

Chapter 3: Empirical Study

3.1 Company timelines

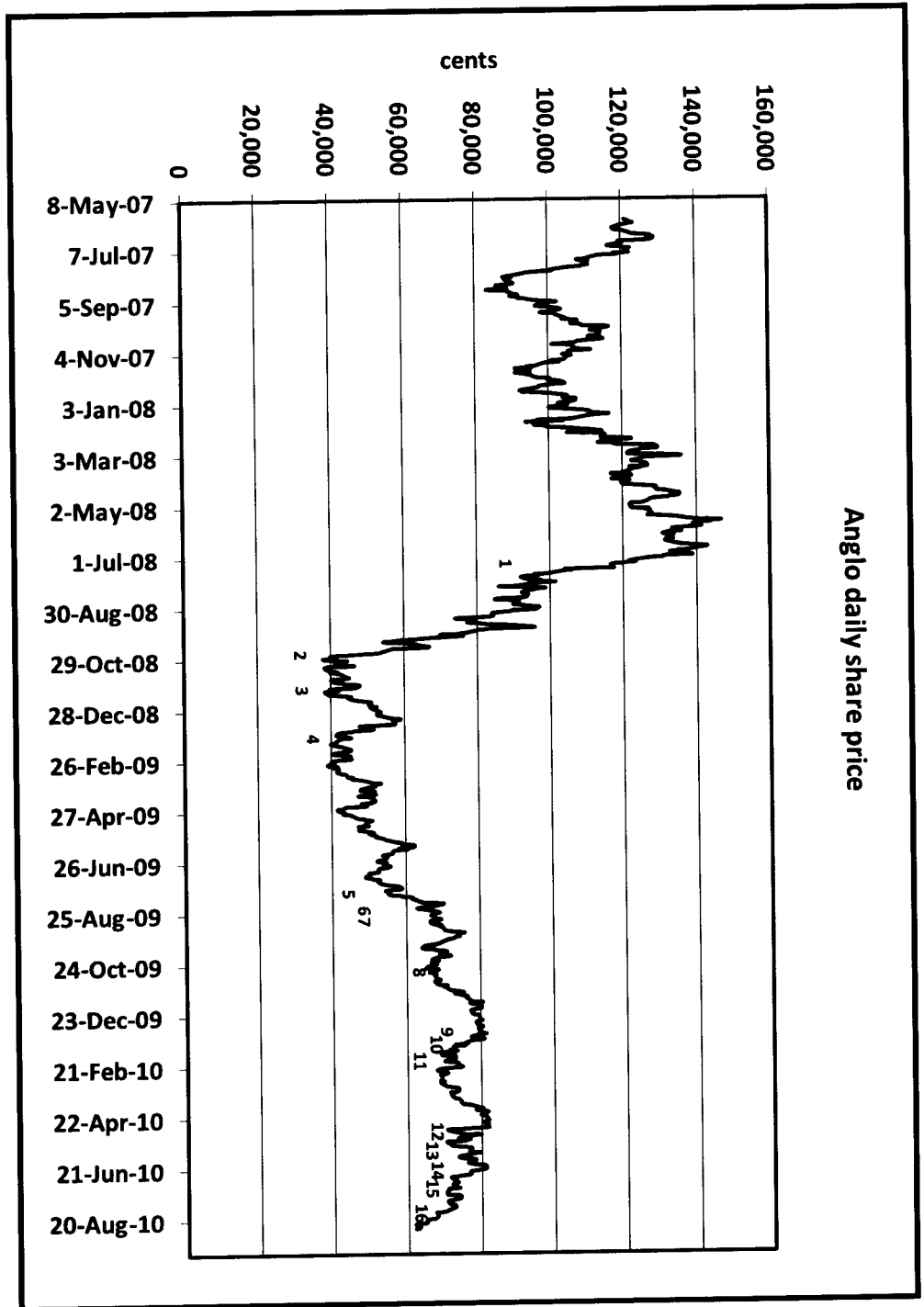
The following graphs show the evolution of the identified companies' share price. Specific events are indicated and given in the subsequent tables. Focus is given to media releases and reports. The main aims are:

- To sketch a view of either positive or negative perceptions about the company that could have influenced investor sentiment;
- To show the evolution of the company's share price through the different periods indicated in figure 1.2;
- To give the reader a glimpse of the specific issues individual company's had to deal with.

A short summary of each company is also provided.

3.1.1 Anglo Platinum

Fig. 3.1: Anglo Platinum share price timeline



Source: Researcher's own compilation

Table 3.1: Timeline media releases and reports: Anglo platinum

Date	Comment	No
9-Aug-10	Anglo Platinum increases its stake in a joint Platinum-Palladium venture in Brazil to 51%	16
26-Jul-10	Anglo reports a 531% increase in earnings y/y/ and projects an 100,000 oz per year increase in production until 2014	15
5-Jul-10	Cynthia Carroll (CEO of Anglo American) takes over as Anglo Platinum's chairperson. This is seen as a breach of good corporate governance practices	14
20-May-10	All Share index drops	13
17-May-10	Anglo reports an increase of 20% in earnings per share	12
8-Feb-10	Anglo Platinum announces full year results for the year ended Dec 2009. Headline earnings down 95%. a R12.5bn rights offer in an effort to reduce debt	11
15-Jan-10	Shares plunge due to statement that profits will drop by 90%	10
12-Jan-10	Anglo Platinum announces a new deal with the Royal Bafokeng Nation, which should boost their Black ownership statistics	9
28-Oct-09	Anglo shows its interest in new fuel cell technology, which would boost platinum demand as it is used as a main component	8
30-Jul-09	Anglo Platinum announces its plans to cut more jobs	7
28-Jul-09	Anglo Platinum reports a 94% drop in free cash flow in the first half of 2009 and an increase in debt from R13.5 bn to R17.9 bn in the 6 months ended June 2009. Headline earnings also dropped by 95%	6
2-Jul-09	Anooraq Resources purchases 51% of Anglo's Lebowa mine and operations	5
9-Feb-09	Full year results ended Dec 2008. Headline earnings increase of 8%. Anglo passes on final dividend payments, report a 231% increase in debt and the cut of 10000 jobs. Capital expenditure will also be reduced to R9.1b from R14bn	4
17-Dec-08	Anglo cuts production and capital expenditure	3
8-Nov-08	A fire at Anglo Platinum's Polokwane Smelter causes production delays. The company announces that its production losses could be as much as	2

	200 000 ounces. The share price dropped by 8.1%	
28-Jul-08	Anglo Platinum announces an increase of 21% in headline earnings for the first half of the year. An ordinary share dividend payout of R35 was declared	1

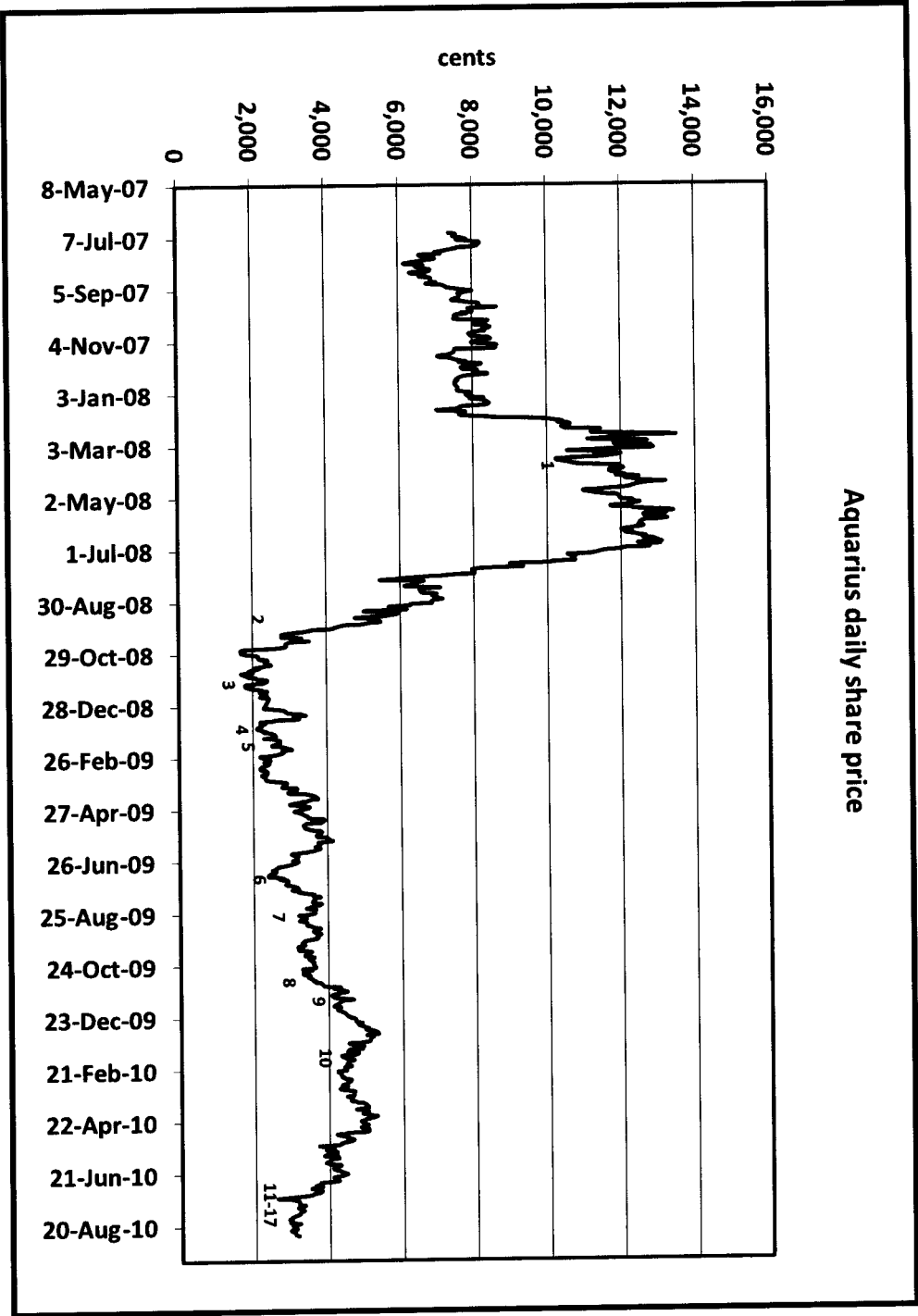
Source: Various media reports as well as company releases

