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Factors Influencing Financial Structures In Mining Empowerment Transactions

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ABSTRACT

Black Economic Empowerment (BEE) in the mining sector is dependent on regulatory imperatives and stakeholder interactions. Despite the regulatory drivers however, mining empowerment transactions, like any other financial transactions, must be based on sound economic and financial fundamentals so as to ensure their sustainability. The purpose of this research was to investigate the factors influencing financial structures in mining empowerment transactions in South Africa. BEE within the mining sector has been at the forefront of transformation and empowerment within the economy, however academic literature on the drivers or factors influencing mining empowerment transactions, their evolution and the roles played by mining stakeholders, is limited at best, hence the motivation behind the research.

Exploratory research and qualitative analysis methodology were carried out in this research. Specifically, in-depth face-to-face interviews with eleven experts in the field of BEE transactions were performed.

The results confirmed that: the financial vehicles available to BEE investors were dependent on the macro-environment of business; financier risk was a function of ineffectual deal structuring; the type and level of debt structuring was the key factor in financial structuring and greatly influenced the success of the deal; and, lastly, that joint ventures (JVs) were in essence strategic alliances to meet the fundamental objectives of mineral rights conversions and an increase of black capital in the economy, as opposed to partnerships based primarily on operational equality.

DECLARATION

I declare that this research proposal is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research proposal.

Signature

Date

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LIST OF ABBREVIATIONS

BEE	Black Economic Empowerment
DCF	Discounted Cash Flow
DME	Department of Minerals and Energy
HDSA	Historically Disadvantaged South African
IDC	Industrial Development Corporation
FSC	Financial Services Charter
JV	Joint Venture
M&A	Mergers and Acquisitions
MPRDA	Mineral Petroleum Resource Development Act
SPV	Special Purpose Vehicle

1 CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM

1.1 PURPOSE OF STUDY

The purpose of this research was to investigate the factors influencing the financial structuring of Black Economic Empowerment (BEE) mining deals by means of the financial vehicles available to BEE investors, in order to explore optimal mining empowerment financial structuring.

1.2 CONTEXT OF STUDY

The concept of BEE was first noted in the early 1990s as a means of redressing the socio-economic imbalances on the majority of the South African population resulting from apartheid, initially by increasing black shareholding in major corporations (Ponte, Roberts & van Sittert, 2007). The role of government has been to introduce various policy documents and legislation with the aim of facilitating and catalysing transformation; specific to the mining sector, these have included the Broad-Based Socio-Economic Empowerment Charter for the South African Mining Industry, commonly referred to as the Mining Charter or Charter (Republic of South Africa, 2002a) and the Minerals and Petroleum Resources Development Act (MPRDA) (Republic of South Africa, 2002b). The MPRDA (2002b, p. 9) is pillared on nine key objectives which include: “the right of the State to exercise sovereignty over all mineral and petroleum resources within the Republic” as well as “promote equitable access to the nation’s mineral and petroleum resources to all the people of South Africa”. Hence the MPRDA enabled government to leverage its position as custodian of state minerals by awarding new order mineral licences to those mining companies

that qualified under the Charter. The Charter and its associated Scorecard are pillared on nine socio-economic upliftment objectives, the aims of which are to promote and foster the entry and participation of Historically Disadvantaged South Africans (HDSAs) in the mining sector. One of the nine objectives is ownership and joint ventures, and to this end the Mining Charter requires that 15% of the ownership of mining industry assets be transferred to HDSAs by 2009 and 26% by 2014. Mining companies can achieve ownership requirements either by selling an equity stake to a BEE partner or by entering into a joint venture (JV).

A key challenge in the structuring of BEE deals is the lack of capital or access to capital experienced by BEE investors (Pincock & Butler, 2005). Typically the financiers of BEE transactions include: banks, private equity firms, government backed institutions, such as the Industrial Development Corporation (IDC), as well as the parent companies to be invested in; hence the playing field is often skewed in favour of the financiers in BEE transactions and as a consequence the financial structuring of the deal may not lend itself to mutually beneficial funding arrangements for all stakeholders. Other stakeholders include: parent company shareholders, management, boards of directors and government, all of whom have different views and levels of influence on a transaction (Engelbrecht, 2007). Furthermore, as noted by Dickinson (2008, p. 62) “Empowerment in the SA market is an artificial driver that keeps mining M&A more buoyant than it would otherwise be – if based purely on commercial grounds. Companies are doing deals because they want to retain or acquire mining rights”. Hence the primary focus of this research is on the finance vehicles available to BEE investors, the factors influencing them and how the resulting hybrid structures could

be optimised so as to achieve sustainability; and to a lesser extent, to explore the feasibility of such transactions post regulatory requirements, where it is anticipated that they would be based solely on commercial grounds.

1.3 SIGNIFICANCE OF STUDY

As noted previously, BEE investors typically lack capital or access to capital (Pincock & Butler, 2005). This is primarily due to the exclusion of BEE investors from the mainstream economy during apartheid which inhibited them from accumulating wealth (Republic of South Africa, 2003); as a consequence their resulting poor credit ratings lead financiers to see BEE investors as high risk (Huyghebaert & Van de Gucht, 2007) and this is further illustrated in the financial debt instruments made available to acquire equity (Burger, Munian, & de Groot, 2003). What is lacking from the limited academic literature on BEE transactions is a fundamental awareness and appreciation of the role and significance of optimal financial structuring in the financing of BEE mining deals so as to mitigate risk and propagate sustainability. Further to this, recent amendments to Section 38 of the Companies Act enable a company to offer financial assistance for the purchasing of its own shares as a means of facilitating BEE transactions provided the following three requisites are met (Temkin, 2008):

- The assets of the company exceed their liabilities.
- The company remains liquid for the period of assistance.
- The shareholders of the company must have approved the terms and conditions of the funding mechanism by means of a special resolution.

Hence it is an opportune time in BEE to provide a greater understanding of the choice and management of financial vehicles for a JV; it is envisioned that a greater insight and depth into the facilitation of BEE deal structuring will be gained from this research.

1.4 PROBLEM STATEMENT

The determination of the factors influencing financial structures in mining empowerment transactions.

1.5 DELIMITATIONS, LIMITATIONS AND ASSUMPTIONS

Delimitations

- The research highlights the most common forms of finance vehicles available to BEE investors and does not investigate all forms of financing.
- The research investigates the corporate finance theory applicable to the finance vehicles stated herein in order to provide greater depth into the mechanisms behind deal structuring and not generalise the findings across all deals.
- Reference to specific JVs and their financial structuring lies outside the scope of the research.
- The research highlights tax as a factor in financial structuring, but does not provide an analysis of tax or tax related issues.
- The research makes mention of the Financial Services Charter (FSC), but does not detail the exact nature of the FSC and how it can or should be leveraged to enhance BEE activity.

Limitations

- The research is limited to the financial vehicles, as influencing agents, in the financial structuring of BEE mining transactions.
- The research is not a survey or ranking exercise on types of BEE mining structures completed to date.
- Academic literature specific to BEE (mining) transactions is not available hence the literature is limited to news media, for example business articles, presentations, research reports and corporate finance theory base.
- Sample size is greatly determined by the availability of expert respondents.

Assumptions

- For the purposes of this research the terms ‘financial structuring’ and ‘capital structuring’ are used interchangeably.

2 CHAPTER 2: LITERATURE REVIEW

The management of a company's capital structure can take place through debt or equity issuance, debt or equity repurchases, dividend increases, acquisitions, new investments and risk management (Shivdasani & Zenner, 2005). By extending elements of this theory towards BEE mining financial structuring of JVs it is envisioned that a greater insight and depth into optimising financial structuring will be gained. To this end the research will be divided into the following four components in addressing the research problem: financial vehicles, financier risk, BEE investor leveraging and joint ventures.

2.1 FINANCIAL VEHICLES

Section 38 of the Companies Act (Republic of South Africa, 1973) has its origins in the 1948 English Companies Act which sought to prevent companies from purchasing their own shares, thus reducing its capital and putting its creditors and minority shareholders at risk (Mgudlwa & Miller, 2003). To this end and as noted earlier in Section 1.3, Section 38 of the Companies Act initially prohibited firms from providing financial assistance to BEE investors in purchasing their own equity as a means of facilitating BEE. Nevertheless, several legal ways in which to structure BEE transactions with the assistance of firms were borne out of Section 38. For example:

- **Special purpose vehicles** (SPVs) were established whereby third party financing was utilised to purchase shares within a company with the proviso that the BEE

investor's equity be held as security until the debt is paid off (van der Merwe, 2004); the risk associated with SPVs is that they tend to be highly leveraged and depend greatly on the market performance of share prices (M'Paradzi, 2006) as well as the resulting cash flow of the JV.

- **Equity transfer** of new shares at a discount to a BEE investor or consortium resulting in a dilution effect on the value of original shareholder equity and potential adverse tax implications (Daya, 2006).
- **Mezzanine** financing whereby lenders offer unsecured debt, that is debt with no collateral (Richards, 2002). However, this finance vehicle comes with high interest rates and if payment defaults occur, the lender has the right to convert the debt into equity in the company. Despite the high interest rate and risk in defaulting payments, Mezzanine provides the borrower with quick liquidity, hence its attractiveness.

Other debt financing models as noted by Taplin & Snyman (2003) include:

- **Conventional Debt Funding** which is based on the premise that cash flow or dividend flow will enable the BEE investor to service the debt. The risk taken by the financiers is that of cash flow failing to materialise.
- **Gearing with Equity Sweeteners to Financiers** whereby a market related interest rate is placed on the loan coupled with a sweetener for financiers, so that they are able to benefit from the upside share price of the company if the share price traded above its initial price at the commencement of the deal.

- **Vendor Finance** where normally a passive investor or in the case of BEE mining the parent company itself, will sell shares to the BEE investors on a **deferred payment** basis over a period of time.
- **Preference Shares** which provide financiers with guaranteed after tax income; redeemable preference shares provide financiers with the option of partaking in the company.
- **Share Buy Backs** whereby the parent company buys back shares through a subsidiary which can then be issued to the BEE investor with a potential tax benefit.
- **Convertible Debentures** which are issued to the financier by the BEE investor and which will come into play if capital or interest payments are not met, or if the market value of the acquisition falls below a certain level.
- **Revenue Stripping** enables the vendor to acquire all or part of the BEE investor's share of production or dividend stream.
- **Asset Based Financing** occurs when BEE investors acquire separate assets, especially in the case where assets have separate cash flows.

Proposition 1

The financial vehicles available to BEE investors and the hybrids thereof are dependent upon the macro-environment of business: the market, legislation and access to capital.

2.2 FINANCIER RISK

Financiers base their decisions to lend money on the level of risk exposure to the borrowers which is dependent on their financial standing, management of the venture,

and on the nature of the industry. These factors play a significant role in the debt ratio, debt mix and maturity structure of the lender debt (Huyghebaert & Van de Gucht, 2007). Limited BEE investor capital also results in financiers bearing the risk associated with a BEE transaction. “As BEE groups and funders of BEE transaction are aware, the return profile of the investments is asymmetrical – the funder assumes all the downside risk, while sharing the upside potential with the BEE groups, primarily brought on by the BEE group’s lack of capital” (Stassen & Kirsch, 1999, p.8). With risk being a critical factor in the lending of capital by financiers, it goes without saying that non-financial factors also play a significant role in the decision to lend (Grunert, Norden, & Weber, 2005).

Borrowers of capital are often rated so as to determine the quality of the debtor as well as to ascertain their potential for defaulting a loan. Although BEE investors would generally rank low in such ratings, it is recommended that the hybrid rating model presented in Krahnert & Weber (2000, p.8), which takes into account factors such as business risk, competition risk, legal risk and quality of management, be used to assess and monitor the risk and sustainability of JVs.

Relationship lending is based on the premise that the decision for a financial intermediary to provide services such as the lending of capital to a firm depends greatly on borrower specific information collected over time (Bharath, Dahiya, Saunders & Srinivasan, 2007).

