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Prioritisation of Markets for Growth of South African Majority Black-Owned Junior Coal Mining Firms

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A consultancy report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

Johannesburg, 2019

DECLARATION

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

Zaheer Saloojee

Signed at ……Johannesburg……

On the …29th….. day of ….May… 2019.

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4) Dr Yussuf Saloojee for reviewing and editing the report.

SUPPLEMENTARY INFORMATION

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ABSTRACT

South African majority black-owned junior coal miners (MBOJCMs) can sell coal to the state-owned power utility, Eskom, the export market and local industry. The allocation of limited resources between these markets can affect profitability and sustainable growth. Prioritising these markets, to achieve the optimal sales mix, is therefore a critical decision for MBOJCMs.

The strategic capabilities of MBOJCMs was studied to determine their competitive advantage compared to other resource companies, and to recommend how they should prioritise the allocation of their resources and funds between the three markets.

The study adopted a mainly qualitative approach. Semi-structured interviews were conducted with thirteen coal industry experts to gain an understanding of the current coal environment, and to explore the different dynamics facing MBOJCM's and the markets in which they operate. A SWOT analysis was followed by the application of the GE-McKinsey matrix.

Based on their strengths and the attractiveness of the different markets, it was determined that MBOJCMs are best positioned to supply Eskom. Although the export markets and the local industrial markets also offer growth potential and provide higher profit margins, Eskom's drive to empower MBOJCMs and the state-owned utility's insatiable demand for coal provides more stability for juniors that can secure long-term supply contracts. The lower grade coal that juniors generally produce is also better suited to Eskom and the logistics involved in supplying the power-producer are easier for them to deal with.

EXECUTIVE SUMMARY

Being majority black-owned, in a country that is committed to transformation, offers a company a competitive advantage in the national coal industry. This report study identifies the strategic capabilities of majority black-owned junior coal miners (MBOJCMs) and explores the markets to which they can sell their coal.

The relevance of this report is enhanced by the changing dynamics in the global and local coal industries, which are creating new opportunities for MBOJCMs. The recovery in seaborne coal prices since the beginning of 2016, and the increase in demand for lower-grade SA coal by the Asian markets have improved the attractiveness of the export markets. At the same time, Eskom's black emerging miner (BEM) strategy and the BBBEE preferential procurement policies of local industrial customers continue to attract MBOJCMs to these markets. With the option to sell coal to these markets, MBOJCMs are faced with a difficult strategic decision of how to allocate their limited resources in order to realise the best return on investment.

While the export market and local industrial market offer better margins, Eskom provides stability if a long-term contract is signed with the power utility. Although, Eskom's current financial woes and the possible restructuring of the state-owned entity is becoming more of a concern for their suppliers. Other factors that influence how a MBOJCM should prioritise the markets to which to sell, and which have been considered in this report study include: the quality of coal produced by MBOJCMs and suitability for the different markets; the capital and infrastructure requirements of each market; barriers

to entering a market; the competitive intensity in a market; the growth prospects of each market.

The report study reveals that MBOJCMs have a competitive advantage in the Eskom market and they should, therefore, focus on supplying Eskom and prioritise investments accordingly. To a lesser degree, both the inland market and the export market also offer opportunities for MBOJCMs to generate profits, with the inland market being the more attractive of the two. Investing in the capacity to supply these two markets would help MBOJCMs to diversify their revenue base, but these markets should receive a smaller share of the investment capital.

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LIST OF ABBREVIATIONS

BBBEE	Broad Based Black Economic Empowerment
BEM	Black emerging miner
MCSA	Minerals Council South Africa (previously, The Chamber of Mines)
MBOJCM	Majority Black-owned junior coal miner
MPRDA	Mineral and Petroleum Resources Development Act
Mt	Million Tonnes
RBCT	Richards Bay Coal Terminal
SA	South Africa
SWOT	Strengths, Weaknesses, Opportunities, Threats

KEY DEFINITIONS

Black-owned company – juristic person that has a shareholding or similar member interest that is Black controlled, in which Black participants enjoy a right to economic interest that is at least 51% of the total such rights measured using the Flow Through Principle (Department of Trade and Industry, 2016, p. 68).

Black people – Africans, Coloureds and Indians who are citizens of the Republic of South Africa by birth or descent, or who become citizens of the Republic of South Africa by naturalisation before 27 April 1994 or on or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalisation prior to that date (Department of Trade and Industry, 2016, p. 68).

Junior Miners – companies with an asset base of R50 million to R7 billion (South African Mining Development Association, 2014, p. 2).

Coal reserves – the amount of coal that can be extracted economically from the ground under current economic and technological conditions (Coil, McKittrick, & Higman, 2012).

1. INTRODUCTION

In his 2018 State of the Nation address, South Africa's (SA) president, Cyril Ramaphosa, identified the mining industry as a "sunrise industry" (2018) that could assist in alleviating the country's unemployment problem.

Coal is a critical commodity that is mined in SA and used to generate 82% of the country's electricity (Minerals Council South Africa, [MCSA], 2018). Coal has played a significant role in the economic development of the country and it remains a major source of employment, employing 77 506 people directly and indirectly providing approximately 170 000 jobs outside the industry in 2016 (MCSA, 2018).

Coal reserves in SA have been estimated to be between 15 billion tonnes (Hartnady, 2010) and 31.5 billion tonnes (Prevost, 2018). Based on current annual production - 253.1 million tonnes (Mt) in 2016 - these reserves will last for decades to come (MCSA, 2018). Therefore, despite government's ambitions to diversify the energy mix, it is likely that the coal industry will remain an important part of the economy and its future growth for the foreseeable future.

For a long time, the local coal industry was dominated by five resource companies that produced 85% of the country's coal (Oberholzer & Daly, 2014). However, this is changing, as the industry begins the process of transformation. The recent divestment by Anglo American of its Eskom-tied coal operations, and South32's planned disposal of its SA coal operations, is starting to challenge the status quo. This comes in response to several factors, including the country's state-owned power utility's (Eskom) commitment to economic transformation. Eskom procures 53% of locally produced coal (ESKOM, 2018) and in 2017, 38.2% of this coal came from junior coal miners - more than double the amount bought from junior coal miners in the previous year (Prevost, 2018). A major factor in this procurement shift is Eskom's Black Emerging Miner (BEM) Strategy, which was developed in partnership with government in 2012. It requires 51% black ownership of suppliers

wishing to sign new supply contracts with the power utility (ESKOM, 2016). This off-loading of assets by the major resource companies will therefore present opportunities for majority black-owned junior coal miner's (MBOJCM) to acquire these assets and increase their production capacity.

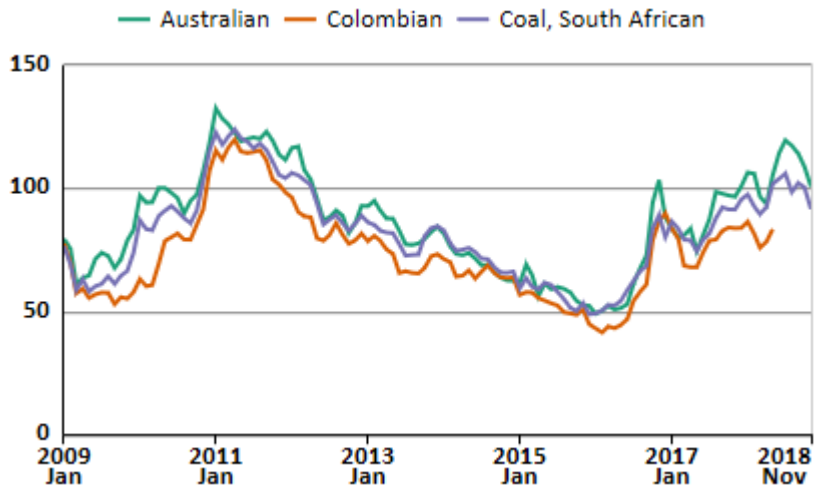
A positive development for the coal sector since 2016, has been the recovery in global coal prices, which has translated into higher local coal prices. (See Figure 1.1)

The creation of markets for lower quality coal in India and other Asian countries has meant that, in securing new coal, Eskom and local industrial users must now compete with export prices as the demand for SA coal increases abroad. This is coupled with a lack of appetite by financial institutions and mining companies to invest in new projects, due to the uncertain legislative and political environment in the country and other factors that have put a strain on local coal supplies. Globally, investors have also been deterred from investing in coal, due to the international drive to shift away from coal to cleaner sources of energy. However, while the Western world reduces its dependence on coal, demand from the East is on the rise. This off-setting demand shift, combined with declining investment in new sources of supply, has contributed to the recovery in coal prices we have seen since 2016.

In addition to unstable global coal prices, SA producers are also affected by fluctuations in the rand. In Figure 1.2, we see that the rand coal price increased through 2015, despite the decline in global coal prices, which can be seen in Figure 1.1. This was due to significant weakening of the rand throughout 2015. Because global coal prices are denominated in U.S. dollars, fluctuations in the rand can have a significant impact on the profitability of MBOJCMs. A weaker rand helps local producers, who can sell their coal at higher rand prices, while their operating costs are affected to a lesser degree by a depreciating local currency.

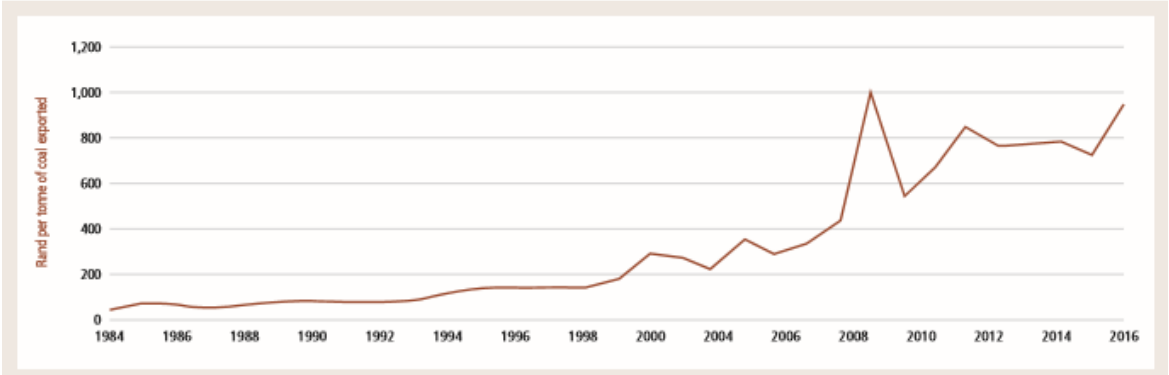
The current environment therefore presents both challenges and opportunities for MBOJCMs, which, if navigated strategically, could offer the potential to deliver handsome returns.