Summary

- Anglo received significant negative coverage on its huge increase in net debt.
- Anglo platinum reduced its head count by more than 20,000.
- Although net profits were maintained, Anglo had to stop dividend payments due to its increased debt.
- A rights offer of R12.5bn was completed to reduce debt. This had a diluting effect on earnings per share.
- Anglo made its plans clear that it wants to explore outside of Africa (Brazil) and also go into joint ventures with end product producers. This is a positive move in order to position itself in different geographies, as well as to boost its own market by vertical integration.

3.1.2 Aquarius Platinum

Fig. 3.2: Aquarius platinum share price timeline



Source: Researcher's own compilation

Table 3.2: Timeline media releases and reports: Aquarius Platinum

Date	Comment	No
12-Aug-10	Aquarius Platinum reports a headline profit of \$27.8m after a loss of \$45m in the previous year. It expects unit costs to rise 5% due to safety regulation changes	17
29-Jul-10	Aquarius announces a possible closure of its Blue Ridge operations due to safety and operational issues	16
26-Jul-10	Aquarius Platinum announces that its Section 54 stoppage was uplifted after a production delay of 19 days	15
20-Jul-10	Aquarius Platinum's shares increase 15% after it announces that it has a say in how its mine's safety should be improved	14
16-Jul-10	The Department of Minerals instructed Aquarius Platinum to modify some of its safety measures after reviewing the fatal incident at Aquarius Platinum's Marikana operations. Share price drops by more than 20%	13
8-Jul-10	Aquarius Platinum may lose more than 2000 ounces of platinum due to its safety stoppage at Marikana operations after fatal accident	12
1-Jul-10	Aquarius Platinum share price drops by 7% after a safety review at its Blue Ridge operations is said to imply a negative impact on operations	11
11-Feb-10	Aquarius Platinum announces a headline profit for the first six months ended Dec 2009 after a loss in the corresponding period the previous year	10
4-Dec-09	Aquarius announces that its expansion at its JV Mimosa mine in Zimbabwe is completed	9
19-Nov-09	Aquarius announces that it will re-open its Everest mine operations within the next year	8
27-Aug-09	Aquarius experiences production losses due to strikes at its operations over wage disputes	7
14-Jul-09	Aquarius Platinum releases plans to restart operations at its Everest South mine. Share prices increased by 11%	6
12-Feb-09	Aquarius announces its plans to take over junior platinum miner Ridge Mining	5

28-Jan-09	Aquarius Platinum announces that it expects a headline loss for the first six months ended Dec 2008	4
15-Dec-08	Aquarius Platinum announces that it is shutting down its Everest mining operations due to unstable ground conditions	3
12-Sep-08	Aquarius announces that it is willing to participate in the consolidation of the South African Platinum industry	2
28-Apr-08	Aquarius announces that it has completed its share buyback program from Impala Platinum	1

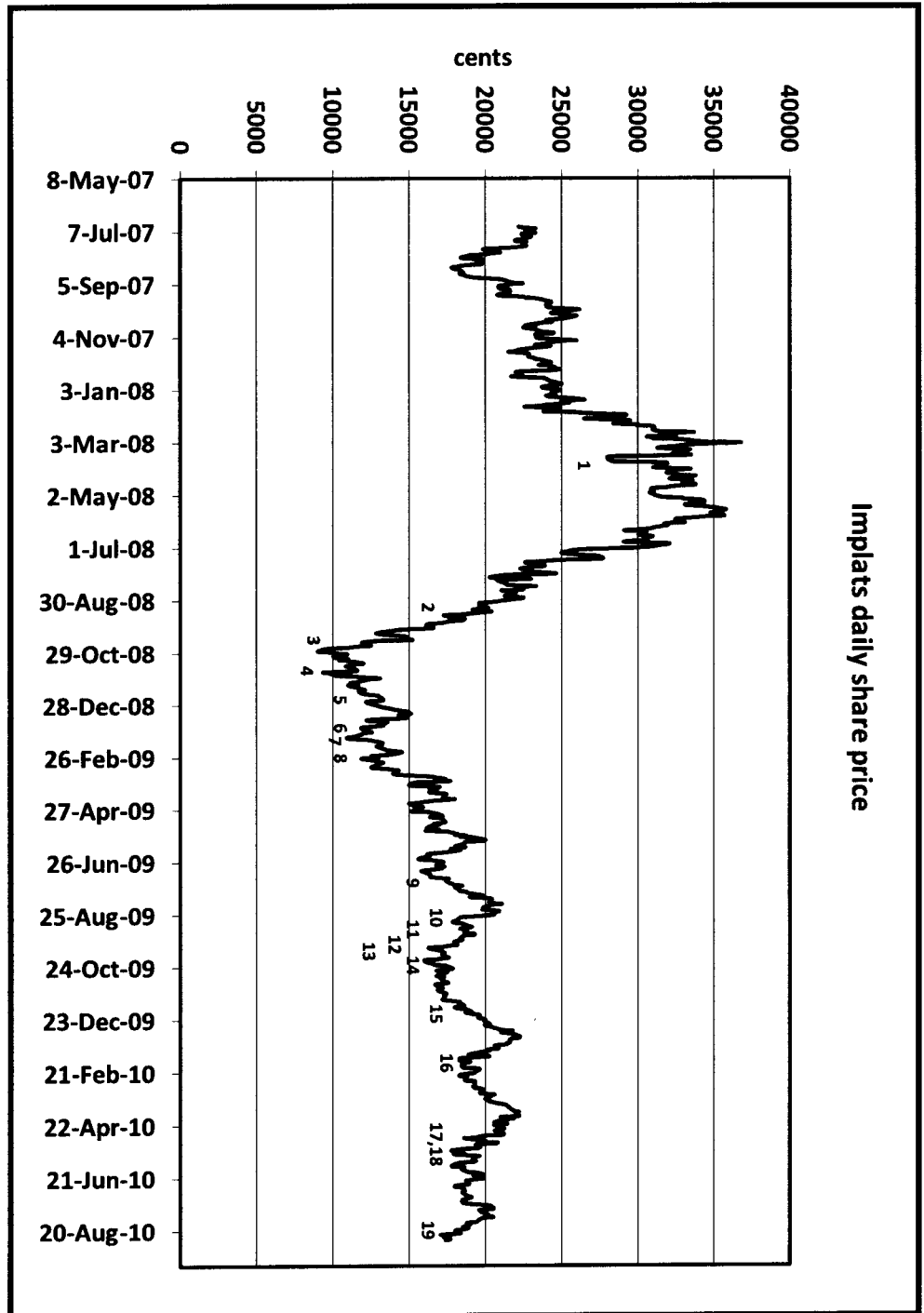
Source: Various media reports as well as company releases

Summary

- Aquarius Platinum went from profits to net losses during the recession. This caused it to halt dividend payments.
- Negative coverage of safety incidents caused major damage to Aquarius' share price as mines had to be closed for long periods.