Hence a lender is more willing to provide financial services to a firm with a well-established track record in its industry and one that it has had dealings with in the past; more specifically, Bharath *et al.* (2007) have shown that relationship lending leads to at least a 40% probability of future lending between a bank and a firm, versus a 3% probability in its absence. In the case of BEE investors who were new entrants to the economy and without a prior track record or banking relationship, banks were willing to mitigate their lending risk, provided that parent mining companies were willing to underwrite or provide surety on the transaction.

Proposition 2

Ineffectual financial structuring of a mining transaction will result in a defaulting of the loan by the BEE partner.

2.3 BEE INVESTOR LEVERAGING

The issuance or uptake of debt over equity, or vice versa, is a key and central debate in corporate finance. Dittmar & Thakor (2007, p.1) seek to address the question: “Why and when do firms issue equity?”, stating that firms are more likely to issue equity as opposed to debt when their share price is high, which is counter intuitive as an increase in share price lowers a firm’s leverage ratio, which in turn would lead to greater debt issuance.

Advantages and disadvantages of debt financing include the following (Richards, 2002):

Advantages

- Repayment - sole obligation to lender is to refinance the loan as per the agreed upon schedule.
- Tax deductions – principal and interest payments on a business can be classified as business expenses and thus be deducted from the company's income tax.
- Interest rate – after tax deductions the borrower will benefit from a lower interest rate by the amount of: $interest\ rate \times (1 - tax\ rate)$.

Disadvantages

- Repayment – if business opportunity fails and even in the case of bankruptcy, the loan repayments still have to be made and lenders will have first claim over equity investors.
- Interest rate – even after the tax benefits from the discounted interest rate, the interest rate can still vary, depending on external factors as well as personal and business credit ratings.
- Collateral – as a precautionary measure, lenders will typically insist on collateral in the event that the borrower defaults on payments.

As noted earlier in Section 2.1 there are several financial vehicles available for structuring empowerment transactions. The level and type of debt is critical to the success of a transaction. For example, because private equity is expensive compared

to debt or public equity markets (Fenn, Liang & Prowse, 1997), it is imperative that the parent mining company be involved to the extent that the success of the transaction is ensured.

Proposition 3

The sustainability of a BEE mining transaction is dependent on the level and type of debt structuring as well as the terms and conditions of the debt incurred.

2.4 JOINT VENTURES

The financial structuring of the JV inevitably has an influence on the overall structure of the JV and the resulting relationship between JV stakeholders. Academic literature tends to characterise JVs from the point of reference whereby synergies are enhanced through the partnership; however in the case of BEE mining JVs, particularly the earlier ones, the value add of the BEE investor tended to be questionable, e.g. “the SPV structure did not promote operational involvement and transfer of skills to BEE” (Mbetse, 2004, p.22).

Joint venture activity has been characterised by strategic alliance formulation whereby the diversity is embraced and knowledge transfer and acquisition encouraged for the betterment of the JV (Grant & Baden-Fuller, 2004; Inkpen, 2000). Inkpen & Tsang (2005) describe how knowledge through network relationships further enhances the success of the JV.

Partnership managers are active managers who play a distinct role in the company in which they invest (Fenn, Liang, & Prowse, 1997). This may be in the form of voting through seats on the board, to involvement in company strategy. However, such an active role would necessarily require a high level of expertise in the industry; hence BEE investors typically do not take on partnership managerial roles except in the area of transformation or mineral rights conversion.

Merchant & Schendel (2000, p.723) investigated conditions under which announcements of international JV formation lead to increases in shareholder value for the host company, which lead to their research proposal: “shareholder value must be created when JVs are formed in the presence of conditions that enhance the economic efficiency of firm”. Their findings show that shareholder value in the firms sampled was influenced by: the nature of individual business activities versus JV activity, efficiencies the partners realise as a JV, externally embedded influences on partners, such as similarity in cultures, and advantages arising from a partner’s resources and intellectual property. Both Chalos & O’Connor (2004) as well as Pangarkar & Klein (2004) identified JVs in terms of the rights and obligations of participants, such as management, performance and knowledge transfer. With respect to the former, various control mechanisms are put in place so as to align JV activities with overarching JV strategy and these include: i) cultural controls to encourage alignment of partner values ii) behavioural controls to direct management and iii) output controls to motivate management. It will be shown herein that elements of these findings from JV literature are applicable to BEE mining JVs.

Proposition 4

The financial structuring of the BEE mining JV influences the overall structure of the JV and consequently the level of interaction between the JV partners.

3 CHAPTER 3: RESEARCH PROPOSITIONS

The propositions detailed below are also presented alongside their corresponding literature review, data collection tool and analysis in the form of a Consistency Matrix in Appendix 1.

3.1 PROPOSITION 1 – FINANCIAL VEHICLES

The financial vehicles available to BEE investors and the hybrids thereof are dependent upon the macro-environment of business: the market, legislation and access to capital.

3.2 PROPOSITION 2 – FINANCIER RISK

Ineffectual financial structuring of a mining transaction will result in a defaulting of the loan by the BEE partner.

3.3 PROPOSITION 3 - BEE INVESTOR LEVERAGING

The sustainability of a BEE mining transaction is dependent on the level and type of debt structuring as well as the terms and conditions of the debt incurred.

3.4 PROPOSITION 4 – JOINT VENTURES

The financial structuring of the BEE mining JV influences the overall structure of the JV and consequently the level of interaction between the JV partners.

4 CHAPTER 4: RESEARCH METHODOLOGY

4.1 RESEARCH METHOD

Exploratory research and qualitative analysis methodology were carried out in this research. According to Zikmund (2003) the purpose of exploratory research is to diagnose a situation, screen alternatives and discover new ideas. The first two of these purposes were carried out by means of secondary data collection by means of a literature review, in order to assess the history and current standing of BEE mining financial structuring; the last purpose resulted from the data collection.

Initially case study methodology was going to be used in order to explore specific deals. However preliminary or pre-research face-to-face interviews, based on convenience sampling, were held with both industry players and academics as a means of exploring the feasibility of the research (see interview list in Table 10, Appendix 2); a key finding from the pre-research interviews was that owing to the confidential nature of the details behind BEE mining transactions, disclosure from stakeholders would be limited. Hence the approach taken in this research was to focus on the actual finance vehicles from a corporate financier perspective, as opposed to an analysis of specific deals. To this end it was decided that exploratory research be carried out by means of in-depth face-to-face interviews with experts in the field of BEE mining transactions.

4.2 POPULATION

The target population in this research can be defined as all stakeholders that have been involved in the financial structuring of BEE mining transactions. These stakeholders include: parent mining companies, BEE investors and financiers.

4.3 SAMPLING AND SIZE

The nature of qualitative research is to provide an in-depth understanding of a concept or problem as opposed to quantifying the extent of a phenomenon (Zikmund, 2003). As such a smaller sample size is required in qualitative research compared with quantitative research. Non-probability sampling was deemed to be the appropriate sampling technique in choosing the respondents necessary to investigate the unit of analysis of the research - the financial vehicles utilised in BEE mining transactions. This also led to the usage of snowball sampling.

Non-probability sampling is defined as “a sampling technique in which units of the sample are selected on the basis of personal judgment or convenience” (Zikmund, 2003, p. 380), whereas snowball sampling is defined as “a sampling procedure in which initial respondents are selected by probability methods and additional respondents are obtained from information provided by the initial respondents” (Zikmund, 2003, p. 384). Hence for the purposes of this research judgmental (or purposive) non-probability sampling (McBurney, 1998; Zikmund, 2003) was carried out where the researcher selected the respondents in the population based on the key criteria of the

respondents having been active participants in the financial structuring of BEE mining transactions.

The size of the sample, based on the target population, was chosen to be at least five respondents per stakeholder category which included: parent mining companies, BEE investors and financiers. Hence 15 respondents were to undergo in-depth face-to-face interviews in this research. However, during the course of the interviews a *convergence* of results was observed and the interviews were stopped after 11 respondents. Albeit a smaller sample size than initially planned, it must be noted that the level of seniority, as well as the quality of respondents, provided the researcher with further confidence to limit the sample size rather than interview a larger sample of respondents with less experience and credibility in the field.

During the course of the research it was also decided that an equal weighting of respondents per stakeholder category was no longer a requirement; rather, owing to the availability of the respondents, representation from each of the categories was deemed sufficient. Lastly, a fourth interview category, *other*, was added, which referred to people with expertise in BEE theory and practices as a whole, as opposed to mining specific. This brought new and valuable insight into the research.

4.4 DATA COLLECTION

Data was collected by means of one hour in-depth face-to-face interviews with experts in the field of financial structuring in BEE mining transactions (shown in Table 1 below).

Note: The identities of the interviewees will not be declared in the results section and

the order of responses will be scrambled relative to the order of appearance in Table 1. The interviewees were guaranteed anonymity in the results; this allowed for more candid and open responses and a greater analysis of the issues raised as opposed to the personalities involved. All of the interviews were conducted during the period of 15 July – 30 July 2008 with the exception of the last one, which was conducted on 5 September 2008 due to scheduling difficulties.

Table 1: Interview List

Category	First Name	Last Name	Organisation	Designation
Financial Institutions				
	1 Germien	Du Plessis	Bravura Corporate Finance	Senior Financier
	2 Helmut	Engelbrecht	Standard Bank	Director: Acquisition Finance Group
	3 Fradreck	Shoko	JP Morgan	Executive Director
	4 Theuns	Ehlers	Absa	Head: Project Finance
BEE Investor				
	1 Janine	Du Bruyn	Unipalm Investment Holdings	Director
	2 Shakes	Matiwaza	Mvelaphanda Group Limited	Group Investment Executive
Parent Company				
	1 Craig	Fish	Anglo Platinum	Manager: Corporate Finance
	2 Albert	Jamieson	Lonmin Platinum	Executive Vice President
Other				
	1 Vuyo	Jack	Empowerdex	Executive Chairman
Referrals/Snowball				
	1 Ernst	Kannenber	Resource Finance Advisors	Executive
	2 Joel	Kesler	Anooraq Resources Corporation	Head Of Business Development

The interviews were an hour in duration and semi-structured. These were based on an interview guide (see Appendix 3) which is an extension of the research propositions previously stated in Sections 2 and 3. Other issues raised outside of the propositions framework that were deemed to add value to the research were also noted and analysed. The guide was designed to enhance the level of interaction with the respondents, but not to lead them, so as to enable flexibility and spontaneity in the interview process. Hence the guide was used by the researcher merely as a reference

in order to ensure consistency in the approach to each interview, as opposed to being the focus of the interview as recommended by Patton (2002).

Permission was granted by all interviewees to record the interview, which enabled both the researcher and respondent to engage without the distraction of note-taking and it also enabled the researcher to observe non-verbal communication during the interview, which fostered a better interpretation of points made. Furthermore, according to Patton (2002) failure to note the exact words of an interviewee invalidates qualitative research as the interviews are the raw data upon which the research is based.

After each interview formal transcripts from the interview recordings were made through the services of a professional transcriber in order to ensure the accuracy and integrity of the interview. Notes were made from the transcripts and where queries remained, the researcher contacted interviewees afterwards for clarification.

4.5 DATA ANALYSIS

Data from the interviews were coded as a means of analysing the research in terms of the propositions noted or other issues, arising from the propositions during interviews. Hence the research was primarily based on the analysis of the insights gained during the interviews addressing the propositions and other issues raised, and not specifically on the people formulating those insights. Consequently, the first level of analysis entailed preparing a summary table of the interviews based on the issues raised as shown in Table 2 below (adapted from MacKenzie (2008)):

Table 2: Interview Response Ranking

ISSUES	INTERVIEWEES						etc	AVERAGE	%
	1	2	3	4	5				
1									
2									
3									
4									
5									
etc									

The issues per interviewee were ranked according to the ranking system in Table 3 below where the “average” was taken to be the average score per issue across all interviewees. Hence the higher the average the higher the ranking; “%” is the percentage of interviewees that responded on a particular issue.