Figure 1.1: Monthly spot coal prices *(US$/metric tonne)*



Source: World Bank Commodity Price Data (Gusev, 2018)

Figure 1.2: Rand coal prices per tonne at Richards Bay



Source: World Bank Commodity Markets Outlook (MCSA, 2018)

1.1. Statement of the Problem

South African MBOJCMs can sell coal to Eskom, the export markets and the local industrial market. Allocating their limited funds and resources between these markets affects profitability and the ability to grow the business in a sustainable way. However, prioritising the markets and achieving an optimal sales mix presents a difficult strategic decision for these companies.

1.2. Objectives of the Report

The objectives of this study are:

1. Identify the strategic capabilities of a South African MBOJCM.

2. Recommend how a MBOJCM should prioritise markets and allocate its resources and funds between Eskom, the export markets and the local industrial market, based on coal quality in their resource base.

1.3. Scope of the Report

This report focuses on the steam/ thermal coal market, i.e. coal used mainly for generating electricity, but also for other applications. Management theories were applied to South African MBOJCMs and the coal markets to which they have access. The data required for the application of the management models, were obtained through interviews conducted with various industry experts.

1.4. Research Assumption

Interviewees are knowledgeable about the subject and will be forthcoming with their insight.

1.5. Structure of the Report

The introduction and outline of the report are followed by a literature review. In the literature review, the different markets available to MBOJCMs is analysed and various management theories applicable to resource allocation are evaluated. The report then deals with the specific management theories and trans-disciplinary management theories that were considered appropriate for use in this study and selected. The research questions follow, and the methodology used to perform the research is then explained. Using the selected management frameworks, the strategic capabilities of MBOJCMs are identified and the coal markets compared and categorised into good or less preferable prospects. Based on this categorisation, the optimal allocation of resources to the different markets is recommended.

1.6. Importance of the Study

The SA government has been facilitating transformation in the mining industry through formal policies such as the BBBEE Act No.53 of 2003 (Government Gazette, 2004) and the Mining Charter (Government Gazette, 2002), with the latter being an initiative by government, labour and industry to achieve socio-economic empowerment (Matlou, 2015). Eskom is also driving the transformation agenda in the coal sector though its BEM strategy. These policies have contributed to the decision by Anglo American in 2017 and 2018 to divest itself of its SA Eskom-tied coal assets (Anglo American 2017 and 2018) and, more recently, by South32 (Shabalala, 2018). The emergence and growth of MBOJCMs is thus needed to ensure the sustainability of the sector.

As coal assets become available and government introduces further policies that favour MBOJCMs, more of these companies are likely to enter the market. Junior miners are also attracted to the coal industry because: coal extraction requires a

smaller investment compared to other commodities (Forrest & Loate, 2017); the sector is less affected by downturns in the commodity cycle, if long-term contracts are secured with the power utility, because of the relatively stable demand for coal by Eskom.

However, junior coal miners still face many obstacles, including their ability to raise finance and delays experienced in obtaining the necessary licences to operate (Forrest & Loate, 2017). Therefore, allocating limited resources and funds in the most efficient way is essential for their survival and success. Also, before embarking on any new projects, an analysis of the quality and suitability of the coal for the different markets, as well as the long-term viability of these markets, needs to be considered carefully.

The findings of this study will be useful to existing MBOJCMs operating in SA and to aspiring candidates. This study adds value, in that no study has previously been done using a portfolio analysis tool to compare the export, Eskom and inland markets.

1.7. Research Ethics

All experts interviewed were requested to sign a letter of consent, which explained the reason for the interview, the objectives of the study and that the interview was voluntary and could be ended at any time if the respondent wanted to do so. Permission to record the interview was also obtained from the interviewee and anonymity of comments has been maintained in this report.

1.8. Research Limitations

The energy sector is constantly evolving. New scientific developments and changing government policies - both locally and abroad - continually influence and

change the outlook for coal. Therefore, any major developments that occur in the industry after this report is completed, will affect the validity of the recommendations.

Each of the management theories selected have certain limitations and these were identified during the literature review process.

Every effort was made to interview experts who are representative of the coal industry at large. However, this may not have been fully achieved. There is also a risk that interviewees may have misinterpreted a question, which could have resulted in incorrect conclusions being made in their responses.

1.9. Research Delimitations

The local coal market is affected by seaborne coal prices, as substantial amounts of SA coal are exported. Just over a quarter of local production is exported, and in 2018 this equated to 73.47 Mt (Richards Bay Coal Terminal, 2019). Even though coal was used to generate 38% of the world's electricity in 2017 (International Energy Agency, 2018), and the International Energy Agency (IEA) expects coal-generated electricity to grow by 8.6% by 2040 (International Energy Agency, 2017), the future of the commodity is uncertain, because of the global shift to other sources of energy such as renewables. However, advocates of clean coal technology believe that using coal in an environmentally friendly way is possible, and as more countries start to adopt this technology, coal could fall back into favour (Schernikau, 2016). This study does not include a detailed analysis of the global coal market, its outlook, and the effect it could have on the local coal market.

SA is a party to the Kyoto Protocol, in terms of which it has committed to reducing its carbon emissions. The full effect of this commitment on the coal industry is also not considered in this study. The introduction of carbon taxes and the shift to renewable energy, nuclear energy or fracking in the Karoo could affect the future

use and demand for coal in the country as a source of energy. Detailed research needs to be done to consider the effect that these events could have on local coal demand, if they are implemented.

In this report, no financial analysis or modelling is performed to compare the profitability of the different markets.

2. LITERATURE REVIEW

2.1. Introduction

In this literature review, the different markets available to a South African MBOJCM are explored by analysing reports and other publications. Various management theories are then evaluated, to determine the applicability of these models for a MBOJCM that is deciding on how to allocate resources between the different coal markets to which it has access.

2.2. Thermal Coal Products

The existence of different grades of thermal coal and the various coal specification requirements of customers adds an element of complexity to the marketing function. Eskom, the export market and the domestic market all have distinctive product specifications and sizing requirements (Steyn & Minnitt, 2010, p. 598). Higher grade coal is demanded by export markets and local industrial customers, while Eskom requires a lower grade product (Motiang & Nembahe, 2017).

The geology of a coal resource will determine the type of coal that can be extracted and the market to which it can be sold (Steyn & Minnitt, 2010). Coal can also be beneficiated to improve its quality by washing it to reduce its ash content. The washability of the coal also determines the market to which it can be sold (Steyn & Minnitt, 2010).

Table 2.1: Thermal coal product specifications

Parameter	Units	Eskom	Domestic	Export
Calorific value	(NAR)	21-24 Mj/kj	24.5 - 27.5 Mj/kg	5850-6000kcal/kg (27.5 Mj/kg)
Total moisture	% (AR)	8 - 12	8 - 12	8 -12
Ash	% (AR)	25 - 34	15 - 21	15
Volatile matter	% (AR)	20 - 30	23 - 30	22 - 20
Sulphur	% (AR)	0 - 2	0 - 1.5	0 -1.0
Hardgrove index			45 - 70	45 - 70
Ash fusion temp	°C			1.250
Phosphorus	%		0.001 - 0.01	0.001 - 0.01
Calcium oxide in ash	% (DB)			12
Sizing	mm	0x40 mm	0x6 mm 6x25 mm 25x40 mm	0x50 mm

Source: Thermal coal products in South Africa (Steyn & Minnitt, 2010)

2.3. Markets for South African Coal

2.3.1. Eskom

Eskom is the largest consumer of SA coal and it sets the benchmark price for domestically consumed coal (MCSA, 2018). Local prices determined by Eskom are less volatile than export prices (MCSA, 2018). Eskom can therefore offer stability for MBOJCMs in the form of long-term supply contracts. These supply contracts could also assist MBOJCMs to raise finance from financial institutions. By committing to further cost-plus agreements and off-take commitments in the future, Eskom could attract more players into the market, as such contracts translate into less risk for potential investors (MCSA, 2018).

Many of the existing coal fired power stations will require coal into the 2030's and four of them beyond the 2040's (The Green House, 2013). However, Steyn, Burton & Steenkamp (2017) found that Eskom will have surplus electricity capacity for the foreseeable future and recommended that the power utility consider cancelling part of the construction of Kusile, which is one of two new power plants being built.

A major deterrent against doing business with Eskom is the way the state-owned entity has been run and the negative effect this has had on its operational profitability and cashflow position. In recent times, Eskom's financial woes have been well documented in the media and have been attributed to mismanagement and corruption at the company. The company has been the subject of a parliamentary enquiry, and although a new board was appointed at the beginning of 2018 (Tandwa, 2018), there are serious hurdles that need to be overcome, in order to stabilise the company again. This could affect the ease of doing business with Eskom in the future.

2.3.2. The Export Market

Coal exports are a significant foreign exchange earner for SA. Just over a quarter of local production was exported in 2016, yet it equated to 45% of the revenue earned from total coal sales (MCSA, 2018). Historically, local prices have always been lower than export prices, averaging 35.2% less between 1970 and 2015 (MCSA, 2018). Most SA coal is exported out of the Richards Bay Coal Terminal (RBCT), which is a privately owned 91Mt template capacity coal terminal (Richards Bay Coal Terminal, 2014a). In 2018, the terminal shipped out 4% less than its historic export record of 76.47Mt, which it achieved in the previous year (Richards Bay Coal Terminal, 2019). Higher export prices and a weakening exchange rate have incentivised exporters to supply this market (MCSA, 2018). In 2018, most exports went to India (35.29Mt), Pakistan (9.37Mt) and South Korea (6.73Mt) (Richards Bay Coal Terminal, 2019). In order to grow the export market, further investment is required in rail infrastructure by Transnet Freight Rail and new mines need to be developed in the Central Basin (Witbank, Highveld and Ermelo coalfields) and, in the longer term, in the Waterberg area, to meet export demand (The Green House, 2013).

Although RBCT is privately owned, black juniors have access to 4Mt of export capacity at the terminal, through the Quattro allocation, which is a 2004 initiative by the RBCT to assist MBOJCMs gain access to the export market (Richards Bay Coal Terminal, Transformation, 2014b). Despite this initiative, according to RBCT's CEO, Andrew Waller, only 1.7Mt of the allocation was utilised in 2017 (Brenden, 2018). He attributed the under-utilisation to administration issues at the Department of Mineral Resources (DMR), which oversees the Quattro allocation (Brenden, 2018). However, Forrest and Loate (2017) argued that the quality of coal extracted by MBOJCMs is not always of export standard, which therefore reduces their ability to take advantage of their Quattro allocation.