3.1.3 Impala Platinum

Fig. 3.3: Impala platinum share price timeline



Source: Researcher's own compilation

Table 3.3: Timeline media releases and reports: Impala Platinum

Date	Comment	No
26-Aug-10	Impala announces an increase in dividend payments and a decrease in headline earnings of 21%	19
21-May-10	Impala confirms a work stoppage at its No12 shaft due to a strike by maintenance workers over a pay dispute	18
20-May-10	All Share index drop	17
18-Jan-10	Impala announces a drop in headline earnings of 76% for the six months ended Dec 2009. It also maintained a dividend of 120c per share	16
4-Dec-09	Impala announces that its expansion at its Mimosa mine in Zimbabwe was completed	15
26-Oct-09	Fred Roux, chairman of the board, is dismissed. Roux is stated as saying that Impala Platinum has been under-achieving on production efficiencies and levels	14
22-Sep-09	Three workers killed in the past week at Impala operations	13
14-Sep-09	Impala announces that it will continue to burn cash in order to finance expansion projects	12
27-Aug-09	Impala announces a drop of 52% in headline earnings for the year	11
25-Aug-09	Underground operations come to a halt due to strikes over wage disputes. Impala loses 2500 - 3000 ounces daily	10
21-Jul-09	Impala reports the death of nine employees due to a fall of ground incident. Production is halted	9
19-Feb-09	Headline earnings rise 14% for the half year ended 31 Dec 2008. Dividend payments are however slashed by 60%. Impala announces a cut of 33% in its proposed CAPEX	8
14-Jan-09	Impala announces that its proposed acquisition of Mvelaphanda Resources and Northam Platinum is terminated due to volatile market conditions. The share price drops by 5.5%	7
9-Jan-09	Impala closes one of its mining shafts due to a fatal accident	6
15-Dec-08	Impala Platinum announces that cutbacks in production levels are needed in order to stop further decline in the platinum price	5
20-Nov-08	Impala announces that it has suspended its share buyback program. Its shares drop by 17%	4

5-Oct-08	Impala announces its intension to acquire Northam Platinum and Mvelaphanda resources	3
28-Aug-08	Impala announces a 57% increase in headline earnings for the year ended 30 June 2008. It announces that its production could increase by 5% over the next year	2
16-Apr-08	Impala announces that it will dispose of its shareholding in Aquarius Platinum	1

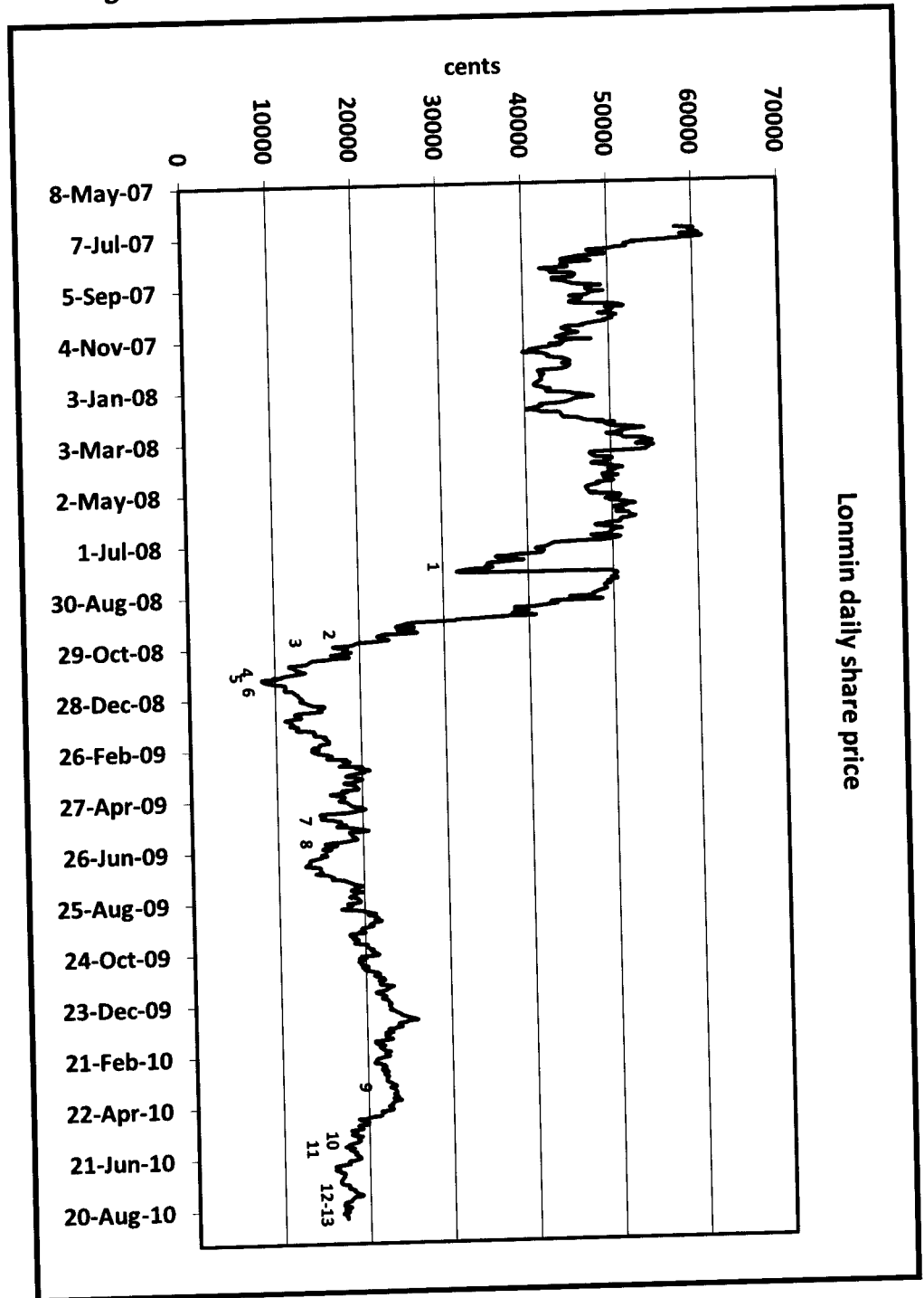
Source: Various media reports as well as company releases

Summary

- Impala maintained profits as well as dividend payments.
- Many expansion and takeover plans were stopped at the onset of the recession period.
- Impala was in a good position (cash positive) at the end of the review period to capitalize on post-recession growth opportunities.
- Impala experienced mining stoppages due to safety incidents as well as wage disputes.
- Impala successfully cut its production and capital expenditure levels to maintain cost effectiveness, and to minimise debt.

3.1.4 Lonmin

Fig. 3.4: Lonmin share price timeline



Source: Researcher's own compilation

Table 3.4: Timeline media releases and reports: Lonmin

Date	Comment	No
11-Aug-10	Lonmin announces that the Department of Minerals and Resources (DMR) has approved their Section 102 applications for the rights to sell by product minerals from its operations	13
5-Aug-10	The DMR orders Lonmin to stop the selling of its by product minerals	12
24-May-10	Lonmin announces that there has been further setbacks in the re-commissioning of its No 1 furnace and said that further toll smelting is needed	11
10-May-10	Lonmin reports a half year headline profit of \$65m compared to a loss of \$142m in the same period last year	10
30-Mar-10	Lonmin announces another unplanned shutdown of 30 - 40 days of its No 1 furnace due to a burn-out	9
15-Jun-09	Lonmin announces an unplanned shutdown of 30days of its No 1 furnace due to a burn-out	8
11-May-09	Lonmin announces that it only had to retrench 3280 employees during the recession period	7
2-Dec-08	Lonmin is reviewing its operations in Limpopo and job losses of 6000 is on the cards	6
28-Nov-08	Lonmin announces that about 4000 job losses is on the table at its Marikana operations	5
18-Nov-08	Lonmin's new CEO makes drastic changes at the company, including mine closures and changes in mining strategies	4
1-Oct-08	Xstrata withdraws its offer to acquire Lonmin	3
29-Sep-08	Lonmin appoints new CEO, Ian Farmer	2
7-Aug-08	Lonmin rejects offer from Xstrata	1

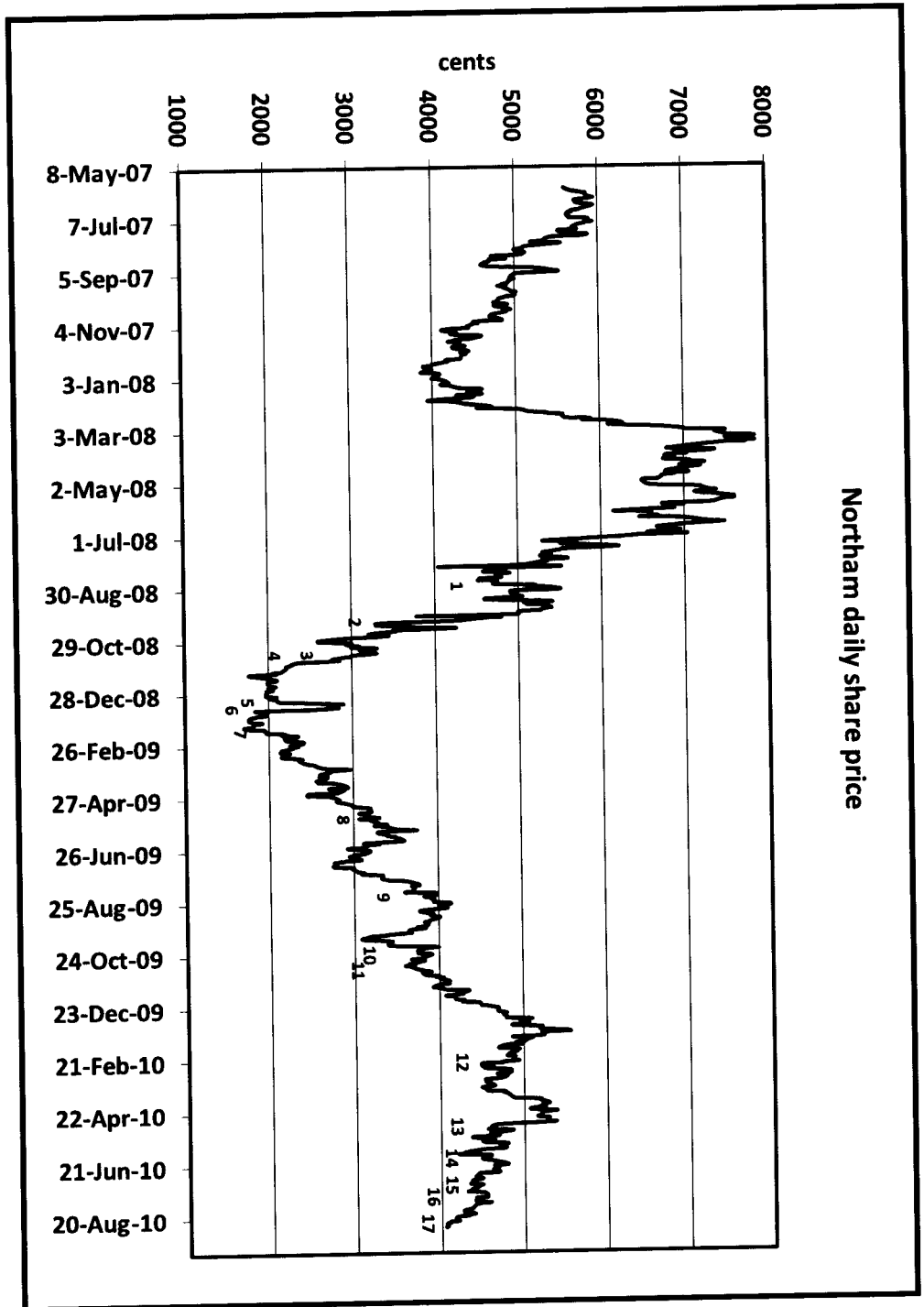
Source: Various media reports as well as company releases

