The following proposed research proposition was developed from the conceptual framework as discussed in chapter four: The new mining law regime which came into force on 1 May 2004, has negatively affected the attractiveness of South Africa as a venue for investment for the companies currently operating in the South African export coal industry, in relation to the yield and risk pertaining to future investments as compared to other countries competing for investment.

An analysis of the data obtained through the semi-structured interviews referred to in chapter five supports the conclusion that the new mining law regime which came into force on 1 May 2004 has negatively affected the attractiveness as a venue for investment for the respondent companies currently operating in the export coal industry in relation to the risk and yield pertaining to future investments as compared to other countries competing for investment. The data obtained from the respondents on the various aspects relating to the modern concept of security of tenure in relation to the relevant provisions of the new Act through the questionnaire and general observations, indicates that the investment decisions of the respondent companies have been negatively impacted by the new Act.

One respondent commented to the researcher that according to information at his disposal, the South African minerals industry has lost out to approximately 20% of investment in the global mining industry since the publication of the Mineral and Petroleum Resources Development Act in late 2002. According to the respondent same percentage can be extrapolated to the South African export coal mining industry.

From the above the conclusion can be drawn that South Africa has become less attractive to investors as a venue for investment in the export coal industry and that the Act has discouraged such investment since its publication in late 2002. Indications are that such investments have been redirected to other countries presenting similar coal resource opportunities.

Recommendations

The study confirms that the existing body of research, which indicates that the weaker form of security of tenure such as that imposed by Government in terms of the new legislative regime applicable to the South African mining industry, has negatively impacted on the investment decisions of multinational mining enterprises and consequently proved to be detrimental to South Africa's competitive position in relation other developing countries in the mining industry.

The study confirms the research conducted by Etemad and Salmasi (2002) concerning the modern theory of foreign direct investment as adapted to the mining industry, which concludes that it is the or nature of the authorization to prospect or mine as controlled by the local or national authorities (the right to mine, length of tenure and other policies conducive to mineral development i.e. the mining code of a country), which modulates the value attributed by investors to a mineral resource and determines the realizable value thereof to a specific investor. It is the magnitude of this modulation factor ranging from highly positive (e.g., set of incentives increasing the absolute value of the resource such as long term security and continuity of tenure of mineral rights) to highly negative (e.g., high transactional cost, risks, and disincentives reducing the absolute value of the resource) that determines the realisable value of a mineral deposit to a potential investor. It is further submitted that additional research be conducted regarding the theory of internalisation and the impact of the requirements of the new legislation such as the sale of up to 26% of the equity in mining companies to historically disadvantaged persons.

It is recommended that the necessary legislative amendments to the new mining law regime be effected in order to bring the South African regime into alignment with the various aspects of security of tenure which are regarded by mining multinational companies as the most important criteria in making investment decisions internationally. The divergent interpretations of the relevant provisions of the Mineral and Petroleum Resources Development Act is of particular concern in this regard. This alignment is required in order for South Africa as a nation state to retain or enhance its international competitive advantage in the coal mining industry. Opposing socio-economic and environmental concerns however pull in opposite directions. The imperatives of sustainable development requires from governments to ensure appropriate land use, care for the environment both during mining and after closure and to ensure that the impact on local communities be limited and that the

benefits of mining be shared by local communities and previously disadvantaged persons. The major challenge for a legislature is to achieve a balance between the security of tenure sought by those multinational mining companies who wish to invest large amounts of money in the risky business of exploration and mining and the equally compelling governmental imperative to protect the environment and ensure that development enriches the lives of those affected by the activities.

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Covering letter to research questionnaire

Confidential

To the Senior Official
Company

Dear Sir,

Research concerning the effects of the Mineral and Petroleum Resources Development Act on investment in the export coal industry

As part of my studies for a MBL degree through the UNISA School of Business Leadership, I am conducting research in my private capacity concerning the effects of the Mineral and Petroleum Resources Development Act on investment decisions of companies in the export coal sector.

I undertake to keep the identities of the specific respondents anonymous. Should you or your company consider any of the questions in the attached questionnaire as being commercially sensitive you need not answer the same. The relevant information will be treated as confidential and will only be used in my personal capacity for purposes of the research study. On completion of this study all information will be destroyed and shredded.