2.3.3. The Local Industrial Market

Local demand for coal for industrial and household use is about a quarter the size of the export market. Demand for coal from this market may grow with economic growth in the country, while alternative sources of energy and the introduction of carbon taxes may affect demand negatively (The Green House, 2013). But for now, the local market offers good opportunities for MBOJCMs to make good margins, as certain local prices exceed export prices, due to the current supply shortage being experienced in the SA market (Prevost, 2018).

Table 2.2: Local coal sales by industry supplied (2017)

Commodity	Mass (Mt)	Price (R/t)
Merchant & Domestic	12.3	465
Industries	4.94	558
Steel	2.91	739
Chemical	1.2	486
Cement	1.2	482
Brick & Tile	0.3	272
Agriculture	0.07	864
Mines	0.05	830
Transport	0.002	1140
TOTAL	**22.972**	

Source: IHS Markit Feb 2018 (Prevost, 2018) Abbreviations: Mt – Million tonnes; R/t – Rands/tonne

2.4. Coal Supply Dynamics

The declining quantity and quality (Burton & Winkler, 2014, p. 3) of coal in the Central Basin, where most of the country's coal is mined (Burton & Winkler, 2014), is likely to result in supply shortfalls by the early 2020's, should new mines not be developed in the area timeously (The Green House, 2013). The Waterberg region is estimated to hold 50% of the country's coal resources, but The Green House (2013), Hartnady (2010), Jeffrey (2005) and the MCSA (2018) identified many challenges to unlocking the reserves in this region, including inadequate water supply and rail infrastructure. Should the government decide to build coal power stations in the future, the economic viability of developing the area will be justified, and this could create further opportunities for MBOJCMs.

Different experts (Green House, 2013; MCSA, 2018; Oberholzer and Daly, 2014) have identified the following factors that deter potential investors from entering the sector:

- The current uncertain policy and legislative environment

- Delays in obtaining the necessary mining permits from various government departments
- Labour risks
- Meeting Broad-Based Economic Empowerment (BBBEE) requirements
- The possibility of coal being declared a strategic resource by the government
- Pending carbon taxes and SA's commitment at the Paris Accord to greenhouse gas reductions
- Political uncertainty in the country
- Non-agreement on a fair pricing model for coal supplied to Eskom
- Land access issues
- Eskom's current financial woes

2.5. Evaluation of Management Theories

2.5.1. SWOT Analysis

A SWOT analysis is used to identify the strategic capability of a company (Johnson, Whittington, Scholes, Angwin, & Regner, 2014). This tool is used to identify a company's: strengths and weaknesses, which are usually internal; and opportunities and threats, which relate to the external environment (Johnson et al., 2014). Some of the common problems often encountered with using a SWOT analysis is the creation of long lists of factors that are vague, unverified and not resolved or implemented (Hill & Westbrook, 1997). The non-requirement to weight or prioritise factors was also identified as a downfall of the tool by Hill and Westbrook (1997). For the proposed study, the tool was useful in identifying the strategic capabilities of MBOJCMs but is too simplistic for purposes of determining resource allocation decisions. This tool was therefore used in conjunction with other management tools.

2.5.2. Porter's Five Forces Model

Porter's Five Forces framework is a management tool that can be used to assess the attractiveness and potential profitability of a specific market in terms of five competitive forces (Johnson et al., 2014). These forces include: ease of entering the market; threat of substitute products; power of buyers to influence price; power of suppliers; the extent of rivalry between competitors (Johnson et al., 2014). Many of these factors are relevant when comparing the attractiveness of the Eskom, export and inland markets.

However, this tool does not consider the strengths that a business may have in certain markets. An example is the competitive advantage that a MBOJCM has in the Eskom market because of its ownership status. Eskom's BEM Strategy gives MBOJCMs an advantage in this market.

This tool could, therefore, be useful in identifying factors to compare the attractiveness of markets; however, for it to be used when making resource allocation decisions, it needs to be complemented by a more comprehensive tool.

2.5.3. Yip's Globalisation Framework

Yip's Globalisation Framework is a management tool that is used to assess the drivers of internationalisation, such as market drivers, cost drivers, government drivers and competitive drivers (Johnson et al., 2014). This management framework is often used to assess the viability of expanding into global markets; therefore, it is a useful tool for determining the potential of the export market for SA coal. However, it could not be applied to Eskom and the inland market, and therefore would not assist in comparing the different markets so as to determine resource allocation.

2.5.4. The BCG Matrix

The BCG matrix is used to determine the attractiveness and balance of a business portfolio, by categorising the businesses within the portfolio according to their market share and market growth (Johnson et al., 2014). The simplicity of the matrix makes it a very popular management tool for portfolio analysis (Philip, William, & Rajunor, 2012). But it is this same characteristic of simplicity that has earned the model much criticism. Duica, Croitoru, Duica & Robescu (2014) argue that when considering the complexity and dynamics of the present business environment, the use of a single business portfolio tool such as the BCG matrix, for purposes of decision making, is not advisable. The BCG matrix was therefore not used in this research report, and a more comprehensive tool was sought.

2.5.5. The GE-McKinsey Matrix

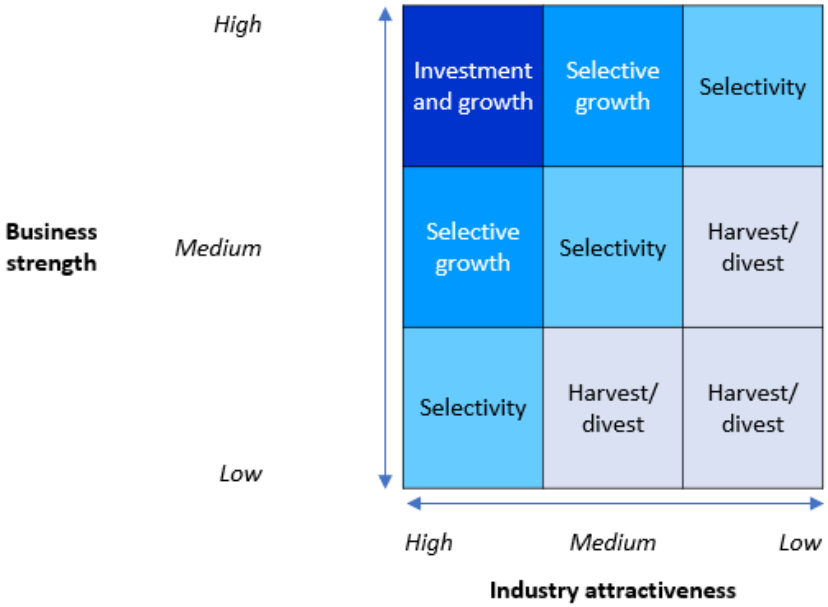
The GE-McKinsey matrix is used to consider a portfolio of businesses by categorising them according to the attractiveness of an industry and the strengths of a business (Johnson et al., 2014). This strategy tool uses a systematic approach to assist with investment decisions and resource allocation, by classifying different business units into one of three categories, i.e.: invest/ grow; selectively change; harvest/ divest (Martin, 2015).

Johnson et al. (2014) identified two advantages that the GE-McKinsey matrix has over the BCG matrix in terms of portfolio analysis: the outcomes are less mechanistic (Johnson et al., 2014, p. 248) and the axes are based on several factors that affect business strength and industry attractiveness. Therefore, the GE-McKinsey matrix provides more meaningful results and is used to prioritise markets in this report study. Other models were considered when assessing the attractiveness of the different markets.

Certain factors from Porter's Five Forces model are applicable to the GE-McKinsey matrix when determining the attractiveness of the different markets within the industry. The power of buyers to influence price, is an example of such a factor. While Eskom can influence price to a certain degree, local industrial customers in the inland market have less power, whereas the export market is controlled by seaborne prices and is therefore affected by the buying power of international customers. The inland market would therefore be the most attractive of the three markets in terms of this factor.

For purposes of this project, the GE-McKinsey matrix was adapted so that it applied to a type of business, instead of to a single organisation, which was how the model was originally created. The matrix was created to allow General Electric to manage its portfolio of businesses (Johnson et al., 2014). In this report, it is used in the context of all MBOJCMs, instead of a specific MBOJCM. Therefore, factors that will be selected to evaluate business strength in the different markets need to be factors that are common to all MBOJCMs. The strengths of MBOJCMs were identified when doing the SWOT analysis and these were used to determine the strategic capabilities of MBOJCMs.

Figure 2.1: GE-McKinsey Matrix



Source: (Johnson, Whittington, Scholes, Angwin, & Regner, 2014)

3. RESEARCH QUESTIONS

3.1. Research Question 1

What are the strategic capabilities of a South African MBOJCMs?

3.2. Research Question 2

How does the export market, Eskom and the inland market compare in terms of attractiveness of these different markets and the strengths of MBOJCMs?

3.3. Research Question 3

Based on the prioritisation of the different markets, how should a MBOJCM allocate its resources most effectively?

4. RESEARCH METHODOLOGY

4.1. Project Plan, Approach and Method

To perform the SWOT analysis and apply the GE-McKinsey matrix, data was collected by conducting interviews with coal analysts, senior employees of coal mining companies and other professionals with knowledge of the coal market. The use of interviews as an instrument to collect data is common when using a qualitative research approach. A mainly qualitative approach was considered appropriate for this study as it allowed for exploration of the different dynamics facing MBOJCMs and the markets in which they operate, through open discussion (Sauro, 2015). It also helped to gain an understanding of the current coal environment, which assisted in prioritising the different markets for coal (Sauro, 2015). This approach also helped to breakdown the complexities of the different markets, such as the logistical and infrastructural constraints that limit a MBOJCM's ability to supply the export markets (Sauro, 2015).

In addition, when applying the GE-McKinsey matrix, interviewees were also asked to provide weightings and ratings for the identified factors. The selected management tool therefore uses a combination of quantitative and qualitative variables. The data collection process was broken down into two interview phases. The first phase concentrated on the SWOT analysis for MBOJCMs. The second phase focused exclusively on the GE-McKinsey matrix.

As the principal researcher and author of this report, and an employee of a MBOJCM, the researcher had to ensure objectivity in the research undertaken and that the researcher did not allow personal opinions to influence the interpretation of the findings from the interviews. All interviews were recorded, and each participant was sent a copy of the interview transcript and the GE-McKinsey rating sheet for review and approval.

