

Equities

5 September 2011 | 88 pages

South African Platinum Sector

Value Trap

- **Value, at first sight:** The FTSE/JSE platinum index has fallen 21% y-t-d, underperforming the JSE Alsi by 18%. The pull-back in platinum equity valuations has resulted in the sector trading close to historic low P/BV's, suggesting deep value at first glance. But beware. In this note, we highlight four reasons why SA platinum equities are likely to remain lower-for-longer. Asset quality and low-cost growth optionality should become the main value drivers. We expect NHM, IMP and RBP (all Buys) to outperform in this environment, LON (Hold) and AMS (Sell) to underperform.
 - **Lower-for-longer:** We highlight four reasons why SA platinum equity valuations are likely to remain lower-for-longer: 1) P/BV's have been favourably distorted by recent equity raisings, 2) lower P/BV's are well justified by lower ROIC's, 3) our surplus outlook for platinum suggests lower-for-longer ROIC's and subsequently P/BV's, and 4) forward PE's are still 13% above historic median levels.
 - **Quality and low-cost growth will become main value drivers:** We do not expect significant margin expansion from current levels, mainly due to our surplus outlook for platinum (please see our note out today *Precious Metals Outlook: Buy Palladium, Take Profit on Platinum*). Low-cost growth should be the main value driver in the medium term. In our view, NHM is the clear winner, while RBP offers attractive longer-term value. With quality assets, longer-term low-cost growth optionality and an attractive valuation, IMP also offers attractive value.
 - **Leverage plays should be laggards:** We believe that leveraged companies (AMS and LON) are likely to lag their defensive and growth counterparts in the short to medium term, given our muted PGM price outlook.
- **Valuation – We prefer NHM, IMP and RBP:** Given the analysis in this note, we believe that sector ROIC's and valuations are likely to remain below historical median levels for longer than what the consensus suggests. Even so, selective value exists. NHM (Buy, TP R50), IMP (Buy, TP R220) and RBP (Buy, R70) offer attractive value from current levels, in our view. These remain our preferred picks in the sector. We maintain Hold ratings on LON and AQP. AMS is our least preferred, Sell, TP R610.

Johann Steyn

+27-11-944-0087

johann.steyn@citi.com

Jon H Bergtheil

jon.bergtheil@citi.com

Craig Irwin

craig.irwin@citi.com

| Ticker | Rating | | Target Price | | Current Year Earnings Estimates | | Next Year Earnings Estimates | |
|--------|--------|-----|--------------|---------|---------------------------------|----------|------------------------------|----------|
| | Old | New | Old | New | Old | New | Old | New |
| AMSJ.J | 3M | 3M | R610.00 | R610.00 | ZA¢2,965 | ZA¢2,756 | ZA¢4,077 | ZA¢3,818 |
| IMPJ.J | 1M | 1M | R220.00 | R220.00 | R13.84 | R13.56 | R16.91 | R16.55 |
| LMI.L | 2M | 2M | £15.35 | £13.63 | US¢104.0 | US¢97.8 | US¢178.6 | US¢164.4 |
| NHMJ.J | 1M | 1M | R50.00 | R50.00 | ZA¢219 | ZA¢189 | ZA¢389 | ZA¢341 |
| RBPJ.J | 1M | 1M | R70.00 | R70.00 | ZA¢289 | ZA¢280 | ZA¢371 | ZA¢362 |

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

Citi Investment Research & Analysis is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Contents

| | | | |
|--|-----------|---|-----------|
| Summary | 3 | Risks | 50 |
| Value at First Sight | 5 | Royal Bafokeng Platinum (RBPJ.J) | 52 |
| But Beware | 6 | Four reasons to Buy RBP | 54 |
| Lower for longer | 6 | 1. Low-cost, cash-generative asset | 54 |
| All About Low-Cost Growth From Here | 10 | 2. Attractive medium- to longer-term growth outlook | 57 |
| Low-cost growth has become main value driver | 10 | 3. Ideally located to partake in industry consolidation | 60 |
| Valuation and Risks | 14 | 4. Appealing Valuation | 62 |
| Long-term fundamentals remain | 14 | Valuation and Risks | 63 |
| Valuation: NHM and IMP our preferred picks | 14 | Earnings downgrades | 63 |
| Risks | 16 | Valuation: Maintain Buy, TP R70 | 63 |
| Input price assumptions | 16 | Risks | 64 |
| Anglo American Platinum Ltd (AMSJ.J) | 20 | Lonmin PLC (LMI.L) | 66 |
| New Strategy, Same Result | 22 | Still on Track Long Term | 68 |
| Reflecting on AMS's old strategy | 22 | Progress in fits and starts | 68 |
| New strategy: Not a game changer | 23 | ROE & ROIC Analysis | 71 |
| ROE & ROIC analysis | 26 | Valuation and Risks | 72 |
| Valuation and risks | 27 | Earnings downgrades | 72 |
| Earnings downgrades | 27 | Valuation: Hold, TP downgrade to £13.63 (R170) | 72 |
| Valuation: Maintain TP R610, Sell | 27 | Risks | 73 |
| Risks | 28 | Anglo American Platinum Ltd | 76 |
| Impala Platinum (IMPJ.J) | 30 | Impala Platinum | 77 |
| IMP to Remain Best-in-Class | 32 | Northam Platinum | 78 |
| IMP created superior economic value | 32 | Royal Bafokeng Platinum | 79 |
| Mainly due to its low-cost assets | 32 | Lonmin PLC | 79 |
| Near-term operational fears are starting to dissipate | 32 | Appendix A-1 | 81 |
| IMP likely to remain best-in-class | 33 | | |
| Attractive longer-term value proposition | 33 | | |
| ROE & ROIC Analysis | 35 | | |
| Valuation and Risks | 36 | | |
| Earnings changes | 36 | | |
| Valuation: Maintain TP R220, Buy | 36 | | |
| Risks | 37 | | |
| Northam Platinum (NHMJ.J) | 40 | | |
| Problems "Zondereinde" | 42 | | |
| Wage negotiations: Another challenging round ahead | 42 | | |
| Tough conditions | 42 | | |
| Booyse on Track | 44 | | |
| Capex creep | 44 | | |
| Production and cost outlook unchanged | 45 | | |
| Remaining challenges | 47 | | |
| ROE & ROIC Analysis | 48 | | |
| Valuation and Risks | 49 | | |
| Earnings downgrades | 49 | | |
| Valuation: Maintain Buy, TP R50 | 49 | | |

Summary

Four reasons why the sector likely remains lower-for-longer:

The y-t-d pull-back in platinum equity valuations has resulted in the sector trading close to historical lows on a P/BV basis, implying deep value at first sight. In this note, we detail four reasons why SA platinum valuations are likely to remain lower-for-longer:

- 1. P/BV's are artificially low:** Equity raisings and rights issues over the past 4 years have inflated BV's. As a result, P/BV's appear lower than they actually are. Adjusting for share issues, sector P/BV's only trade near historical median levels.
- 2. Low P/BV's well justified by low ROIC's:** Sector ROIC is also trading near its 15-year historical 10th percentile level. This suggests that low P/BV's are realistic.
- 3. Surplus market outlook implies lower-for-longer ROIC's:** Our bottom-up proprietary supply/demand models suggest a medium-term surplus outlook for platinum. This, together with rising capex, should support lower-for-longer ROIC's.
- 4. Above median PE multiples:** The SA platinum sector currently trades at a forward PE of 17x. This is 13% above its historical median of 15x.

For these reasons, we believe it is likely that the sector will yield below-median ROICs and trade at below-median P/BV's for the foreseeable future.

Figure 1. P/BV, ROE and ROIC comparative sheet

| | Rating | Current price | TP | ETR* (%) | P/BV | | | ROE | | | ROIC | | |
|-----------------|----------|---------------|--------|----------|------|------|------|------|------|------|------|------|-------|
| | | | | | CY09 | CY10 | CY11 | CY09 | CY10 | CY11 | CY09 | CY10 | CY11 |
| Northam | Buy, 1M | 36.29 | 50.00 | 38.7 | 1.4 | 1.9 | 1.8 | 17.2 | 6.6 | 5.8 | 14.3 | 4.7 | 3.8 |
| Impala Platinum | Buy, 1M | 180.25 | 220.00 | 25.5 | 2.4 | 2.8 | 2.7 | 27.8 | 8.7 | 13.0 | 16.8 | 7.1 | 11.1 |
| Aquarius | Hold, 2H | 3.71 | 4.50 | 23.9 | 2.5 | 2.8 | 2.5 | 12.8 | 4.6 | 3.8 | 9.3 | 3.68 | 6.476 |
| RBPlat | Buy, 1M | 58.50 | 70.00 | 19.7 | n/a | 1.0 | 1.0 | n/a | 6.5 | 4.3 | n/a | 3.3 | 2.0 |
| Lonmin | Hold, 2M | 12.91 | 13.63 | 7.1 | 1.9 | 2.8 | 2.5 | 0.9 | 3.9 | 6.1 | 18.1 | 13.1 | 4.3 |
| Anglo Platinum | Sell, 3M | 584.02 | 610.00 | 6.4 | 4.3 | 3.4 | 3.1 | 35.4 | 10.8 | 22.1 | 16.2 | 9.26 | 8.63 |

Source: Citi Investment Research and Analysis, Bloomberg

NHM, IMP and RBP look best positioned to outperform in this environment

In this environment, position on the cost curve and low-cost growth should become the key value drivers over the next 3-5 years. We believe NHM, IMP and RBP (all Buys) are best positioned to outperform in this environment. Leverage plays like LON (Hold) and AMS (Sell) are likely to underperform.

Figure 2. CIRA mining valuation comparatives sheet (calendarised)

| | TP Curr. | Rating | Current price | TP % upside | CY11e DY (%) | ETR* (%) | Current P/DCF | P/E | | | EV/EBITDA | | | |
|------------------|----------|----------|---------------|-------------|--------------|----------|---------------|------|-------|-------|-----------|-------|-------|-----|
| | | | | | | | | CY10 | CY11e | CY12e | CY10 | CY11e | CY12e | |
| Xstrata | GBP | Buy, 1M | 10.66 | 18.01 | 68.9 | 1.9 | 70.9 | 0.5 | 9.9 | 7.9 | 7.0 | 6.1 | 4.9 | 4.4 |
| Barrick gold | USD | Buy, 1M | 50.75 | 78.00 | 53.7 | 0.9 | 54.6 | 2.0 | 15.1 | 10.5 | 9.7 | 9.5 | 6.5 | 6.1 |
| Anglo American | GBP | Buy, 1M | 25.46 | 38.00 | 49.3 | 2.1 | 51.3 | 0.7 | 10.4 | 7.3 | 6.1 | 5.8 | 4.2 | 3.3 |
| BHP Billiton | GBP | Buy, 1M | 20.89 | 30.00 | 43.6 | 3.2 | 46.8 | 0.7 | 10.8 | 7.9 | 7.6 | 6.7 | 5.2 | 5.0 |
| Rio Tinto | GBP | Buy, 1M | 37.51 | 52.00 | 38.6 | 2.0 | 40.7 | 0.7 | 8.5 | 6.5 | 7.0 | 4.5 | 3.2 | 2.9 |
| Northam | ZAR | Buy, 1M | 36.29 | 50.00 | 37.8 | 0.9 | 38.7 | 0.7 | 28.5 | 25.7 | 13.7 | 18.0 | 15.8 | 8.7 |
| Randgold | GBP | Buy, 1M | 64.20 | 86.78 | 35.2 | 0.9 | 36.1 | 1.2 | 68.4 | 22.3 | 11.9 | 45.3 | 13.4 | 7.1 |
| African Rainbow | ZAR | Buy, 1M | 186.00 | 240.00 | 29.0 | 3.5 | 32.5 | 0.9 | 16.0 | 10.1 | 8.1 | 6.7 | 4.6 | 3.7 |
| Newmont | USD | Buy, 1M | 62.62 | 80.00 | 27.8 | 1.9 | 29.7 | 1.8 | 13.5 | 13.4 | 12.7 | 6.5 | 5.9 | 6.0 |
| Impala Platinum | ZAR | Buy, 1M | 180.25 | 220.00 | 22.1 | 3.4 | 25.5 | 0.7 | 19.9 | 14.5 | 12.0 | 10.1 | 7.4 | 6.3 |
| Aquarius | AUD | Hold, 2H | 3.71 | 4.50 | 21.3 | 2.6 | 23.9 | 0.8 | 23.7 | 16.0 | 12.1 | 9.9 | 8.2 | 6.8 |
| Newcrest | AUD | Buy, 1M | 39.45 | 48.00 | 21.7 | 1.2 | 22.9 | 1.8 | 30.5 | 23.0 | 17.8 | 21.6 | 12.7 | 9.6 |
| RBPlat | ZAR | Buy, 1M | 58.50 | 70.00 | 19.7 | 0.0 | 19.7 | 1.0 | 31.7 | 20.7 | 16.1 | 14.0 | 9.8 | 8.3 |
| AngoGold Ashanti | ZAR | Hold, 2M | 315.41 | 360.00 | 14.1 | 1.4 | 15.5 | 1.6 | -9.6 | 11.6 | 9.2 | 14.0 | 6.0 | 4.9 |
| Exxaro | ZAR | Hold, 2M | 186.19 | 200.00 | 7.4 | 3.8 | 11.2 | 1.2 | 13.5 | 8.7 | 7.4 | 17.4 | 10.4 | 7.9 |
| Lonmin | GBP | Hold, 2M | 12.91 | 13.63 | 5.6 | 1.5 | 7.1 | 1.0 | 27.2 | 17.1 | 10.7 | 9.5 | 6.5 | 4.4 |
| Anglo Platinum | ZAR | Sell, 3M | 584.02 | 610.00 | 4.4 | 1.9 | 6.4 | 1.0 | 27.2 | 21.0 | 15.3 | 14.1 | 10.1 | 7.7 |
| Kumba Iron Ore | ZAR | Sell, 3M | 486.95 | 430.00 | -11.7 | 9.1 | -2.6 | 1.4 | 11.4 | 8.7 | 8.6 | 6.5 | 4.6 | 4.5 |
| Gold fields | ZAR | Sell, 3M | 116.02 | 105.00 | -9.5 | 3.0 | -6.5 | 1.7 | 21.2 | 9.9 | 9.3 | 7.1 | 4.3 | 4.4 |
| Harmony | ZAR | Sell, 3M | 94.18 | 85.00 | -9.7 | 0.0 | -9.7 | 1.8 | 83.5 | 35.9 | 26.0 | 20.3 | 12.7 | 8.5 |

Source: Citi Investment Research and Analysis

Value at First Sight

The decline in SA platinum equity valuations y-t-d suggests a return to value, at first sight.

The SA platinum sector has declined 21% y-t-d

SA platinum equities have underperformed y-t-d...

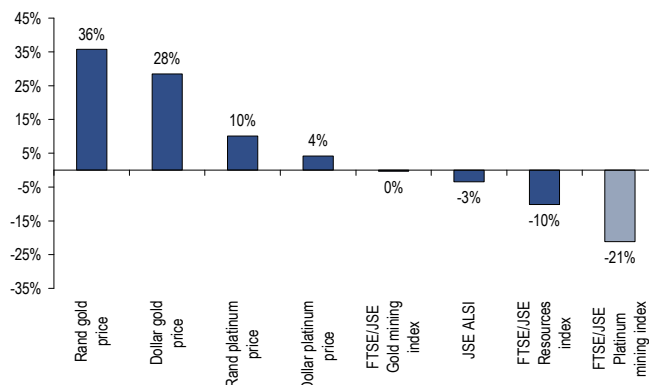
The SA platinum sector has declined 21% y-t-d. It has significantly underperformed the rand-platinum price, as well as all comparable indexes. In our view, the sector's disappointing performance can be ascribed to: 1) muted growth in PGM prices, 2) uninspiring operational performances and double-digit unit cost inflation, and 3) uncertainty about indigenisation policies in Zimbabwe, which have weighed on the valuations of IMP and AQP.