Yours sincerely

Shane Laubscher

Appendix 1

Research Questionnaire

Research into the effects of the Mineral and Petroleum Resources Development Act
28 of 2002 ("MPRDA")
Questionnaire on Investment Decisions

For the attention of the Senior Official of:

Position in Company: _____

Experience in the industry _____

Name of Interviewer: _____

Date of Interview: _____

Question 1 (Change in nature from privately held to State held minerals)

How does your Company perceive the change from a system of private ownership of mineral rights to one of State sovereignty and custodianship of mineral rights (in terms of the MPRDA) as impacting on your future investment decisions (this specifically pertains to change in nature of mining and prospecting rights from privately owned real rights to administrative law rights to be granted from the State in terms of the MPRDA):

(i) With regard to existing operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

(ii) With regard to a new operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

Question 2 (Transferability of prospecting and mining rights)

How has the transferability of rights in terms of the MPRDA (now subject to ministerial consent), impacted on your Company's investment decisions with regard to existing and new rights:

(i) With regard to existing operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

(ii) With regard to a new operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

Question 3 (Bondability of Rights)

How has the change with regard to the bondability (as security for debt) of prospecting and mining rights in terms of the MPRDA impacted on your Company's investment decisions with regard to existing and new rights (this relates *inter alia* to the rights lapsing of rights on liquidation of the holder and ministerial consent required for execution sales in other instances. Reconnaissance permissions and retention permits cannot be mortgaged):

(i) With regard to existing operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

(ii) With regard to a new operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

Question 4 (Administrative discretions)

How has the administrative discretions which apply to the granting, retention, renewal of new prospecting and mining rights and the conversion of old to new order rights and (which are subject to administrative appeal, judicial review and judicial appeal in terms of the MPRDA) impacted on your Company's investment decisions with regard to existing and new rights:

(i) With regard to existing operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

(ii) With regard to a new operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

Question 5 (Security and Continuity of Tenure)

How does your Company perceive the rights to retention of rights from a prospecting to a mining phase, the renewal of prospecting or mining rights, the ability to acquire retention permits as well the Minister's powers to cancel or suspend rights and permits in terms of the MPRDA, to have impacted on your Company's investment decisions with regard to existing and new rights:

(i) With regard to existing operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

(ii) With regard to a new operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

Question 6 (Environment, land use and aboriginal claims)

How does your Company perceive the aspects related to the increased legal obligations and costs related to environment management, land use and dealing with aboriginal claims in terms of the MPRDA to have impacted on your Company's investment decisions:

(i) With regard to existing operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

(ii) With regard to a new operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

Question 7 (Transaction Costs)

How does your Company perceive the financial aspects in terms of the MPRDA (costs of production, including the costs of public policies as regulatory requirements, royalties, income taxes, tariffs, search and information costs, bargaining and decision costs and policing and enforcement costs) to have impacted on your Company's investment decisions with regard to existing and new rights:

(i) With regard to existing operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

(ii) With regard to a new operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

Question 8 (Continuity of tenure with regard to existing old order rights)

How does your Company perceive its ability to retain existing rights and convert the same into new order rights in terms of the transitional provisions of the MPRDA to have impacted on your Company's investment decisions with regard to existing rights:

(i) With regard to existing operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

(ii) With regard to prospecting rights and potential new operations ?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

Question 9 (Clarity of rights and obligations)

How does your Company perceive the clarity with regard to rights and obligations in terms of the provisions of the MPRDA to have impacted on your Company's investment decisions with regard to existing and new rights?

(i) With regard to existing operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

(ii) With regard to prospecting rights and potential new operations ?

- d. No impact.
- e. Positive impact.
- f. Negative impact.

Question 9 (Administrative delays in the processing of prospecting and mining rights)

How does your Company perceive the delay by the Department of Minerals and Energy with regard to applications for prospecting and mining rights in terms of the provisions of the MPRDA to have impacted on your Company's investment decisions with regard to existing and new rights?

(i) With regard to existing operations?

- a. No impact.
- b. Positive impact.
- c. Negative impact.

(ii) With regard to prospecting rights and potential new operations ?

- g. No impact.
- h. Positive impact.
- i. Negative impact.

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