4.2. Method of data collection

Prioritisation of markets for a MBOJCM was determined by considering the dynamics of each market. Each option has its own opportunities and challenges, which are dependent on the prevailing conditions in the local and global economy and in the coal industry. Therefore, a mainly qualitative process of comparing these markets provides better strategic insight than comparing the profitability of the different markets and it assists in identifying the actual drivers of these markets.

Interviewees provided their latest insights, opinions and understanding of the coal market to justify the weightings and ratings they gave to the various factors identified so as to compare these markets. The interviews were semi-structured, allowing both structure in the form of an interview questionnaire, and flexibility in probing interviewee responses further, where necessary. Face-to-face interviews allowed for questions to be explained and clarified where necessary. The disadvantages of using this form of data collection procedure include the availability of interviewees and, in some cases, the amount of time required to conduct the interview.

4.3. Sampling and data collection

Qualitative research requires that sufficient relevant information be obtained from a small sample of interviewees, rather than trying to obtain data from many individuals. The objective is therefore to acquire an in-depth understanding of a topic or issue (Shari, 2012). Saturation is reached when all relevant information and insight on a topic has been obtained (Charmaz, 1990), and reaching this point drives the need to conduct further interviews. Regarding the minimum number of individuals who should be interviewed, anywhere between 5 and 50 is considered enough by most experts (Shari, 2012). For this report study, 13 individuals were interviewed. They included CEOs, senior-employees, and other professionals who

service or work in the coal industry; therefore, enough scope and volume of opinion has been obtained.

An initial list of experts was identified from the researcher's existing network and the social media platform, Linked-in; thereafter, a snowball sampling approach was used to identify additional participants. This form of sampling enabled the researcher to identify people who are relevant to the topic and to ask them to refer others who are knowledgeable on the topic (Glen, 2014). This is a non-probability sampling method, as the chance of selection is not random, but based on the researcher's judgement (Glen, 2014).

The interview questionnaire was developed to obtain information needed to apply the selected management theories. Most experts were knowledgeable on all aspects of the industry and on all markets. A few of the experts only had knowledge of certain markets and therefore could not give the same level of insight with all the questions.

A SWOT analysis can generate an exhaustive list of strengths, weaknesses, opportunities and threats, so prioritisation and focus (Johnson et al., 2014) was important when using the tool.

To compare the different markets using the GE-McKinsey matrix, interviewees were presented with a list of factors that affect the attractiveness of the different markets and that can be used to determine the competitive strength of MBOJCMs in these markets. These factors were identified during the literature review. The respondents were then asked to rate each factor in terms of attractiveness of the market and competitive strength of the business, using a scale of 1-5. They were then asked to weight each factor according to importance, and justification for certain weightings and ratings were also provided. The weightings and ratings were then captured into a spreadsheet and consolidated.

4.4. Analysis of data

A common and easy method for analysing qualitative research is thematic analysis, which extracts meaning from data and includes pinpointing themes (Javadi & Zarea, 2016). In this report, thematic analysis was used to identify themes and common patterns. This required repeated listening to the recorded interviews. The themes were then reviewed and defined so that they could be used in the management theory models identified for this study. Quotes from the interviews were also used in the final report.

For the GE-McKinsey matrix, total scores for the attractiveness of the different markets and the competitive strengths of MBOJCMs were calculated by multiplying the weighting and rating for each factor, as provided by the interviewees (Martin, 2015). Based on the total scores, the different markets were plotted on the matrix and classified into one of three categories: grow; hold; divest (Martin, 2015). (Refer to Figure 5.1 of this report.)

4.5. Reliability and Validity of the Research

Reliability refers to consistency in results (Price, Jhangiani, & Chiang, 2015). The reliability of the data obtained during the actual interviews was increased by interviewing thirteen experts who are knowledgeable about the SA coal markets. Reliability was further enhanced by asking the interviewees to check that their responses had been recorded accurately.

The validity of the interview questions and model was piloted by requesting a work colleague, who has vast experience in the coal industry, to participate in a mock interview. The data collected from the pre-testing exercise and from the actual research interviews, provided the insights needed to achieve the objectives of the report.

Subjectivity can be an issue when using the GE-McKinsey matrix. Identifying the factors to determine industry attractiveness and business strengths can be a subjective process, as can the weightings and ratings of factors, when using this model (Martin, 2015). A focus on common themes and the calculation of average weightings and ratings of factors were used to filter out the more subjective responses.

4.6. Interpretation of data

The management theories were developed to strategically guide the thinking and data collection process, to ensure that the correct information was gathered to solve a specific problem.

The SWOT analysis provides a comprehensive list of strengths, weaknesses, opportunities and threats faced by a MBOJCM, whilst the GE-McKinsey matrix identified how a MBOJCM should allocate resources to the different coal markets in the future, depending on where they are categorised in the matrix.

5. RESEARCH FINDINGS

5.1. SWOT Analysis

5.1.1. STRENGTHS

Majority black-owned

Being majority-Black owned makes it easier for a company to do business in SA, as it can take advantage of BEE opportunities such as: Eskom's BEM strategy; preferential procurement strategies of customers trying to improve their BEE scorecard; RBCT's quattro allocation and its aspirations to improve its BEE rating; the fact that TFR is state-owned and therefore also has BEE empowerment goals. Most participants who were interviewed agreed with this strength and Participant 12 described it as "a hedge against politics", importantly also mentioning that it affects a miner's ability to secure mining rights.

However, Participant 4 pointed out that it is important to note that it is not a policy, but rather a strategy of Eskom to procure from companies that are 51% or more black-owned. Participant 4 agreed that implementing the BEM strategy can be difficult when there is a shortage of coal in the market, as has been experienced in SA recently. Participant 3 shared this view, citing the shift in the political landscape in the country with the resignation of President Zuma in 2017, the current tough local economic conditions, and the coal cliff that we are seeing in SA, as factors that may force Eskom to reconsider some of its strategies.

Participant 10 warned against coal miners focusing only on Eskom as a customer, explaining that it is difficult for a junior to make money from selling to Eskom, due to the lower margins offered by the utility and its tough quality and compliance requirements. Participant 10 added that export traders offer better margins and are

looking to improve their BEE procurement spend, which presents an opportunity for MBOJCMs to supply them with coal instead.

Participant 1 felt that being majority Black owned would not necessarily provide a competitive advantage in the inland market, as customers in this market are less concerned about ownership status and more concerned about the quality of the coal and the services offered by the supplier.

Simplified corporate structure

Most MBOJCMs have a simplified corporate structure, which improves their ability to act quickly to take advantage of opportunities as they arise. Although participants agreed with this strength, they differed on the degree that it would benefit MBOJCMs in terms of the different decisions that they need to make. Participant 1 explained that it is the smaller size of these businesses that make them more agile and responsive to the requirements of their customers. They can act faster and conclude a deal quicker, as all the decision makers are in the room during the negotiation process. This means the process is more efficient compared to larger corporates, which require various consultations and authorisations from within the organisation before being able to act on an opportunity. Participant 2 described this strength as being “nimble”, and not having to deal with the bureaucracy encountered at the larger resource companies when decisions must be made.

However, Participant 13 pointed out that the types of transactions that are entered into by MBOJCMs can be concluded quickly by the larger resource companies as well, and that it is not the approval process, but rather the “level of detail” that the larger companies go into when evaluating the viability of a project, that is more rigorous and time-consuming. He also mentioned that larger companies are beginning to become more agile in their approach and adopting quicker decision-making processes, which could eliminate this strength for a MBOJCM in time to come.

Participant 3 agreed that having a simplified corporate structure is a strength, but felt it can also pose a risk, as bad contracts may be entered by MBOJCMs because inadequate steps are taken to analyse and approve a deal. Participant 8 said that the extent of this strength would need to be assessed in terms of the opportunity cost associated with taking more time to act when an opportunity arises. Participant 10 also expressed concern about making core business decisions and evaluating mining deals that require “stability, security and continued supply”. He further explained that some decisions could be detrimental to the sustainability of a business if they are not considered properly, citing the example of penalties imposed by Eskom on a supplier who does not deliver according to the coal specifications agreed to in a contract.

Compliance with the Mining Charter

MBOJCMs comply with the ownership requirements of the new mining charter and so can enjoy benefits such as access to mining and prospecting rights. Participants agreed with this.

However, Participant 3 raised the question of the degree and extent to which the mining charter would benefit MBOJCMs. He argued that the previous charter had negatively impacted the SA mining industry and investment into the industry, but that the country’s new leadership has addressed the charter with urgency under the new minerals minister. He attributed this to the current president’s mining background and his understanding of the importance of “fostering the mining industry” through an investment-friendly charter.

Although Participant 7 agreed that MBOJCMs would likely find it easier to comply with the ownership requirements of the new mining charter, he said that there may be certain aspects of the charter that they may find more difficult to comply with, because of their smaller balance sheets compared to the major resource companies. Participant 7 gave the example of expenditure on community projects,

which MBOJCMs may find harder to finance compared to the major resource companies.

Other Strengths

Participant 2 mentioned that an entrepreneurial flair exists in these types of businesses, which results in a bigger appetite for risk, and this opens up more opportunities for MBOJCMs. Participant 12 also indicated that many MBOJCMs are run by owners and managers (who themselves "have skin in the game" through some form of equity ownership), and therefore they have more incentive to make a success of the business, as they stand to lose or gain a lot more in the long-run.

Participant 7 also pointed out that MBOJCMs' lower cost structures makes it easier for them to make money from smaller quantities of resources, which the major resource companies tend to leave behind, because they prefer to mine large quantities of resources, which they are better equipped to do. However, Participant 10 argued that the lower overheads of MBOJCMs does not necessarily mean that they are able to produce coal at a lower cost per tonne than the bigger mining houses, as the bigger production volumes dilute the cost of the bigger overheads bill. Participant 13 said that it is, in fact, the "fit for purpose business models" of some MBOJCMs that makes them more competitive in terms of their ability to extract value from smaller mines.

5.1.2. WEAKNESSES

Cashflow constraints

Most participants interviewed agreed that limited funds is a major issue experienced by MBOJCMs and that cashflow problems are often encountered during the start-up phase, ramp-up period and when trying to grow the business. Participants all agreed that it is difficult for MBOJCMs to raise finance.