Figure 3. SA platinum sector underperforms in 2011 y-t-d



Source: INET

Figure 4. SA platinum sector's relative performance, 2011 y-t-d



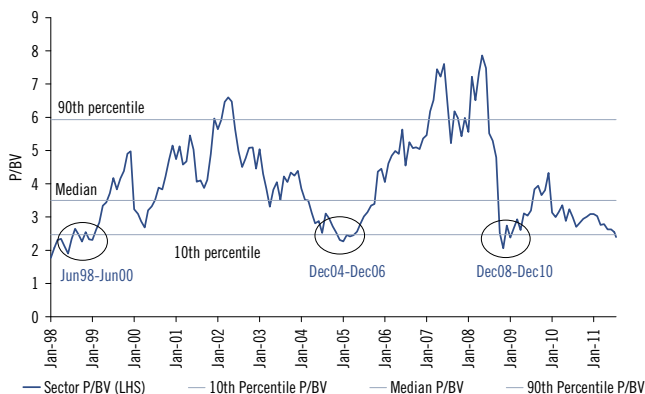
Source: INET

It appears as if the sector has entered deep value territory

...and now trades near 15-year low P/BV's

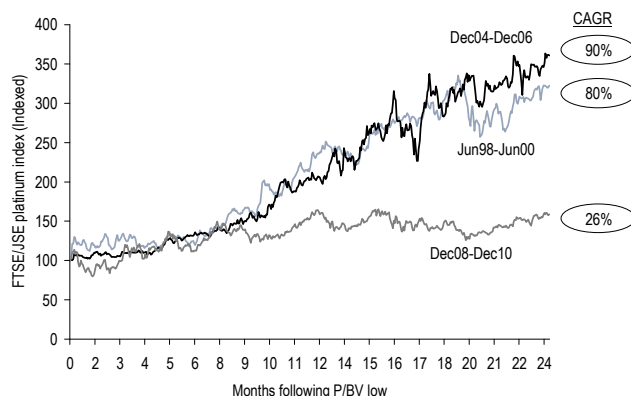
As a result of this decline in market valuations, the sector now trades near historical lows on a P/BV basis (Figure 4). Sector valuations have been this low only three times over the past 15 years (1998, 2004/05 and 2008). All three of these occurrences were followed by strong rallies in the following 24 months (Figure 5). As such, one cannot be blamed for viewing the sector as deeply into value territory, at least at first sight.

Figure 5. SA platinum sector historical P/BV



Source: Citi Investment Research and Analysis, company reports and INET

Figure 6. Sector performance post historical P/BV lows



Source: INET, Citi Investment Research and Analysis

But Beware

Even though sector P/BV's suggests deep value at first sight, we highlight four reasons why SA platinum equity valuations will likely remain lower-for-longer.

Lower for longer

We cite four reasons why platinum equity valuations will likely remain lower-for-longer

Even though sector P/BV's appear to suggest deep value, we highlight four reasons why SA platinum equity valuations will likely remain lower-for-longer.

1. **P/BV's are artificially low:** Equity raisings and rights issues over the past 4 years have inflated BV's. As a result, P/BV's appear lower than they actually are.
2. **Low P/BV's well justified by low ROIC's:** Sector ROIC is also trading near its 15-year historic 10th percentile level. This suggests that low P/BV's are realistic.
3. **Surplus market outlook implies lower-for-longer ROIC's:** Our bottom-up proprietary supply/demand models suggest a medium-term surplus outlook for platinum. This, together with rising capex, should support lower-for-longer ROIC's
4. **Above median PE multiples:** The SA platinum sector currently trades at a forward PE of 17. This is 13% above its historical median of 15x.

We discuss these reasons in more detail below.

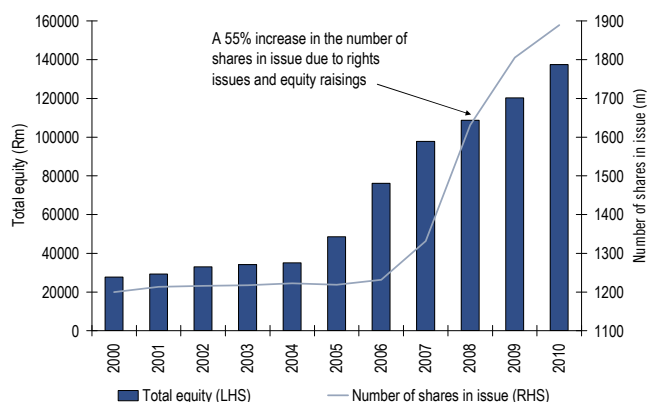
1. P/BV's are artificially low

Equity raisings have inflated BV's

The sector's BV is 19% inflated

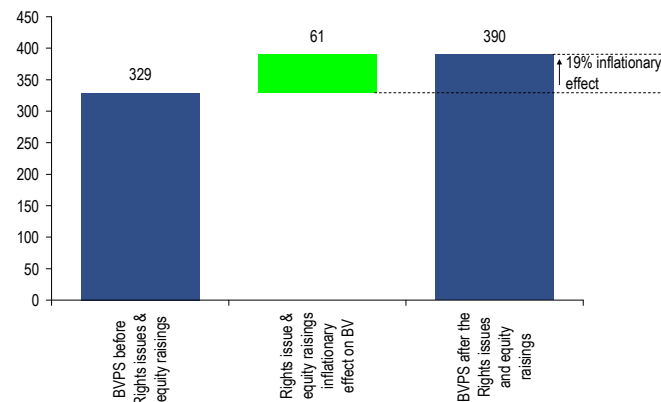
Even though it appears as if the sector offers attractive value, we caution that the denominator of the P/BV equation has been inflated by equity raisings and/or rights issues over the past four years. We estimate that the combined effect of these equity raisings and rights issues have inflated the sector's BV by 19%.

Figure 7. SA platinum sector historical equity evolution (Rm, 2000-2010)



Source: Company reports and Bloomberg

Figure 8. Effect of rights issues and equity raisings on the sector's BV



Source: Company reports, CIRA

Adjusted P/BV's only near 15-year historic median levels

Adjusting for this inflation effect, sector valuations not that cheap

As a result, the sector appears cheaper than it actually is on a P/BV basis. Adjusting for the 19% BV inflation effect, we estimate that the sector is in reality only trading at a P/BV of 2.99, which is more in line with its 15-year historical median level.

Figure 9. SA platinum sector historical P/BV, with and without BV adjustments for equity raisings and rights issues



Source: Citi Investment Research and Analysis

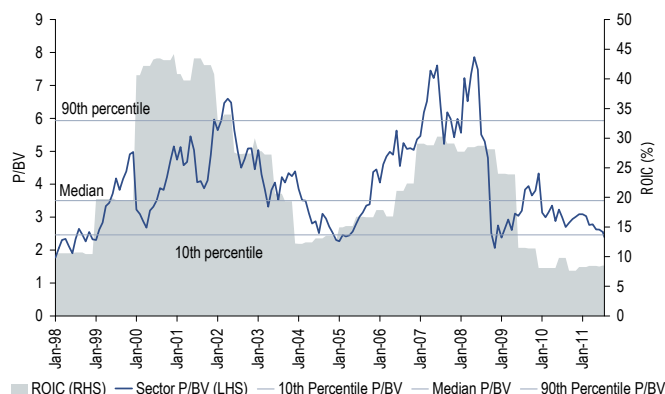
2. Lower P/BV's are well justified by lower ROIC's

P/BV's have historically tracked ROIC

Sector ROIC is also near 15-year historical 10th percentile

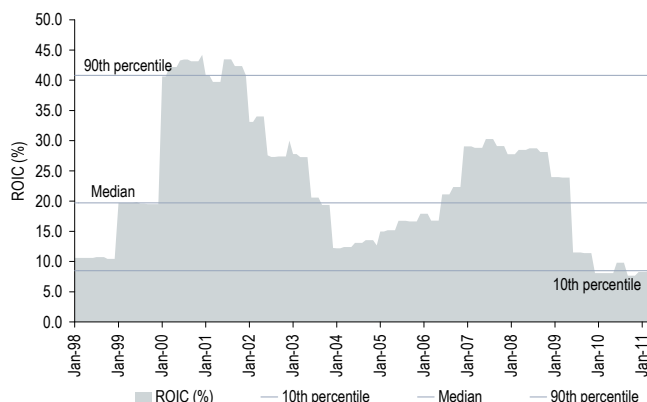
There is a strong visual correlation between sector P/BV's and ROIC's. This correlation is well justified as lower ROIC's imply lower profitability from assets, which in turn deserves a lower valuation multiple. Given that sector ROIC is also trading near its 15-year historic 10th percentile, the currently low P/BV's are realistic, in our view.

Figure 10. Platinum sector historical P/BV and ROIC



Source: Citi Investment Research and Analysis, INET

Figure 11. Platinum sector historical ROIC (%)



Source: Citi Investment Research and Analysis, INET

Margin expansion is therefore unlikely...

In this context, margin expansion for the sector as a whole is unlikely, while IC is likely to continue to increase as new investment is required to sustain current levels of production.

... and ROIC may remain structurally lower, for longer

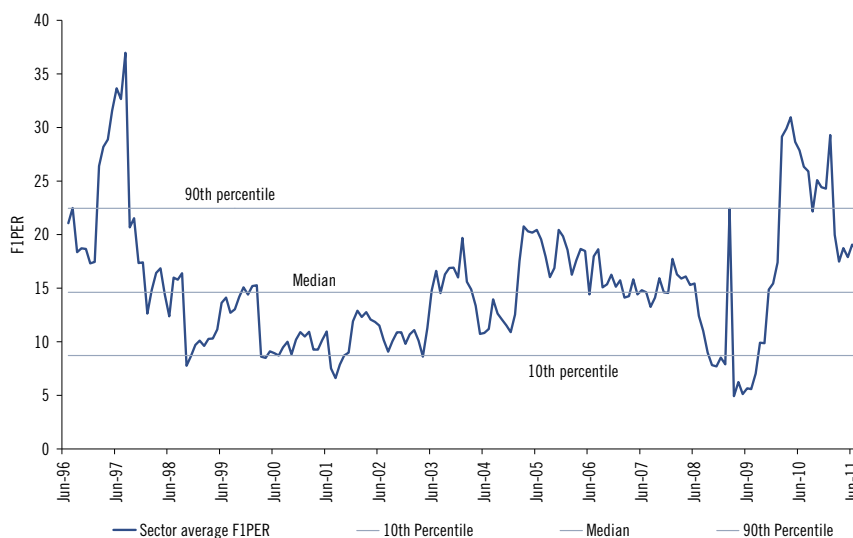
As a result, we expect ROIC's to remain lower for longer. This in turn implies lower for longer P/BV levels. Value therefore only exists for those with a longer-term outlook, in our view.

4. Above median PE multiples

The SA platinum sector currently trades at a forward PE of 17x. This is 13% above its historical median of 15x. Even though PE's have been volatile, we do see it as applicable in assessing the near- to medium-term downside potential for the sector. Again, if our outlook for muted PGM price growth (and subsequently earnings growth) does realise, we view it as unlikely that a significant re-rating in valuations and PE will materialise in the near term.

Sector still trades above historical median PE

Figure 15. SA platinum sector 15-year 1-year fwd PEs



Source: Datastream

All About Low-Cost Growth From Here

Low-cost growth should be the main value driver for SA platinum companies over the next 5 years.

Low-cost growth has become main value driver

Up to 2008, rising rand-PGM prices drove close to 95% of the value for SA platinum companies, growth 5%. We expect this equation to change dramatically in the coming five years, given our surplus outlook for platinum.

Riding the wave

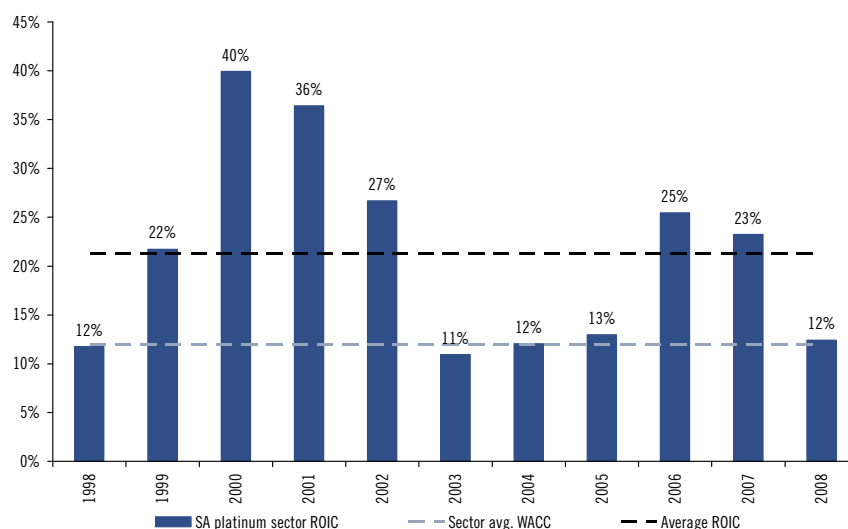
SA platinum stocks accreted significant value up to 2008 thanks to rising PGM prices

The sector delivered average ROICs of 21% up to 2008, due to rising PGM prices

The SA platinum sector delivered an average return on invested capital (ROIC) of 21% over the past decade, well above the sector's WACC of 12%.

This time of plenty for SA platinum equities was mainly due to spiraling PGM prices, which rose 350% on average between 2000 and 2008, a CAGR of 21%.

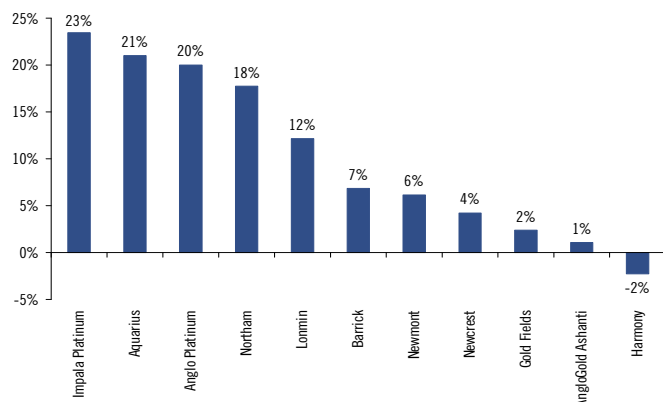
Figure 16. SA platinum sector ROIC (% , 1998-2008)



Source: Company reports, Citi Investment Research and Analysis

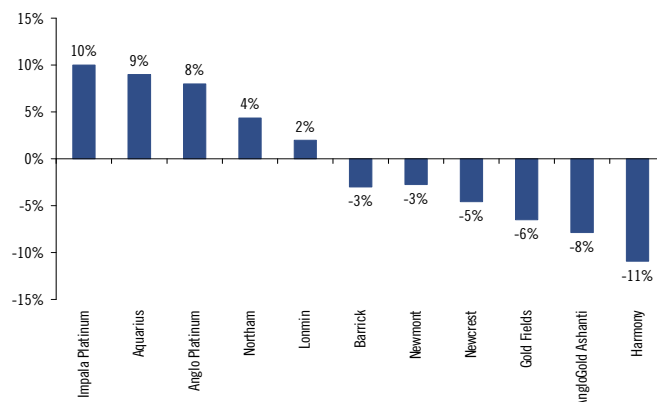
On a relative basis, Implats (IMP) delivered superior economic value with a ROIC of 23%, followed by Aquarius (AQP) with 21% and Anglo Platinum (AMS) 20%. Platinum companies have significantly outperformed their gold counterparts in terms of ROIC.