Table 3: Description of Ranking

Rank	Description
0	not mentioned
1	brief mention
2	satisfactory response covering corporate finance issues
3	detailed response
4	detailed response with examples

Note: all issues raised consisted of sub-issues which were also ranked and the total score rolled up into what is observed in Table 2. The sub-issues per proposition are shown in Appendix 4.

In rating the responses in this manner an initial insight into the types and detail of responses furnished by the respondents was ascertained, thus providing an initial response overview. Furthermore, this provided the researcher with greater clarity and

focus in utilising the consistency matrix for developing responses to the propositions being researched.

4.6 VALIDITY AND RELIABILITY

Rowley (2002) highlighted that four tests are widely used to establish the quality of empirical social research: construct validity, internal validity, external validity and reliability. With respect to the research detailed herein, construct validity, where data collection questions and measures are linked to research propositions, and external validity, where generalisation is based on replication logic, will be explored. For example, it may be possible, even in the qualitative research, to use triangulation in order to assess the rationale behind the usage of various financial vehicles in mining empowerment transactions. Triangulation is an analytical research technique that makes pertinent conclusions based on observations and results from multiple methods by leveraging the strengths of several methods while minimising the impact of their individual short-comings (Modell, 2005); or, simply put, “it uses evidence from different sources to corroborate the same fact of finding” (Rowley, 2002, p.23). Hence triangulation can either result in convergence or divergence of observations as a means of establishing validity and reliability of findings. As noted in Section 4.3 the former was observed during the interview phase of the project.

5 CHAPTER 5: RESULTS PRESENTATION AND ANALYSIS

The purpose of this research was to determine the *factors influencing financial structures mining empowerment transactions*. To this end interviews were held with 11 respondents considered to be experts by virtue of their involvement in the structuring of mining empowerment deals and in the case of a single respondent, by virtue of his overall expertise and involvement in the field of BEE for which he is renowned in South Africa.

This chapter presents the research findings from the interviews as per the Research Propositions and Research Methodology, Chapters 3 and 4 respectively. Exploratory in-depth face-to-face interviews with expert were conducted in order to address the four propositions. Owing to the nature of the interview process, that is its non-rigid structure, interviewees were able to speak freely and without inhibitions. This resulted in three key observations:

- A varying number of issues and their corresponding sub-issues were raised per proposition; those deemed to be major issues or issues of significance were noted as such and appear in the results tables herein.
- Issues were raised which fell outside the immediate scope of the propositions, but were nevertheless of great value and significance to the study; these were placed in a fourth category titled 'other issues'.

- It was inferred that the greater the number of respondents raising the same issues, the greater the role of these issues as *factors influencing financial structures mining empowerment transactions*.

The results of the research are arranged according to the *research categories*, that is the *4 propositions* and *other findings*. Each section consists of a summary of the major issues raised, tabulated per category, followed by an analysis and discussion of the results. A total of 34 major issues were noted for all categories. Note: there was an unequal distribution of major issues throughout the categories, which provided initial guidance into the importance and relevance of each category to the overall research. Although the major issues per proposition are noted in Tables 4 through 8, not all issues are discussed herein; only those that were deemed to add significant value to affirming or disproving the propositions are discussed and in some cases these may not have been the highest ranked issues. Where there was overlap in major issues these were addressed jointly. Furthermore, the scores of the underlying sub-issues per category were rolled up into the scores shown in the results table.

5.1 PROPOSITION 1 – FINANCIAL VEHICLES

The financial vehicles available to BEE investors and the hybrids thereof are dependent upon the macro-environment of business, i.e. the market, legislation and access to capital.

5.1.1 DATA ANALYSIS

A total of 12 major issues were raised by the interviewees when discussing Proposition 1 and are tabulated below in Table 4 in order of importance as per the scoring criteria.

Table 4: Proposition 1 – Financial Vehicles Issues

ISSUES	INTERVIEWEES											AVERAGE	%
	1	2	3	4	5	6	7	8	9	10	11		
Availability of capital	2	2	2	2	2	2	3	2	3	3	2	2.3	100
Financial structuring	4	4	3	4	3	3	3	4	3	3	2	2.0	100
Stakeholders	3	4	3	2	3	1	2	0	0	0	4	2.0	73
Facilitation	2	3	2	2	2	2	2	2	2	2	0	1.9	91
Legislation	3	3	3	0	4	2	1	0	3	0	1	1.8	73
Financial / non-financial factors	0	0	3	0	3	2	0	2	0	0	2	1.1	45
Bank issues	2	0	0	0	0	3	0	0	0	3	2	0.9	36
Commodity cycle	0	2	0	0	2	3	1	0	0	0	2	0.9	45
The macro environment	3	0	0	0	2	0	0	4	0	0	0	0.8	27
The asset	3	0	0	0	4	0	0	0	0	0	0	0.6	18
Financial basis	0	2	0	3	0	0	1	0	0	0	0	0.5	27
BEE objectives	0	0	0	0	0	0	0	0	0	3	3	0.5	18

5.1.1.1 Financial Structuring and Facilitation

As in any other deal structuring, there is an imperative that mining empowerment transactions must have a sound economic and financial basis in order for them to succeed. This point was more highly emphasised by the banking and private equity respondents (who comprised 45% of the interviewees) and was accepted by the other respondents. Transactions were noted to consist of various stakeholders with different imperatives. In the words of Interviewee 8:

“And generally in these BEE transactions you have an empowerment party on the one side, and certainly in the early days when these transactions really started to heat up, in 96/97, you had a BEE party on the one side with little or no asset base as a result of history in SA, and you had a corporate on the other side that was looking to do the deal which had a very strong capital base. And then you had of course the debt and equity capital market on the outside that were looking for investment opportunities.”

With little or no asset base, BEE investors had little if any financial bargaining chips in the structuring of mining empowerment transactions. All respondents noted that it was incumbent on the parent mining company to facilitate transactions. Basically a transaction occurred in three ways, i.e. the parent mining company would have to offer one of the following in order to facilitate a transaction:

- a discount on the market price for the assets
- provision of vendor financing at or below market rates
- provision of a guarantee to a funder

According to 36% of the respondents, Special Purpose Vehicles (SPVs) were the funding structure of choice, particularly in the early days of BEE mining transactions. The SPV enabled financiers to pay funds into the separate vehicle (thus mitigating their risk) to assist BEE investors in purchasing shares in a company, in return for debt and equity instruments. For example, a financier’s profit structure can be a host of tax efficient vehicles such as a separate class of preference shares, put and call arrangements or ownership of a minority stake; the BEE company retains its voting

rights, but relinquishes the upside of share performance to the financiers up to a predetermined hurdle rate (Desi, 1998).

In detailing some of the issues surrounding financial structuring and facilitation of transactions, Interviewee 7 stated the following:

“So there are creative ways around that structure to speed up some value to the empowerment groups or to the funders, whatever the case might be; whereas if you are funding directly into a transaction there is far more flexibility in terms of how you structure it, using the assets in that company, using the cash flow to actually repay the debt, whereas in a listed environment you normally rely on dividends and who knows, in a mining entity you might need to spend three years of cash flow and operation, sort of working capital, so there are no dividends. So it really is a negotiating game between the cash flow, how you can actually service the debt and what structure you put in place. And it is generally the SPV type pref share that has more flexible roll up of dividends, whereas the senior debt into a company - obviously you have to try and service that debt.”

It can be inferred that the SPV functions well in a bull market where there is a steady in-flow of cash which exceeds the cost of financing the debt; Jack & Harris (2007) also made reference to this point. Conversely, when the in-flow of cash is not steady or exceeding the cost of refinancing the debt, the risk for BEE investors increases as financiers can in essence pull out of the deal, thus leaving the BEE investors with more debt than equity. Furthermore, as will be seen in Section 5.2 (Proposition 2 – Financier

Risk), the SPV can unravel if the underlying debt and equity instruments were poorly structured. Suffice it to state at this stage that it was noted by one of the respondents that it is not about the structure per se, but about the substance or underlying nature of the structure that matters, otherwise the SPV becomes a one-sided entity benefiting white investors.

Despite the multitude of financial vehicles or hybrids thereof available to BEE investors previously described, all respondents were in agreement that in general a financier will typically provide financing in the form of:

- senior debt – a straight loan;
- mezzanine financing – a hybrid of debt and equity; or
- pure equity – through ordinary shares.

This in essence represents a financing continuum whereby the inherent lending risk increases from senior debt to pure equity. In line with Section 2.1 (Financial Vehicles) and more specific to mining empowerment transactions, **Senior debt** is typically characterised in the following manner:

- Financiers are very close to the cash flow and essentially shareholders either lend directly to the owner of the assets or they lend into the entity that is a majority shareholder of the assets.
- Financiers take significant security, often asset backed security, hence typically a considerable cover ratio.

Mezzanine financing is a level of financing that sits between the ground floor level of debt financing and the top floor level of equity financing. It is characterised by a combination of debt and equity hence there is a fixed debt return as well as an upside participation in equity. The further away from senior debt in the continuum the less asset-based security and the more share-based security, so typically, mezzanine financing will generally have only share-based security and usually take an equity upside, hence they would take a portion of equity risk with a debt underpin.

As its name implies **pure equity financing** is funding through the purchasing of ordinary shares. Hence it is the riskiest of the three options in the continuum, as it takes pure equity risk with no guaranteed underpin.

Bank ranking of the continuum entails that senior debt providers are settled first, followed by mezzanine financing and then pure equity, which generally does not have any security. Hence the financing continuum is in essence a means of tranching out the financing requirements for a deal so as to appeal to various stakeholders with different risk-reward profiles. The riskier or more bullish an investor the greater return they would experience; conversely the less bullish investor would receive fewer returns, but in the event of default would get paid first. Consequently, senior debt is always cheaper than mezzanine financing which in turn is cheaper than pure equity.

There was agreement among the respondents that the main purpose of structuring tranches or layers of financing is to fit the specific investor risk profiles. First prize

would be to finance the deal solely on senior debt assuming that the cash flows could support it. However, in many cases, especially with empowerment deals, the cash flows are insufficient to support the level of financing required and this brings in other forms of financial structuring along the financing continuum.

It was previously stated that a key criterion for transactions was a discount to the BEE investors on the market price of the assets and this was highlighted by 40% of the respondents. Common amongst the respondents was that there exists a balancing act between the level of discount given to the BEE investors upfront at the pricing stage and the sustainability of the deal. Does a mining company provide more discount upfront (on the market price of the asset) which would enable the BEE investors to better access external funding and potentially at a cheaper rate? Conversely, does a mining company provide less discount knowing full well that after an assessment of the deal, financiers will only put in a small portion of funding at cheap rates, thus leaving the company to put in the residual? The worst case scenario is that the company might have to “re-empower” if the deal falls flat. Key to this debate is the end objective of the BEE investor ultimately seeing economic benefits from the transactions and the build of black capital in the sector and the economy as a whole. To this end it is common to find that the discount itself is also counter balanced by BEE investor lock-ins. In summary and as Interviewee 4 put it:

“So that is basically how it gets done: it is either discount on the market price for the assets or the company providing vendor funding at below market rates, or thirdly the company may decide to give a guarantee to the funder. Because what the funder will

say is: Have I got recourse only to the cash flows of the asset I fund or have I got wider recourse to the company in general?. Now if the company gives a guarantee to the fund to say 'you don't only have a security the asset which you fund, I will give you security over all my other assets', then that also enables the funder to say 'well, the risk on loan I haven't only got recourse to the cash flows of the investment, I have got recourse to more security, so I can also provide a cheaper rate'."

Hence the structuring of an empowerment transaction is facilitated by discounts on the market price of the assets, vendor financing at or below market rates and funder guarantees. In a lot of cases deals are being transacted at a discount rate of 30-40% to the market, thus making access to funding easier.