Participant 6 explained that access to finance is a major obstacle experienced by junior miners, even at the exploration stage. He said that banks do not finance at this stage, and juniors must therefore find and use equity to finance their exploration. He further explained that getting to the stage of having a bankable feasibility study is a lengthy and expensive process. Participant 6 also mentioned that banks will not fund 100% of a mining project, and the best that they have done in the past for Eskom-contracted mines was 70%; however, nowadays it is closer to 50%.

Participant 6 admitted that banks have not developed a financing model to bridge the gap and fund junior mining projects. He attributed this partly to the fact that the junior miner market in South Africa is not as developed as other jurisdictions, like Australia and Canada, and there are no significant tax benefits that incentivise financing of these companies. Participant 12 explained that even when a MBOJCM can access funds, it comes at a higher cost, because of their riskier profile. Investors that are prepared to invest in junior miners are looking for higher returns, and he said that, as an investor, he “would not get out of bed in the morning for a 10% return” on a junior.

Participant 2 said that obtaining funding can be an issue specifically when trying to do an acquisition and provided the comparison of funders viewing it as a “mosquito wanting to swallow an elephant”.

Participant 3 added that a trap that many MBOJCMs fall into is paying large amounts of money for reports to help them determine the mining potential of an area. In most instances, these reports do not provide them with the information needed to determine whether they can mine the area in an economically viable way; therefore, they are unable to secure funding to proceed with the project.

Participant 4 pointed out that there are often claw-back clauses that funders include in financing agreements, which require the borrower to maintain certain levels of

liquidity. If this claw-back is triggered, it can affect the shareholding of the business, and ultimately the Black ownership. This would then impact the strategic advantage of a MBOJCM.

Participant 11 explained that equity finance is also difficult to come by, even if a MBOJCM is listed, because the shares of these companies are mostly illiquid. This deters equity funds from investing in them, because these funds generally want to invest in companies in which they can sell their shares easily.

Participant 10 suggested that junior coal miners that struggle to access funding could approach the big coal trading businesses to pre-finance them by signing off-take agreements. Participant 11 also suggested this option but warned about the high cost of this form of finance.

Lack of comprehensive technical skills within the organisation

Most participants agreed that there is a lack of comprehensive technical skills within these organisations, pointing out that most MBOJCM are limited to the technical skills and specific competence of the owner of the business, who is usually an engineer or a geologist. A lack of funds prevents them from hiring employees across the required range of technical disciplines and they must therefore use consultants who are specialists in a specific area, as and when required.

Participant 2 added that it is difficult for MBOJCMs to attract talent from the big multinational resource companies, because people working in the industry “are trapped in the paradigm of big conglomerate’s”. Participant 2 pointed out that people are attracted to the big mining houses because of the perceived security and prestige of working at these organisations, not realising that the risk of being retrenched during downtimes exists at these companies as well. But it is this “mindset” that makes it difficult for MBOJCMs to attract talent from the big mining houses, as they cannot offer the same status as these people enjoy when working at the big conglomerates.

Participant 3 also highlighted that there is a lack of support for these companies from government, even though the government has committed to providing technical support to juniors through the Department of Mineral Resources (DMR) and other institutions.

Many of the participants contended that MBOJCMs can access the necessary skills as and when required and that they could come up with a model that supports this. Participant 11 explained that, based on his experience at a junior coal miner, they relied on consultants whenever they considered the risks associated with a decision to be high and did not have the required specialist skills in-house. Several participants indicated that there is no shortage of mining skills in South Africa and that hiring these skills on a part-time basis may be an option. However, Participant 12 cautioned about the decline in the availability of these skills within SA, as the major resource companies that have a global presence are hiring and re-deploying these technically skilled individuals to other regions. Participant 7 also conceded that the consequent high reliance on technically skilled consultants by MBOJCMs could pose a risk to the business.

Participant 8 recommended an idea based on a proposal he had recently come across, where the author proposed that MBOJCMs establish corporations to which they all contribute and then share the services provided. He explained that this could include sharing of technology, space, logistics or technical skills.

Lower quality coal resources

Most participants agreed that MBOJCMs must make do with mines that have smaller reserves, lower quality coal and shorter lives, as these are the only mines that they have access to because of both affordability and availability. Participants agreed that MBOJCMs usually take over mines from the bigger resource companies that have already extracted what Participant 10 described as the “easy coal”. This means they must mine deeper underground, which makes it harder for

them to extract the deposits profitably. Participant 3 added that many of the mines owned by MBOJCMs are “badly formed and are geologically complex and difficult to mine”. Participant 12 described this as a “symptom” of a “timing issue”, because MBOJCMs were late stage movers for a finite resource, which the bigger resource companies were able to “cherry pick” when they initially invested in the coal mining industry. Participant 4 said that MBOJCMs would, therefore, need to really maximise the use of their resources to obtain good quality coal from their mines.

Participant 1 added that another issue currently faced by miners is that reserves are being cut up into smaller portions and being sold as such to provide access to more miners. The downside of this initiative, which was designed to give access to more players wanting to enter the coal mining industry, is the difficulties experienced in mining these smaller reserves, whilst still trying to remain profitable, as mining profitably is about “*scales and volumes”*.

Participant 13 commented that he does not consider the quality of coal as a problem or a weakness, explaining that “there is a market for any coal”. He did agree, however, that the difficulty and potentially higher cost associated with mining some of the resources owned by MBOJCMs could be a weakness, specifically in terms of accessing infrastructure and the necessary equipment required to exploit the product.

Other Weaknesses

Participant 7 explained that MBOJCMs often have little “bargaining power” when negotiating prices, as they are more desperate to conclude a sale, mainly due to cashflow demands. This effectively makes them a price taker across all the markets.

Participant 7 also pointed out that most MBOJCMs have a single mine and are dependent on the output from this mine to meet their contractual supply commitments and generate cashflow, which puts them in a very difficult situation should a problem arise at the mine that affects production. Participant 12 also

mentioned this weakness and stressed the importance of junior's de-risking by bringing more mines into operation to reduce and spread their risks.

Participant 10 explained that the biggest weakness he has found with junior coal miners is that they over-simplify mining and do not do proper research and planning to understand the mine before embarking on a project. From his experience, he has noticed that they tend to rush to start mining without trying to build a robust business. This does not serve them well in an industry that is "complex, difficult and volatile". He went on to explain that, with this approach, they can make money in good times, but when times are tough, they "can go under".

Participant 11 identified a lack of adequate internal controls and processes as another weakness and a major risk that is prevalent among MBOJCMs, because this aspect of the business is not regarded as important enough to demand adequate focus and attention in smaller organisations, where resources are limited.

Participant 2 also explained that having a reputation as a majority black owned company that has benefited from BEE deals in South Africa can sometimes disadvantage a company that aspires to diversify the business internationally. There may be a perception that the company was created only to take advantage of BEE opportunities in South Africa and this makes it difficult for it to be accepted and to pursue business interest in other countries.

5.1.3. OPPORTUNITIES

ESKOM's BEM Strategy

Most participants agreed that ESKOM's BEM strategy provides MBOJCMs with the opportunity to supply the power utility and secure a steady source of revenue. Participant 12 described Eskom as a "captive customer" who will always need coal. Whilst Participant 10 agreed that supplying Eskom on a cost-plus basis would be a

good opportunity, he cautioned against relying on a strategy that focuses only on supplying Eskom, citing lower margins as a down-side of doing business with Eskom.

Participants also agreed that Eskom's plans to create opportunities for MBOJCMs in other areas, such as coal road haulage, could provide avenues for growth. However, Participant 4 mentioned that these plans could be affected by the new Transnet board's intentions to improve rail services and extend rail use to the likes of Eskom.

RBCT's Quattro Allocation

Most participants agreed that the Quatro allocation at RBCT offers MBOJCMs an opportunity to export coal. However, Participant 3 argued that Quattro is currently being bypassed by many juniors, as the growth of juniors has outpaced the current 4Mt allocation. Participant 3 said that, with the increase in demand for lower quality coal from the likes of India, the export market is thriving, and therefore every "*Tom, Dick and Harry"* now wants to export coal. He mentioned that India's preference for South African coal over Australian and US coal is linked to the suitability of SA coal for their requirements, specifically the lower sulphur content in SA coal. So even though SA coal is more expensive compared to competitors' prices, Indian demand for SA coal is high. Participant 3 also feels that other routes to exporting coal, such as using traders to export coal and using the Navitrade export terminal, is starting to become a preferred export route by MBOJCMs, instead of them using the Quattro allocation at RBCT. But Participant 3 is also of the view that the current high export prices we are seeing will not continue in the short-medium term.

The under-utilisation of the 4Mt Quattro allocation by MBOJCMs in 2017, was attributed to the dynamics within Quattro by Participant 7. He explained that Quattro previously had one stock-pile allocation at RBCT, and now two are available; but if a MBOJCM wanted to use Quattro it would need to supply the same grade of coal

as per that stockpile. Participant 10 explained that he believes the reason for the Quattro allocation at RBCT not being fully utilised is because a big capital investment is required to export coal directly and it takes a long time to realize a return. The long process that is involved in getting coal out of the mine and to the export terminal also exposes an exporter to the risk of potential delays and associated costs that may be experienced due to train or ship delays. In his opinion, the opportunity for a MBOJCM to export coal therefore exists in supplying coal to the bigger resource companies and traders. Participant 12 agreed that selling coal to traders in order to gain exposure to the export market is a safer option for MBOJCMs that are looking to shift risk away in return for a sacrifice in margin.

Access to Developmental Institution Funding

Most participants agreed that the IDC and other developmental institutions provide MBOJCMs with an option to access funding. Participant 13 added that MBOJCMs that can obtain funding from these institutions have a “competitive advantage”. Most participants also acknowledged that this type of funding is not as efficient as traditional bank funding in terms of the process to obtain the funding and the higher cost associated with this type of funding. However, Participant 3 raised the point that unless the funds are given as seedling money, i.e. given to miners requiring funds to prospect and convert resources to reserves, they will not be needed or useful to junior miners.

Off-loading of assets by the major resource companies

Most participants agreed that the off-loading of coal assets by major resource companies presents an opportunity for MBOJCMs to acquire these assets, if they can raise the capital to do so. However, Participant 11 described this opportunity as being “very competitive” and whilst Participant 12 identified “clever and well capitalised MBOJCM” as the best placed candidates, Participant 10 commented that you need to be “connected” to benefit from these opportunities.

Participant 12 also cautioned against the risk of acquiring mines that are not profitable to mine, as the major resource companies might use this opportunity to get rid of such mines. Participant 13 expressed the opinion that most of the coal assets have already been disposed of and that this type of opportunity is "diminishing".