Summary

- Lonmin had numerous operational setbacks (Mainly No1 furnace). With no real versatility the company had to make use of toll smelting at Impala, which had a huge cost implication.
- The failed takeover bid from Xstrata caused major volatility in the share price.
- Lonmin reverted to retrenching employees as well as undergoing other restructuring exercises.
- Negative media coverage of mining rights for its by-products caused serious damage to the share price.
- Due to its ineffectiveness in reducing costs, Lonmin went into a net loss.

3.1.5 Northam Platinum

Fig. 3.5: Northam platinum share price timeline



Source: Researcher's own compilation

Table 3.5: Timeline media releases and reports: Northam Platinum

Date	Comment	No
20-Aug-10	Northam Platinum announces revenue increase of 23%, but only a slight increase in profits of 1.7% y/y. Cash in hand of R1.1b.	17
30-Jul-10	Northam announces the start-up of its operations at the Zondereinde mine after a safety stoppage. Estimated loss is 7 000 ounces	16
15-Jul-10	Northam announces that it has entered a relationship with Jubilee Platinum to construct a state of the art DC arc furnace with the newest ConRoast technology	15
17-Jun-10	Northam announces that it has increased its estimated capital investment needed for the first phase of the Booyendal project to R3.6bn	14
17-May-10	The operations at the Zondereinde mine are halted due to an incident at the converters. This part of the plant is shut down until 11 June	13
23-Feb-10	Northam announces its half year results ending Dec 2009. Revenue increase of 8% but profits down 42% due to lower metal prices and stronger rand value. Dividends of 20 c/s declared	12
15-Oct-09	Northam agreed to a 11.5% wage hike	11
8-Oct-09	Northam announces the conclusion of the Booyendal feasibility study. This mine will be able to produce another 245 000 ounces per year. Northam will spend R3bn over the next three years to develop the first phase of the mine	10
14-Aug-09	Northam announces its full year results. Sales up by 22%. 18% drop in sales revenue. Profits dropped by 64%. Cash reserves of R921m and yearly total dividend of 78 c/s	9
14-May-09	JP Morgan raises its recommendation of Northam shares from overweight to neutral, and this causes a surge in the share price of 4.4%	8
5-Feb-09	Northam reports half year results. Sales revenue increase of 7.7%. Profits decreased by 21.5%.	7
15-Jan-09	Northam share price falls by 27% due to Impala Platinum announcement that it has terminated its plans to buy Northam Platinum and Mvelaphanda Resources	6
8-Jan-09	Northam Platinum shareprice jumps 12% as Impala Platinum announced that it has continued takeover talks	5

19-Nov-08	Northam announces that Impala Platinum has again announced its proposal to take over Northam Platinum	4
11-Nov-08	Northam announces the death of employees due to a drilling incident	3
2-Oct-08	Impala Platinum announces its plans to acquire Northam Platinum	2
25-Aug-08	Northam announces its full year results. 12.6% increase in profits. Record sales revenues. Total dividend for year at 330 c/s. Cash of R1.5bn	1

Source: Various media reports as well as company releases

Summary

- Apart from some safety incidents Northam maintained positive media coverage.
- The failed Impala takeover caused some volatility in share price.
- Northam maintained a good cash (low debt) position which, together with continued profits, allowed it to maintain some dividend payouts.
- Its world renowned Booyendal project received positive coverage and makes it an attractive investment as future growth is evident.

3.2 Questionnaires

Questionnaires were compiled for each company and distributed to executive committee members for completion. The main aims were:

- To get some input from top managers in the industry about the importance of some aspects mentioned in chapter 2.
- To obtain an idea of how the company's management viewed its own performance.

An example of the questionnaires is supplied in Appendix A4. After numerous efforts and consultation sessions, limited response was received on questionnaires. Impala Platinum (Four) and Anglo Platinum (One) were the only companies that responded.

3.2.1 Impala Platinum

Impala Platinum was the only company that completed all the questionnaires that were sent. Four members of the executive committee of Impala Platinum completed the questionnaires namely: David Brown (CEO), Dawn Earp (CFO), Paul Dunne (Executive Director), Les Paton (Executive Director). A summary is given below.

Risk Management

Q1) All correspondents rated risk management as quite important as a tool to optimize shareholder value. The following risks were ranked according to importance to their business (Initials of each member used for index):

Table 3.6: Importance ratings for different risk factors (Impala)

	DB	DE	LP	PD	Avg	Geo Avg	STDV
Health & Safety	1	1	1	2	1.25	1.2	0.43
Environment (legislation, fines, plant closure, public relations, legacy)	2	2	8	4	4	3.4	2.45
Operational upsets (Furnace shutdowns, flooding etc.)	8	3	4	7	5.5	5.1	2.06
Asset risks (mine slides, fires, explosions etc.)	9	4	5	6	6	5.7	1.87
Human resources and skills	3	6	2	1	3	2.4	1.87
Relationship with labour unions	4	8	6	5	5.75	5.6	1.48
Electricity supply	7	7	3	8	6.25	5.9	1.92
Decline in product demand due to substitute development	6	1	1	1	1.25	1.1	1.30
Political risks (mining rights, nationalisation, political stability)	5	5	7	3	5	4.8	1.41

Source: Researcher's own compilation

The following conclusions can be drawn:

- Impala Platinum's executive committee regards health and safety, environmental risks and human resources and skills as the biggest risks to shareholder value (red).
- Operational upsets, relationships with unions, asset risks, relationships with labour unions, electricity supply and political risks are seen as medium risks (grey).
- Decline in product demand is seen as a very low risk. This is a sign of confidence in future product demand (green).

Safety

Q2) The general consensus from Impala's executive team is that safety performance over the past two years was not very good. According to Les Paton, the incident on July 21 2009 where 9 employees were killed was the worst in the company's history.

Profits, Cash, Debt, Working capital management & Costs

Q3) All four correspondents view Impala's performance on managing cashflow during the recession period as very good.

Q4) Cost reduction was rated as excellent.

Q9) Impala's management team rate their company's performance on profits during the recession period as excellent.

Q17) Impala's debt management during the recession period is seen as excellent.

Q12) Impala's ability to manage working capital in order to boost profits was rated as excellent, although one respondent deemed it to be moderate.

Human resources

Q5) There seems to be no consensus on the views of how well equipped Impala is in terms of their HR structures. The impact of the HR structure on both current and future profits received rankings from moderate to excellent.

Q6) In terms of having the needed talent within the management teams of the company, there are also varying views. One respondent feels that new talent needs to be acquired while others feel that Impala is in an excellent position.

Q8) All correspondents felt that their company's workforce adapted very well to the changing operating environment.

Q13) Impala's BBBEE performance is rated as good.

Corporate Governance

Q7) All correspondents believe that their company's corporate governance is contributing either moderately or very well to its sustainability.

Strategic issues

Q18) Impala's current investment in Zimbabwe (Zimplats as well as Mimosa joint venture with Aquarius) is seen as sufficient for their current strategic positioning, but should be expanded in the future.

Q15) Impala feels that the diversification of mining assets is moderate to extremely important, and that their current mining portfolio is well diversified.

Q16) Impala's ability to capitalize on by-product sales is rated as excellent.

Q11) Impala is interested in mergers and takeovers, but such corporate activities will be evaluated based on the possible inherent value of the transaction.

Q10) Impala's executive members rate Impala's current technology as being well (good) equipped to ensure their competitive advantage.

Dividend payments

Q14) Impala was one of only two companies that continued to pay dividends. The management team feels that these dividend payouts contributed excellently towards optimising shareholder value during the recession and will continue to do so in the future.

Summary

- Impala's management believes that their company achieved excellent financial results.
- It maintained dividend payments that allowed it to maintain share holder value growth.
- Non-monetary performance in human resource management, risk and corporate governance were also ranked to be above average, while all respondents indicated that health and safety should be improved.
- The management team believes that Impala is in an excellent strategic position to optimise growth in the post-recession period.