Figure 17. SA platinum sector relative ROIC (% , 1998-2008)



Source: Company reports, Citi Investment Research and Analysis

Figure 18. Relative economic value creation (ROIC-WACC, 1998-2008)

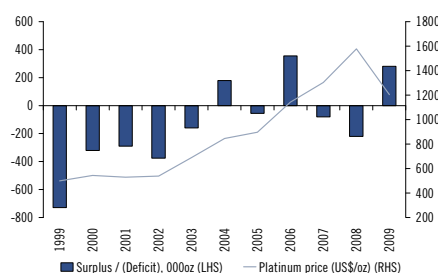


Source: Company reports, Citi Investment Research and Analysis

PGM markets were predominantly in deficit during this period

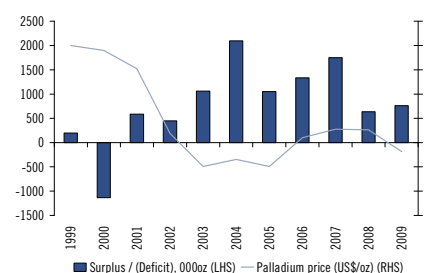
This sharp rise in PGM prices was due to predominantly deficit markets in platinum and rhodium over the past decade, somewhat offset by a predominantly surplus market in palladium.

Figure 19. Platinum supply/demand balance



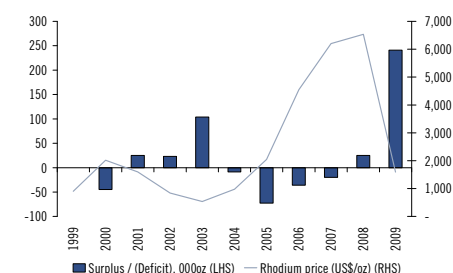
Source: CIRA, Johnson Matthey

Figure 20. Palladium supply/demand balance



Source: CIRA, Johnson Matthey

Figure 21. Rhodium supply/demand balance



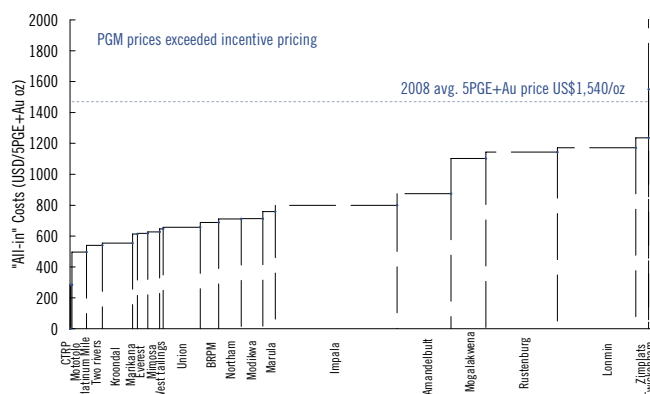
Source: CIRA, Johnson Matthey

Rising prices overshadowed operational inefficiencies

The rise in PGM prices overshadowed operational inefficiencies...

In an environment of excessive margins, operational efficiency took a distant second priority.

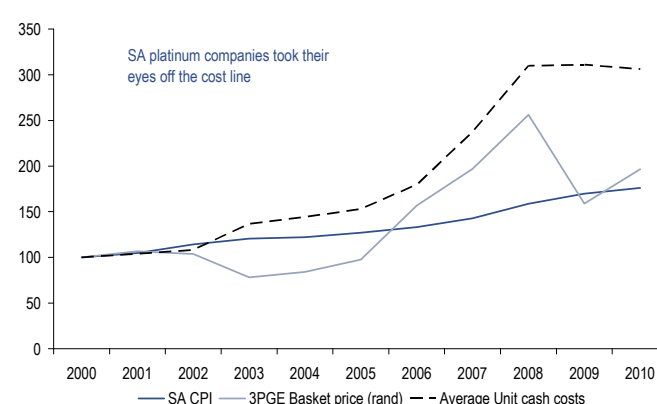
Figure 22. In an environment of excessive margins... (2008 5PGE+Au "all-in" cost curve*, US\$/oz)



Source: Company reports, Citi Investment Research and Analysis

* Including cash operating costs and all capex

Figure 23. ...cost control took a distant second priority (unit cost inflation vs. SA CPI, Indexed)

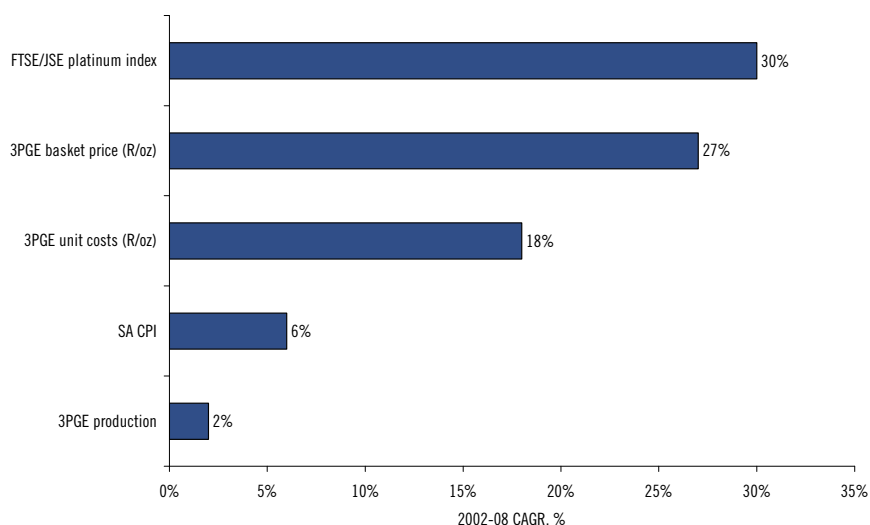


Source: Company reports, Citi Investment Research and Analysis, Bloomberg

... and drove close to 100% of the sector's performance and value creation over the past decade

As a result, we highlight that the performance in platinum equity valuations was almost completely due to rising PGM prices. This is as volume growth was minimal (2% CAGR) over the past decade; while poor cost control (18% CAGR) was overshadowed by rising PGM prices.

Figure 24. Spiraling PGM prices overshadowed operational inefficiencies and drove most of the value within the SA platinum sector (2002-08 CAGR, %)



Source: I-net, Company reports, CIRA

Going forward, the sector cannot solely rely on rising prices

Muted basket price outlook

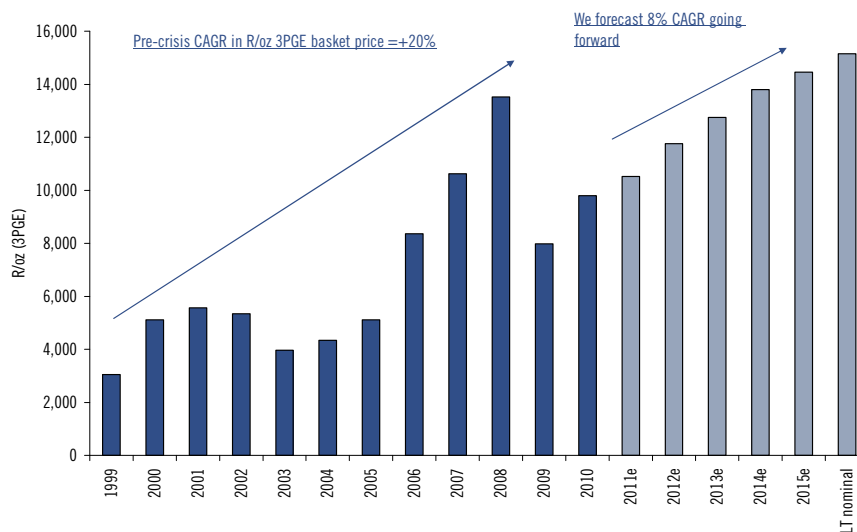
Going forward, the sector will not be able to solely rely on PGM prices to drive value...

Even though we expect the industry to remain supported by strong fundamentals, we caution that a repeat in the past decade's price performance is unlikely going forward. This is mainly due to our view of a predominantly surplus market for platinum, somewhat offset by a likely growing deficit market in palladium. (Please refer to our report out today *Precious Metals Outlook: Buy Palladium, Take Profit on Platinum*.)

...as a repeat of the 2004-08 heyday is unlikely

In contrast to the past decade when the rand-based 3PGE basket price grew by a CAGR of 27%, we believe the SA PGM sector will not be able to solely rely on PGM prices for value creation. Going forward, we only expect a 8% CAGR in the rand-based 3PGE basket price. As a result, a repeat of the past decade's +18% CAGR in unit costs will mean significant margin compression for the sector.

Figure 25. Historical and CIRAe 3PGE basket price (R/oz)



Source: Citi Investment Research and Analysis, INET

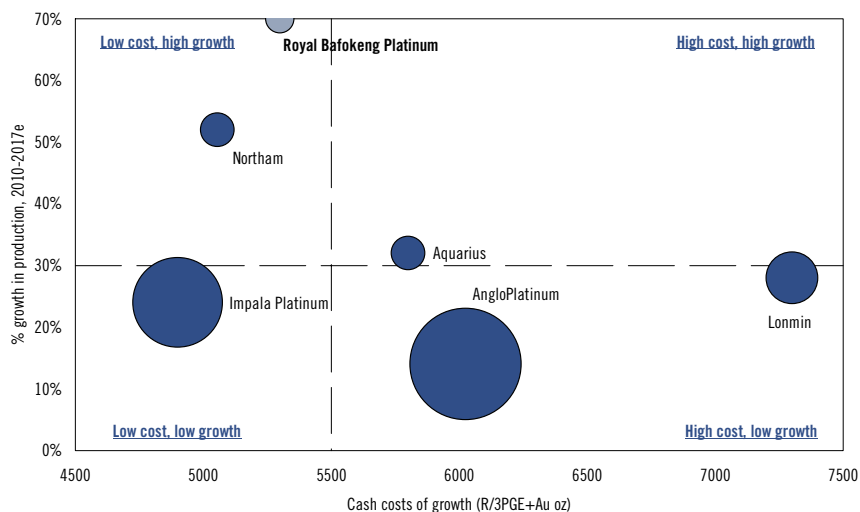
As a result, position on the cost curve and low-cost growth will become paramount

Position on the cost curve and low-cost growth optionality should become the most prominent drivers of value

Going forward, position on the cost curve and low-cost growth optionality will likely become paramount for longer-term value and outperformance. We view asset quality, operational excellence and low-cost growth as the most important drivers of value going forward.

We believe NHM, IMP and RBP best fits these criteria.

Figure 26. Comparative growth*, and cost of growth, outlook for SA platinum companies (% growth, R/ounce)



Source: Company Reports and CIRA Estimates

*RBP's growth limited to 70% on this chart for presentation purposes. Actual growth is estimated at 120%

Valuation and Risks

Even though future ROIC's and P/BV's are likely to settle below historical median levels, the SA platinum sector remains supported by strong fundamentals. Companies that are well positioned on the cost curve and that hold low-cost growth optionality should remain well rewarded in this environment. NHM, IMP and RBP look best positioned to outperform in this environment.

Long-term fundamentals remain

The SA platinum sector was supported by strong fundamentals over the past decade. We believe these fundamentals will remain going forward. However, our view of a surplus market in platinum will likely imply that ROIC's (and subsequently P/BV's) will remain below historical median levels in the foreseeable future.

We caution that whereas spiralling PGM prices helped all of the SA platinum companies to outperform over the past decade, more careful stock selection within the sector will be required going forward. We believe position on the cost curve and low-cost growth optionality will be key drivers for outperformance going forward. In this context, NHM, IMP and RBP should offer the best longer-term value from current levels.

Valuation: NHM and IMP our preferred picks

In this context, we believe NHM and IMP offer superior medium- to longer-term value

We value SA PGM equities on a sum-of-the-parts DCF basis. For AMS, IMP, NHM, and RBP, we apply a ZAR nominal WACC of 11.9% (beta 1.0, equity risk premium 5.0%, risk-free rate of 8.5%). For LMI and AQP, we apply a USD nominal WACC of 9.0% (beta 1.0, equity risk premium 5.0%, risk-free rate of 5.5%). Given our view of a rather flat PGM basket price profile, we find it difficult to motivate a P/DCF exit multiple to our valuations. As such, our TPs are based on 1.0x DCF (unless stated otherwise).

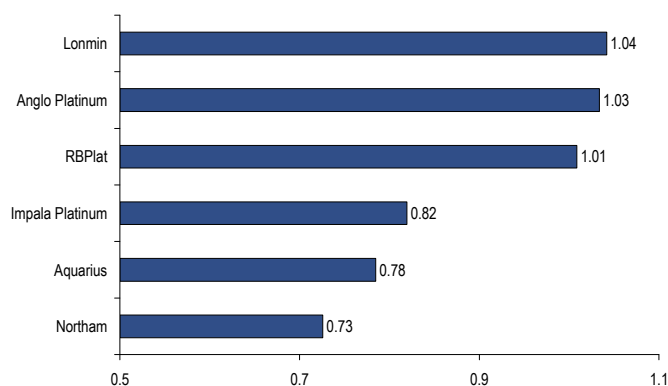
- **Anglo Platinum Ltd – Sell (3M), TP R610:** We see limited volume expansion opportunity for AMS and caution downside risks to the company's cost targets going forward as the low-hanging fruit has now been picked. With limited catalysts, we view AMS as fully priced. Sell, TP R610.
- **Impala Platinum Ltd – Buy (1M), TP R220:** Even though the company is facing near-term operational challenges, we believe it remains structurally well positioned for longer-term economic value accretion and is undervalued at current levels. Buy, TP R220.
- **Northam Platinum Ltd – Buy (1M), TP R50:** Near-term operational challenges at Zondereinde have introduced an attractive entry point into a company with a unique medium-term, low-cost growth outlook. Buy, TP R50.
- **Royal Bafokeng Platinum Ltd – Buy (1M), TP R70:** RBP holds: 1) a highly cash-generative asset with further improvement potential, 2) a superior long-term growth outlook through Styldrift, and 3) is strategically well positioned to partake in industry consolidation. Buy, TP R70.
- **Lonmin – Hold (2M), TP downgrade to GBP13.63 (R170):** We expect LMI to achieve its production targets to mid-decade. However, the company only now appears fairly valued. Hold. TP £13.63.
- **Aquarius Ltd – Hold (2M), TP downgrade to AUD 4.50 (R31).**

Figure 27. Platinum sector valuation comparatives sheet (calandarised)

| | TP Curr. | Rating | Current price | TP | % upside | CY11e DY (%) | ETR* (%) | Current P/DCF | P/E | | EV/EBITDA | |
|-----------------|----------|----------|---------------|--------|----------|--------------|----------|---------------|-------|-------|-----------|-------|
| | | | | | | | | | CY11e | CY12e | CY11e | CY12e |
| Northam | ZAR | Buy, 1M | 36.29 | 50.00 | 37.8 | 0.9 | 38.7 | 0.7 | 25.7 | 13.7 | 15.8 | 8.7 |
| Impala Platinum | ZAR | Buy, 1M | 180.25 | 220.00 | 22.1 | 3.4 | 25.5 | 0.7 | 14.5 | 12.0 | 7.4 | 6.3 |
| Aquarius | AUD | Hold, 2H | 3.71 | 4.50 | 21.3 | 2.6 | 23.9 | 0.8 | 16.0 | 12.1 | 8.2 | 6.8 |
| RBPlat | ZAR | Buy, 1M | 58.50 | 70.00 | 19.7 | 0.0 | 19.7 | 1.0 | 20.7 | 16.1 | 9.8 | 8.3 |
| Lonmin | GBP | Hold, 2M | 12.91 | 13.63 | 5.6 | 1.5 | 7.1 | 1.0 | 17.1 | 10.7 | 6.5 | 4.4 |
| Anglo Platinum | ZAR | Sell, 3M | 584.02 | 610.00 | 4.4 | 1.9 | 6.4 | 1.0 | 21.0 | 15.3 | 10.1 | 7.7 |