Short-medium term Eskom supply contracts

Most participants agreed that supply shocks in the market and the current coal cliff that the country is experiencing presents opportunities for MBOJCMs to secure short-medium term supply contracts with Eskom at good margins. Such a situation arose recently when Optimum coal (which was a major supplier to Eskom power stations) was unable to deliver coal to the state-owned entity, forcing it to source coal through short-term contracts. Participant 3 stressed that there is currently a big supply-demand gap in the market, due mainly to decreased coal production over the past few years. Participant 12 also believes that a point will be reached when inland coal will be trading at a higher price than export coal, purely because of supply constraints.

However, although Participant 10 agreed that short-medium term Eskom contracts can be lucrative, he warned against MBOJCMs focusing only on these types of contracts, as they are not in line with building a business that is robust, sustainable and consistent in terms of supply.

Other Opportunities

Participant 7 identified the opportunity to partner with larger companies that need to improve their empowerment status, in order for them to do business with Eskom. He mentioned the joint venture as a vehicle that could be used to structure the partnership and gave the examples of Universal Coal and Keaton Energy, which have partnered with MBOJCMs to improve their BEE status. Participant 10 further explained that these partnerships with the bigger resource companies and coal

traders can help MBOJCMs to obtain finance and secure the sale of their coal via off-take agreements. He conceded that such partnerships would offer lower margins but would help them build a more robust business. A risk that Participant 10 identified with off-take agreement partnerships is the strain on the relationship between the two parties when production difficulties are encountered by MBOJCMs that affect their ability to deliver coal.

Participant 6 also mentioned the opportunity for MBOJCMs to benefit from preferential procurement policies of potential customers that are looking to improve their BEE scorecard.

Participant 7 identified opportunities to merge or acquire other juniors as a strategy that MBOJCMs could use to unlock significant value.

Although many of the participants agreed that the logistics of the coal business presented an opportunity for MBOJCMs to grow the business, participant 12 does not consider coal logistics to be a good opportunity for MBOJCMs to pursue. He explained that mining coal and moving coal are very different in terms of skill sets and risks, and that pursuing opportunities in logistics may result in “added complexities to a simple business model”. He also raised the concern that Eskom might be encouraging MBOJCMs to participate in these activities as a means of shifting cost from themselves onto MBOJCMs.

Participant 10 identified that an opportunity exists for MBOJCMs to form a consortium to share technical skills, access financial services, and assist each other with various other aspects that would improve their overall competitiveness, including off-take agreements that would mitigate the risk of lower quality and volume of coal produced by any of the member companies that make up the consortium.

Participant 8 added that there are abundant coal resources underground and that MBOJCMs need to consider introducing modern technology and improved mining

methods to extract these resources. Participant 8 pointed out that the KZN region is well-endowed with high-quality coal, but this has not been exploited, because consumption is concentrated in the Gauteng and Mpumalanga areas, and it will be costly to transport the coal there.

According to Participant 3, the supply gap that is currently being experienced in the coal market is not only affecting Eskom, but the local industrial market as well. Participant 3 mentioned that industrial customers are being forced to modify their boilers to accept lower quality coal, as they are unable to obtain the right quality of coal needed to use these boilers optimally. Participant 3 described the local industrial market as the “orphan child” that is over-shadowed by the Eskom and export markets yet has great potential to offer good returns. Participant 3 is, therefore, of the opinion that the local industrial market offers great potential for MBOJCMs that can produce the right quality of coal, as required by this market. He also indicated that recent research that he has conducted has revealed that the local market has been offering even higher prices than the export market over the past few months.

Participant 13 added that the creation of markets for lower quality coal and the corresponding demand for SA coal from export destinations such as India has given local players optionality to sell their coal to these markets. He further explained that this opportunity did not previously exist for MBOJCMs, therefore, it can now help them to realise a better return for their shareholders by selling to the export market.

Participant 13 agreed that the ‘’use-it or lose-it’’ principal (which gives the DMR the right to take back a mining license from mine owners who have not begun mining within 365 days of obtaining the license) presents an opportunity for MBOJCMs. He explained that the opportunity exists for partnerships to be established between owners of the mining right, who do not have the funding to develop the mine, and MBOJCMs who are looking for resources to mine.

5.1.4. THREATS

Inability to raise finance

Most participants agreed that access to funds is a threat for MBOJCMs, due to: them being perceived as risky; global pressure on financial institutions to cut-back on financing of coal projects; and the rise of renewables. Participant 6 also mentioned that juniors are competing against other mining companies and companies in other industries for the allocation of funds by financial institutions, and that recent corporate scandals that have surfaced in SA have caused financial institutions to exercise heightened levels of scepticism when making investment decisions. Participant 12 identified the lack of investments flowing into the coal sector as "the number 1 risk" facing the industry.

Participant 3 said that the risks associated with funding juniors is a major deterrent. He added that, in most cases, MBOJCMs do not have proper business plans and reserve reports for their resources, which makes it very difficult for them to attract investment. Participant 6 also pointed out that bad experiences from dealing with certain juniors has negatively affected financial institutions' appetite to invest in them. He said, juniors are regarded as risky as "there are many skeletons out there".

Regarding the negative sentiment associated with investing in coal, Participant 7 pointed out that these industry dynamics affect both junior and large miners. He added that their ties with international financial institutions, which are cutting back on funding coal projects, is also a driver for local banks to reduce exposure to the sector.

Shift-away from coal to other sources of energy

Most participants agreed that the global shift to cleaner sources of energy, SA's Cop 21 carbon emissions commitments, and the looming introduction of carbon

taxes, all create uncertainty about the future of the coal industry and pose a threat for MBOJCMs.

Participant 4 mentioned that Eskom is looking to diversify to other sources of energy, and this may be a long-term threat to the future of coal and MBOJCMs' sustainability. Until recently, nuclear energy was being considered as a possible major addition to SA's future energy mix, but Participant 3 dismissed the possibility of this form of energy being pursued, given the "stigma" associated with it as being one of the policies of the previous government. Globally, renewables have been gaining traction and Participant 12 said that Moore's Law is currently playing out in this space, where costs are dropping dramatically, and yields are improving, making renewables cheaper than coal, which may cause a shift away from coal. However, Participant 13 believes that coal will be complemented by other sources of energy, but it will still be part of the energy mix. The participant stated that the previous debate of "renewables or coal" has now changed to "renewables and coal".

The implementation of carbon taxes continues to be postponed, with Participant 12 commenting that it would be interesting to see how carbon taxes would be implemented and who would be the end-payer.

Many of the participants felt that the shift away from coal is less of a threat in the short-medium term. Participant 7 commented that this threat is more applicable to companies that have mines with a longer life, and since most MBOJCMs' mines have a shorter life-of-mine, this is less of a threat for them. Participant 3 believes that coal will be the main source of energy in South Africa for the next 50 years or longer. He said coal's major advantage over alternative sources of energy is its lower cost, and that the part that it plays in the future energy mix will only be affected if prices increased to levels that would reduce its competitiveness. Participant 8 feels that the heavy reliance on coal globally and the vast range of products and industries that use coal reduce the likelihood that the country and world will ever

move away from coal. Participant 11 cited the building of new power plants in the East as a major driver for the continued demand for the commodity globally.

Legislative barriers

Most participants agreed that obtaining a mining license, a water-use licence, and Quattro allocation (export capacity) from the DMR is difficult. Participant 11 explained that this can be a major hindrance for a MBOJCM, especially when trying to secure funding for a project. He drew on the example of a recent interaction he had with a bank, when it indicated that until the required water license was obtained for a mining project to begin, it would not lend any money for the project. He further explained that this problem is a serious issue in an environment that is becoming stricter about regulatory compliance, yet the processes to obtain regulatory approvals are inefficient. He described cases he came across where applications for licenses have been lost and resulted in processes that should have taken six months taking 2-3 years. Therefore, this threat also negatively affects the MBOJCM's ability to raise funding, especially when it comes to attracting foreign investors who have the option of investing in other places where the regulatory environment is more efficient.

However, Participant 7 said that, from his experience, he has found that the authorities are more accessible to MBOJCMs. But he conceded that this does not mean that MBOJCMs are able to conclude regulatory processes more easily - they are just able to engage with the relevant authorities if necessary.

Eskom's financial woes

Most participants agreed that Eskom's financial problems posed a threat to MBOJCMs, because of their dependence on the power utility as a major customer. Participant 3 described Eskom's financial difficulties as "very scary". Participant 6 added that this may affect MBOJCMs' ability to raise finance, as banks would consider the possible risk of Eskom extending payment terms to suppliers, and the

effect this could have on the MBOJCM's cashflow. Participant 6 pointed out that investing in junior coal miners would indirectly also expose banks to Eskom.

However, Participant 7 believes MBOJCMs would be prioritised by Eskom if the state-owned entity experienced serious cashflow problems that would affect its ability to pay suppliers. He further pointed out that Eskom has made public statements about supporting Black-owned mines and the monetary amount payable to juniors is much less than that owed to the majors because of the smaller volumes of coal supplied by MBOJCMs. He also raised the point that Eskom's awareness that MBOJCMs are not well positioned to deal with extended payment terms and the resultant cashflow problems this may cause for the juniors would deter them from putting the juniors at risk, and potentially seriously impacting a source of coal supply for them. Many of the participants also indicated that key stakeholders must remain committed to Eskom because of the organisation's importance for the survival of the country, and this should give MBOJCMs some degree of comfort. Finally, some of the interviewees who supply Eskom, confirmed that they have never experienced any issues with obtaining payment from Eskom.

Participant 4 further pointed out that initiatives were in place to return Eskom to profitability. He added that Treasury would not allow "the lights to go-off", and this should give MBOJCMs confidence to do business with Eskom. He also mentioned that privatising Eskom or turning it into a partly privately-owned organisation is something that may be considered by the board in the future. '

Coal being declared a strategic resource

Participant 4 admitted that declaring coal a strategic resource and eliminating the willing buyer willing seller competitive environment is something that Eskom and other players in the coal market are pushing for government to do. Participant 6 mentioned that he is aware of a major resource company that does not want to invest in coal anymore, because of a fear of it being declared a strategic resource.

Other participants also mentioned their concerns about the negative effects this would have on investments into the sector.