3.2.2 Anglo Platinum

Only one respondent from Anglo Platinum’s executive committee completed the questionnaire. July Ndlovu (Director of operations) gave his view of the items discussed in the questionnaire.

Risk

Q)1 Managing risk is of paramount importance to Anglo Platinum. The following order of importance was provided:

Table 3.7: Importance ratings for different risk factors (Anglo)

	JN
Health & Safety	1
Environment (legislation, fines, plant closure, public relations, legacy)	3
Operational upsets (Furnace shutdowns, flooding etc.)	6
Asset risks (mine slides, fires, explosions etc.)	5
Human resources and skills	2
Relationship with labour unions	4
Electricity supply	7
Decline in product demand due to substitute development	8
Political risks (mining rights, nationalisation, political stability)	9

Source: Researcher’s own compilation

The following conclusions can be drawn:

- Health and safety, human resources and skills, as well as environmental risk were ranked to be the highest risks (This is in accordance with Impala Platinum's ratings).
- Operational upsets, asset risks and relationship with unions was rated as medium risks.
- Electricity supply, decline in product demand and political risk was ranked as lowest risks.

Safety

Q2) Mr. Ndlovu rated Anglo Platinum's safety performance as average.

Profits, Cash, Debt, Working capital management & Costs

Q3) Cash flow management was rated as good.

Q4) Cost reduction was rated as good.

Q9) Profits of operations was reported as good.

Q17) Mr. Ndlovu feels that Anglo Platinum's debt management was good during the recession. This is in contrast to what was reported in the media and financial reports.

Q12) Working capital management was rated as good.

Human resources

Q5) Mr. Ndlovu feels that Anglo Platinum's current HR structure puts them in a perfect position for current as well as future profits.

Q6) The correspondent from Anglo Platinum feels that the company is in a perfect position in terms of the talent in managerial positions.

Q8) Flexibility and adaptability of workforce was rated as good.

Q13) Anglo's BBBEE performance was rated as good.

Corporate Governance

Q7) Mr. Ndlovu feels that his company has done well in terms of corporate government. This is in contrast to the perceptions of the industry due to the appointment of Cynthia Carroll as chairperson of the board (She is also the CEO of Anglo America, which is the majority shareholder in Anglo Platinum).

Strategic issues

Q18) Anglo's current investment in Zimbabwe is seen as sufficient.

Q15) Anglo feels that the diversification of mining assets is extremely important and that their current mining portfolio is well diversified.

Q16) Anglo's ability to capitalize on by-product sales is rated as good.

Q11) Mergers and takeovers is apparently not part of Anglo Platinum's strategy.

Q10) As head of operations Mr. Ndlovu believes Anglo Platinum's technology puts them in an excellent competitive position.

Dividend payments

Q14) Mr. Ndlovu feels that his company's policy to halt dividend payments had an average contribution to shareholder value, but believes that it will have a good impact for future growth.

Summary

Mr. July Ndlovu's view of his company's performance can be summarized as follows:

- Financial performance is rated as above average. Based on the actual reviewed performance in debt management, the respondent's view seems to be slightly biased.
- Anglo Platinum's performance in non-monetary performance measures are rated to be above average. The management team of Anglo seems not to view the appointment of Cynthia Carroll as chairperson of the board as a breach of good corporate governance.

- Anglo is in a good strategic position to capitalize on future growth opportunities.

3.3 Company performance

Financial results from each company were used in order to evaluate relative performance according to specific strategies discussed in section 2.5. Detailed company information is given Appendix 5. Comparison data for selected financial and other information are provided in Table A5.6. The period under review is 2007–2010.

3.3.1 Profitability and costs

Anglo Platinum

Anglo's average cash profit margin for the period was 25% with a low of 5% achieved in 2009. Average ROA and ROE for the period was 15% and 29% respectively, with lows of 5% and 10%. Earnings per share dropped by 76% from 2007–2009 before improving again by 112% in 2010, with an overall decrease of 50% in the period 2007–2010. Reduction in profits can mostly be attributed to reduced product market price, an increase in operating costs as well as massive interest payments on large debts. Cost per platinum ounce produced increased steadily by 26% from 2007–2009. Cost improvements, which included employee layoffs, enabled Anglo to maintain cost levels from 2009–2010. Overall cost increase was limited to 26% (7.1% per year), which is close to the inflation rate. Future profits will be hampered by financing costs until debt can be further reduced. Anglo's vast resource base and diversified operations should provide a good platform for future profits. Its partnership with end producers of platinum products will also stimulate specific product demand.

Aquarius Platinum

Aquarius' average cash profit margin for the period was 40% with a low of 6% achieved in 2009. Average ROA and ROE for the period was 18% and 26% respectively, with lows of -5% and -13%. Earnings per share dropped from a positive 736c/s to a negative of 106 c/s in one year (2008-2009). Reduction in

profits can mostly be attributed to reduced market prices, closures of mines, higher costs and increased financing costs. Cost per platinum ounce produced increased steadily by 30% (9% per year) from 2007 – 2010. Aquarius' costs are still the lowest in the industry, but are skewed by the fact that it does not have its own refinery operations. Future profits will be hampered by financing costs until debt can be reduced. Increased throughput from the Everest mine, as well as expansions at its Mimosa joint venture should ensure growth.

Impala Platinum

Impala's average cash profit margin for the period was 41% with a low of 32% achieved in 2010. Average ROA and ROE for the period was 16% and 21%, respectively with lows of 8% and 10%. Earnings per share dropped by 41% from 2007–2010 and almost 75% from an ultimate high in 2008. Reduction in profits can mostly be attributed to market prices and an increase in operating costs. Cost per platinum ounce produced increased considerably by 58% from 2007–2009, which can be attributed to reduced throughput. Future profits will be stimulated by the company's good cash and debt position as well as its diversified mining operations and its ability to obtain maximum profits from by-product sales.

Lonmin

Lonmin's average cash profit margin for the period was 28% with a low of -2% achieved in 2009. Average ROA and ROE for the period was 6% and 8% respectively with lows of -5% and -12%, which is a relative poor performance. Earnings per share dropped from a value of 2329c/s to a loss of 1309c/s from 2008 - 2009. Reduction in profits can mostly be attributed to lower market prices, operational problems, and an increase in operating costs, as well as massive interest payments. Cost per platinum ounce produced increased steadily by 47% (13.8% per year) from 2007–2010. Cost improvements, which included employee layoffs and other management restructuring exercises, did not have the needed effect on cost reductions. Future profits will be hampered by financing costs until

debt can be reduced further. Limited flexibility in terms of operations, as well as low diversified mining assets could limit future growth.

Northam Platinum

Northam's average cash profit margin for the period was 39% with a low of 20% achieved in 2010. Average ROA and ROE for the period was 22% and 31% respectively with lows of 6% and 7%. Earnings per share dropped by 68% from 2007–2010. Reduction in profits can mostly be attributed to lower market prices and an increase in operating costs. Profits were boosted by very low finance costs. Cost per platinum ounce produced increased considerably by 60% (16.8% per year) from 2007–2010. The development of the Booyendal project will ensure considerable revenue growth in the following five years. Northam's low debt also provides a good platform for future growth.

3.3.2 Cash and debt

Anglo Platinum

Anglo achieved an overall decrease in cashflow of 41% from 2007–2010 as well as an increase in total debt from 2007–2009 of 90%. Net debt increased five fold in the same period. Debt to Assets ratio increased steadily from 0.45 to 0.57 before a rights offer issue was made. The rights offer of R12.5bn in 2010 helped to reduce total liabilities to R32.4bn, which is considerable compared to industry standards. The rights offer increased the number of shares in the company, which diluted earnings per share. A dividend payout ratio in 2007 of 99% should have been reduced to ensure good cashflow for future times.

Aquarius Platinum

Aquarius achieved an overall decrease in cashflow of 46% from 2007–2009 before an increase of 250% for 2009–2010. This increase in cashflow was mainly fuelled by an increase in debt of more than 76%% from 2009-2010. Total debt increased by 73% from 2007–2010. Debt-Assets ratio was maintained around the average value of 0.37.

Impala Platinum

Impala saw an overall increase in cashflow of 20% from 2007–2010 with an increase in total debt from 2007–2009 of only 10%. Taking into account the market conditions, this is an excellent performance. Debt-Assets ratio of 0.31 was reduced to 0.27 in 2010. Impala had an excellent performance in cashflow and debt management.

Lonmin

Lonmin achieved an overall decrease in cashflow of 58% from 2007–2010, while reducing debt by 15% mainly due to a rights offer. Debt-Assets ratio decreased from a level of 0.4 to 0.32 in 2010.

Northam Platinum

Northam's cashflow decreased by 2% during the period 2007–2010, as well as an increase in total debt from 2007–2009 of 32%. Debt-Assets ratio was reduced to 0.12 from levels of 0.3 mainly due to the Booyendal exploration ground being converted to mining assets.

3.3.3 Dividend payouts and the P/E ratio

Anglo Platinum

Anglo Platinum halted all dividend payments at the end of 2008 due to its ever increasing debt situation. P/E average ratio of 29 is very high with a peak value of 54. In strong growth periods, a high price earnings ratio could indicate strong investor confidence, but in low or negative growth periods a high P/E ratio could indicate that the share price is over-valued and could experience slow or negative growth.