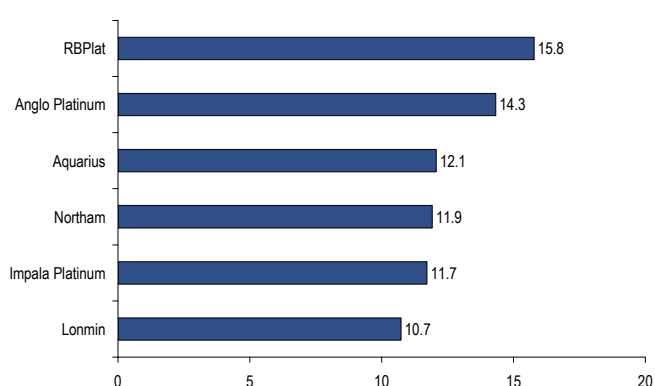
Source: Citi Investment Research and Analysis

Figure 28. Relative P/DCF



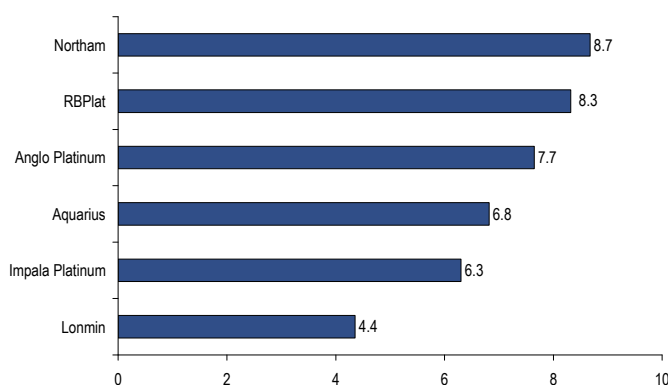
Source: Citi Investment Research and Analysis

Figure 29. CY12e P/E



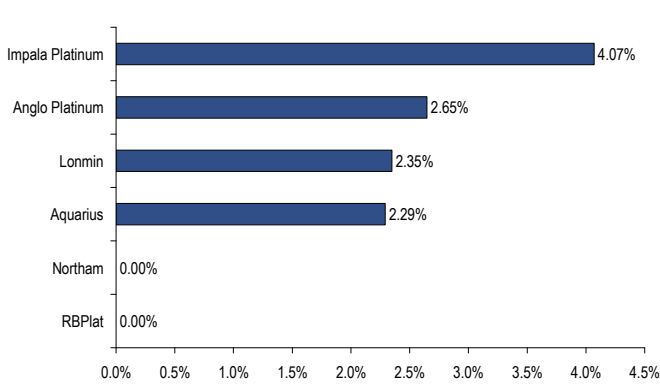
Source: Citi Investment Research and Analysis

Figure 30. CY12e EV/EBITDA



Source: Citi Investment Research and Analysis

Figure 31. CY12e dividend yield (%)



Source: Citi Investment Research and Analysis

Figure 32. CIRA mining valuation comparatives sheet (calendarised)

| | TP Curr. | Rating | Current price | TP % upside | CY11e DY (%) | ETR* (%) | Current P/DCF | P/E | | | EV/EBITDA | | | |
|-------------------|----------|----------|---------------|-------------|--------------|----------|---------------|------|-------|-------|-----------|-------|-------|-----|
| | | | | | | | | CY10 | CY11e | CY12e | CY10 | CY11e | CY12e | |
| Xstrata | GBP | Buy, 1M | 10.66 | 18.01 | 68.9 | 1.9 | 70.9 | 0.5 | 9.9 | 7.9 | 7.0 | 6.1 | 4.9 | 4.4 |
| Barrick gold | USD | Buy, 1M | 50.75 | 78.00 | 53.7 | 0.9 | 54.6 | 2.0 | 15.1 | 10.5 | 9.7 | 9.5 | 6.5 | 6.1 |
| Anglo American | GBP | Buy, 1M | 25.46 | 38.00 | 49.3 | 2.1 | 51.3 | 0.7 | 10.4 | 7.3 | 6.1 | 5.8 | 4.2 | 3.3 |
| BHP Billiton | GBP | Buy, 1M | 20.89 | 30.00 | 43.6 | 3.2 | 46.8 | 0.7 | 10.8 | 7.9 | 7.6 | 6.7 | 5.2 | 5.0 |
| Rio Tinto | GBP | Buy, 1M | 37.51 | 52.00 | 38.6 | 2.0 | 40.7 | 0.7 | 8.5 | 6.5 | 7.0 | 4.5 | 3.2 | 2.9 |
| Northam | ZAR | Buy, 1M | 36.29 | 50.00 | 37.8 | 0.9 | 38.7 | 0.7 | 28.5 | 25.7 | 13.7 | 18.0 | 15.8 | 8.7 |
| Randgold | GBP | Buy, 1M | 64.20 | 86.78 | 35.2 | 0.9 | 36.1 | 1.2 | 68.4 | 22.3 | 11.9 | 45.3 | 13.4 | 7.1 |
| Assore | ZAR | Buy, 1M | 215.51 | 280.00 | 29.9 | 4.9 | 34.8 | 0.8 | 11.5 | 7.7 | 6.9 | 7.5 | 5.2 | 4.6 |
| African Rainbow | ZAR | Buy, 1M | 186.00 | 240.00 | 29.0 | 3.5 | 32.5 | 0.9 | 16.0 | 10.1 | 8.1 | 6.7 | 4.6 | 3.7 |
| Newmont | USD | Buy, 1M | 62.62 | 80.00 | 27.8 | 1.9 | 29.7 | 1.8 | 13.5 | 13.4 | 12.7 | 6.5 | 5.9 | 6.0 |
| Impala Platinum | ZAR | Buy, 1M | 180.25 | 220.00 | 22.1 | 3.4 | 25.5 | 0.7 | 19.9 | 14.5 | 12.0 | 10.1 | 7.4 | 6.3 |
| Aquarius | AUD | Hold, 2H | 3.71 | 4.50 | 21.3 | 2.6 | 23.9 | 0.8 | 23.7 | 16.0 | 12.1 | 9.9 | 8.2 | 6.8 |
| Newcrest | AUD | Buy, 1M | 39.45 | 48.00 | 21.7 | 1.2 | 22.9 | 1.8 | 30.5 | 23.0 | 17.8 | 21.6 | 12.7 | 9.6 |
| RBPlat | ZAR | Buy, 1M | 58.50 | 70.00 | 19.7 | 0.0 | 19.7 | 1.0 | 31.7 | 20.7 | 16.1 | 14.0 | 9.8 | 8.3 |
| AngloGold Ashanti | ZAR | Hold, 2M | 315.41 | 360.00 | 14.1 | 1.4 | 15.5 | 1.6 | -9.6 | 11.6 | 9.2 | 14.0 | 6.0 | 4.9 |
| Exxaro | ZAR | Hold, 2M | 186.19 | 200.00 | 7.4 | 3.8 | 11.2 | 1.2 | 13.5 | 8.7 | 7.4 | 17.4 | 10.4 | 7.9 |
| Lonmin | GBP | Hold, 2M | 12.91 | 13.63 | 5.6 | 1.5 | 7.1 | 1.0 | 27.2 | 17.1 | 10.7 | 9.5 | 6.5 | 4.4 |
| Anglo Platinum | ZAR | Sell, 3M | 584.02 | 610.00 | 4.4 | 1.9 | 6.4 | 1.0 | 27.2 | 21.0 | 15.3 | 14.1 | 10.1 | 7.7 |
| Kumba Iron Ore | ZAR | Sell, 3M | 486.95 | 430.00 | -11.7 | 9.1 | -2.6 | 1.4 | 11.4 | 8.7 | 8.6 | 6.5 | 4.6 | 4.5 |
| Gold fields | ZAR | Sell, 3M | 116.02 | 105.00 | -9.5 | 3.0 | -6.5 | 1.7 | 21.2 | 9.9 | 9.3 | 7.1 | 4.3 | 4.4 |
| Harmony | ZAR | Sell, 3M | 94.18 | 85.00 | -9.7 | 0.0 | -9.7 | 1.8 | 83.5 | 35.9 | 26.0 | 20.3 | 12.7 | 8.5 |

Source: Citi Investment Research and Analysis

Risks

Upside risks to our view include a weakening in the ZAR/USD exchange rate, PGM prices rising above our expectations and better-than-expected operational performances. Conversely, downside risks include a stronger ZAR, lower-than-expected PGM prices and a failure to deliver on operational objectives. *Please refer to individual company sections for more detail.*

Input price assumptions

Figure 33. CIRA input price assumptions

| December year end | FY08 | FY09 | FY10 | FY11e | FY12e | FY13e | FY14e | LT real | LT Nominal |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|---------|------------|
| US\$/oz | | | | | | | | | |
| Platinum price | 1,577 | 1,173 | 1,610 | 1,807 | 1,875 | 1,725 | 1,700 | 1,500 | 1,722 |
| Palladium price | 353 | 246 | 525 | 800 | 935 | 900 | 850 | 550 | 631 |
| Rhodium price | 6,599 | 1,444 | 2,678 | 2,090 | 1,900 | 2,300 | 3,000 | 3,000 | 3,444 |
| Gold price | 873 | 960 | 1,226 | 1,590 | 1,650 | 1,500 | 1,350 | 1,050 | 1,205 |
| 3PGE+Au basket price | 1,540 | 907 | 1,348 | 1,518 | 1,588 | 1,511 | 1,526 | 1,307 | 1,500 |
| ZAR/USD exchange rate | | | | | | | | | |
| | 8.26 | 8.37 | 7.33 | 6.90 | 7.37 | 8.40 | 8.98 | 10.00 | 10.00 |
| R/oz | | | | | | | | | |
| Platinum price | 13,031 | 9,812 | 11,808 | 12,468 | 13,819 | 14,490 | 15,266 | 15,000 | 17,220 |
| Palladium price | 2,918 | 2,054 | 3,851 | 5,520 | 6,891 | 7,560 | 7,633 | 5,500 | 6,310 |
| Rhodium price | 54,537 | 12,077 | 19,633 | 14,421 | 14,003 | 19,320 | 26,940 | 30,000 | 34,440 |
| Gold price | 7,212 | 8,028 | 8,993 | 10,987 | 12,227 | 12,600 | 12,123 | 10,500 | 12,050 |
| 3PGE+Au basket price | 12,728 | 7,589 | 9,884 | 10,476 | 11,704 | 12,692 | 13,699 | 13,065 | 14,997 |

Source: Citi Investment Research and Analysis

Figure 34. CIRA mining valuation comparatives sheet (calendarised)