5.1.1.2 Availability of Capital and the Role of the Bank

Although all respondents acknowledged that the availability of capital for BEE investors was dependent on the type of deal structuring and level of facilitation, in only 30% of the interviews did the respondents explicitly state or take a position on accessing funds for BEE investors, stating that it was either difficult to raise capital or that access was not a problem. On the one hand it was stated that access to capital was not a problem since there are private equity funds within South Africa with off-shore funding that are taking a greater interest in the resource sector. On the other hand it was highlighted that due to the credit crunch and liquidity issues, banks were taking a lot of strain, hence raising funds today was more difficult and more expensive than it was a year ago. The researcher, however, would tend to agree with the view of another respondent who stated that getting access to capital is driven by the quality of the

underlying asset. The underlying asset is the most important criterion in accessing capital, while other factors such as the participant's relationship with the bank and political profile played a secondary role.

Hence what drives a bank's appetite for lending to an investor is the quality of the underlying assets. Banks tend to be risk averse, however the risk of losing money in funding an empowerment deal with a blue chip company is very limited, especially considering that a bank would be more amenable to taking on low risk vanilla tranches because its business model can support that. If the underlying cash flows pertaining to mining assets are not robust then a bank can either increase the interest rate, the risk profile it places on the asset, or require greater equity from the BEE investors, and therein lies a problem with respect to access to capital.

As is noted in Section 5.1.1.3 the commodity cycle plays a significant role in the structuring of empowerment transactions. Over the past three to four years while the industry has been riding the commodity wave, lending institutions have wanted to fund empowerment deals. The banks claim to have been supportive of funding mining empowerment deals, thus capital has been available and they have been a lot more flexible than private equity or development institutions in the risks they have taken owing to the different manner in which they could gear their portfolio; further to this, owing to their superior balance sheets, they could also take on a broader, more diversified resource portfolio.

Despite the role that banks have played in funding BEE mining transactions, Interviewee 7 was particularly critical stating the following:

“...there are certain assets that are bankable assets where it is easy to mitigate the risk. But bottom line the banks are just pushing their interest income and the diversification of their fees, and that is why it is blatantly clear that they are over-charging on things. So they are quite aggressive, I would say to the point of really milking every ounce of milk from the deal. So to say that they are exposed to undue risk they would never even finance that deal if they were exposed to undue risk, so they can manage that risk – the question is how much are they able to share with the black parties, because effectively they just put them in a straight jacket with some of those terms and the risk they take virtually becomes risk free because they can still write options, put options against the company and they want this security and they have the shares as security and they want extra other kind of guarantees and that and they want to make sure if they lease this property that it is like backed... so we have the most risk-averse banking system in this country. That is why it is profitable for the likes of Barclays to come here because they are able to see some returns on practices that they would never get away with internationally. So it is overstated - the risk that the banks are taking.”

This is a tough stance on banks and a potential area for further investigation in looking at empowerment case studies. However, all financier respondents in the research highlighted that although the banks may be incentivised to a certain extent through the FSC (Republic of South Africa, 2002) to engage in BEE transactions, the landscape in deal financing is highly competitive and as stated earlier there has to be a sound

economic and financial basis behind any deal prior to it being considered by the banks. Nevertheless some of the banks have been found to be opportunistic in that they levy a fee for just giving the money to a BEE investor over and above the interest rate; hence they are aggressive in that they require, say, a 5% upfront fee, thus making the loan 105% of the value of the asset, and rendering the deal unsustainable given the current economic environment. As a result, deals have failed because of the high leverages inherent in the deals.

5.1.1.3 Commodity Cycle

Only 36% of the respondents made specific reference to the commodity cycle yet it plays a crucial role in the structuring of mining empowerment transactions. As noted by one of the respondents, the BEE deals which have been conducted over the past three to four years, when the bulk of the deals were done, were done at valuations that were significantly lower than the current valuation, hence it is a result of the commodity prices and overall market price movements. This has benefited BEE partners immensely. For example, in one instance a particular BEE group managed to pay off a debt to a major mining company in only two years compared to the eight years initially envisioned.

Furthermore, during this period when commodity prices were on the increase, interest rates were on the decline and the share prices also increased as the mining environment improved. Hence mining deals were very attractive and in demand so the participants benefited greatly.

5.1.1.4 Legislation

With respect to legislation, focus was placed on Section 38 of the Companies Act, on which 64% of the respondents commented. As noted earlier in Section 1.3, Section 38 of the Companies Act now allows a company to offer financial assistance for the purchasing of its own shares as a means of facilitating BEE transactions (Temkin, 2008). Interestingly, it was noted by one of the respondents that previously Section 38 was also used as an excuse by mining companies not to do deals, stating that it inhibited vendor financing without which BEE investors had limited access to funding. However, all respondents did mention that prior to this recent amendment, companies used innovative structuring to get around it. For example, Interviewee 1 highlighted:

“So people used structures that were a step or two removed from actually extending the loan to the empowerment guys. Or what they did is they leveraged the vehicle itself. So internally they restructured the group so that the value of the vehicle in which the empowerment guys invest, is pushed right down to 0 or to R100000 or whatever it is, and then the investment is made. And that isn’t a Section 38 contravention because you are playing on your own balance sheet, and the fact that your own the balance sheet now reflects a leveraged value and you can invite an empowerment partner to invest at a lower value, doesn’t mean that you have given him a loan - effectively you have given a loan internally in the company.”

It was clear to the respondents that although several measures existed in which a company could effectively side step Section 38 and that such measures went against

the spirit of the Companies Act, the justification in essence was that such structures served the best interest of the BEE investor.

It is worth noting, however, that Section 38 was present before empowerment legislation and it was essentially a corporate governance measure to ensure that directors exercised due diligence in their fiduciary duties. Hence directors or the company could not fund someone, be it themselves or others, to buy shares in the company; however, a company could lend money to its employees to buy its shares, but the directors or executive were precluded by Section 38 from taking part.

The current amendments to Section 38 place the onus and accountability squarely on directors to ensure that by funding a deal the liabilities of a company do not exceed the assets in any such transaction.

5.1.2 DISCUSSION

The key areas identified in the research in terms of financial vehicles were financial structuring and facilitation, availability of capital and the role of the bank, the commodity cycle and legislation.

With respect to financial structuring and facilitation it was found that asset-backed financing structures were noted as being cheaper and less risky than equity structures, in part because asset cover was available and due to their proximity to cash flows. As highlighted by Mbetse (2004) it was found that in the case of equity structuring, earn-in rights were also available to BEE investors enabling them to sell forward their

portion of future production for equity within the JV. Facilitation was a balancing act between the discount given to BEE investors by the mining company which would enable the BEE investors to acquire greater external funding potentially at a cheaper rate, and the sustainability of the deal.

In terms of the availability of capital and the role of the bank, the key learning gained from this was that even in the current credit crunch financing was available, but it was imperative that stakeholders do a thorough due diligence into the underlying assets and the deal as a whole from the outset so as to be able to put forward a bankable proposition; at the end of the day banks are in the business of lending and their business model and risk appetite towards any deal, not just BEE deals, is that the deal must be based on a sound economic and financial foundation – legislation alone will not drive a successful and sustainable deal.

At present the commodity cycle has started to downturn, however when most of the BEE mining deals were structured, about 3 to 4 years ago, the cycle was going into an upturn. Hence investors were able to benefit greatly from higher commodity prices and lower interest rates. Therefore the future view on commodity cycles is a critical feature of deal structuring.

Lastly, Section 38 of the Companies Act (Republic of South Africa, 1973; Mgudlwa & Miller, 2003) was not an impediment to deal structuring and its recent amendment in essence provides for greater transparency in vendor financing.

Each deal is unique and so are their structures hence transactions can be structured in several hybrid ways using SPVs. In line with van der Merwe (2004) that SPVs were effective in third party financing, the research also unravelled greater detail in the features of SPVs and stakeholder involvement highlighting that benefits or returns from an SPV towards BEE investors could be very limited depending on the structure. The findings were in agreement with M'Paradzi (2006) who argued that SPVs depended greatly on market factors. Hence **Proposition 1 holds** in that *the financial vehicles available to BEE investors and the hybrids thereof are dependent upon the macro-environment of business: the market, legislation and access to capital.*

5.2 PROPOSITION 2 – FINANCIER RISK

Ineffectual financial structuring of a mining transaction will result in a defaulting of the loan by the BEE partner.

5.2.1 DATA ANALYSIS

A total of 6 major issues were raised by the interviewees when discussing Proposition 2 and are tabulated below in Table 5 in order of importance as per the scoring criteria.

Table 5: Proposition 2 – Financier Risk Issues

ISSUES	INTERVIEWEES											AVERAGE	%
	1	2	3	4	5	6	7	8	9	10	11		
Funding risk	3	4	0	4	0	0	0	0	0	0	3	1.3	36
Financial indicator risks	3	3	0	2	0	0	2	0	0	0	2	1.1	45
Macro environmental risk	3	0	0	4	0	0	0	0	0	0	3	0.9	27
General risk issues	2	0	0	0	2	0	0	3	0	0	3	0.9	36
BEE risk	0	0	3	3	0	0	0	0	0	0	3	0.8	27
Risk mitigation	0	3	3	0	0	0	0	0	0	0	3	0.8	27

5.2.1.1 Funding Risk & Mitigation

Only 18% of the respondents detailed the mechanisms they have in place to mitigate risk, which was quite astonishing considering the inherent risk associated with debt financing and the structuring of empowerment transactions. In the case of one respondent the mining company has provided back up facilities to the BEE partner for financial distress situations. The company provides a standby facility where in times of cash flow shortfalls the company diverts portion of its cash in-flows from the underlying assets to the BEE partner. The advantage of this facility is that the company's exposure is limited to the underlying cash flows being generated, and not to its other assets. This finance bridging facility is structured at a facilitated interest rate. This comes at a cost, but makes more commercial sense than having the BEE partner default on its loan. The back up facility also enables the BEE partner to acquire more senior debt at better terms, which in turn promotes the sustainability of the transaction.

Another risk-mitigating practice that was discussed consists of the mining company entering into an arrangement with debt financiers so that on the realisation of security the mining company has step-in rights - a type of a call option or a right of first refusal. The financiers are comfortable as they have a logical seller and buyer, and the mining company is comfortable as they do not have to worry about having a *BEE partner* who may very well be their competitor.

Cash flow covers as well as asset covers are other mechanisms that were raised that can be put in place in order to mitigate risk. In general the lower the rates of return, the higher both the cash flow cover and the asset cover that a bank would require. Reasonable estimates for cash flow cover and asset cover ratios were noted as 2.5 and 1.5, respectively.

It was also suggested that risk mitigation has less to do with financial structuring than it does with doing homework upfront - proper due diligence. Hence financiers often require proper bankable independent feasibility studies signed off by competent technical experts. The studies should also consist of sensitivity analyses whereby upside and downside scenarios, and break even analyses, are explored; these scenarios would entail future views on changes in factors such as commodity prices and rand/dollar exchange rates. Financial analyses of this nature would enable the parties to ascertain under what conditions a BEE investor would not be able to repay their debt and as such, there could be better management of the transaction process.

5.2.1.2 General Risk Issues

When it comes to risk Interviewee 4 highlighted that:

“...any level of risk would be acceptable, provided that you get a sufficient return for it.”

Hence in a bullish environment banks may have more risk appetite and be willing to extend themselves. In order for mining companies to protect themselves, lock-ins were introduced. This is a form of security that enables mining companies to achieve their legislative BEE requirements without having the BEE partners cashing in and exiting. The deal comes at an economic cost to the mining company as well as to its shareholders, hence the need for lock-ins from their perspective. However, if a BEE investor came to the company with cash and was willing to purchase equity in the company at market prices, then the company would not be justified in requiring a lock-in, as the same requirements are not in place for white shareholders.