Aquarius Platinum

Dividend payments were stopped in 2009 but re-introduced in 2010 with a payout ratio of 100%, which seems to be a very desperate attempt to stimulate investor demand.

Impala Platinum

Impala maintained half year dividend payments during the recession period (Only other company was Northam). A constant dividend payout ratio of around 50% was maintained except for 2009 when it was reduced to 32%, which is an excellent performance. An average P/E ratio of 17 with a highest value of 25 indicates a health organization with sustainable growth prospects.

Lonmin

Lonmin halted all dividend payouts from 2008 due to an increase in net debt as well as net losses. P/E ratio is skewed in 2009 (negative) and very high in 2010 (87.7) which indicates a company that is fragile under difficult conditions.

Northam Platinum

Northam maintained dividend payouts during the recession. The dividend payout ratio decreased from a high of 94% to a low of 22% in 2010. P/E ratio average of 15.4 with a high of 27.1 in 2010 indicates a stable company with good future prospects.

3.3.4 Safety performance

Anglo Platinum

Anglo Platinum's safety performance came off a very poor base with a lost time injury frequency rate (Injuries per 200 000 man hours worked - LTIFR) of 10.15. This was reduced to 6.0 during 2010, which is a considerable improvement but it still ranks as one of the poorest performances compared to industry performance.

Aquarius Platinum

Aquarius is the best performer of all companies, which could be attributed to its highly mechanised operations (LTIFR of 2.8). Aquarius also uses "toll smelting", which means that they have significantly less employees per ounce of platinum produced. Mine closures due to suspected safety hazards did however impact negatively on share price and profitability.

Impala Platinum

Impala's safety performance is the second best in the industry with average LTIFR of 3.5 and low of 2.9.

Lonmin

Lonmin safety performance is poor compared to other companies. Average LTIFR of 7.2 with low of 6 after considerable reductions was made since a high of 11 in 2007.

Northam Platinum

Northam's average LTIFR of 7.9 is the worst in the industry, but a reduction of more than 50% during the past 2 years indicates a significant improvement.

3.3.5 Reduction of workforce, reduced production, working capital management and CAPEX

Anglo Platinum

Anglo's workforce reduced considerably in order to minimise costs whilst maintaining throughput. After an initial increase in CAPEX during 2008, expenditure reduction was implemented during 2009–2010. Due to maintaining production levels, working capital increased from R820m to R11765m, which means cash is being tied up in stocks.

Aquarius Platinum

No real retrenchment program was introduced. CAPEX was reduced by some margin. Production levels reduced mainly due to mine closures. Working capital was reduced by 50% from 2008, which can be contributed to lowered production levels.

Impala Platinum

No real retrenchments were made during the recession period (Total employees were in fact increased). Throughput was reduced by roughly 15%, which increased costs but helped to minimise working capital increases to 70%. CAPEX

was increased considerably during 2008–2009 before being reduced in 2010. Impala's positive cash balance allowed it to continue with expansion projects, which should place it in good stead for future growth.

Lonmin

Some retrenchment programmes were introduced to streamline human resource structures. CAPEX was reduced by more than 50% from 2008 levels to minimise increases in net debt. Productivity was reduced mainly due to operational problems. Working capital increased by more than 50% from 2007–2009. In the first half of 2010 working capital went into a negative value of R1,38m with a current ratio of 0.49, which poses a considerable liquidity risk to operations.

Northam Platinum

Northam's throughput was maintained at maximum levels during the recession period. Working capital was managed very well with a decrease of 9% from 2008–2010. CAPEX was increased every year from 2007–2010, mainly due to exploration and other development projects connected with the Booyendal project. Northam's positive net cash position allowed it to continue with expansion strategies.

3.3.6 Summary

Table 3.8 provides a ranking sheet for the performance of each selected company on selected performance measures as set out in section 2.5. The different individual strategies were grouped as follows:

Current profits: Profits, profit margins, earnings per share, costs, efficiencies, toll smelting

Future profits: Debt, cashflow, human resource structures, assets, growth prospects, diversity of mining operations and assets, strategic alliances with other companies

Dividend payouts: Dividend payouts during the period under review

Risk management: A combination of the different risk management aspects discussed in section 2.4.4

Companies were ranked on a scale of 1 – 5 (1 being best performer and 5 being worst performer) for each of the 4 main categories

Table 3.8: Rankings in terms of certain key strategic performances of individual companies

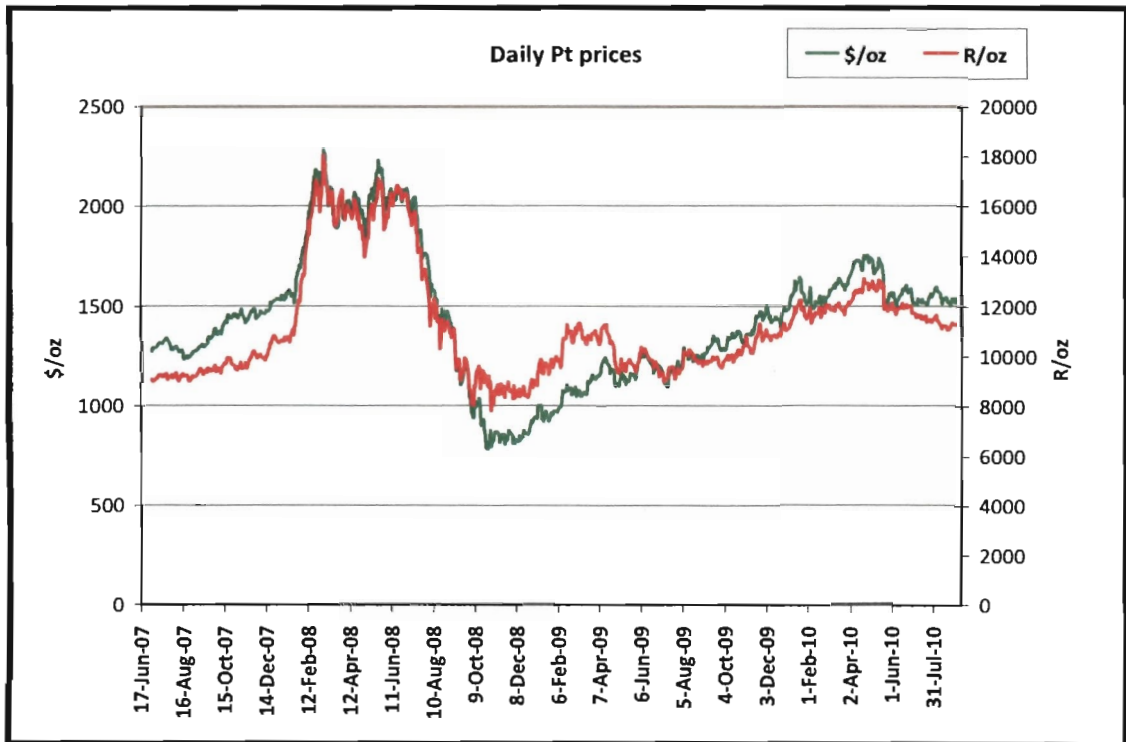
	Anglo	Aquarius	Impala	Lonmin	Northam
Current Profits	3	4	1	5	2
Future Profits	3	4	2	5	1
Dividend payouts	4	3	1	5	2
Risk Management	2	4	1	5	3
Average score	3.0	3.8	1.3	5.0	2.0
Standard deviation	0.7	0.4	0.4	0.0	0.7

Source: Researcher's own compilation

3.4 Shareholder value

The impact of the market platinum price has had a significant impact on the profitability of platinum companies. The market dollar price can, however, be misleading as South African companies operate in an environment where the Rand is the currency. Fig. 3.6 indicates the difference between the \$/oz platinum price and the R/oz platinum price due to the strong appreciation effect of the Rand against the Dollar. The Rand's appreciation to the Dollar since the end of 2008 can be seen in the fact that the growth in \$/oz exceeds that of R/oz. This phenomenon is important to bear in mind when evaluating share price growth with market price growth.

Fig. 3.6: Comparison between R/oz and \$/oz platinum market price

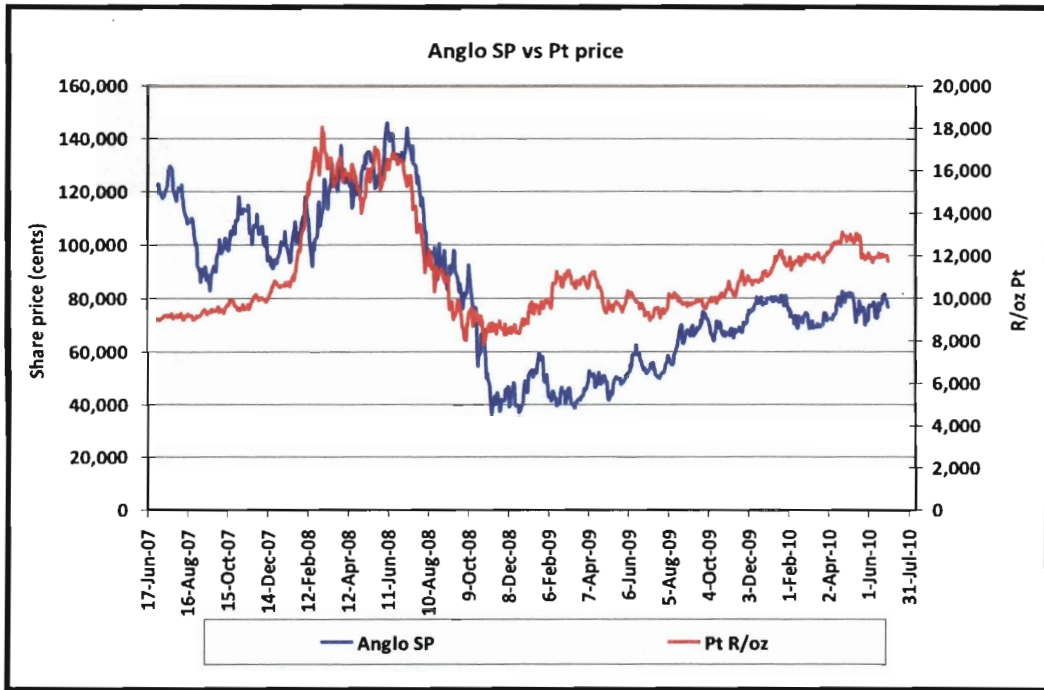


Source: Researcher's own compilation

The evolution of each individual company's share price is evaluated below, after which a summary is provided to show how companies succeeded (or failed) in optimising shareholder value during the recession period.