| | Rating & risk | Price (US\$) | Historic P/E | | Forward P/E | | EV/EBITDA | | | FCF yield | | Div Yld | | P/B | | ROE | |
|---------------------------|------------------|-----------------|--------------|-----------|-------------|-----------|-----------|----------|----------|-----------|-----------|-----------|-----------|----------|----------|------------|------------|
| | | | 2009 | 2010 | 2011E | 2012E | 2010 | 2011E | 2012E | 2010 | 2011 | 2010 | 2011E | 2010 | 2011E | 2010 | 2011E |
| Platinum | | | | | | | | | | | | | | | | | |
| Aquarius Platinum | 2H | 3.9 | 191 | 24 | 17.3 | 14.3 | 9.8 | 8.7 | 7.9 | -5% | 0% | 2% | 2% | 2.1 | 2.0 | 1% | 6% |
| Lonmin | 2M | 21.1 | -83 | 27 | 17.2 | 10.8 | 9.5 | 6.5 | 4.4 | 7% | 4% | 1% | 1% | 1.5 | 1.4 | 6% | 9% |
| Anglo American Platinum | 3M | 82.7 | 194 | 26 | 21.0 | 15.2 | 13.4 | 10.1 | 7.6 | 2% | 2% | 2% | 2% | 2.7 | 2.6 | 25% | 13% |
| Impala Platinum | 1M | 25.9 | 20 | 19 | 14.7 | 12.1 | 9.8 | 7.6 | 6.4 | 2% | 4% | 2% | 3% | 2.4 | 2.3 | 13% | 16% |
| Northam Platinum | 1M | 5.1 | 21 | 27 | 25.7 | 13.6 | 17.1 | 15.8 | 8.6 | 1% | -9% | 1% | 1% | 1.4 | 1.3 | 5% | 5% |
| Royal Bafokeng | 1M | 8.3 | -5 | 30 | 20.8 | 16.0 | 13.2 | 9.8 | 8.3 | 1% | -5% | 0% | 0% | 0.9 | 0.9 | 36% | 4% |
| Gold | | | | | | | | | | | | | | | | | |
| AngloGold Ashanti | 2M | 45.6 | -322 | -10 | 11.7 | 9.3 | 14.2 | 6.0 | 4.9 | -10% | 8% | 0% | 1% | 4.1 | 3.0 | 6% | 35% |
| Gold fields | 3M | 16.7 | 34 | 21 | 9.9 | 9.4 | 7.1 | 4.3 | 4.4 | 4% | 10% | 2% | 3% | 1.7 | 1.7 | 8% | 17% |
| Harmony Gold Mng | 3M | 13.6 | 64 | 84 | 36.2 | 26.2 | 20.5 | 12.8 | 8.6 | -3% | 0% | 0% | 0% | 1.4 | 1.3 | 1% | 3% |
| Barrick Gold | 1M | 50.8 | 26 | 15 | 10.5 | 9.7 | 9.5 | 6.5 | 6.1 | 2% | -1% | 1% | 1% | 2.6 | 1.6 | 19% | 19% |
| Newmont Mining | 1M | 62.6 | 24 | 14 | 13.4 | 12.7 | 6.5 | 5.9 | 6.0 | 7% | 6% | 1% | 2% | 2.3 | 2.0 | 19% | 16% |
| Newcrest Mining | 1M | 42.2 | 27 | 26 | 23.0 | 17.8 | 18.6 | 12.7 | 9.6 | 1% | 0% | 1% | 1% | 2.5 | 2.0 | 10% | 10% |
| Randgold Resources | 1M | 104.4 | 122 | 68 | 22.3 | 11.9 | 45.3 | 13.4 | 7.1 | -3% | 3% | 0% | 1% | 5.3 | 4.3 | 8% | 21% |
| Fresnillo | 2M | 33.3 | 66 | 44 | 23.1 | 27.1 | 24.5 | 13.8 | 15.7 | 2% | 0% | 1% | 2% | 13.3 | 10.1 | 36% | 50% |
| Diversified miners | | | | | | | | | | | | | | | | | |
| BHP Billiton | 1M | 33.9 | 16 | 11 | 7.9 | 7.6 | 6.7 | 5.2 | 5.0 | 8% | 10% | 3% | 3% | 3.5 | 3.1 | 38% | 43% |
| Rio Tinto | 1M | 60.7 | 17 | 8 | 6.5 | 6.9 | 4.5 | 3.1 | 2.9 | 10% | 11% | 2% | 2% | 2.0 | 1.6 | 28% | 27% |
| Anglo American | 1M | 41.5 | 20 | 10 | 7.3 | 6.1 | 5.8 | 4.2 | 3.3 | 10% | 11% | 2% | 2% | 1.5 | 1.2 | 22% | 21% |
| Xstrata | 1M | 17.1 | 17 | 10 | 7.8 | 6.9 | 6.0 | 4.8 | 4.3 | 5% | 2% | 1% | 2% | 1.2 | 1.1 | 13% | 15% |
| Kumba Iron Ore | 3M | 69.7 | 22 | 11 | 8.8 | 8.6 | 8.4 | 6.3 | 6.1 | 7% | 9% | 7% | 9% | 10.9 | 8.6 | 132% | 109% |
| Exxaro | 2M | 27.2 | 27 | 13 | 9.0 | 7.6 | 17.1 | 10.8 | 8.1 | 5% | 4% | 3% | 4% | 3.8 | 2.9 | 35% | 38% |
| African Rainbow | 1M | 26.4 | 20 | 15 | 10.1 | 8.0 | 6.4 | 4.6 | 3.7 | 1% | 4% | 2% | 3% | 2.0 | 1.7 | 15% | 19% |
| Copper | | | | | | | | | | | | | | | | | |
| Freeport McMoran | 2H | 47.1 | 16 | 10 | 7.9 | 9.0 | 5.2 | 3.9 | 4.0 | 11% | 12% | 1% | 3% | 3.6 | 2.7 | 46% | 38% |
| Southern Copper Corp | 2H | 33.8 | 31 | 18 | 11.5 | 12.0 | 9.9 | 7.0 | 7.0 | 5% | 6% | 5% | 6% | 7.4 | 6.3 | 40% | 59% |
| Antofagasta | 2H | 21.7 | 32 | 22 | 13.5 | 11.0 | 7.7 | 4.9 | 4.3 | 3% | 10% | 5% | 6% | 3.5 | 3.3 | 18% | 25% |
| Kazakhmys | 1H | 17.5 | 16 | 6 | 5.2 | 5.1 | 5.4 | 4.8 | 4.4 | 5% | 6% | 1% | 2% | 1.1 | 1.0 | 20% | 15% |
| KGHM | 3H | 59.3 | 13 | 7 | 5.3 | 6.5 | 4.5 | 2.9 | 3.1 | 12% | 14% | 2% | 5% | 2.4 | 1.8 | 37% | 39% |
| Jiangxi Copper | 1M | 2.9 | 24 | 12 | 8.3 | 7.6 | 9.3 | 6.2 | 5.3 | -7% | 4% | 1% | 2% | 1.9 | 1.6 | 18% | 21% |
| FST Quantum Minerals | 1M | 24.1 | 3 | 13 | 16.7 | 11.4 | 9.1 | 7.2 | 5.2 | 4% | -2% | 1% | 1% | 3.8 | 3.0 | -5% | 22% |
| Grupo Mexico | 2H | 3.4 | 30 | 16 | 10.5 | 10.9 | 7.4 | 5.2 | 5.2 | 10% | 6% | 3% | 5% | 4.5 | 3.6 | 30% | 38% |
| Ferrous | | | | | | | | | | | | | | | | | |
| Siderurgica Naci | 1H | 9.9 | 9 | 9 | 7.7 | 11.4 | 4.7 | 4.7 | 5.1 | -5% | -1% | 3% | 3% | 3.1 | 3.0 | 38% | 39% |
| ENRC | 1H | 11.0 | 14 | 6 | 6.1 | 5.8 | 4.4 | 3.6 | 3.5 | 2% | 4% | 3% | 3% | 1.4 | 1.2 | 25% | 22% |
| Fortescue Metals | 1H | 6.6 | 44 | 17 | 9.8 | 8.7 | 10.5 | 6.5 | 6.3 | 4% | -4% | 1% | 1% | 10.4 | 6.2 | 51% | 68% |
| Cliffs Natural | 1H | 82.9 | 78 | 12 | 6.1 | 6.1 | 7.8 | 4.5 | 4.5 | 9% | 6% | 1% | 1% | 2.9 | 1.8 | 32% | 37% |
| Coal | | | | | | | | | | | | | | | | | |
| Macarthur | 3M | 17.1 | 25 | 32 | 23.6 | 19.7 | 20.1 | 13.8 | 10.6 | 1% | 2% | 2% | 3% | 3.0 | 2.2 | 8% | 8% |
| Whitehaven Coal | 1M | 6.5 | 40 | 46 | 30.4 | 14.7 | 23.1 | 15.6 | 8.4 | -7% | -2% | 1% | 2% | 2.8 | 2.7 | 7% | 6% |
| Bumi Resources | 1H | 0.3 | 30 | 17 | 14.3 | 8.3 | 9.0 | 7.2 | 3.8 | 8% | 15% | 1% | 2% | 5.5 | 2.8 | 28% | 24% |
| Adaro Energy | 1M | 0.2 | 18 | 29 | 12.0 | 7.5 | 8.7 | 5.8 | 4.5 | -6% | 6% | 2% | 1% | 3.7 | 2.9 | 13% | 27% |
| China Coal | 1M | 1.3 | 15 | 15 | 11.9 | 10.1 | 8.0 | 6.2 | 5.4 | -1% | -6% | 2% | 2% | 1.5 | 1.4 | 10% | 12% |
| China Shenhua | 1L | 4.7 | 19 | 16 | 14.0 | 12.2 | 8.9 | 7.8 | 6.6 | 5% | 5% | 2% | 2% | 3.0 | 2.6 | 21% | 20% |
| Arch Coal Inc | 1H | 20.3 | 54 | 21 | 9.9 | 6.7 | 9.2 | 6.3 | 5.2 | 12% | 6% | 2% | 2% | 1.5 | 1.2 | 7% | 11% |
| Peabody Energy | 1H | 48.8 | 25 | 16 | 10.7 | 8.3 | 8.7 | 6.4 | 4.9 | 4% | 6% | 1% | 1% | 2.8 | 2.2 | 18% | 23% |
| Nickel & Zinc | | | | | | | | | | | | | | | | | |
| Sterlite Industries | 1M | 2.8 | 11 | 9 | 6.2 | 5.4 | 3.9 | 2.8 | 2.5 | -2% | -4% | 1% | 1% | 1.1 | 0.9 | 13% | 16% |
| Norilsk | 1H | 244.0 | 18 | 9 | 6.5 | 6.2 | 6.0 | 4.1 | 3.6 | 11% | 11% | 3% | 4% | 2.5 | 1.8 | 32% | 32% |
| Hindustan Zinc | 3L | 2.8 | 15 | 12 | 10.2 | 9.4 | 6.8 | 5.4 | 4.4 | 5% | 7% | 1% | 1% | 2.6 | 2.1 | 24% | 23% |
| Average | | | 25 | 20 | 13 | 11 | 11 | 7 | 6 | 3% | 4% | 2% | 2% | 3 | 3 | 23% | 25% |

Source: Citi Investment Research and Analysis

This page is intentionally left blank

Anglo American Platinum

Company Focus

- Company Update
- Estimate Change

| | |
|------------------------------|-------------|
| Sell/Medium Risk | 3M |
| Price (31 Aug 11) | R585.50 |
| Target price | R610.00 |
| Expected share price return | 4.2% |
| Expected dividend yield | 2.1% |
| Expected total return | 6.2% |
| Market Cap | R154,216M |
| | US\$22,036M |

Price Performance (RIC: AMSJ.J, BB: AMS SJ)



Anglo American Platinum Ltd (AMSJ.J) New Strategy, Same Result – Sell

- **New strategy unlikely to solve our main concern, rising costs** — In addition to its 1H11 results, AMS announced its new strategy of prioritising growth projects on the basis of capital efficiency. We commend this focus on capital efficiency. However, we doubt whether it would solve our key concern about AMS, which is spiralling costs. We maintain our view that AMS is unlikely to gain relative cost position to its peers in the medium term. Maintain Sell, TP R610.
- **Costs the main concern** — AMS's 1H11 HEPS of 1,234c was in line with guidance. Production of 1.16m equivalent refined platinum ounces was below our 1.21m ounce expectations. We doubt whether AMS will meet its 2.6m ounce full-year target. Costs of R12,991/ounce (equivalent refined platinum) was disappointing and supports our view that AMS will find it difficult to manage costs better than its peers. We also caution downside risks to AMS's full-year cost target of R12,400/ounce.
- **Nothing in new strategy that changes our view** — We appreciate AMS's focus on capital efficiency in its new strategy. However, we question whether this strategy will indeed solve one of the most pressing issues for AMS, the one of spiralling costs (from an already-high base). Please see pages 20-23 for more detail.
- **Valuation and risks: Maintain Sell, TP R610** — We downgrade our FY11e-13e earnings on the back of our new PGM prices. Maintain Sell, TP R610. Upside risks include higher rand-PGM prices and better-than-expected operational delivery.

Anglo American Platinum Ltd (ZAR)

| Year to 31 Dec | 2009A | 2010A | 2011E | 2012E | 2013E |
|-----------------------|----------|----------|----------|----------|----------|
| Sales (RM) | 36,687.0 | 46,906.0 | 48,657.2 | 56,445.3 | 63,134.1 |
| Net Income (RM) | 710.0 | 5,712.0 | 7,218.8 | 9,999.6 | 10,984.8 |
| Diluted EPS (¢) | 298 | 2,242 | 2,756 | 3,818 | 4,194 |
| Diluted EPS (Old) (¢) | 298 | 2,242 | 2,965 | 4,077 | 4,747 |
| PE (x) | 196.3 | 26.1 | 21.2 | 15.3 | 14.0 |
| EV/EBITDA (x) | 33.8 | 13.5 | 10.2 | 7.7 | 6.9 |
| DPS (¢) | 0 | 891 | 1,116 | 1,546 | 1,698 |
| Net Div Yield (%) | 0.0 | 1.5 | 1.9 | 2.6 | 2.9 |

| Fiscal year end 31-Dec | 2009 | 2010 | 2011E | 2012E | 2013E |
|--|----------------|---------------|---------------|---------------|----------------|
| Valuation Ratios | | | | | |
| P/E adjusted (x) | 196.3 | 26.1 | 21.2 | 15.3 | 14.0 |
| EV/EBITDA adjusted (x) | 33.8 | 13.5 | 10.2 | 7.7 | 6.9 |
| P/BV (x) | 4.3 | 2.7 | 2.6 | 2.4 | 2.1 |
| Dividend yield (%) | 0.0 | 1.5 | 1.9 | 2.6 | 2.9 |
| Per Share Data (¢) | | | | | |
| EPS adjusted | 298 | 2,242 | 2,756 | 3,818 | 4,194 |
| EPS reported | 1,263 | 4,254 | 2,793 | 3,818 | 4,194 |
| BVPS | 13,503 | 21,412 | 22,282 | 24,723 | 27,390 |
| DPS | 0 | 891 | 1,116 | 1,546 | 1,698 |
| Profit & Loss (RM) | | | | | |
| Net sales | 36,687 | 46,906 | 48,657 | 56,445 | 63,134 |
| Operating expenses | -35,766 | -39,251 | -37,972 | -41,553 | -46,771 |
| EBIT | 921 | 7,655 | 10,685 | 14,892 | 16,363 |
| Net interest expense | -236 | -70 | -9 | -100 | -100 |
| Non-operating/exceptionals | 2,290 | 5,609 | -234 | -609 | -682 |
| Pre-tax profit | 2,975 | 13,194 | 10,442 | 14,184 | 15,581 |
| Tax | 153 | -2,197 | -3,045 | -4,113 | -4,519 |
| Extraord./Min.Int./Pref.div. | -122 | -157 | -83 | -71 | -78 |
| Reported net income | 3,006 | 10,840 | 7,314 | 10,000 | 10,985 |
| Adjusted earnings | 710 | 5,712 | 7,219 | 10,000 | 10,985 |
| Adjusted EBITDA | 5,047 | 11,976 | 15,038 | 20,027 | 21,680 |
| Growth Rates (%) | | | | | |
| Sales | -28.2 | 27.9 | 3.7 | 16.0 | 11.9 |
| EBIT adjusted | -94.5 | 731.2 | 39.6 | 39.4 | 9.9 |
| EBITDA adjusted | -74.7 | 137.3 | 25.6 | 33.2 | 8.3 |
| EPS adjusted | -94.7 | 651.5 | 23.0 | 38.5 | 9.9 |
| Cash Flow (RM) | | | | | |
| Operating cash flow | 4,697 | 11,112 | 10,977 | 12,929 | 15,364 |
| Depreciation/amortization | 4,126 | 4,321 | 4,353 | 5,135 | 5,317 |
| Net working capital | 275 | -582 | -900 | -2,277 | -1,016 |
| Investing cash flow | -10,264 | -7,041 | -7,752 | -8,401 | -5,215 |
| Capital expenditure | -11,301 | -7,960 | -7,256 | -8,771 | -5,585 |
| Acquisitions/disposals | 957 | 743 | 300 | 370 | 370 |
| Financing cash flow | 6,135 | -4,188 | -4,715 | -4,048 | -4,447 |
| Borrowings | 6,464 | -16,147 | -374 | 0 | 0 |
| Dividends paid | -6 | 0 | -3,913 | -4,048 | -4,447 |
| Change in cash | 568 | -117 | -1,490 | 480 | 5,701 |
| Balance Sheet (RM) | | | | | |
| Total assets | 75,821 | 83,801 | 89,630 | 97,875 | 105,687 |
| Cash & cash equivalent | 3,532 | 2,534 | 1,044 | 1,524 | 7,225 |
| Accounts receivable | 2,891 | 2,988 | 4,770 | 5,829 | 6,302 |
| Net fixed assets | 35,283 | 37,438 | 39,476 | 43,112 | 43,380 |
| Total liabilities | 43,188 | 28,783 | 30,890 | 32,743 | 33,570 |
| Accounts payable | 5,409 | 6,190 | 8,348 | 10,201 | 11,028 |
| Total Debt | 22,791 | 6,644 | 6,273 | 6,273 | 6,273 |
| Shareholders' funds | 32,633 | 55,018 | 58,740 | 65,132 | 72,117 |
| Profitability/Solvency Ratios (%) | | | | | |
| EBITDA margin adjusted | 13.8 | 25.5 | 30.9 | 35.5 | 34.3 |
| ROE adjusted | 2.3 | 13.2 | 12.8 | 16.2 | 16.1 |
| ROIC adjusted | 1.9 | 8.7 | 11.3 | 14.7 | 15.4 |
| Net debt to equity | 59.0 | 7.5 | 8.9 | 7.3 | -1.3 |
| Total debt to capital | 41.1 | 10.8 | 9.6 | 8.8 | 8.0 |

For further data queries on Citi's full coverage universe please contact CIRA Data Services Europe at CIRADataServicesEMEA@citi.com or +44-207-986-4050



New Strategy, Same Result

Reflecting on AMS's old strategy

With the onset of the global economic crisis (GEC) in 2008/09, AMS reverted to a strategy of managing costs, while keeping production flat. Its strategy was well communicated and unambiguous, as per the following quote from p.16 of its 2009 annual report:

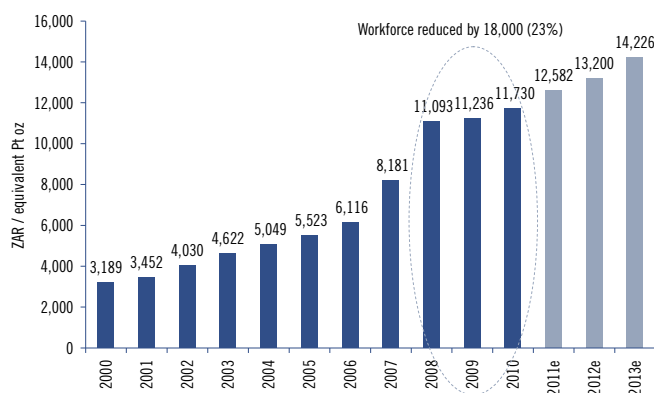
"Cost management is being institutionalized in our business and we have plans to keep unit costs flat over the next two years."

At that stage, AMS was operating at unit cash costs of R11,236/oz (equivalent refined platinum) and its target was to maintain costs at this level in 2010 and 2011.

It intended achieving this target through: 1) right-sizing its workforce for 2.5m ounces of production, 2) delivering on-the-ground operational efficiency improvements, and 3) improving its infrastructure to reduce travel time of employees to work faces etc. (which admittedly was a longer-term goal).