Participant 8 mentioned that he is busy with an analysis into the effect that a declaration of coal as a strategic resource could have on the industry. He mentioned that one of the findings was that investment into the coal sector was driven by export prices and not domestic prices. Therefore, if coal is designated as a strategic resource, this would affect the company's ability to export coal, which is a very lucrative market for it. This would, in turn, negatively affect its willingness to invest in the coal sector. Participant 8 acknowledged that Eskom would provide a market for coal produced locally, but this would not drive companies to invest in the sector. Therefore, the participant believes that should coal be declared a strategic resource, very few coal miners would survive, and MBOJCMs would be the main casualties. Participant 10 shared this view and said that MBOJCMs would only survive if Eskom offered them cost-plus contracts.

Participant 6 explained that coal being declared a strategic resource would specifically affect miners who have invested significantly in a washing plant to produce export quality coal, and who would then be forced into a situation where prices are dictated to them.

Participant 13 described the possibility of coal being declared a strategic resource as a "bad idea" that would affect the country's fiscus negatively through a loss in taxes earned from coal exports. He also said that it would result in coal miners struggling to obtain future funding, because investors would be deterred from investing in an industry that does not allow them to enjoy the benefits of the upside potential that the global coal markets may offer.

Participant 13 added that he believes that the market will resolve the coal cliff problem that Eskom is currently facing. He explained that the problem that Eskom currently finds itself in, is because they moved their buying behavior from

“sustainable, long-term, dedicated supply, to unsustainable, short-term volatile pricing supply”.

Other Threats

Participant 1 identified the automation of the mining industry as an additional threat to MBOJCMs, as they may not afford the technology to automate, whereas the larger resources companies can. This would therefore give the larger resource companies a competitive advantage over MBOJCMs. If a MBOJCM can afford to automate, there is then the risk that automation may cause a labour risk, due to the possible loss of jobs from this shift.

Participant 2 also raised the point that the way suppliers treat MBOJCMs could affect their businesses negatively, as suppliers often consider MBOJCMs to be risky. This is because of the size of their balance sheet and therefore often require cash upfront or cash on delivery when supplying them. In instances where they are prepared to open an account and offer payment terms, they usually require a guarantee and offer very short payment terms. This will affect the MBOJCM’s cashflow and ability to do business and it could “effectively” lead to them having to close-down.

Participant 2 agreed that labour risks always exists, but as a MBOJCM there is better opportunity to “craft personal relationships” that could reduce the risk of encountering labour issues. Participant 7 also agreed that labour risks will always be an issue. Participant 8 agreed that labour risk is always an issue in mining and said that MBOJCMs can be specifically affected when central bargaining councils agree on member rate increases, which are not as affordable for MBOJCMs, as for major resource companies that have bigger balance sheets. However, Participant 8 did say that multi-year wage agreements is an option that has and can still be used to prevent wage conflicts from arising often.

Participant 6 recounted a concern raised by a junior coal miner whom he had met recently. It was about the rising expectations of communities that reside in the areas where mining operations are taking place. The junior coal miner said that being a majority Black owned company does not make the community in the area in which the company mines any less demanding. Participant 6 explained that should the local community bring the operations of a junior coal miner to a halt, the impact on the business could be significant, if the junior coal miner depends on that mine for the majority of its coal production.

Participant 6 also said that South Africa's reliance on the Indian market for the country's coal exports may affect the growth expectations of the export market. A decline in Indian demand for SA coal will have a negative effect on local coal prices and reduce the profitability of MBOJCMs.

5.2. GE McKinsey Matrix

5.2.1. MBOJCMs' strengths

Participants were required to rate and weight several factors, in order to determine and compare whether these factors provided MBOJCMs with a competitive advantage in the export, inland and Eskom markets.

Ratings ranged between 1 and 5, with a high rating indicating that the strength served a MBOJCM very well in that market, and a low rating indicating the opposite. Weightings were distributed between the factors according to the importance of the factor for purposes of comparing the different markets. A higher percentage weighting indicated that a factor was considered more important when comparing the different markets.

Majority Black ownership status

How much does majority black ownership status improve the competitive advantage of MBOJCMs in each market?

	Rating	*Weighting*
Export	2.18	
Eskom	4.50	
Inland	3.27	
Strength		27%

Eskom's BEM strategy and its inclination to do business with majority Black owned miners resulted in participants rating it the highest for this factor, whilst local businesses wanting to improve their BEE scorecards by procuring from MBOJCMs was a common reason many participants gave for the higher rating in the inland market. Participants felt that ownership status did not really provide any competitive advantage in the export market - hence the low rating.

Simple corporate structure that makes the business agile

How much does the simple corporate structure and consequent improved agility of MBOJCMs improve their competitiveness in each market?

	Rating	*Weighting*
Export	3.33	
Eskom	3.85	
Inland	3.92	
Strength		16%

Most participants felt that this characteristic would give MBOJCMs a competitive advantage in all three markets, but slightly more in the inland market, where quick decisions can help a business to procure coal quickly and to conclude more sales.

However, many of the participants felt that this factor was not as important as the other factors when comparing the strengths of MBOJCMs in the different markets - hence the low weighting compared to other factors.

Quality of coal

How well suited is the coal produced by MBOJCM to each of the markets?

	Rating	*Weighting*
Export	2.83	
Eskom	3.92	
Inland	2.83	
Strength		29%

Participants were unanimous in their assessment that the lower quality coal produced by MBOJCMs is generally not ideal for supply to the export markets and inland customers but is better suited to Eskom use.

Available resources

How well resourced are MBOJCMs for purposes of supplying each of the markets?

	Rating	*Weighting*
Export	1.91	
Eskom	3.25	
Inland	2.82	
Strength		27%

Most participants believed that MBOJCMs are under-resourced in terms of their ability to supply the export market, due to limited access to rail infrastructure and the privately-owned RBCT export terminal. They are better resourced to supply the inland market and can most easily supply Eskom, given their resource capability.

Based on the average weighting allocated to this factor, it is considered important for purposes of comparing the different markets in terms of a MBOJCMs' strengths.

5.2.2. Market attractiveness

The following factors were identified during the literature review as being relevant when comparing the attractiveness of the export, inland and Eskom markets.

Growth potential of the market

What are the prospects for each of these markets?

	Rating	*Weighting*
Export	3.58	
Eskom	4.15	
Inland	3.42	
Strength		9%

Most participants felt that coal will still form a significant part of SA's energy mix for decades to come, and therefore the Eskom market would offer growth potential for the foreseeable future. Although not as optimistic about the export and inland markets, participants felt that these markets also offered growth potential. The export market will be driven by the growing demand for coal from the East; however, Participant 2 is concerned that customers in the inland market may turn to alternative sources of energy.

Competitive intensity within the market

Does the current competition that exists in these markets make it difficult for MBOJCMs to operate in the markets?

	Rating	*Weighting*
Export	2.00	
Eskom	2.92	
Inland	2.42	
Strength		9%

In terms of the competitive environment, participants rated the Eskom market as being the easiest to operate in, because of the initiatives taken by the state-owned entity to do business with MBOJCOMs. The Export market is considered competitive because the major resource companies are the dominant players in this market. The inland market was rated as being neutral in terms of competitiveness.

Barriers to entering the market

How easy is it for a MBOJCM to enter each of these markets and to do business in each?

	Rating	*Weighting*
Export	1.75	
Eskom	3.00	
Inland	3.00	
Strength		13%

Participants identified the inland market and the Eskom market as easier to enter. A well-established local transport industry makes it easier to supply Eskom and the inland market, from a logistical perspective. While less onerous tender processes involved in securing customers in the inland market was identified as a reason some participants preferred this market. The export market was considered the most difficult to enter, due to the private ownership of the RBCT and access to logistics infrastructure. Eskom's rating was affected by some participants feeling that Eskom's supplier screening process and the contract awarding process is difficult in terms of legislative and compliance requirements.

Powers of sellers

How strong a position are coal sellers in when negotiating in each of the markets?

	Rating	*Weighting*
Export	2.58	
Eskom	2.54	
Inland	2.92	
Strength		11%

The inland market was rated as being the best of the three markets in terms of a MBOJCM's ability to negotiate favourable prices. Export prices, on the other hand, fluctuate according to global prices, while Eskom can bully suppliers because of

their buying power. Participant 10 said that when it comes to Eskom, “you do it their way, or you don’t sell to them”.

Profit earning potential

How good are the profit margins that each of the markets offer?

	Rating	*Weighting*
Export	4.33	
Eskom	3.00	
Inland	3.50	
Strength		14%

Participants rated the export market as offering the best profit margins, which was in line with the literature (MCSA, 2018). The inland market was rated second best, with one participant saying you “can cream it” in this market. Profit margins earned from selling to Eskom were not considered significant by the participants.

The average weighting allocated to this factor was amongst the highest, which is consistent with the fact that profitability is key when making business decisions.

Affected by seasonality and cycles

How heavily are each of the markets affected by seasonality and cycles.

	Rating	*Weighting*
Export	2.42	
Eskom	4.08	
Inland	3.00	
Strength		9%

Participants identified the export market as being the most heavily affected by seasonality and cycles, as this market is driven by the demand and supply dynamics of countries that import coal from South Africa. The inland market is affected to a lesser degree, and the highest demand from this market tends to be in the winter season and during periods of strong economic growth. The Eskom market is least

affected by seasonality and cycles but is affected by similar factors to those that affect demand from the inland market.

Government policies and legislation applicable to that market

How heavily regulated are each of the markets?

	Rating	*Weighting*
Export	2.92	
Eskom	3.08	
Inland	3.17	
Strength		11%

Participants rated all three markets similarly in terms of degree of regulation, with Participant 10 commenting that a “coal miner is a coal miner”, no matter what market they supply.

Capital intensity

How capital intensive are each of the markets?

	Rating	*Weighting*
Export	1.78	
Eskom	3.20	
Inland	2.89	
Strength		14%

Participants rated the Eskom market as being the least capital intensive of the three markets, with the export market requiring the largest capital investment. The reason for this is the large equity investment that would be required to gain access to RBCT. Participant 2 also explained that proportionate equity contributions would need to be made by RBCT shareholders when capital intensive projects are undertaken.

Stability of demand and customers within that market

How stable are each of the markets in terms of demand?

	Rating	*Weighting*
Export	2.42	
Eskom	4.38	
Inland	2.92	
Strength		10%

The Eskom market was rated as the most stable by a significant margin. The inland market was also rated as stable and the export market as a little unstable, due to the demand and supply dynamics of the international coal markets.

Earnings volatility

Participant 7 identified earning volatility as an additional factor that needed to be rated to compare the attractiveness of the export, inland and Eskom markets.