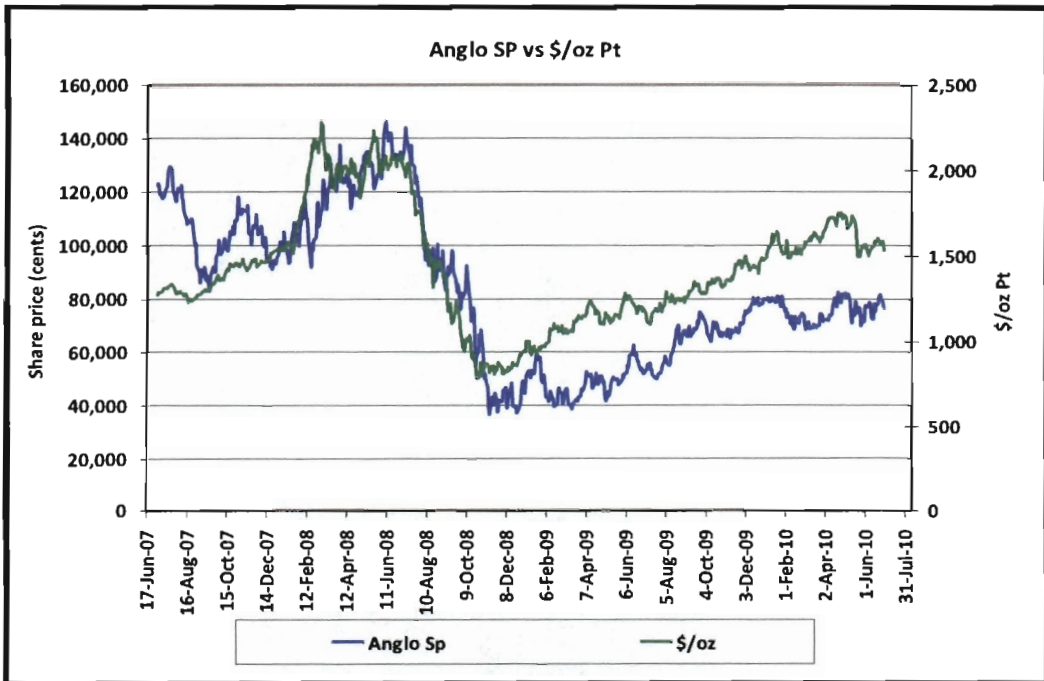
3.4.1 Anglo Platinum

Fig. 3.7: Anglo Platinum share price compared to R/oz price



Source: Researcher's own compilation

Fig. 3.8: Anglo Platinum share price compared to \$/oz price



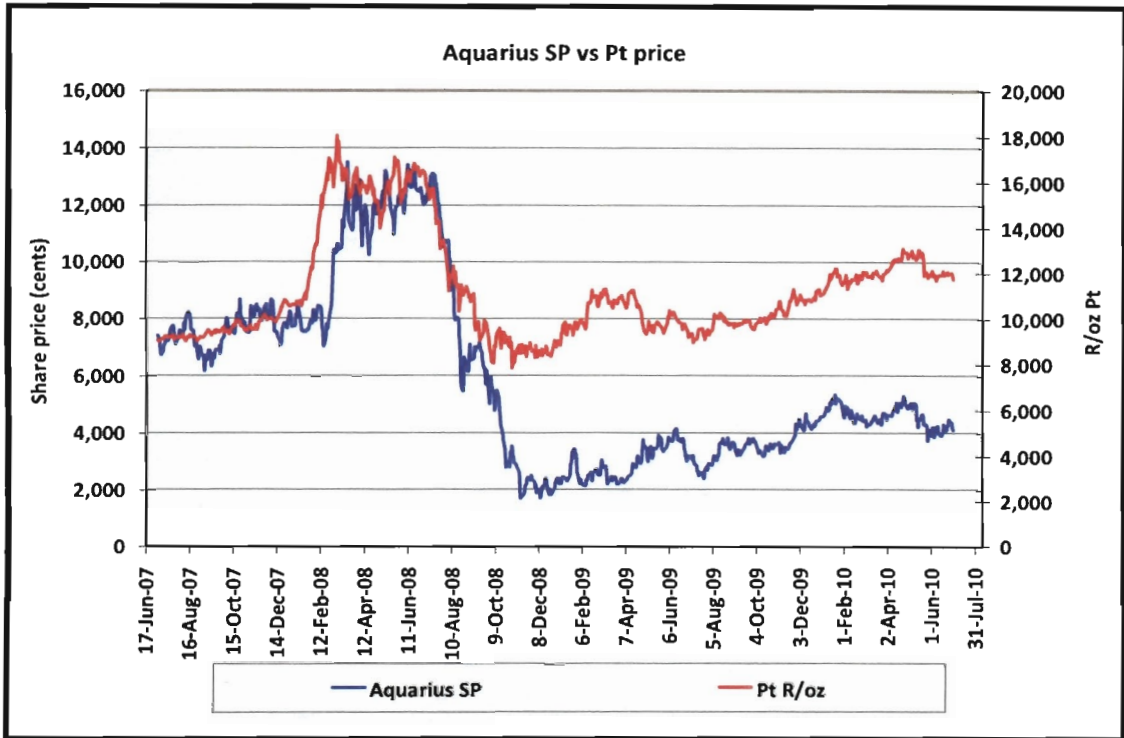
Source: Researcher's own compilation

Figures 3.7 & 3.8 clearly show how the share price of Anglo Platinum was influenced by the market price of platinum. It is also clear that the post trough (Nov/Dec 2008) growth in share price more closely followed the growth in \$/oz than the R/oz. Other remarks include:

- Share price at end of June 2010 is still lower than average baseline price for period Jul – Dec 2007.
- Steady growth was experienced since Dec 2008 and is closely linked to growth in market \$/oz price.

3.4.2 Aquarius Platinum

Fig. 3.9: Aquarius Platinum share price compared to R/oz price



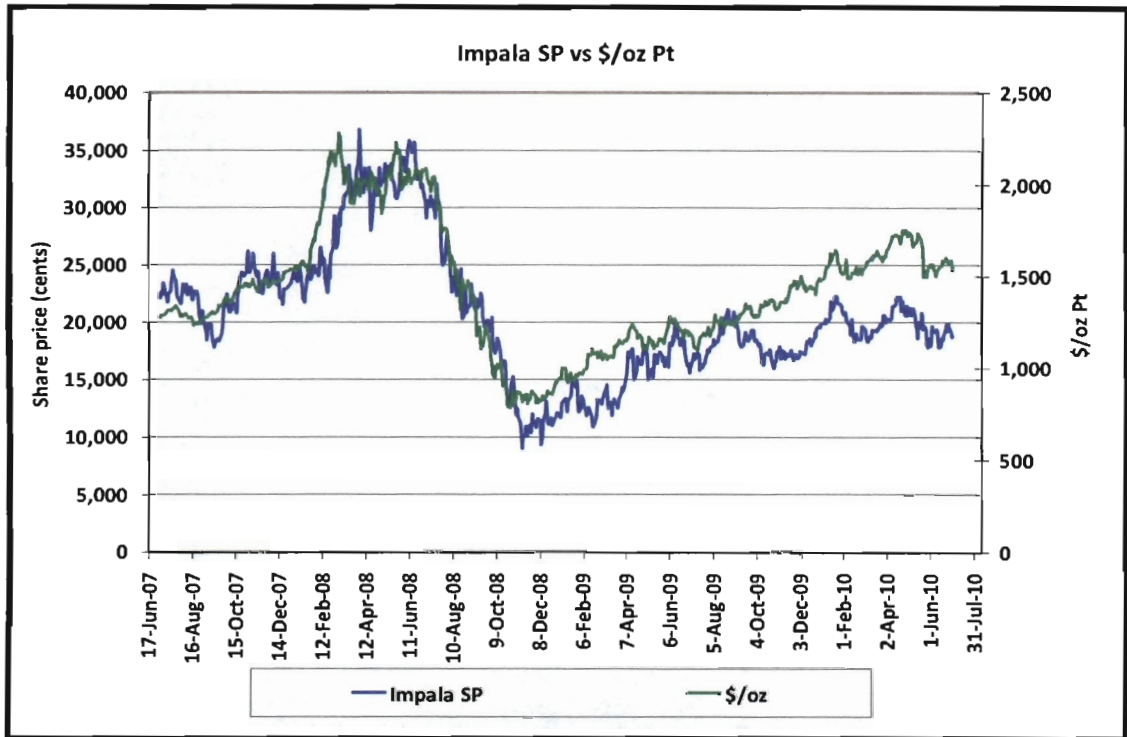
Source: Researcher's own compilation

Aquarius's share price experienced a much steeper original drop in share price than some of the other companies. Other remarks include:

- Recovery growth rate lower than growth in \$/oz and also slightly lower than R/oz.
- June 2010 share price levels still considerably lower than baseline (Second half of 2007).