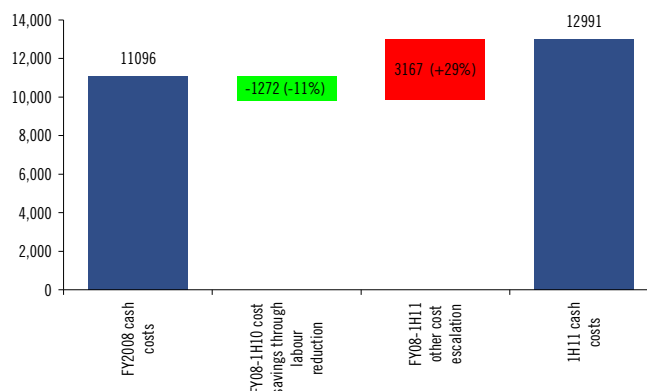
It immediately embarked on reducing its workforce by 23% (or 18,000 heads), which helped costs to remain flat from 2008 to 2009. However, the balance of its costs continued to increase at c.10% p.a. (Figure 2), which to us was an early warning sign that once the low-hanging fruit were picked (headcount reduction), delivering on its cost ambitions would become increasingly difficult.

Figure 35. Most of cost savings in 2009/10 came from labour reductions (R/equivalent refined Pt oz)



Source: Company data, Citi Investment Research and Analysis

Figure 36. Excluding effect of labour reduction, other costs escalated by 29% between FY08 and 1H11 (R/equivalent Pt oz)



Source: Company data, Citi Investment Research and Analysis

Indeed it did. Post the headcount reduction, AMS's costs continued to increase in line with the rest of the industry. The fact that its 1H11 costs spiralled to R12,991/ounce (which implies 2Q11 costs of R13,200/ounce) supports our long-held thesis that AMS will find it difficult to move down the cost curve and significantly improve its cost position relative to its peers, especially IMP. In fact, even with its significant headcount reductions, we calculate that AMS only gained 9% relative to IMP on the cost curve between 2008 and 2009, and 0% between 2009 and 2010. With no further headcount reductions possible for AMS, we doubt whether further improvement relative to IMP would be possible in the medium term.

New strategy: Not a game changer

AMS recently announced its new strategy, which revolves around capital management in order to meet rising PGM demand (estimated at 4% p.a. by AMS) and improve its overall market share while spending as little as possible capital. In essence, it sequences AMS's growth opportunities on basis of capital efficiency. The five opportunities in order of capital priority are:

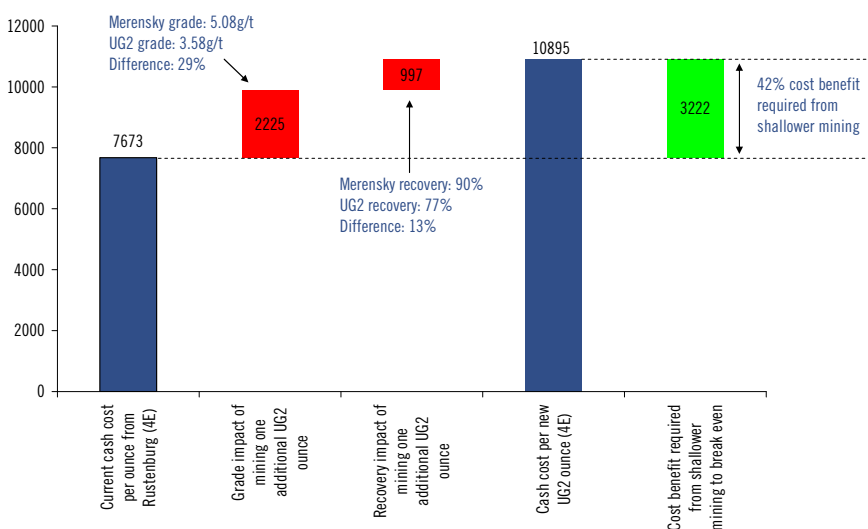
- Rustenburg UG2 optimisation (near term).
- Mogalakwena (near term).
- Unki (near to medium term).
- Eastern Limb (medium term).
- Western Limb deep shafts (longer term).

We highlight the opportunities and challenges for each of these initiatives below.

1. Rustenburg UG2 optimisation (near term)

- **The opportunity:** AMS has historically extracted mainly Merensky reef at Rustenburg, now leaving the opportunity to go back and mine the shallow UG2 ore body. Given the shallow nature of Rustenburg's remaining UG2, it should (in theory) be beneficial from a capital and operating cost point of view to focus on this reef going forward.
- **The challenge:** We caution that Rustenburg's UG2 ore is 29% lower in grade than its Merensky ore (Merensky 5.08g/t vs. UG2 3.58g/t, 4E) and typically achieves 13% lower recoveries (Merensky 90% recovery vs. UG2 77%). This implies that a 42% operating cost benefit is required on order to justify mining one additional ounce of shallower UG2 vs. deeper Merensky (*Figure 37*).

Figure 37. Cost benefit required to justify mining one additional ounce of shallower UG2 at Rustenburg (R/ounce, 3PGE+Au)



Source: Citi Investment Research and Analysis

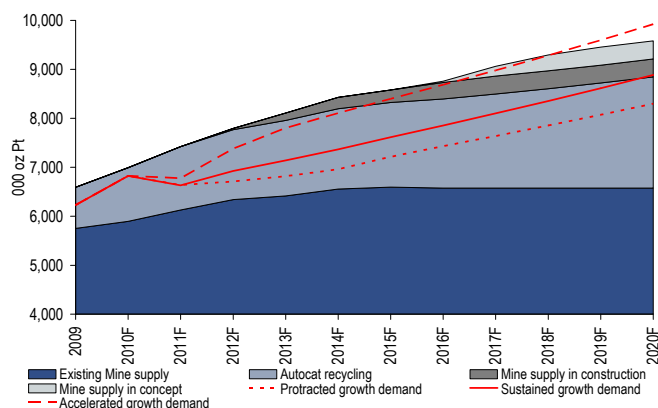
- As a result, should AMS attempt to increase production from Rustenburg on this basis, we view it as highly unlikely that it will be able to move Rustenburg down the cost curve. Even without attempting to increase production from Rustenburg, AMS expects Rustenburg's UG2:Merensky split to increase from the current 70:30 to 75:25 by 2015 and 80:20 by 2020. Given the analysis in *Figure 37*, this UG2:Merensky outlook does not augur well for lower operating costs from Rustenburg, in our view.

2. Mogalakwena (near to medium term)

The opportunity: As an open-pit mine with extensive reserves and resources, Mogalakwena has the potential to become a substantial low-cost mine within AMS's stable, should market conditions allow. AMS claims that it has improved its capacity to process the difficult Platreef ore, and that community issues are being resolved.

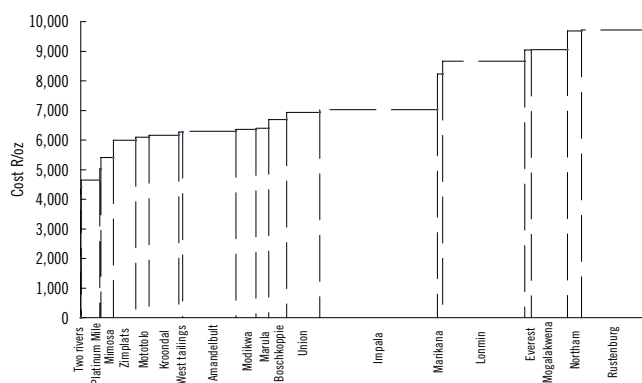
The challenge: Given that current rand-based PGM prices are not incentivising the complete cost curve (supportive of our view of a substantial medium-term surplus outlook for platinum, see *Figure 38*), we believe AMS will not be able to increase production from Mogalakwena by any significant extent in the near to medium term. This is as its Rustenburg operations are positioned on the right-hand side of the cost curve (*Figure 39*) and are currently marginal on a post-project capex free cash flow (FCF) basis. Any increase in production from Mogalakwena will push the market further into surplus, in our view, and will result in further margin pressure on Rustenburg. As a result, whatever AMS would gain through higher production at Mogalakwena, it will likely lose through even more depressed margins at Rustenburg.

Figure 38. Citi's supply and demand outlook for platinum (000 ounces)



Source: Citi Investment Research and Analysis

Figure 39. 2H10 5PGE+Au all-in cost curve (R/oz, 5PGE+Au)



Source: Citi Investment Research and Analysis

3. Unki (near to medium term)

The opportunity: Unki is a low-cost mine in Zimbabwe with significant reserves and significant ramp-up potential in the longer term. Its phase I is in ramp-up and will likely achieve steady state production of 141 ounces (4E) by 2013. Further longer-term expansion potential exists.

The challenge: Near term, political and indigenisation uncertainty in Zimbabwe may delay any further expansion at Unki. Also, similar to our argument for Mogalakwena above, our view of a medium-term surplus market for platinum implies that AMS will not be able to increase production from Unki to any significant extent any time soon. This is as its Rustenburg operations are positioned on the right-hand side of the cost curve and are currently marginal on a post project capex

FCF basis. Any significant increase in production from Unki will push the market further into surplus, in our view, and will result in further margin pressure on Rustenburg. As a result, whatever AMS would gain through higher production at Unki, it would likely sacrifice through even more depressed margins at Rustenburg.

4. Eastern Limb option (medium term)

The opportunity: AMS has an extensive undeveloped footprint on the Eastern Limb. Projects such as Twickenham, der Brochen and Ga-Pasha provide AMS with production flexibility in the medium to longer term.

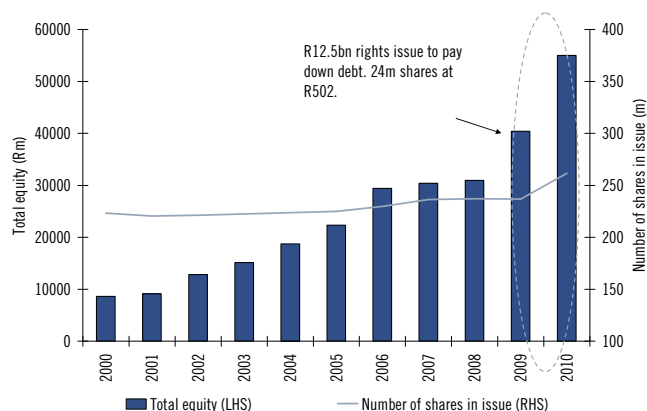
5. Western Limb deep shafts (longer term)

The opportunity: AMS has multiple deep shaft opportunities on the Western Limb. Even though these projects are currently marginal to uneconomical, AMS believes that PGM prices would likely prove these projects feasible in 10-20 year's time. Opportunities 1-4 above provide AMS with the flexibility to wait for prices to move higher before committing to these higher capex and higher opex projects.

ROE & ROIC analysis

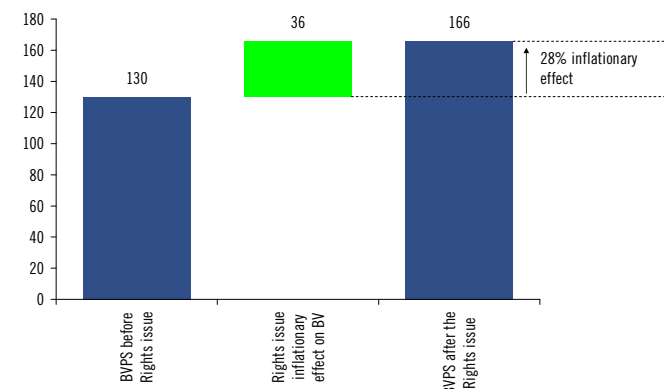
During FY10 AMS had a R12.5bn rights issue, which consisted of 24m shares being issued at R502.18 per share. The rights issue proceeds were used to restructure its balance sheet by paying down high debt levels. Before the rights issue, AMS had a book value per share of R130 which was inflated 28% to R166 by the rights issue.

Figure 40. AMS's historical equity evolution (Rm, 2000-2010)



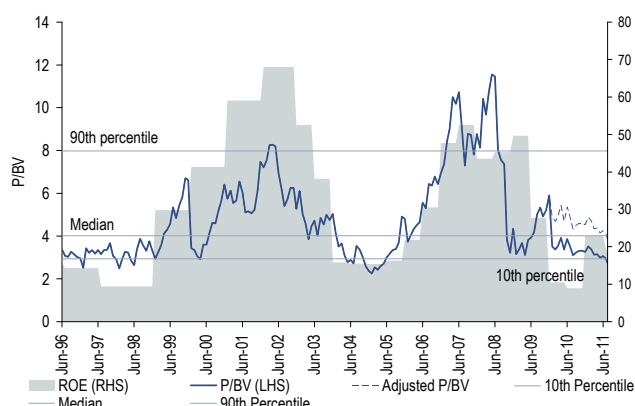
Source: Company reports and Bloomberg

Figure 41. AMS's R12.5bn rights issue inflated its BV 28%



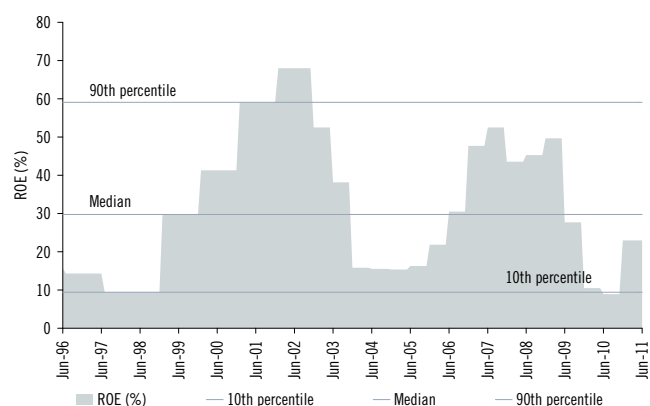
Source: Company reports, CIRA

Figure 42. AMS historical Adjusted P/BV and ROE



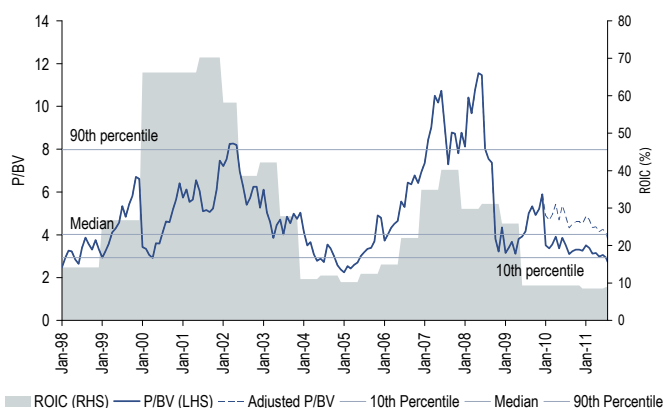
Source: Company reports and Bloomberg

Figure 43. AMS historical ROE



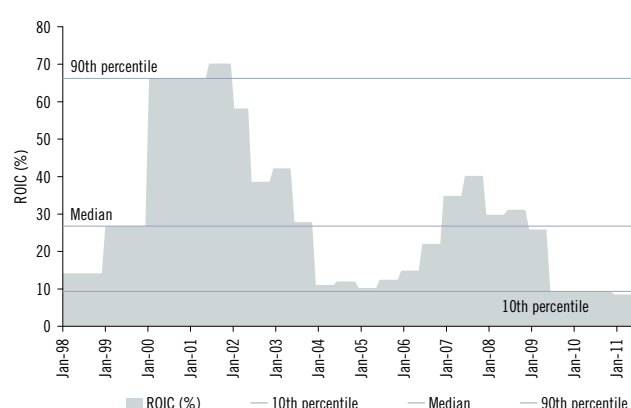
Source: Company reports and Bloomberg

Figure 44. AMS historical Adjusted P/BV and ROIC



Source: Company reports and Bloomberg

Figure 45. AMS historical ROIC



Source: Company reports and Bloomberg

Valuation and risks

Earnings downgrades

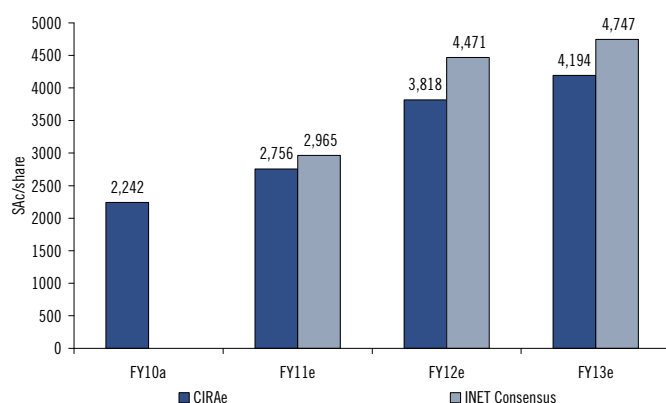
We downgrade our FY11e, 12e and 13e earnings expectations to 2,756c (-7%), 3,818c (-6%) and 4,194c (-12%) respectively on the back of new PGM price assumptions.