	Rating	*Weighting*
Export	1.00	
Eskom	5.00	
Inland	3.00	
Strength		15%

He rated Eskom as being the most favourable, export the least favourable and inland as less volatile. In terms of weighting, he regarded this factor as important and weighted it at 15%.

5.2.3. Average weighted ratings

By consolidating the weightings and ratings received for all factors identified, the following average weighted-ratings were calculated:

MBOJCMs' Strengths

Market	*Average weighted rating*
Export	2.31
Eskom	3.99
Inland	2.91

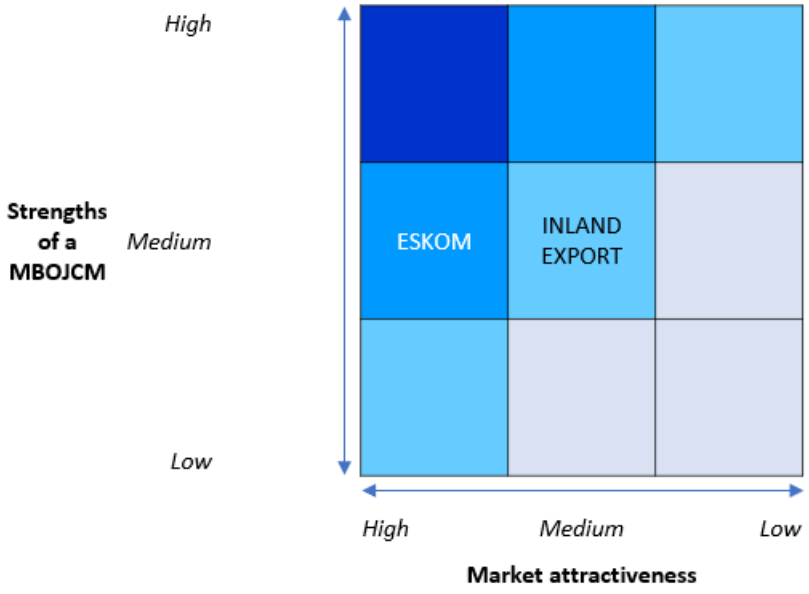
Market attractiveness

Market	*Average weighted rating*
Export	2.59
Eskom	3.29
Inland	2.75

5.2.4. GE-McKinsey Matrix

By plotting the average weightings and ratings onto the GE-McKinsey matrix, the matrix appears as indicated in Figure 5.1

Figure 5.1: GE-McKinsey Matrix for MBOJCMs



The following can be seen in the GE-McKinsey matrix above:

- Eskom is in a “grow” quadrant,

- The inland market is in a “hold” quadrant, and closer to the “grow” quadrants

- The export market is also in a “hold” quadrant, but further away from the “grow” quadrants.

6. ANALYSIS AND DISCUSSION

6.1. Key Findings

Being majority black-owned, in a country that is committed to transformation, offers a company a competitive advantage in the national coal industry. Most of the interviewees agreed that ownership status was a significant strength for MBOJCMs. This finding is consistent with the literature, where initiatives such as Eskom's BEM strategy and the BBBEE Act No.53 of 2003 were identified as allowing MBOJCMs to outperform competitors (ESKOM, 2016; Government Gazette, 2004).

Eskom offers the largest market for SA coal and its policy of favouring majority black-owned miners over the major resource companies is an important factor driving change in the coal industry and creating new opportunities for MBOJCMs (MCSA, 2018). The divestment of their Eskom-tied coal mines by major resource companies is increasing and is an example of this change. This report study therefore confirms that the biggest opportunity that currently exits for MBOJCMs is to supply Eskom.

Eskom's selection as the preferred market for MBOJCMs is despite the growing opportunity for MBOJCMs to participate in the export market. The global shift in demand for coal, from the East and the West, has played an important role in the ability of MBOJCMs to participate in the export market (MCSA, 2018). This market was previously only available to miners who could produce high grade coal that was suited to the European market, which was the main destination for SA coal. However, India, Pakistan and other Asian countries have recently replaced European countries as the biggest importers of SA coal (Richards Bay Coal Terminal, 2019). The Asian market also uses lower grades of coal than was used by their European counterparts. This has created a market for lower grade coal in the seaborne market and has made it possible for MBOJCMs to participate in this

market, as the lower grade coal that they produce now has an alternative market to Eskom.

Forrest and Loate (2017) identified the ability of MBOJCMs to raise finance as a major obstacle that they face. The finding of this report study confirmed this. MBOJCMs are often entrepreneurs who start a business with limited capital and operate a single mine. Their weak balance sheets make it difficult for them to raise capital and they are often faced with cash flow problems. This weakness also limits their ability to exploit new opportunities that may arise in the sector. Additionally, an emerging problem for the industry is the growing unwillingness of some local banks to fund coal projects because of pressure from global environmental organisations. This aspect of access to funding has been addressed extensively in this report study.

Coal quality was also identified as a key factor that determines the market to which MBOJCMs can sell. Even though the lower coal quality demanded from Asia has opened the export market to MBOJCMs, their coal is best suited to Eskom's requirements, as it demands an even lower grade of coal. When comparing the attractiveness of the markets, participants weighted capital intensity and profit earning potential as most important when pinpointing the best potential market for a MBOJCM. As found by other researchers, participants rated the export market as offering the most lucrative margins (MCSA, 2018). But the GE-McKinsey ratings also reveal that selling to the export markets requires a much larger capital investment than is needed to supply Eskom.

The GE-McKinsey matrix revealed that MBOJCMs may, therefore, not be as well suited to supplying export markets or the inland markets as are the major resource companies. Access to rail sidings and the RBCT are examples of limitations that impact their ability to participate in the export market, while the coal quality requirements of the inland market makes it more difficult to supply this market. Despite this, both the export markets and the inland markets where categorised into

the ‘’selectivity’’ quadrant in the GE-McKinsey matrix. This indicates that there may still be an opportunity for MBOJCMs to diversify their revenue by supplying these markets.

6.2. Study Contribution

The recovery in seaborne coal prices, increased appetite for SA coal from the Asian markets and the divestment of Eskom-tied coal mines by SA’s major resource companies, are a few key developments in the industry that have created new opportunities for MBOJCMs. These recent developments have created the need for updated research to determine whether they have changed how a MBOJCM should prioritise selling to Eskom, the export markets and local industrial markets.

In the past, MBOJCMs would not have been able to supply coal to the export markets because of the incompatibility of the lower grade coal that they produce with the requirements of the export markets. However, declining coal reserves in the Mpumalanga region, lacklustre investment in the mining sector (related to legislative policy uncertainty), and a lack of investment in cost-plus mines by Eskom, has negatively affected local coal supplies. These supply constraints and the resultant coal cliff that the country now faces adds further relevance to this study report because these factors have been considered by participants when they compared the different markets.

The GE-McKinsey matrix portfolio analysis tool was used to prioritise the coal markets. It is the use of this tool that distinguishes this study report from previous work that compares the coal markets. The model required interviewees to weight and rate the various strengths of MBOJCMs, as well as other factors that determine the attractiveness of the coal industry. These ratings and weightings brought a quantitative element to the study, which is what differentiates it from previous

research done on the coal markets, as they only compared the markets from a purely qualitative perspective.

6.3. Limitations of the findings

A limitation of the GE-McKinsey matrix is that industry attractiveness and the strengths of MBOJCMs can only be accurately weighted and rated by experienced persons who are familiar with all three markets. An added limitation is that the weightings given to the different factors can be subjective. To mitigate this, experts with extensive experience in the industry were interviewed. One of the participants indicated that he/she only had experience in one of the markets and therefore this individual only provided ratings and weightings for that specific market. The one-on-one interviews allowed the researcher to explain each question and probe the responses, ratings and weightings that were not consistent with the literature encountered. Sending a copy of the interview transcript and the GE-McKinsey ratings and weightings to each participant after their individual interviews provided them with an opportunity to identify any misinterpretations and is an added strength in terms of the findings.

The participants selected for interviewing are all from the Johannesburg area and thirteen experts were interviewed. However, balance was achieved in that participants included investors, bankers, analysts, CEOs, executives and Eskom-affiliated individuals.

6.4. Suggestions for further research

The study identified several issues that warrant further investigation and study. Four are detailed below.

First is prioritising the export markets, Eskom and the inland market, by comparing the profit earning potential of each of the three markets. This would require detailed financial analysis and modelling to be performed. The findings from such a study would provide a more analytical comparison of the markets.

Second, is a detailed study of the different options available for MBOJCMs to export coal, and a recommendation of the best way for them to participate in this market. Such a study would be useful to MBOJCMs looking to take advantage of the opportunities that exists in the export markets.

Third, a study to determine how MBOJCMs can collaborate to share skills and capital so that they are able to take advantage of opportunities that may be difficult to pursue on their own, would be useful. Developing such a model would assist MBOJCMs that are looking to grow their business but are constrained by limited access to resources.

Finally, in his 2019 State of the Nation Address, President Cyril Ramaphosa announced the decision to break Eskom up into three separate entities (Ramaphosa, 2019). The impact that the implementation of this strategy could have on MBOJCMs is uncertain and therefore a study to determine this would be useful.

7. CONCLUSION

While the role of coal in the future of the global economy is uncertain, it is the opinion of most interviewees that coal will be a major part of SA's energy mix for decades to come. The abundant supply of the commodity within the country, the current extremely high dependence on coal for SA's electricity needs, and recent investments by Eskom in coal-fired power plants, support the case for long-term investment in coal in SA.

The study found that MBOJCMs are well positioned to operate and take advantage of opportunities that exist within the SA coal industry. Their majority black ownership status gives them a competitive advantage in several areas, and as the drive for transformation within the country gains even more traction, further opportunities are likely to arise. However, to create a sustainable business, they would need to manage their weaknesses strategically and mitigate against several threats that have been identified in this study - specifically managing cashflow and access to funding.

Their limited resources make it even more important that they invest prudently. Strategic allocation of resources is then a key decision for any MBOJCM. With the option to sell coal to Eskom, the local industrial market and the export markets, a MBOJCM must decide which of these markets to prioritise in terms of its investment, taking into consideration the different quality and logistical requirements of supplying each of these markets.

Based on the research findings and the GE-McKinsey matrix that was plotted using these findings, a MBOJCM has a competitive advantage in the Eskom market and should therefore focus on supplying Eskom and prioritise its investments accordingly. To a lesser degree, both the inland market and the export market also offer opportunities for MBOJCMs to generate profits, with the inland market being the more attractive of the two. Investing in the capacity to supply these two markets

will help MBOJCMs diversify their revenue base, but these should receive a smaller share of their investment capital.

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