

Shareholder value optimisation in the platinum industry during recessionary times

J Raats

**Mini-dissertation submitted in partial fulfilment of the
requirements for the degree Masters in Business Administration
at the North-West University**

Study Leader: Prof. Jan Kotzé

November 2010

Vanderbijlpark Campus

Acknowledgements

The finalization of this mini-dissertation could not have been completed without the support of the following people, and I cannot thank you enough:

- **My wife Magdie, for her understanding and support**
- **Prof. Jan Kotzé for his guidance and valuable input**
- **Christine Bronkhorst for her endless help in finding literature and other data**
- **The rest of my family for their prayers and support**

Lastly I want to give thanks to God for the talents and opportunities that He has provided me, not only to complete this course, but also for the many other blessings I have received in life.

Abstract

The recession of 2008/09 was the worst decline of global markets since the Great Depression in the 1930's. Some international markets lost 30 – 50% of its value in the period July to October 2008. The main reason for this dramatic drop in investor demand was the sub prime crisis in the USA where growth was fuelled by providing loans to house owners who could not afford the mortgage payments.

Platinum, which is the biggest mining sector in South Africa both in terms of revenue and employment, was not spared this sudden decrease in demand. Platinum market price lost more than 50% of its value, free-falling from a level of over \$2000/oz to below \$1000/oz in three months.

A recession poses a massive challenge to the management teams of companies. Their main task of ensuring shareholder value growth comes under enormous pressure from macro-economic factors outside of their control. Strategic objectives based on high growth and demand scenarios have to be adapted to a low demand and negative growth environment. This study embarks on a journey to determine what strategies the different management teams of the five top South African platinum mining companies implemented and how successful they were in optimising shareholder value during the recession period.

The impact of risk and return on investor demand were discussed on a theoretical level and tested on a practical level by evaluating the performances of individual companies and finding correlations between company performance and shareholder value optimisation. Companies who performed well by maintaining good profit margins, maintaining dividend payouts, managing risks well and continuing to build a good platform for future profit growth performed the best in optimising shareholder value during the recession period.

Recommendations are made based on theoretical and practical best practices for how to optimise shareholder value during future recessionary times. Opportunities for companies in the platinum mining industry for the next 3 – 5 years are also evaluated and summarized.

Keywords: platinum, recession, shareholder value

Table of contents

Chapter 1: Nature and Scope of the study	8
1.1 Introduction.....	8
1.1.1 <i>Shareholder Value</i>	8
1.1.2 <i>Recession</i>	9
1.1.3 <i>Platinum mining in South Africa</i>	9
1.2 Problem Statement.....	10
1.3 Objective.....	11
1.3.1 <i>Primary Objective</i>	11
1.3.2 <i>Secondary Objectives</i>	12
1.4 Scope of Study	12
1.5 Research Methodology.....	13
1.6 Limitations of the study.....	14
1.7 Layout of the study	14
Chapter 2: Literature study	16
2.1 Platinum mining in South Africa.....	16
2.1.1 <i>Platinum overview</i>	16
2.1.2 <i>Platinum and the market</i>	17
2.1.3 <i>Platinum in South Africa</i>	22
2.2 Overview of identified platinum companies	25
2.2.1 <i>Introduction</i>	25
2.2.2 <i>Review of identified companies</i>	27
2.2.3 <i>BBBEE</i>	28
2.2.4 <i>Summary</i>	28
2.3 Recession.....	29
2.3.1 <i>General</i>	29
2.3.2 <i>Current economic recession</i>	31
2.3.3 <i>Impact of current recession</i>	32
2.4 Shareholder Value and Management Strategies.....	34
2.4.1 <i>Theory</i>	34
2.4.2 <i>Dividend payouts</i>	35

2.4.3 Share price growth.....	36
2.4.4 Risk.....	38
2.4.5 Shareholder value: A Management perspective	41
2.5 Optimising shareholder value in a recessionary period	42
Chapter 3: Empirical Study	47
3.1 Company timelines	47
3.1.1 Anglo Platinum.....	48
3.1.2 Aquarius Platinum.....	51
3.1.3 Impala Platinum	54
3.1.4 Lonmin	57
3.1.5 Northam Platinum	60
3.2 Questionnaires	63
3.2.1 Impala Platinum	63
3.2.2 Anglo Platinum.....	67
3.3 Company performance	70
3.3.1 Profitability and costs	70
3.3.2 Cash and debt	72
3.3.3 Dividend payouts and the P/E ratio.....	73
3.3.4 Safety performance.....	74
3.3.5 Reduction of workforce, reduced production, working capital management and CAPEX.....	75
3.3.6 Summary	76
3.4 Shareholder value	77
3.4.1 Anglo Platinum.....	79
3.4.2 Aquarius Platinum.....	81
3.4.3 Impala Platinum	82
3.4.4 Lonmin	83
3.4.5 Northam Platinum	84
3.4.6 Summary	85
Chapter 4: Conclusions and Recommendations	87
4.1 Company performance in terms of optimising shareholder value	87