5.2.1.3 Macro Environmental Risk

Macro environmental risks are those that are outside the control of the transaction stakeholders. These include market conditions such as commodity cycles, which have already been discussed in Section 5.1.1.3. As noted by one respondent, what compounds risk in the mining sector is that mining assets are extremely volatile, that is both the cash flow and the asset values; probably more volatile than other sectors such as retail and this makes attaining cheap vanilla debt financing difficult. With respect to cash flows the following risks are inherent:

- Cash flows can lag capitalization for months or years, hence financiers must take an extended repayment profile view on the assets.
- SPVs will only realize cash once dividends are declared, hence upfront the company must commit to a dividend profile otherwise the deal may not work with a BEE investor.
- As a minority shareholder the BEE investor does not receive the various exemptions when dividends are declared thus resulting in a leakage of withholding tax on that dividend declaration into the SPV.
- Paying out dividends impacts on the company's risk profile as it essentially entails paying BEE partners in order for them to refinance their loan instead of using the cash flow to capitalize the business.

Furthermore, it was noted that financing must carry a market-related interest and the preference share must carry a market-related yield; in the current environment where the asset is expensive and where cash flows have not necessarily kept up with the rate of escalation in commodity prices, this leads to a high risk profile. Cash flows are a function of revenue, operating expenditure and capital expenditure; and revenue is a function of macro environment factors such as commodity prices and rand/dollar exchange rates, both of which fluctuate, hence the inherent risk within the transaction.

5.2.1.4 BEE Investor Risk

With the exception of a few of the larger black mining houses, BEE investors do not take any risk as they do not put any capital into the deal. The only "risk" they endure is

reputational risk. So they are present in large owing to non-financial factors such as relationship building with the DME, as well as to ensure the delivery of mining licences, without which the parent mining company cannot operate.

5.2.2 *DISCUSSION*

The key areas identified in the research in terms of financier risk were funding risk and mitigation, general risk issues and macro environmental risk.

Various mechanisms are available to funders with respect to mitigating their risk, ranging from standby facilities to assist BEE investors in times of downturns, to step-in rights, cash flow covers and asset covers. However, the most critical feature of deal structuring and risk mitigation is deemed by the researcher to be proper due diligence from the outset of the transaction. There is no substitute for due diligence and although the deal can vary owing to the impact that macro environmental factors have on the industry as noted in Section 5.1, proper scenario analyses can provide answers on what to do in the event of fluctuations in the market.

Lock-ins were also introduced in the discussion on general risk issues as a further mechanism for mining companies to ensure that their BEE partners remain in the JV rather than cashing in and leaving, which would leave the mining company in a predicament of having to re-empower, that is find another BEE partner and construct yet another transaction, in order to keep their mining rights. From the point of view of the BEE investor, aside from reputational risk, there is very little if any risk that is

incurred, as any downside risk is taken by the financiers; this point was also highlighted by Stassen & Kirsch (1999).

Grunert, Norden & Weber (2005, p.528) found that “...the combined use of financial and non-financial factors leads to a significantly more accurate default prediction than the single use of financial or non-financial factors”. Surprisingly however was the fact that in discussing risk or risk mitigation, none of the lenders mentioned the non-financial factors of BEE investors. Further to this no mention was made by the respondents of ranking systems to determine the quality of the debtor and their potential for defaulting as presented by Krahnert & Weber (2000, p.8). Hence although non-financial factors play a role in the selection of a JV partner, as will be addressed in Section 5.4, their role as an indicator of loan default prediction was not stated by the interviewees. In fact one is left with a sense after the interview process that the level of facilitation by the mining company is the key driver in transaction sustainability and non-defaulting on the loan by BEE investors.

Based on the findings in this research **Proposition 2 holds** whereby *ineffectual financial structuring of a mining transaction will result in a defaulting of the loan by the BEE partner*. Financial risks that are not planned for and mitigated, lead to ineffectual financial structuring which in turn can lead to a defaulting of the loan by a BEE investor. To this end the decisions made and criteria used in assessing risk exposure and the decision to lend money are more closely linked to the work of Huyghebaert & Van de Gucht (2007, p.102) who acknowledge that “...financing decisions are context-specific, depending on the firm’s characteristics and its history, and that decisions

concerning the level and composition of debt are made simultaneously”. Hence the onus on structure, sustainability and loan default mitigation rests in large on the mining company itself.

5.3 PROPOSITION 3 - BEE INVESTOR LEVERAGING

The sustainability of a BEE mining transaction is dependent on the level and type of debt structuring as well as the terms and conditions of the debt incurred.

5.3.1 DATA ANALYSIS

A total of 3 major issues were raised by the interviewees when discussing Proposition 3 and are tabulated below in Table 6 in order of importance as per the scoring criteria.

Table 6: Proposition 3 – BEE Investor Leveraging Issues

ISSUES	INTERVIEWEES											AVERAGE	%
	1	2	3	4	5	6	7	8	9	10	11		
General structuring issues	1	4	0	0	0	0	0	3	4	0	0	1.1	36
Deal failures	3	0	3	0	0	0	3	0	0	4	0	0.8	36
General leveraging issues	3	0	0	3	0	0	0	0	0	0	0	0.5	18

5.3.1.1 General Leveraging and Structuring Issues

It was evident that it is a lot more difficult for a BEE investor to leverage in a mining environment than in other sectors due to the nature of the underlying assets. As detailed by Interviewee 1:

“...it is a lot easier to leverage in an environment where you can move assets around. So if you have a retail business and you can say ‘I am going to move the assets and the people to a new company and I am going to give the new company some debt, maybe internally generated debt, like inter-company debt, then it is easy to leverage it. But the problem in the mining sector is that those assets are housed in vehicles which have a very specific consent from the department. Now the department takes months to allow you to dispose of those mineral assets to a new vehicle and to transfer that license to the new vehicle. So leveraging within the mining sector is difficult, more difficult than in sectors where you can just simply move assets around.”

It was also noted that mining companies should not over-facilitate the debt financing as this would lead to irresponsible lending to the BEE investor because the banks inherently take a view on the mining company and not the BEE investor. Hence there is a balancing act between ensuring that the BEE partner receives as much cheap funding as possible, but that they do not over-extend themselves with debt. So what is necessary is a reasonable amount of debt at a reasonable cost so as to mitigate against a situation whereby the BEE deal would unravel, as that is counter the transaction for all stakeholders.

5.3.1.2 Deal Failures

With the level of detail involved in the structuring of mining empowerment transactions and the level of expertise involved, especially from the mining company and financiers, it is noteworthy that deal failures do occur. Forty percent of the respondents spoke in detail on their rationale why deals fail, with reasons ranging from

macro environment effects, for example commodity prices when the deal was structured, to poor and unsustainable structuring. The following response from Interviewee 7 was in fact a common thread or sentiment throughout all respondents:

“I think it is the way they were structured initially; it is almost short-sightedness in a way, some empowerment groups didn’t take sufficient discount on the shares and got expensive funding and the one just exceeded the other, specially if you are going on the share price model, it is difficult to control that share price as an empowerment group. And as I say, if you are not driving value for the company, you are going to be out of the money. So I think a lot of the empowerment deals have actually come unstuck more from a relationship point of view than necessarily just the funding being out – sometimes it is a combination of the two, that expectations that have come from both parties, where an empowerment group thought that they would get dividends or thought they would be able to exit a lot sooner and empowerment deals are long-term versions you know? It is not just going to be a two or three year horizon and you cash out and you are all smiling.”

Hence as outlined above, deals have failed owing to various factors such as:

- the high leverage inherent in the deals; and
- expectations from stakeholders, e.g. both black and white stakeholders have expectations of their counterparts which may range from smooth DME relationships to dividend payouts, and when such expectations are not met, the deal, or at the very least the relationship, can unravel.

A critical insight that Interviewee 3 shared was the pressure that some BEE investors have been under to conclude deals due to sheer desperation in trying to secure funding:

“Another one is wrong structuring; it is a question of saying, look the funding structures that you put in place, what rights do those funding structures give you? For example do they give you right to re-finance, to go and seek debt funding, or funding from somebody else, if you decide there is a need to do that. In a lot of instances, the BEE companies are under pressure to conclude deals. You have been to Standard Bank, Absa, Investec, Nedbank, and so forth, and you haven’t received traction. And then comes Bank Y and they say ‘oh we are happy to lend to you and guess what, we are going to charge for the debt, we want to be the first guys in the queue to be paid and things like that, but over and above that we want 25%’. BEE group has spent months trying to put a deal together and they say ‘look, these are the only guys who are willing to fund it, I think we should just do the deal’. So if they do the deal under those circumstances they are effectively accepting terms that are not economic or not in their interests. So now and again it is fundamentally the same as doing a deal where you are paying more than what the asset is actually worth, because at some point in time it is just not going to add up; you need to repay more than what you are effectively generating. It is just not going to work.”

This is extremely insightful because it is seldom written about in the public domain and it sheds further light on the topic of access to capital whereby despite legislation and

the financial vehicles available to BEE investors, there are still inherent barriers in some instances to entering into the mining empowerment space. And those that sometimes do enter into this space do so under unsustainable pretence. A lesson to be learned from such experiences is the necessity for proper assessment of the deal and to effectively negotiate a good deal in terms of re-financing. As noted by Interviewee 3 it is critical to determine where one is building inflexibility into the agreements, especially when it comes to issues such as re-financing.

Interviewee 11 also shared a similar view on the banks, in that the banks were extremely risk averse and only came on board to assist in financing a deal once the parent mining company had underwritten the loan, thus ensuring that it would never be defaulted on.

5.3.2 DISCUSSION

The key areas identified in the research in terms of BEE investor leveraging were general leveraging and structuring issues, as well as deal failures.

When it comes to leveraging and structuring two main points were addressed by the interviewees: first, that the underlying assets in mining are difficult compared to other sectors, hence the flexibility in structuring is somewhat limited. Secondly, the issue of over-facilitation of debt was raised whereby the BEE partners received as much cheap debt as possible, but at the expense of over-extending themselves. Dittmar & Thakor (2007) investigated project financing and when a firm was more likely to issue equity to raise capital as opposed to acquiring debt. In short, as noted in Section 2.3, it was

found that firms were more likely to issue equity as opposed to debt when their share price was high, because that is when investors have a high propensity to agree with management. However, upon greater interrogation, it was determined that their findings in relation to mining empowerment transactions were inapplicable as BEE is a legislated requirement not a capital project per se initially driven by the company itself.

In terms of deal failures, as discussed earlier a critical component of the structuring is to get it right from the outset. For example, issues that were raised include: whether the BEE investor has negotiated a good discount; whether there is any recourse if the commodity cycle downturns; and whether the necessary due diligence been carried out. Also common with BEE failures is the relationship between the mining company and the BEE partner; the expectations that both parties have on one another may not be practical or sustainable, or parties over promise and under deliver.

There is no excuse, not even short-term reputational risk, for a BEE investor to succumb to the pressure of entering into a deal that is fundamentally flawed, or not in its best interests long term. Hence it is best to walk away from a potential deal than to sign one which is likely to fail.

Based on the findings in this research **Proposition 3 holds** whereby *the sustainability of a BEE mining transaction is dependent on the level and type of debt structuring as well as the terms and conditions of the debt incurred*. Richards (2002) discussed the advantages and disadvantages of debt financing, and the points raised prevailed in this

research; knowing what the disadvantages are and how to manage them during the formation of the transaction can ensure sustainability.

5.4 PROPOSITION 4 – JOINT VENTURES

The financial structuring of the BEE mining JV influences the overall structure of the JV and consequently the level of interaction between the JV partners.

5.4.1 DATA ANALYSIS

A total of 3 major issues were raised by the interviewees when discussing Proposition 4 and are tabulated below in Table 7 in order of importance as per the scoring criteria.