3.4.3 Impala Platinum

Fig. 3.10: Impala Platinum share price compared to \$/oz price



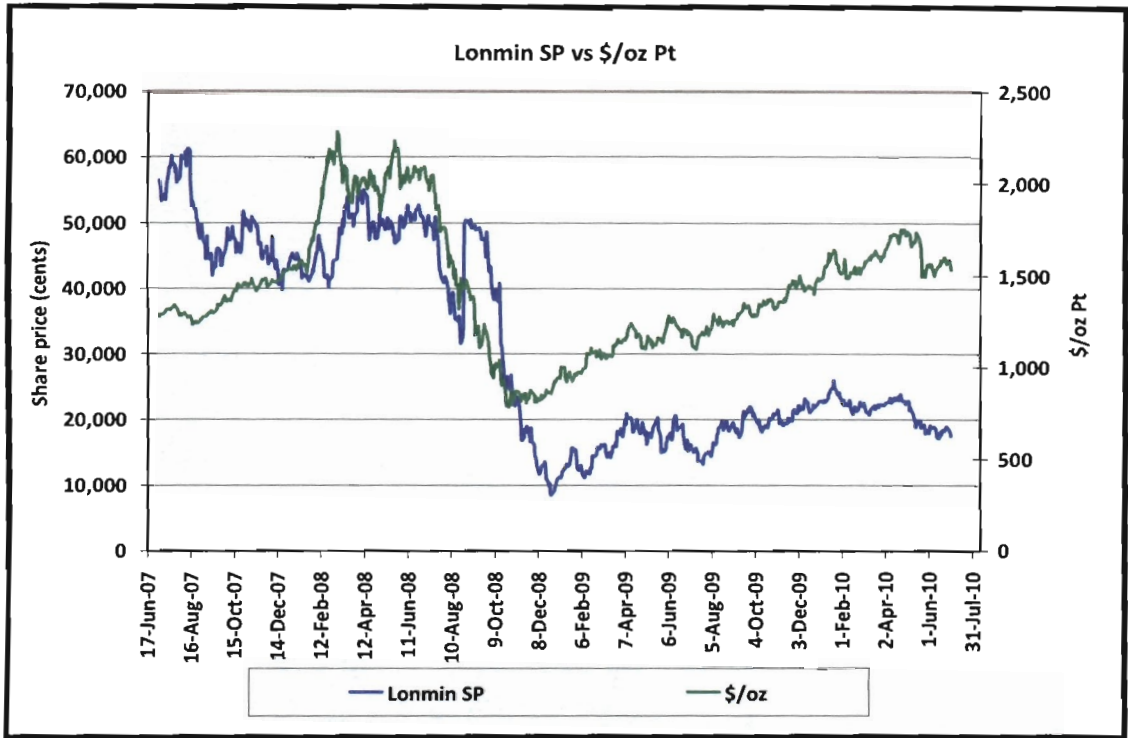
Source: Researcher's own compilation

Impala Platinum's share price followed the evolution of the \$/oz price very closely except for the growth period in the first half of 2010. Other remarks:

- Impala Platinum's June 2010 share price is just below baseline levels.
- Impala's share price also seems to be less volatile than some of the other companies.

3.4.4 Lonmin

Fig. 3.11: Lonmin share price compared to \$/oz price



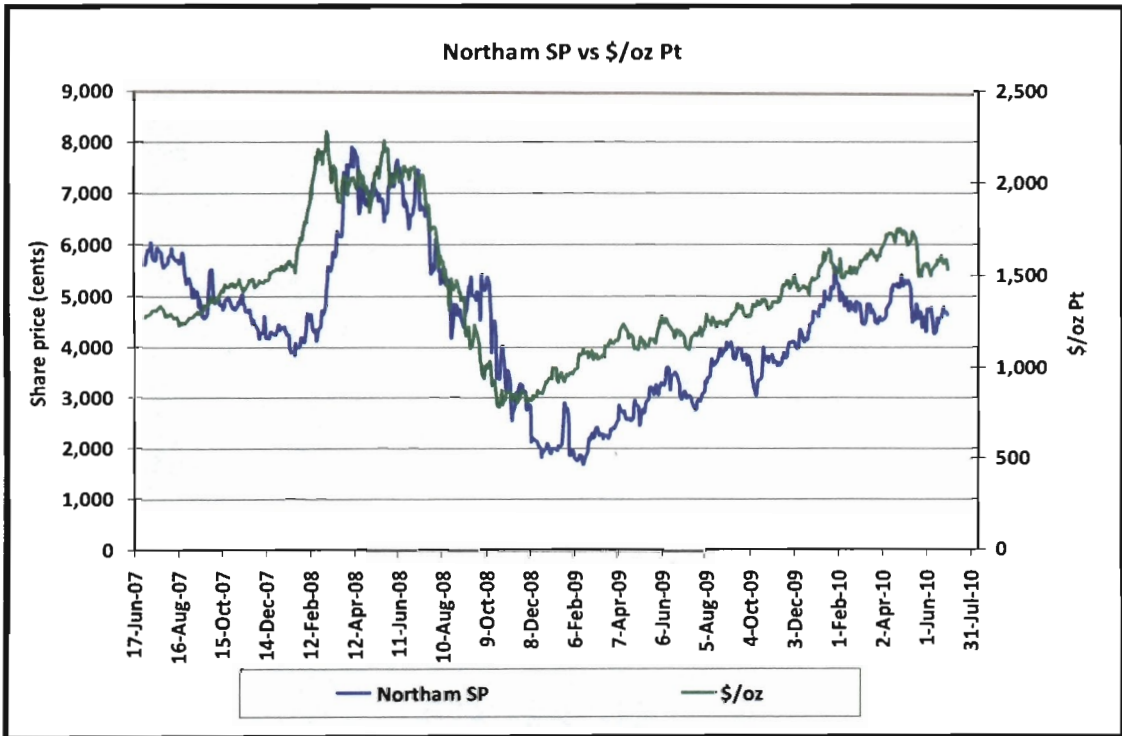
Source: Researcher's own compilation

Lonmin's share price performed far below the market price of platinum in both Dollar and Rand terms. Other remarks include:

- Very sharp decline from pre-recession baseline period.
- Very slow growth since trough period.
- Considerable drop in value from baseline period to June 2010.

3.4.5 Northam Platinum

Fig. 3.12: Northam Platinum share price compared to \$/oz price



Source: Researcher's own compilation

Northam experienced exceptional growth since the trough period (Nov/Dec 200). Growth since beginning of 2009 outpaced growth in \$/oz, as well as R/oz market prices. Other remarks include:

- Northam showed higher volatility than Impala.
- The June 2010 levels were at the same level as baseline period.

3.4.6 Summary

Table 3.9: Shareholder value optimisation comparison

	Anglo	Aquarius	Impala	Lonmin	Northam
Shareholder value increase from baseline Jul - Dec 2007 to June 2010. Dividends re-invested	-23%	-43%	-8%	-61%	2%
Shareholder value increase from trough period Nov - Dec 2008 to June 2010. Dividends re-invested	73%	92%	68%	39%	101%
Shareholder value increase from baseline Jul - Dec 2007 to June 2010. Dividends not re-invested	-21%	-42%	-7%	-60%	1%
Shareholder value increase from trough period Nov - Dec 2008 to June 2010. Dividends not re-invested	73%	92%	67%	39%	99%

Source: Researcher's own compilation

Table 3.10 Growth in Platinum market prices in both Rand and Dollar terms

	R/oz	\$/oz
Increase in market price from baseline Jul - Dec 2007 to June 2010.	25%	14%
Increase in market price from trough period Nov - Dec 2008 to June 2010	39%	84%

Source: Researcher's own compilation

Conclusions

- Northam Platinum performed the best in terms of optimising shareholder value during the recession period, both in terms of growth from baseline period and from trough period at the end of 2008.
- Lonmin performed the worst in both categories. All companies performed worse than the platinum market price increase from the baseline period to end of June 2010 (Both \$/oz and R/oz).
- Impala and Northam's share holder value growth from the trough period to June 2010 outperformed the growth of platinum market price in Rand and Dollar terms.

- Aquarius and Anglo Platinum's shareholder value growth from the trough period to June 2010 was better than the R/oz growth rate, but less than the \$/oz growth rate.
- Lonmin's shareholder value growth rate from the trough period to June 2010 was the same as the R/oz growth rate, but less than half of the \$/oz growth.

Assumptions made for comparison and calculations of shareholder value growth are provided in Appendix 6.