4.2 Conclusions: Influence of company performance (by evaluating strategic objectives) on optimising share holder value during the recession.....	88
4.3.1 Risk.....	88
4.3.2 Returns	89
4.3 Recommendations on specific strategies to optimise shareholder value during future recessionary times	90
4.5 Opportunities in the platinum industry for the next 3 - 5 years.....	92
Bibliography	93
Appendix.....	98
Appendix 1: Platinum	98
Appendix 2: Platinum Companies	98
Appendix 3: Risk	103
Appendix 4: Company Questionnaires	105
Appendix 5: Company Financial and other information	110
Appendix 6: Share holder value evaluation	117
Appendix 7: A statistical evaluation of performance ratings	118

List of Abbreviations

4E	Symbol used to indicate mining grades based on the total of 4 PGM elements
ASX	Australian Stock Exchange
BBBEE	Broad Based Black Economic Empowerment
CAPEX	Capital Expenditure
DME	Department of Minerals and Energy
EE	Employment equity
EPS	Earnings per Share
ETF	Exchange traded fund
FY	Full year (Financial year end)
FYF	Extrapolated forecast for full year performance based on half year results
GDP	Gross Domestic Product
H1	First half of year
H2	Second half of year
JSE	Johannesburg Stock Exchange
JV	Joint venture
LSE	London Stock Exchange
LTI	Lost time injury (Injury causing the injured to be booked off)
NGO	Non-government organization
P/E	Price over earnings ratio
PGM	Platinum Group metal
Pt	Platinum
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on investment
SP	Share price

List of Figures

Fig 1.1: Focus of study.....	11
Fig. 1.2: Specific periods for the share price evolvement during the period under review.....	13
Fig. 2.1: Platinum: Annual supply and demand.....	18
Fig. 2.2 Platinum market price over past 20 years.....	19
Fig. 2.3: Supply and demand data for platinum 2007-2009.....	20
Fig. 2.4: The Bushveld complex: Merensky, UG2 and Platreef	23
Fig. 2.5: PGM grades of different reefs in the Bushveld complex.....	23
Fig. 2.6: SA mining industry: Employment by sector.....	25
Fig. 2.7: Production share as % of combined production 2009.....	26
Fig. 2.8: Proven PGM reserves as % of combined reserves.....	26
Fig. 2.9: Locations of PGM mining operations in South Africa.....	27
Fig. 2.10: Business cycle: Contraction and expansion.....	30
Fig. 2.11: South African quarterly GDP.....	33
Fig. 2.12: Impact of the recession on the mining sector GDP.....	33
Fig. 2.13: Using risk in making optimum investment decisions.....	39
Fig. 2.14: Risk assessments using Probability and Consequences.....	41
Fig. 3.1: Anglo Platinum share price timeline.....	48
Fig. 3.2: Aquarius platinum share price timeline.....	51
Fig. 3.3: Impala platinum share price timeline.....	54
Fig. 3.4: Lonmin share price timeline.....	57
Fig. 3.5: Northam platinum share price timeline.....	60
Fig. 3.6: Comparison between R/oz and \$/oz platinum market price.....	78
Fig. 3.7: Anglo Platinum share price compared to R/oz price.....	79
Fig. 3.8: Anglo Platinum share price compared to \$/oz price.....	79
Fig. 3.9: Aquarius Platinum share price compared to R/oz price.....	81
Fig. 3.10: Impala Platinum share price compared to \$/oz price.....	82
Fig. 3.11: Lonmin share price compared to \$/oz price.....	83
Fig. 3.12: Northam Platinum share price compared to \$/oz price.....	84
Fig. A1: Example of company questionnaires completed by CEO of	

Impala Platinum David Brown..... 104

List of Tables

Table 2.1: World reserves of PGM's.....	24
Table 3.1: Timeline media releases and reports: Anglo platinum.....	49
Table 3.2: Timeline media releases and reports: Aquarius Platinum.....	52
Table 3.3: Timeline media releases and reports: Impala Platinum.....	55
Table 3.4: Timeline media releases and reports: Lonmin.....	58
Table 3.5: Timeline media releases and reports: Northam Platinum.....	61
Table 3.6: Importance ratings for different risk factors (Impala).....	64
Table 3.7: Importance ratings for different risk factors (Anglo).....	67
Table 3.8: Rankings in terms of certain key strategic performances of individual companies.....	77
Table 3.9: Shareholder value optimisation comparison.....	85
Table 3.10 Growth in Platinum market prices in both Rand and Dollar terms.....	85
Table 4.1: Ranking in terms of shareholder value optimisation during the recession period.....	87
Table A2.1: Basic overview of identified companies.....	98
Table A2.2: Operations of the identified companies.....	99
Table A5.1: Anglo Platinum.....	100
Table A5.2: Aquarius Platinum.....	109
Table A5.3: Impala Platinum.....	110
Table A5.4: Lonmin.....	111
Table A5.5: Northam Platinum.....	112
Table A5.6: Company comparison on selected financial and other performances.....	115
Table A 7.1: Data table used for statistical correlation.....	117