Table 7: Proposition 4 – Joint Venture Issues

ISSUES	INTERVIEWEES											AVERAGE	%
	1	2	3	4	5	6	7	8	9	10	11		
JV characteristics	3	0	3	2	0	2	3	0	2	3	1	1.7	73
Shareholder value	0	0	2	2	0	0	3	0	2	3	2	1.3	55
JV outcomes	0	0	0	0	2	1	0	0	0	0	2	0.5	27

5.4.1.1 JV Characteristics and Outcomes

It was argued by one of the respondents that in our legal system the term joint venture is broad in that it could entail tendering together, forming a company together or being shareholders together, for example. However, the main sentiment amongst the respondents around the characteristic issues was that the partnerships that are entered into by mining companies and BEE investors were not 50:50 partnerships, i.e. joint ventures in the sense of joint control. The very nature of the structuring of the

deals entail that the BEE investor party is in an inferior position to the mining company, not only in terms of access to capital, but also in operational expertise, as in most cases the BEE partner is just entering into the sector. Interviewee 6 referred to BEE in the following manner:

“A BEE is like a marriage, it really is, it is more important to get the right BEE partner and support him to get the finance, than to get the wrong one with cash.”

However, it is a marriage without equal partnership as the mining companies have a controlling stake and as such are able to influence decision making and strategy, which is driven by access to capital, skills and resources. In a few instances, depending on the relationship between the BEE investor and the mining company, skills transfer does take place from the mining company to the BEE investor; however, it was noted that in other instances skills transfer happens to the extent that the BEE investor does not become independent from the mining company and thus becomes a competitor.

It was also pointed out that in some cases BEE partners either did not have the inclination to become more operational, but preferred a shareholding status. As such they contributed very little to the company and tended to be on the lookout for other BEE deals. Consequently there have been instances where BEE partners are too thinly spread continually looking for better opportunities and as a result put their time and effort into companies that give them the best rewards as ‘cash is king’. If the deal is badly structured from the outset, then they lose interest. Hence incentives have become part of deal structuring in order to keep the BEE partners focused and

committed as opposed to having the partners run after other opportunities. For example, if the partners bring in further opportunities, they can gain access to further shares and at greater discounts.

Interestingly, the JV landscape was said to be changing somewhat in that people were walking away from dealing with connected people. People have moved away from dealing with a single party or a few individuals and the trend now is to look for broad-based ventures consisting of a greater range of beneficiaries, including the communities in which mining takes place.

The important factor to note in the BEE marriage is to ensure from the outset what the expectations are of the members of the JV. For example, as Interviewee 10 stated:

“You also have other instances right, where people are chosen for some of these transactions, not necessarily because of the technical knowledge or experience over the years, but it is also because of their political affiliations and their standing, if you will. So the expectation from them is not necessarily that they are going to come and try and drive strategy of the business, but you get some companies that want them because maybe they are very good at negotiating the specific aspects or maybe handling the relationships with government which could be crucial to that business – maybe that business has got problems with just dealing with government and state-related enterprises or bodies. And they need someone who can actually help them in that regard. And some people will do a deal just for purposes of complying, right?”

Suffice it to say that at the heart of BEE is a policy and within that legislative framework mining companies must comply in order to operate. Hence the selection of BEE partners in some instances is not by any means altruistic in nature nor done with the intent to fully integrate and incorporate previously disadvantaged citizens into the sector. In as far as skills and knowledge transfer go, an example of one parent mining was provided where directors from the company were nominated to sit on the board of the BEE company as a means of sharing their experiences, and each of the BEE principals were invited to sit in on the parent company's executive committee (EXCO). Hence expectations from both parties were clear early on in the relationship.

5.4.1.2 Shareholder Value

The question on shareholder value and whether or not BEE participation in a JV enhances shareholder value, proved to be the most difficult question in the research as it was purposely broad and left to interpretation. Forty-five percent of all respondents commented on shareholder value and the following response from Interviewee 3, when asked if shareholder value is created upon the formation of JVs, is the most extensive response given and captures the overall sentiment of respondents on this issue:

"It is difficult because you have to define categories of shareholders, the existing shareholder value or the new shareholder value – so you need to distinguish what you are measuring. If you are measuring the existing shareholder value what has been brought in, and if it is a market you can be able to show the pricing and the spikes and there has been research done where looking at share prices - but we can't say share

prices - you can't isolate other things around the share prices and therefore you have a causality kind of argument – nobody can have that – but you can have a correlation saying 'taking away these factors in the market noise, and isolate the noise to be BEE deal, and then can you measure the correlation' – yes you can and the correlation was like on average 10.8% is the spike over the period; 40 days before the announcement and 40 days afterwards you can actually see that there has been a return for doing the BEE deal. But then when you look at the qualitative aspect this data is taken before many companies did BEE deals so therefore the likelihood is that it is much less, that competitive advantage gets eroded the more companies do BEE deals. Then the BEE shareholder value creation from their perspective comes when the asset is much higher than liability and therefore that gives them an asset cover base to say that now at least we have a level of comfort. But they still ... in so it means it is unrealized, so it could be one day high cover but tomorrow it could be negative cover, so because you don't have the ability to move out even if you want cash in and lock-in that particular share holder value that has been created as a result of the price going up. So those are the challenges, so how you define it, is really the asset minus the liability, including accrued interest and any amount really owing as at the date of evaluation."

In essence shareholder value is about managing the company in a sustainable manner in the long term and not necessarily about short term financial returns. Hence the initial dilution of shares as a result of them being sold at a discount to new BEE partners, is far outweighed by the fact that the mining company needs to comply with legislation in order to operate and therein lies the fundamental value add of the BEE partner.

5.4.2 *DISCUSSION*

The key areas identified in the research in terms of JVs were the characteristics and outcomes of JVs, as well as shareholder value.

Defining and measuring shareholder value from the perspective of the original shareholders as well as that of the new BEE shareholders was not as straight forward as one would have anticipated; however, one of the respondents was able to provide a quantitative measure of a correlation in BEE deal announcement and the spike in share price 40 days before and after the announcement. It would be of interest to extend such a quantitative analysis as a means of analysing the returns on a BEE deal. However, ultimately the shareholder value in doing a BEE transaction is that in the absence of the transaction, the mining company would not be able to operate in the absence of the mining licence that comes with such a transaction.

BEE was described as being like a marriage, which implies at the very minimum a partnership. However, what became greatly evident in this research was that the playing field in this partnership is skewed towards the mining company and external funders. After all as a new entrant into the sector and without any credit rating, the BEE investor is left with little choice or input in the structuring of a transaction. That is not to say that such an investor should agree to fundamentally flawed or unsustainable conditions which do not act in the interest of the JV as a whole, but it is the financiers who ultimately decide on the structuring of the transaction.

The majority of BEE investors do not play on a level playing field when it comes to transaction financing. Coupled with a lack of operational expertise, it is no surprise that the research findings indicate that the overall structure and level of interaction between JV partners is greatly influenced by the financial structuring of the transition.

As noted by Mbetse (2004) the purpose of the SPV was not to promote or encourage operational involvement or skills transfer. Grant & Bade-Fuller (2004) and Inkpen (2000) commented on how a JV is characterised as a strategic alliance whereby diversity is embraced and knowledge transfer occurs; this is not the case with mining empowerment JVs. These are first and foremost regulatory driven and as such lack the basic characteristics of a JV. At best they are strategic alliances with a means to an end for both partners in the JV: a mining licence for the mining company and an introduction into the sector for the BEE partner.

Merchant & Schendel (2000) referred to JVs in terms of the efficiencies partners realise in a JV, for example the advantages arising from a partner's resources and intellectual property. It was found that to this end BEE partners, through non-financial factors, contribute to the JV; however, at the end of the day, the holder of capital and operational expertise in the sector has greater control in the JV, assuming that the mining licence has been secured.

Based on the findings in this research **Proposition 4 holds** whereby *the financial structuring of the BEE mining JV influences the overall structure of the JV and consequently the level of interaction between the JV partners.*

5.5 OTHER ISSUES

This section consists of issues that were raised by various respondents during the course of the interviews but which did not fit into the scope of the propositions, but were nevertheless deemed significant in terms of the research project.

5.5.1 DATA ANALYSIS

A total of 10 major issues were raised by the interviewees when discussing ‘other issues’ and these are tabulated below in Table 8 in order of importance as per the scoring criteria.

Table 8: Other Issues

ISSUES	INTERVIEWEES											AVERAGE	%
	1	2	3	4	5	6	7	8	9	10	11		
Further structuring considerations	0	0	0	0	0	0	3	4	3	4	0	1.3	36
Case studies	0	0	0	0	1	0	0	3	0	0	4	1.2	27
Beyond BEE	0	0	0	2	0	0	3	0	2	0	3	1.1	36
Other financial considerations	0	0	0	2	0	4	4	0	0	0	0	1.0	27
Shareholders	0	0	0	3	0	0	2	0	0	0	2	1.0	18
Bank business model	0	0	0	2	0	0	0	0	2	3	0	0.9	27
Social investment	0	0	0	0	2	0	0	0	0	0	0	0.9	9
Alternative capital streams	0	0	0	0	0	0	3	0	0	0	0	0.9	9
Transaction objectives	0	0	0	0	0	0	0	3	0	0	0	0.9	9
Legislation	2	0	4	0	0	2	0	0	0	0	0	0.9	27

5.5.1.1 Further Structuring Considerations

There are advantages and disadvantages to structuring a deal at the holding company level versus at the asset level; this was raised by 18% of the respondents. At the holding company level a BEE partner would have listed security whereas at the asset level the BEE partner would be exposed to a single asset. Therefore it depends on how one wants to structure the deal, as at the operating asset level one does not have to service the interest and generality of the shareholders, hence the greater freedom to operate independently.

In terms of raising debt finance, the advantage of a listed company in structuring transactions is that it has access to a greater investor base through its shareholders or equity capital markets than would a private or unlisted company. Hence in a listed company there is greater flexibility in terms of how a deal can be structured, as one can fund directly into a transaction using the assets of the company or the cash flow, to repay the debt. However, debt funders prefer being as close as possible to the cash flow from the operating assets, hence their preference to lend to a subsidiary of a holding or listed company.

In a listed entity one normally relies on dividends and in a mining environment it may take years to realise, as cash flow would typically be spent on working capital. Ultimately the type of structure is a compromise between cash flow and how the debt can be serviced.

5.5.1.2 Other Financial Considerations

Tax structuring is a complex area, the detail of which is outside the scope of the research; however, it was pointed out that detail tax structuring during deal structuring is paramount as it could create greater value in the transaction. It goes without saying then that the taxpayer can structure the transaction so as to achieve its commercial objectives, but not purely for tax advantage.

Very seldom does one read headlines about someone walking away from a deal; 18% of the respondents spoke about this and it was highlighted that the greatest attribute of a businessman is knowing when to walk away from a deal, as opposed to seeking headlines, which is often observed. Hence a true investor is one that thinks like an economist and financier and is able to weigh options and know when to walk away from a deal and not be pressured by others into entering into a fundamentally unsound deal. For example, if one is taking equity risk then an IRR of 34% is bare minimum; in the case of debt risk, which is fully secured, the threshold may be as low as prime minus 2. Mezzanine debt might have a different IRR rate, but with the parent company standing surety over the empowerment debt and depending on other factors such as credit rating of the company, it should be lucrative.

5.5.1.3 Beyond BEE

It is difficult to predict what the future holds in the space of BEE mining deals. After all beyond government's 26% ownership requirement there appears to be little or no incentive for further mining companies to engage in further BEE type deals under the current structures. The general consensus amongst the respondents was that beyond

legislative requirements, deals with black investors could continue, but under normal market circumstances. That is in the absence of discounts, guarantees or preferential treatment compared to other shareholders; in return the mining company would not be in a position to request a lock-in. On the one hand there exists a level of maturity within empowerment whereby black investors prefer being regarded as investors as opposed to “BEE investors”, while on the other hand, for new entrants in mining, which is an expensive arena to get into, it is much easier to say that ‘this is an empowerment deal, I will take the 10 year lock-in, I will do what is necessary and toe the line to get my share’. Ultimately what the common denominator among white owners and black investors is cash and as long as cash is present that is what ultimately matters.