Figure 46. AMS forecast changes

| | FY09a | FY10a | FY11e | FY12e | FY13e |
|----------------------|-------|-------|-------|-------|-------|
| Production - new | 2464 | 2468 | 2550 | 2597 | 2687 |
| Production - old | 2464 | 2468 | 2550 | 2597 | 2687 |
| %change | 0% | 0% | 0% | 0% | 0% |
| Cash costs - new | 11236 | 11753 | 12582 | 13200 | 14226 |
| Cash costs - old | 11236 | 11753 | 12582 | 13200 | 14226 |
| % change | 0% | 0% | 0% | 0% | 0% |
| Earnings (SAC) - new | 298 | 1935 | 2756 | 3818 | 4194 |
| Earnings (SAC) - old | 298 | 1935 | 2965 | 4077 | 4747 |
| % change | 0% | 0% | -7% | -6% | -12% |

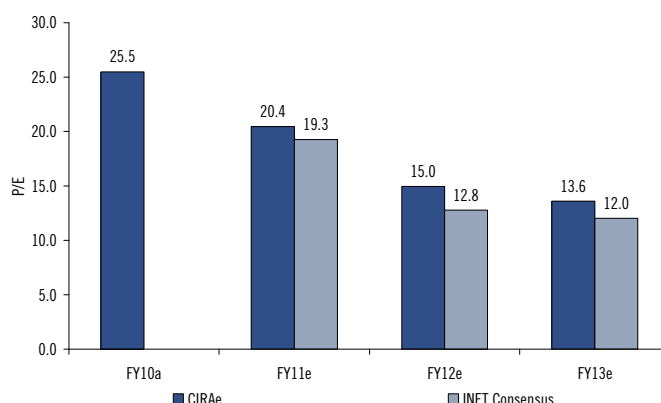
Source: Citi Investment Research and Analysis

Figure 47. Citi HEPS outlook for AMS vs. consensus



Source: Citi Investment Research and Analysis, INET

Figure 48. Citi PE outlook for AMS vs. consensus



Source: Citi Investment Research and Analysis, INET

Valuation: Maintain TP R610, Sell

We maintain our Sell recommendation on AMS, TP R610. We value AMS on a sum-of-the-parts discounted cash flow (DCF) basis. We derive our valuation by applying a nominal WACC of 11.9% (beta 1.0, ERP 5.0%, RFR 8.5%), discounting cash flows over the life of the group's individual assets. We apply a 15% premium to our valuation of AMS relative to its peers to account for its strategic advantage due to its control of 55% of sector reserves.

Figure 49. AMS sum-of-the-parts DCF valuation

| NAV calculation | DCF (Rm) | Exit multiple (x) | Market value (Rm) | % of total |
|--------------------------------------|----------------|-------------------|-------------------|------------|
| Rustenburg | 12,206 | 1.15 | 14,037 | 8 |
| Amandelbult | 24,688 | 1.15 | 28,391 | 17 |
| Union | 15,915 | 1.15 | 18,302 | 11 |
| Mogalakwena | 45,412 | 1.15 | 52,224 | 31 |
| Lebowa | 1,947 | 1.15 | 2,239 | 1 |
| Twickenham | 8,275 | 1.15 | 9,517 | 6 |
| Unki | 4,340 | 1.15 | 4,991 | 3 |
| West Tailings | 1,498 | 1.15 | 1,723 | 1 |
| Kroondal | 11,323 | 1.15 | 13,021 | 8 |
| Modikwa | 9,917 | 1.15 | 11,405 | 7 |
| Marikana | 3,479 | 1.15 | 4,001 | 2 |
| Mototolo | 6,792 | 1.15 | 7,811 | 5 |
| Operational value | 145,793 | 1.15 | 167,662 | 100 |
| Net (debt)/cash | -4,110 | 1.0 | -4,110 | |
| Investments | 3,301 | 1.0 | 3,301 | |
| Overhead costs | -3,326 | 1.0 | -3,326 | |
| Financial obligations | -4,135 | | -4,135 | |
| NAV | 141,657 | | 163,526 | |
| Equity value (Rm) | 163,526 | | | |
| Market cap (Rm) | 157,740 | | | |
| Number of shares in issue (m) | 263 | | | |
| CIRA target price (ZAR/share) | 610 | | | |

Source: Citi Investment Research and Analysis

Risks

We rate AMS Medium Risk to reflect the volatile nature of PGM prices offset by the generally stable regulatory environment the company operates in. Our valuation of AMS is exposed to macroeconomic developments affecting PGM prices and exchange rates, operational risks that might affect volumes and input costs, and political and regulatory risks that might affect costs and the company's reputation.

- **Macroeconomic risks:** Our valuation on AMS is highly dependent on input assumptions of the platinum, palladium and rhodium prices, as well as the rand-dollar exchange rate. Upside risks to our view include higher-than-expected PGM prices and a weaker-than-expected rand.
- **Operational risks:** We base our production and cost outlook for AMS's individual mines on management guidance and by applying our discretion to management's guidance and targets. The main upside risk to our view is the platinum market moving into deficit, in which case AMS will be able to expand production above the current 2.5m ounce (Pt) level.

Impala Platinum

Company Focus

- Company Update
- Estimate Change

| | |
|------------------------------|--------------|
| Buy/Medium Risk | 1M |
| Price (31 Aug 11) | R179.76 |
| Target price | R220.00 |
| Expected share price return | 22.4% |
| Expected dividend yield | 3.7% |
| Expected total return | 26.1% |
| Market Cap | R113,557M |
| | US\$16,226M |

Price Performance (RIC: IMPJ.J, BB: IMP SJ)



Impala Platinum (IMPJ.J) Bang For Your "Buck"

■ **Attractive value play:** IMP reported solid FY11 results with EPS increasing 41% y-o-y to 1,105c. The FY12 outlook was, however, lower than expected. However, we still expect 26% one-year total return. We believe IMP remains "best in class" and is an attractive value play. Buy.

- **Solid FY11:** Excluding the post-tax effects of forex losses and share-based gains, we calculate IMP delivered HEPS of 1,151c, in line with our 1,144c expectations. Platinum production of 1.84m ounces came in 2% below our 1.88m ounce expectations. Unit cash costs of R10,867/ounce (Pt) was in line and an 8% increase y-o-y.
- **IMP remains best-in-class:** This encouraging result supports our view that IMP is likely to remain the lowest-cost and most value-accretive SA platinum company. Despite a flat FY12 outlook, we expect costs to remain well controlled from here going forward as IMP moves back to higher yielding Merensky ounces with the ramp-up of 20, 16 and 17-shafts. We expect IMP to maintain its favourable cost curve position relative to its peers.
- **Outlook:** IMP guides FY12 to be flat y-o-y at 1.84m ounces. This is mainly due to a lower third-party processing outlook and a slower-than-expected ramp-up in production from 20-Shaft at the Lease area. IMP maintains its 2.0m ounce target by 2014. It intends spending R35bn in capex over the next 5 years, R7bn in FY12.

■ **Valuation and Risks – TP R220, maintain Buy:** IMP is one of our favoured picks in the SA platinum sector. Recent uncertainty about indigenisation policies in Zimbabwe, together with global economic uncertainty, has caused IMP to underperform y-t-d. However, we believe IMP's: 1) favourable position on the cost curve, 2) longer-term, low-cost growth optionality, and 3) attractive valuation make it well positioned to outperform its peers on a +12-month basis. We downgrade our earnings outlook on the back of new PGM prices. Maintain Buy, TP R220.

Impala Platinum (ZAR)

| Year to 30 Jun | 2010A | 2011A | 2012E | 2013E | 2014E |
|-----------------------|----------|----------|----------|----------|----------|
| Sales (RM) | 25,125.3 | 33,132.3 | 32,904.8 | 39,015.3 | 43,570.9 |
| Net Income (RM) | 4,718.4 | 6,638.3 | 8,153.6 | 9,945.8 | 11,141.8 |
| Diluted EPS (R) | 7.86 | 11.05 | 13.56 | 16.55 | 18.54 |
| Diluted EPS (Old) (R) | 7.86 | 11.05 | 13.84 | 16.91 | 18.42 |
| PE (x) | 22.9 | 16.3 | 13.3 | 10.9 | 9.7 |
| EV/EBITDA (x) | 12.1 | 8.1 | 7.0 | 5.7 | 5.0 |
| DPS (R) | 3.20 | 5.70 | 6.61 | 8.06 | 9.03 |
| Net Div Yield (%) | 1.8 | 3.2 | 3.7 | 4.5 | 5.0 |

| Fiscal year end 30-Jun | 2010 | 2011 | 2012E | 2013E | 2014E |
|--|---------------|---------------|---------------|---------------|---------------|
| Valuation Ratios | | | | | |
| P/E adjusted (x) | 22.9 | 16.3 | 13.3 | 10.9 | 9.7 |
| EV/EBITDA adjusted (x) | 12.1 | 8.1 | 7.0 | 5.7 | 5.0 |
| P/BV (x) | 2.5 | 2.4 | 2.2 | 2.0 | 1.8 |
| Dividend yield (%) | 1.8 | 3.2 | 3.7 | 4.5 | 5.0 |
| Per Share Data (R) | | | | | |
| EPS adjusted | 7.86 | 11.05 | 13.56 | 16.55 | 18.54 |
| EPS reported | 7.32 | 11.05 | 13.56 | 16.55 | 18.54 |
| BVPS | 72.94 | 75.29 | 82.12 | 90.42 | 99.70 |
| DPS | 3.20 | 5.70 | 6.61 | 8.06 | 9.03 |
| Profit & Loss (RM) | | | | | |
| Net sales | 25,125 | 33,132 | 32,905 | 39,015 | 43,571 |
| Operating expenses | -17,879 | -22,135 | -20,155 | -23,469 | -26,156 |
| EBIT | 7,246 | 10,997 | 12,750 | 15,546 | 17,415 |
| Net interest expense | 2 | -187 | 0 | 0 | 0 |
| Non-operating/exceptionals | -344 | -1,249 | -1,185 | -1,439 | -1,611 |
| Pre-tax profit | 6,904 | 9,561 | 11,565 | 14,108 | 15,804 |
| Tax | -2,431 | -2,751 | -3,354 | -4,091 | -4,583 |
| Extraord./Min.Int./Pref.div. | -79 | -172 | -58 | -71 | -79 |
| Reported net income | 4,394 | 6,638 | 8,154 | 9,946 | 11,142 |
| Adjusted earnings | 4,718 | 6,638 | 8,154 | 9,946 | 11,142 |
| Adjusted EBITDA | 8,329 | 12,369 | 14,291 | 17,139 | 19,232 |
| Growth Rates (%) | | | | | |
| Sales | -3.8 | 31.9 | -0.7 | 18.6 | 11.7 |
| EBIT adjusted | -21.8 | 51.8 | 15.9 | 21.9 | 12.0 |
| EBITDA adjusted | -18.7 | 48.5 | 15.5 | 19.9 | 12.2 |
| EPS adjusted | -21.3 | 40.5 | 22.8 | 22.0 | 12.0 |
| Cash Flow (RM) | | | | | |
| Operating cash flow | 5,597 | 8,285 | 10,497 | 10,921 | 12,435 |
| Depreciation/amortization | 1,083 | 1,372 | 1,542 | 1,593 | 1,817 |
| Net working capital | -1,184 | -371 | 744 | -688 | -603 |
| Investing cash flow | -3,600 | -4,472 | -5,385 | -4,786 | -4,857 |
| Capital expenditure | -4,399 | -5,293 | -5,455 | -4,856 | -4,927 |
| Acquisitions/disposals | 8 | -55 | 70 | 70 | 70 |
| Financing cash flow | -1,816 | -3,044 | -3,971 | -4,843 | -5,426 |
| Borrowings | 22 | -583 | 0 | 0 | 0 |
| Dividends paid | -1,920 | -2,519 | -3,971 | -4,843 | -5,426 |
| Change in cash | 189 | 684 | 1,141 | 1,292 | 2,152 |
| Balance Sheet (RM) | | | | | |
| Total assets | 62,571 | 67,604 | 71,807 | 78,040 | 84,773 |
| Cash & cash equivalent | 3,858 | 4,542 | 5,683 | 6,975 | 9,128 |
| Accounts receivable | 3,588 | 4,783 | 5,096 | 6,006 | 6,802 |
| Net fixed assets | 29,646 | 33,137 | 37,051 | 40,314 | 43,425 |
| Total liabilities | 16,838 | 17,994 | 17,886 | 18,876 | 19,743 |
| Accounts payable | 5,147 | 5,656 | 5,548 | 6,538 | 7,405 |
| Total Debt | 2,128 | 1,842 | 1,842 | 1,842 | 1,842 |
| Shareholders' funds | 45,733 | 49,610 | 53,921 | 59,164 | 65,029 |
| Profitability/Solvency Ratios (%) | | | | | |
| EBITDA margin adjusted | 33.2 | 37.3 | 43.4 | 43.9 | 44.1 |
| ROE adjusted | 11.1 | 14.5 | 16.4 | 18.3 | 18.6 |
| ROIC adjusted | 13.1 | 20.4 | 21.4 | 24.1 | 25.0 |
| Net debt to equity | -3.8 | -5.4 | -7.1 | -8.7 | -11.2 |
| Total debt to capital | 4.4 | 3.6 | 3.3 | 3.0 | 2.8 |

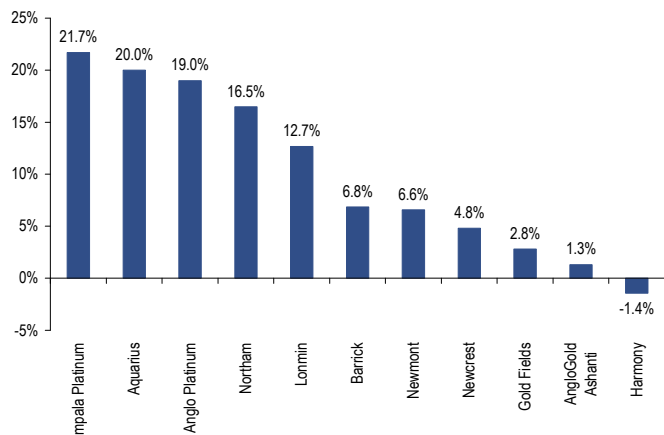
For further data queries on Citi's full coverage universe please contact CIRA Data Services Europe at CIRADataServicesEMEA@citi.com or +44-207-986-4050

IMP to Remain Best-in-Class

IMP created superior economic value

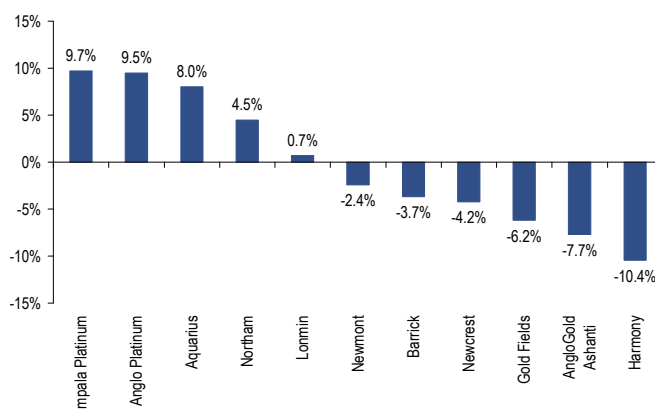
IMP delivered an average ROIC of 22% over the past decade, well above the sector average of 18%.