The alternative view is that this debate depends largely on the political views at the time. If for example after 10 years it is found that these deals are not sustainable, then the government could very well state that ‘we have undergone this exercise to create black capital, it has not worked so we will have to re-look and roll it forward and insist that companies give 51% of their business away’.

There may also be quite a few people cashing in at the end of the legislated dates or at the end of their lock-ins. This may create opportunities again for further transactions and consequently further work for banks, private equity firms or advisory firms.

BEE at its core results in JV strategic alliances which are regulatory driven. For the most part the alliance could not even be considered as horizontal integration as BEE

investors lacked the expertise or asset base specific to the mining sector. Furthermore, being strategic alliances the key factor of mineral rights conversions was equally important if not more important than the financial valuations of the JV entity. However, as time progresses it is postulated that BEE mining firms will be in a position to engage in M&A activity amongst themselves or with larger parent mining companies as a means of increasing the levels of black capital within the economy.

5.5.1.4 Social Investment

Although only mentioned by 10% of the respondents, a critical factor in the structuring of mining empowerment is the communities in which the company operates. The level of social responsibility both in terms of the stakeholder relationships and the environmental issues has increased in recent times. Hence with respect to financial structures there is a definite decision to broad base the structure by involving the communities. This has several benefits in that most of the workers tend to come from the community and community leaders often have political connectivity with the DME who can facilitate discussions with the regulator. Hence these are some of the non-financial factors that add value to an empowerment transaction.

5.5.2 DISCUSSION

The key areas identified in the research in terms of other issues were further structuring considerations and other financial considerations, beyond BEE and social investment.

In terms of further structuring considerations it was interesting to note the flexibility available to an investor, assuming the opportunity is present, with regard to investing in a listed company versus an unlisted company (which could also be a subsidiary of a listed holding company); the former has greater flexibility as the transaction has exposure to both underlying assets and the cash flow to repay the debt, but at a cost since a listed company relies heavily on dividends.

A common sentiment amongst many in corporate South Africa, especially blacks, is that BEE has a finite life - there is a window of opportunity and in the case of mining where the majority of the major deals have already been concluded, that window is quickly closing. Ultimately, as has been noted earlier, future deals will have to be based on a sound economic and commercial footing, and lessons from previous deals will prevail, which may result in reluctance in giving big discounts. Hence the ultimate goal of empowerment is to achieve a steady state within corporate South Africa, where having diversity or demographic representation in a transaction becomes good business sense. Furthermore, there may be far more deals with staff as a means of incentivisation and/or skills retention.

Social investment into the community in which a mine operates is of greater significance today than it was in previous years. Engaging with a community on all levels from environmental issues to working conditions, and engaging the DME as a collective, have been considered as the softer or non-financial issues in mining, but these can influence the structuring of a transaction, particularly from a broad based point of view, which is the recent trend in BEE mining deals.

6 CONCLUSION

6.1 GENERAL

The purpose of this research was to investigate the factors influencing the financial structuring of BEE mining deals by means of the financial vehicles available to BEE investors, in order to explore optimal mining empowerment financial structuring. Based on a literature review four propositions (financial vehicles, financier risk, BEE investor leveraging and joint ventures) were put forward. In order to assess the propositions in-depth face-to-face interviews with experts in the field of BEE were conducted across a spectrum of four categories: parent mining companies, BEE mining companies, financiers and other (experts). Within this framework convergence as well as construct validity were observed and noted.

The financial structuring per BEE mining transaction was found to be unique; consequently, one could not generalise about a single optimal mining empowerment financial structure across all deals. Thus each transaction had its own optimal mix of financial vehicles depending on the stakeholders involved as well as other factors discussed in this research such as access to capital.

A critical finding of the research was that although BEE mining deals are legislated and mining companies were required to engage in this practice in order to acquire their mineral rights conversions which would enable them to continue mining, the failure or success of an empowerment transaction was fundamentally a function of the structure

of the transaction and the relationship between the two JV partners. Hence an empowerment transaction is, at its very core, no different from any other transaction; it must be pillared on sound economic and financial fundamentals and there must be clear and well-defined objectives and expectations among the JV stakeholders.

The key deliverable of mining empowerment transactions however, from government's perspective, was to ensure a critical mass of HDSA equity participants in the economy. It was noted earlier that empowerment was an artificial driver due to legislative imperatives resulting in deals not being executed purely on commercial grounds (Dickinson, 2008). Based on the interviews it was evident that the earlier BEE mining deals, specifically those formulated in the late 1990s did not have a sound financial structures and as a consequence eroded in the face of adverse market conditions such as high interest rates or a downturn in commodity prices; furthermore, parent mining companies tended to do BEE deals as a quick fix to retain or acquire their mineral rights conversions as opposed to developing black capital in the economy. Hence it was concluded that without the artificial drivers or legislative imperatives in place that it was highly unlikely that parent mining companies would have partook in BEE type mining transactions.

The macro-environment of business, which includes the market, legislation and access to capital, was found to greatly influence the types of financial vehicles used in a particular mining empowerment transaction. As noted earlier, the DME, through legislation, has been the key driver of mining empowerment transactions with a long term view of creating black shareholding and empowerment within the mining sector.

Although access to capital was initially a barrier to entry for BEE investors into the sector, owing to their lack of a credit rating resulting from the legacy of apartheid, the onus for achieving a sustainable transaction lies with the mining company who through an adequate discount can facilitate the lending of capital by external parties to the BEE investor.

Commodity cycles also play a distinct role in transaction as a sound deal today may not be sound in the future, and vice versa; hence it is important that flexibility is built into the structuring from the outset in order to plan for eventualities. Ineffectual financial structuring of a mining transaction can lead to a defaulting of the loan. Hence a mining company usually has various mechanisms in place to mitigate risk.

Although it can be argued that the partnerships in place between a mining company and BEE investor are not truly JVs with the operational expertise and capital lying on the side of the mining company, a BEE investor can still add value through non-financial factors into the JV; however, it is imperative that the expectations of JV partners are well-articulated and understood upfront, as a key factor in the failure of deals is not necessarily a poor structure all the time, but poor relations within the JV amongst its stakeholders.

SPVs were found to be the preferred mechanism in structuring transactions; as separate legal entities they provided the BEE stakeholders with a means of deal structuring that did not have a direct impact on the individual business entities. The key criterion of an SPV was to ensure that the dividend flow was more than capable of

servicing the underlying debt of the SPV with a certain coverage ratio. Further to this, it was imperative that the parent mining company should have safety nets in place in the event that the BEE investor could not service its debt, for example, in commodity cycle slumps, as ultimately it is the parent mining company that has, in essence, assumed the majority if not all of the risk. Hence a functional SPV is characterised by its ability to service its debt with the cash flows generated by its underlying assets, and the debt service is dependent on the leverage quality and diversification (Picone, n.d.).

6.2 RECOMMENDATIONS

Mining empowerment transactions at their core consist of two parties, the white parent mining company and the black investor. Rarely does one see a transaction between two black mining companies. It is anticipated that a joint venture between two black mining companies would be a great catalyst towards greater black capital and empowerment and as such would not attract the attention of the Competition Commission especially considering that other companies are far more dominant in this sector. Perhaps a more likely impediment would be the realisation that empowerment groups have been opportunistic in accessing deals and as such have developed large investment portfolios which may pose challenges in structuring a BEE deal with one another; but having said that, Mvelaphanda Resources (Mvela) and Afripalm Resources have managed the feat, thus becoming “the first-ever empowerment transaction between two companies owned by black investors” (Johnson Matthey, 2007). So it is not impossible to structure a deal without white parent mining involvement further catalysing empowerment within the mining sector. Hence a key recommendation to BEE investors would be to develop further black capital between themselves as well

with white mining companies in order to develop greater capacity in this sector. In this manner further steps could be taken so as to mitigate against the asymmetrical return profile inherent in BEE transactions, previously discussed in Section 2.2, where the funder shares in the upside potential of a deal with BEE investors since they take all the downside risk. Hence the ultimate goal, as in the Mvela-Afripalm deal, is for black investors to share in both the downside and upside risks and rewards, and experience a more symmetrical return profile.

Greater support from government and lenders should be granted to BEE groups who become operational and develop skills concurrently, as a means of growing black capital in the economy. The researcher fundamentally believes that there will come a time beyond the regulatory framework of BEE whereby black capital within the economy will need to be grown first and foremost by those black investors who became both operationally as well as strategically effective during the BEE era.

It has been noted that the banking system is generally risk-averse. Beyond the FSC banks could be further incentivised to actively participate in mining empowerment transactions thus taking a greater risk profile. Alternatively, they could be penalized if their actions are deemed to go against the spirit of the various charters in place, be they Mining, Financial or otherwise.

For the most part the majority of BEE mining transactions are focused inward, into the South African environment and heavily dependent on regulatory drivers. BEE investors, as true entrepreneurs, should be looking outside the borders as well for

opportunities in order to take advantage of other M&A activity. Two thousand and seven was a record year for M&A activity in the mining sector mainly due to drivers such as high commodity prices, resource security, increase in global demand for resources, risk diversification and a higher level of private equity (Ernst & Young, 2007); even in the current credit crunch and slight downturn in commodity prices it is anticipated that global demand for commodities will remain high. Hence it is an opportune time for BEE investors to look beyond the borders with respect to mining transactions.

6.3 FUTURE RESEARCH

The greatest advantage of qualitative in-depth face-to-face interviews was the depth and quality of the information conveyed based on the personal experiences of the high calibre of interviewees. This research could be used as the foundation for future work which would aim to better quantify, where possible, the results obtained herein. Although the respondents were able to give great insight into their work they were limited to an extent in the level of detail they could provide as a consequence of confidentiality agreements in place.

The following sections highlight issues that could be developed further, on the back of this current research, as a means of attaining even greater insight into *factors influencing financial structures in mining empowerment transactions*.

6.3.1 *CASE STUDIES*

Moving forward one could look at analysing various deals that have been completed on a case study basis to get a better understanding of how the propositions proposed in this study would fare and as a way of testing the robustness of the study based on actual deals. The main issues that could be investigated would include: a description of the transition, funding, analysis of empowerment partners and ownership structure, as in Engelbrecht (2007).

6.3.2 *USER GUIDE*

As seen in this research, barriers to entry exist in the mining sector, access to capital being a major one. “Broad-Based BEE The Complete Guide” by Jack & Harris (2007) gives excellent general insight into the field of BEE, covering a range of topics such as BEE financing and legislation that non-experts or people not familiar with the landscape can understand and appreciate. In line with the concept of a guide, future research could build upon the research outlined in this paper so as to develop a specific guide into mining empowerment transactions. This could also detail, albeit generically, of how a JV can be valued and the factors that need to be taken into consideration from a financial modelling point of view, which would have an impact on the deal being proposed and ultimately on the type of structure to be put in place. This would add significantly to the literature on BEE mining deals which at this point in time is relatively scarce.

6.3.3 *DISCOUNTED CASH FLOW (DCF)*

The DCF method is the most common method of valuing mining projects and is typically utilised where there is sufficient input data to enable one to forecast certain parameters over the life of mine such as (MacFarlane, 2006):

- Resources and reserves
- Tonnage profiles
- Grade distributions and yield
- Operational expenditure
- Capital expenditure
- Other financial parameters: metal prices, escalations, exchange rates, and discount rates

Hence DCF valuations in mining are complex compared to other sectors due to the level of detail required for forecasting over the life of mine; although most of this detail is proprietary to mining companies one could formulate estimations based on secondary data.

DCF valuation is based on the premise that shareholder value is created when the present value of a project's forecasted inflows exceeds the present value of cash outflows thus resulting in a positive net present value (NPV). DCF valuations are at the foundation of mining transactions; however, research into the robustness of DCF compared to other financial valuation techniques can be explored for mining projects whereby the realisation of cash flows could happen years after an initial capital outlay.

Such an investigation is somewhat lacking in corporate finance literature yet it plays an essential role in all mining transactions.

6.3.4 MERGERS AND ACQUISITION (M&A) ACTIVITY

As noted earlier macro-environmental factors also play a distinct role in not only the structuring of mining empowerment transactions, but also in their success. In the current global credit crunch it is anticipated that more junior South African mining companies will consolidate with one another and that larger mining companies and even more established junior mining companies will actively buy out BEE mining companies that cannot sustain themselves as independent entities (Cowhig & Macharia, 2008). An area of future research could be to investigate the driving forces and the extent to which they result in M&A activity within the South African mining industry. Further to this could be the investigation of the impact of the current global M&A trends and activities in mining whereby emerging-economy countries such as China and India are currently investing great sums into securing mineral assets in order to meet the demands of their current growth rates; for example, China spent \$8bn on mining projects in Africa in 2005 and deals made by BRIC countries (Brazil, Russia, India and China) increased by over 1,200% between 2000 and 2007 (Ernst & Young, 2007). Hence another area of opportunity for future study would be to explore the impact these emerging economies can potentially have on the South African mining sector and more specifically on BEE.

6.3.5 TAX

A delimitation of this research was that the research would highlight tax as a factor in financial structuring, but would not provide an analysis of tax or tax-related issues. Future research in mining empowerment transactions could be to explore tax as it pertains to the financial structuring of mining empowerment transactions and how it compares to other mineral rich countries.

6.3.6 RELATIONSHIP LENDING

As noted by Bharath *et al.* (2007) relationship lending is critical to the success of debt structuring (along with surety from the parent mining company). Although mention was made of relationship lending in this research it is felt that a potential area of future research would be to analyse in detail the evolution of the BEE mining deal over the years until today in terms of relationship lending and to compare that of established companies and their lending partners (such as the banks) during the same time period. This could potentially provide greater knowledge into relationship lending in post-apartheid South Africa as well as explore any correlations between relationship lending, debt structuring and the success of deals in BEE mining transactions.

6.4 CLOSING COMMENTARY

As noted earlier it is common knowledge that the majority of BEE deals utilise hybrid funding structures which include vendor finance, debt finance and equity investment (Pincock & Butler, 2005). However, what is lacking from the limited academic

literature on BEE transactions is a fundamental awareness and appreciation of the role and significance of optimal capital structuring in the financing of BEE mining deals as well as stakeholder interaction. This research shed light on these issues in its investigation of factors influencing financial structures in mining empowerment transactions and it is envisioned that future research can build upon the findings herein and give greater depth to a subject matter that is extremely relevant to South Africa not only from a BEE perspective, but from an overall economic perspective as mining accounts for 7% directly of GDP and 18% directly and indirectly of South Africa's GDP (Kruger, 2007), hence the relevance of this topic.

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8 APPENDIX 1: CONSISTENCY MATRIX

Title: Factors Influencing Mining Empowerment Financial Structures

Table 9: Consistency Matrix

PROPOSITIONS	LITERATURE REVIEW	DATA COLLECTION TOOL	ANALYSIS
<p>Proposition 1 – Financial Vehicles</p> <p>The financial vehicles available to BEE investors and the hybrids thereof are dependent upon the macro-environment of business: the market, legislation and access to capital.</p>	<p>Republic of South Africa, 1973</p> <p>Mgudlwa & Miller, 2003</p> <p>Van der Merwe, 2004</p> <p>M’Paradzi, 2006</p> <p>Daya, 2006</p> <p>Richards, 2007</p> <p>Taplin & Snyman (2003)</p>	<p>Recorded interview and transcribed notes as per Interview Guideline Appendix 2</p>	<p>Content Analysis</p> <p>Comparative Analysis</p> <p>Organisation of the facts into logical order</p>
<p>Proposition 2 – Financier Risk</p> <p>Ineffectual financial structuring of a mining transaction will result in a defaulting of the loan by the BEE partner.</p>	<p>Huyghebaert & Van de Gucht, 2007</p> <p>Stassen & Kirsch, 1999</p> <p>Burger, Munian & de Groot, 2003</p> <p>Grunert, Norden & Weber, 2005</p> <p>Krahnert & Weber, 2000</p> <p>Bharath <i>et al.</i>, 2007</p>	<p>Recorded interview and transcribed notes as per Interview Guideline Appendix 2</p>	<p>Content Analysis</p> <p>Comparative Analysis</p> <p>Organisation of the facts into logical order</p>

PROPOSITIONS	LITERATURE REVIEW	DATA COLLECTION TOOL	ANALYSIS
<p>Proposition 3 – BEE Investor Leveraging</p> <p>The sustainability of a BEE mining transaction is dependent on the level and type of debt structuring as well as the terms and conditions of the debt incurred.</p>	<p>Dittmar & Thakor, 2007</p> <p>Richards, 2002</p> <p>Fenn <i>et al.</i>, 1997</p>	<p>Recorded interview and transcribed notes as per Interview Guideline Appendix 2</p>	<p>Content Analysis</p> <p>Comparative Analysis</p> <p>Organisation of the facts into logical order</p>
<p>Proposition 4 – Joint Ventures</p> <p>The financial structuring of the BEE mining JV influences the overall structure of the JV and consequently the level of interaction between the JV partners.</p>	<p>Mbetse, 2004</p> <p>Grant & Baden-Fuller, 2004</p> <p>Inkpen A.C., 2000</p> <p>Inkpen & Tsang, 2005</p> <p>Merchant & Schendel, 2000</p> <p>Chalos & O’Connor, 2004</p> <p>Pangarkar & Klein, 2004</p> <p>Fenn <i>et al.</i>, 1997</p>	<p>Recorded interview and transcribed notes as per Interview Guideline Appendix 2</p>	<p>Content Analysis</p> <p>Comparative Analysis</p> <p>Organisation of the facts into logical order</p>

9 APPENDIX 2: PRE-RESEARCH INTERVIEW LIST

Table 10: Pre-Research Interviews

Date	First Name	Last Name	Organisation	Designation
09/11/2007	Sandy	Wood	Anglo Platinum	Executive Head: Commercial
23/11/2007	Margie	Sutherland	GIBS	Lecturer
07/12/2007	Gordon	Smith	Anglo Platinum	Head: Strategy, Long Term Planning
07/12/2007	Martin	Prinsloo	Anglo Platinum	GM: Finance
12/12/2007	Neville	Plint	Anglo Platinum	GM: Research
19/12/2007	Albert	Jamieson	Lonmin	Executive Vice President
11/01/2008	Roger	Baxter	Chamber of Mines	Chief Economist
11/01/2008	Guy	Harris	Bell Equipment	Executive: Commercial
28/01/2008	Ronald	Chabvenga	Anglo Platinum	Snr Manager: Corporate Finance
31/01/2008	Craig	Fish	Anglo Platinum	Manager: Corporate Finance
06/02/2008	Carel	Vosloo	RMB	Corporate Financier
25/02/2008	Janine	Du Bruyn	Unipalm Investment Holdings	Director
21/04/2008	Max	MacKenzie	GIBS	Lecturer
08/05/2008	Kevin	Lester	Transcend Corporate Advisors	Executive Director
09/05/2008	Max	MacKenzie	GIBS	Lecturer
23/05/2008	Max	MacKenzie	GIBS	Lecturer

10 APPENDIX 3: INTERVIEW GUIDE

10.1 PROPOSITION 1 – FINANCIAL VEHICLES

The financial vehicles available to BEE investors and the hybrids thereof are dependent upon the macro-environment of business: the market, legislation and access to capital.

- ⊕ Describe the nature of funding structures typically used to assist BEE investors in acquiring equity.
- ⊕ What factors affect the financial structuring decision and how do they affect the performance of the JV?

10.2 PROPOSITION 2 – FINANCIER RISK

Ineffectual financial structuring of a mining transaction will result in a defaulting of the loan by the BEE partner.

- ⊕ Why do deals fail and how could they have been mitigated?
- ⊕ What are the risks associated with each of the financial vehicles noted in Proposition 1?

10.3 PROPOSITION 3 – BEE INVESTOR LEVERAGING

The sustainability of a BEE mining transaction is dependent on the level and type of debt structuring as well as the terms and conditions of the debt incurred.

- ✦ To what extent do factors such as share and commodity prices influence a parent company in issuing equity to a BEE investor?
- ✦ Discuss the terms and conditions of debt financing – are these fair for all stakeholders involved in the transaction?

10.4 PROPOSITION 4 – JOINT VENTURES

The financial structuring of the BEE mining JV influences the overall structure of the JV and consequently the level of interaction between the JV partners.

- ✦ Does a transfer of equity necessarily result in a JV as per academic literature definition or is JV just a convenient name?
- ✦ Shareholder value must be created upon the formation of JVs – is this the case and how is shareholder value defined and measured?

11 APPENDIX 4: INTERVIEW ISSUES UNRAVELLED

Table 11: Sub-issues Per Proposition

Proposition 1	Proposition 2	Proposition 3	Proposition 4
Availability of capital	Funding risk	General structuring issues	JV characteristics
difficult to raise capital	internal vs external funding	debt/equity mix problems	defines JV as per legal interpretation
access not a prob	price savings deals	lock in	non-classical JVs
raising finance	low risk funding	balance act: discount/facilitation	BEE is like a marriage
Financial structuring	asset cover	liquidity issues	
SPV	access to capital - upside/downside	tax	Shareholder value
finance vehicles/continuum	funding the shortfall	debt capacity	shareholder value
senior debt	step in rights	balance sheets	sustainability
mezzanine debt	financier risk - over facilitation	cost of funding	broadbased
mezzanine equity		access to funding	BEE value add
pure equity	Financial indicator risks		
structuring issues/deal process	cashflows	Deal failures	JV outcomes
empowerment continuum	access to capital*	failure	soft JV
tranches & structuring	call option	deal failures	skills transfer
3 ways to structure a deal	dividend flow	failures	JV - walking away from connected people
shares - ord/pref	tax leakage	deal governance	
5 ways of BEE financing	dividend payout		Others
discount rates	underwrite SPVs	General leveraging issues	Further structuring considerations
derivatives	lock in	leveraging	holding vs asset level
equity ownership returns		asset movement	wrong structuring
cash flows	Macro environmental risk	tax act	re-finance
equity and cash flow	resource pricing/commodity prices/market effects	cashflow cover	flexibility
revenue	market related interest and yield		unlisted vs listed company
sustainability	volatility		due diligence
recourse	tax efficient		reserve profile
security			Case studies
cash flows	General risk issues		Incwala case study
Stakeholders	risk profile		Anoorag/AP
role of bank/bank's perspective	vendor financing		
role of banks and company	bank financing		Beyond BEE
credibility of stakeholders	sustainability		beyond BEE
BEE partner criteria	interest rates		the future of deals
role/expectations of BEE partner	risk appetite		competition commission
consortium_risk profile			beyond 26%
DME / dti codes	BEE risk		
roles of stakeholders	risk		Other financial considerations
Facilitation	BEE risk		LBO
general discussion			tax
3 sources of funding	Risk mitigation		IRR
level of facilitation / safety net	risk mitigation		empowerment continuum
3 criteria for deal structuring			tax deductibility
Legislation			tax
Section 38			
Financial / non-financial factors			Shareholders
fin vs non-fin factors			shareholder balance btw new and existing
non-financial factors			old vs new shareholders
financial factors			commerciality vs cost to shareholders
Bank issues			
bank interest rate			Bank business model
bank's point of view			bank business model
credit rules / rating			bank tender process
bank funding - credit crunch			Bank BEE targets
Commodity cycle			bank's core role - push factors
pricing stage			
timing & market conditions			Social investment
commodity cycle			communities around mines
super cycle			
The macro environment			Alternative capital streams
credit crunch			off-shore fund raising activity
credit rules			
The asset			Transaction objectives
asset allocation			transaction objective
asset value			counter party objective
liquidating empowerment assets			counter balance issue
nature of underlying asset			BEE party objective
Financial basis			BEE phases 1, 2 and 3
economic theory			
commercial sense			Legislation
general funding rule*			associated enterprise principle code 100
BEE objectives			codes vs charter
conflicting objectives			legislative M&A