Figure 50. SA platinum sector relative ROIC (% , 1998-2010)



Source: CIRA, Company reports, Bloomberg

Figure 51. Relative economic value creation (ROIC-WACC, 1998-2010)

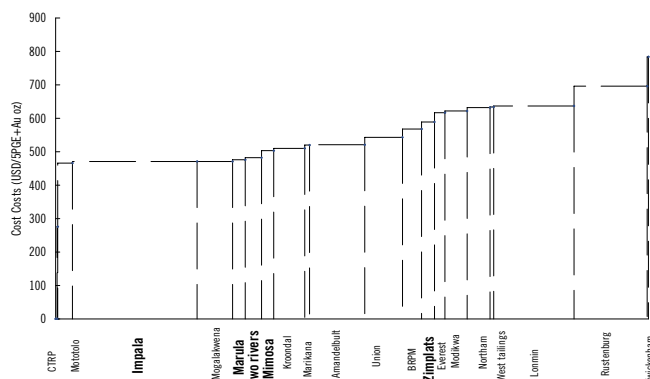


Source: CIRA, Company reports, Bloomberg

Mainly due to its low-cost assets

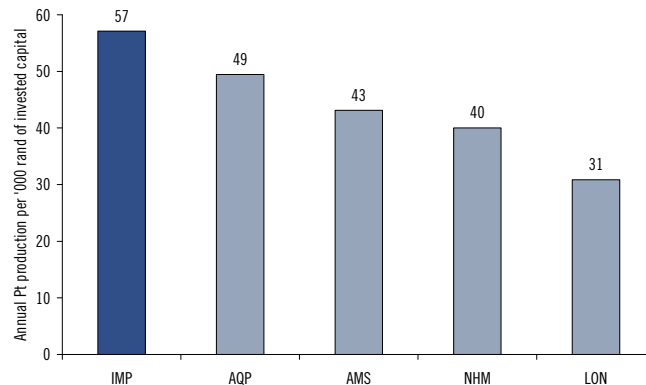
The reason for IMP's unmatched success was mainly due to its low-cost assets and more efficient application of capital relative to its peers (Figures 3 and 4).

Figure 52. 1H08 5PGE+Au cash cost curve (R/oz)



Source: Company reports, Citi Investment Research and Analysis

Figure 53. IMP has superior platinum production per '000 rand of invested capital (Pt oz / '000 rand)



Source: CIRA, Company reports, Bloomberg

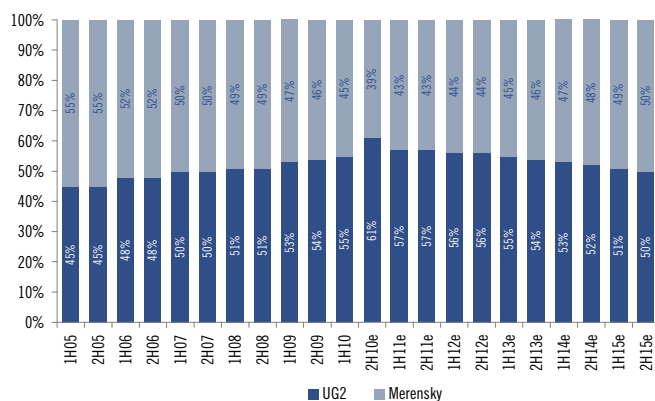
Near-term operational fears are starting to dissipate

A key concern for many has been IMP's near-term operational difficulties, which mainly stemmed from a lack of Merensky development over the past decade and which resulted in the company having to mine 60% UG2 reef and only 40% higher-grade Merensky (historically 50:50) during the latter parts of FY10. Despite these

challenges, IMP's unit costs were well maintained and managed to keep its superior cost curve position.

IMP's Merensky:UG2 split improved from 40:60 in FY10 to 42:58 in FY11. We expect this to improve to 44:56 in FY12. Medium term we expect this split to return to 50:50 by 2016 when shafts 20, 16 and 17 come online.

Figure 54. IMP historical and expected UG2:Merensky split (%)



Source: Company Reports and CIRA Estimates

Figure 55. Expected ramp-up schedule of IMP's Merensky shafts (000 Pt ounces)

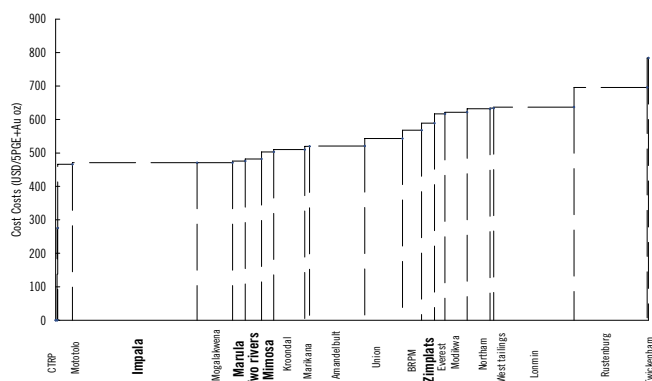
| Shaft | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------------|------|------|------|------|------|------|------|------|------|------|
| 20-Shaft | 0 | 0 | 60 | 90 | 110 | 140 | 150 | 150 | 150 | 150 |
| 16-Shaft | 0 | 0 | 30 | 70 | 100 | 130 | 150 | 185 | 185 | 185 |
| 17-Shaft | 0 | 0 | 0 | 0 | 0 | 50 | 100 | 150 | 180 | 180 |
| Total new Merensky | 0 | 0 | 90 | 160 | 210 | 320 | 400 | 485 | 515 | 515 |
| % Merensky | 40 | 40 | 41 | 45 | 49 | 50 | 50 | 50 | 50 | 50 |

Source: Company Reports and CIRA Estimates

IMP likely to remain best-in-class

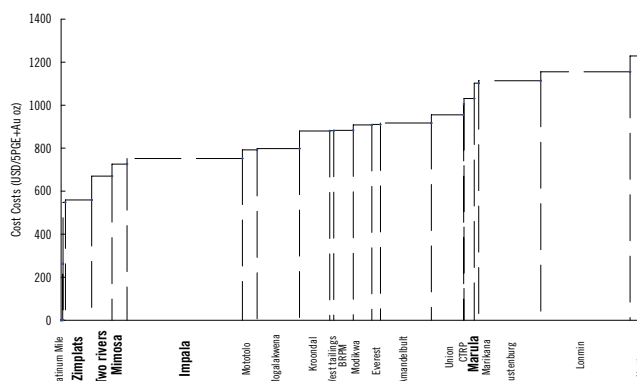
As a result, we believe the worst of IMP's near-term operational issues have now past and expect the company to maintain (and potentially even improve in the long term through Zimplats) its superior position on the global PGM cost curve.

Figure 56. CY08 5PGE+Au cash cost curve



Source: Company reports, Citi Investment Research and Analysis

Figure 57. 1H11 5PGE+Au cash cost curve



Source: Company reports, Citi Investment Research and Analysis

Attractive longer-term value proposition

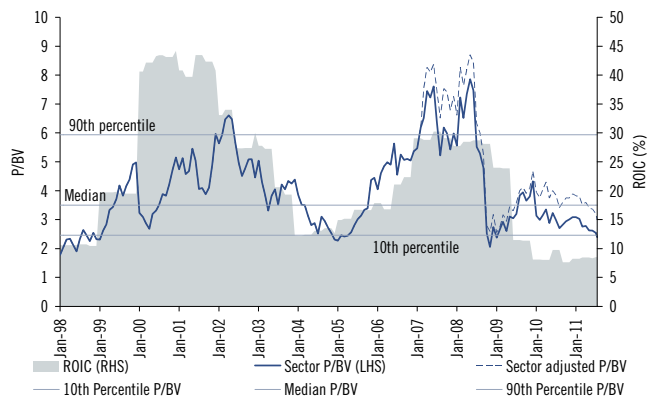
IMP trading below 15-year median P/BV

We also highlight that IMP, as with the rest of the SA platinum sector, is currently trading below its 15-year median P/BV level. It is also currently delivering cyclically-low ROIC's of approximately 12% (i.e. breakeven EVA, given our 12% WACC).

**IMP to remain superior value creator in
SA platinum sector**

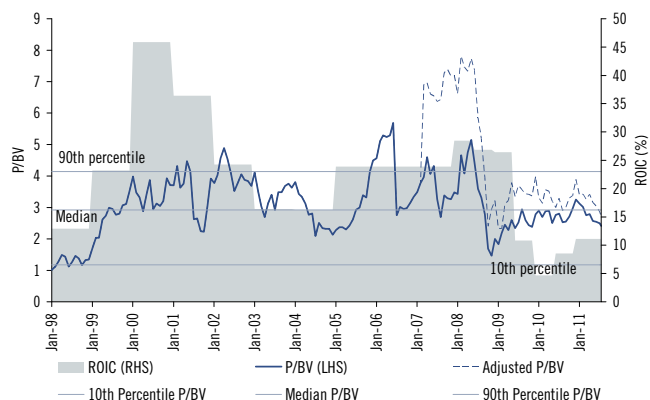
Given its favourable position on the cost curve, we view it as likely that IMP's ROIC will improve further in the medium term as the price incentivises it to sustain and increase production. This argument does not necessarily hold for higher-cost producers like AMS and LON, especially if our near- and medium-term surplus market outlook for platinum realises.

Figure 58. Platinum sector historical P/BV and ROIC



Source: CIRA, Company reports, Datastream and Bloomberg

Figure 59. IMP historical P/BV and ROIC

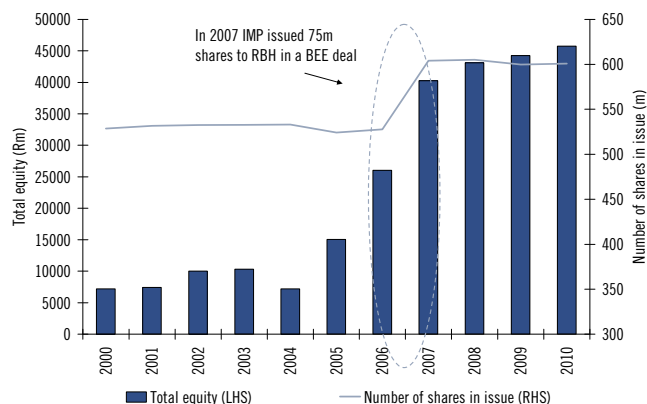


Source: CIRA, Company reports, Datastream and Bloomberg

ROE & ROIC Analysis

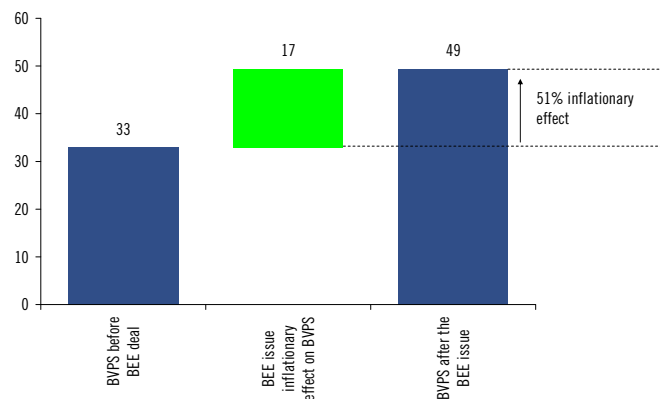
During FY07, IMP issued 75m shares to RBH in a R12bn BEE deal. The share issue price of R166 was above IMP's book value per share of R33 at that stage, which resulted in a 51% increase in book value. Post the BEE deal, IMP's book value was R49 per share.

Figure 60. IMP's historical equity evolution (Rm, 2000-2010)



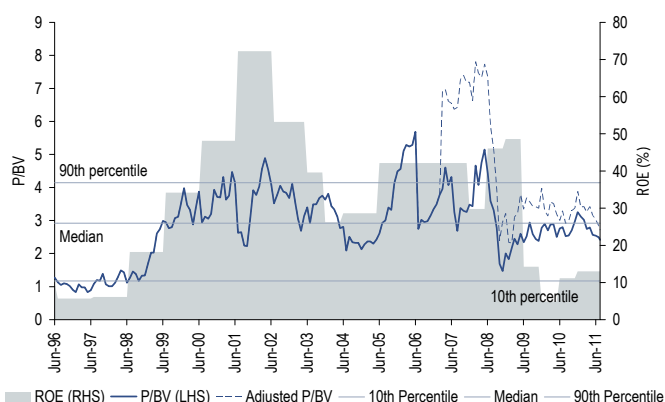
Source: Company reports and Bloomberg

Figure 61. IMP's R12bn BEE share issue inflated its BV 51%



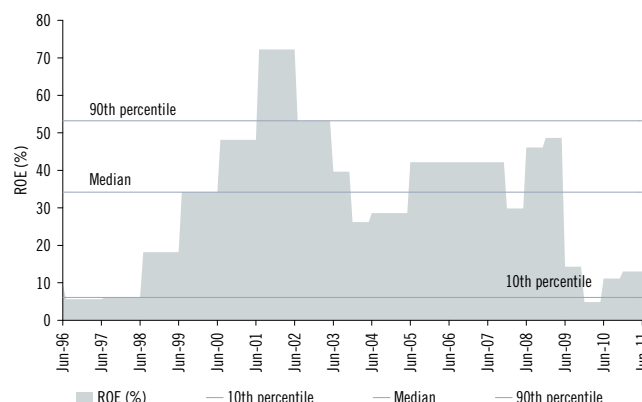
Source: Company reports, CIRA

Figure 62. IMP historical Adjusted P/BV and ROE



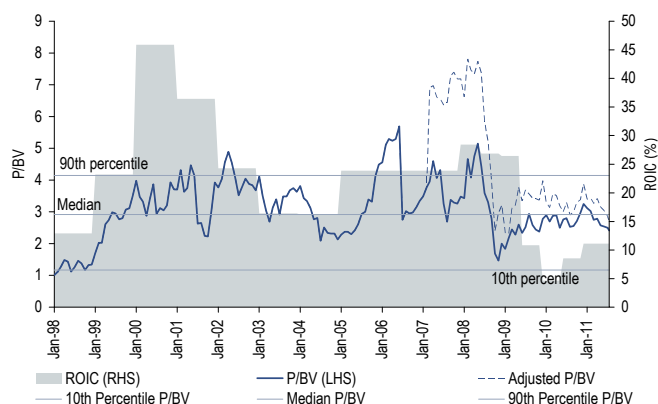
Source: Company reports and Bloomberg

Figure 63. IMP historical ROE



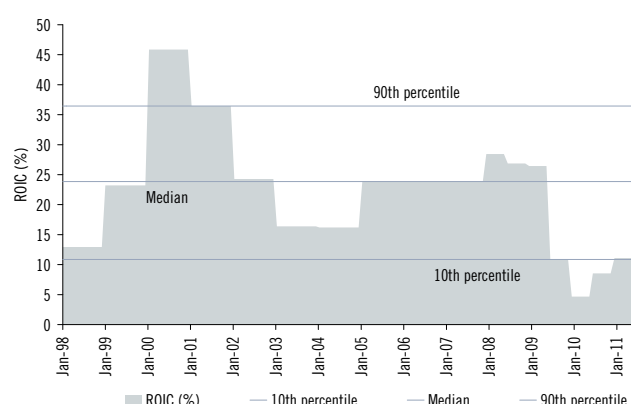
Source: Company reports and Bloomberg

Figure 64. IMP historical Adjusted P/BV and ROIC



Source: Company reports and Bloomberg

Figure 65. IMP historical ROIC



Source: Company reports and Bloomberg

Valuation and Risks

Earnings changes

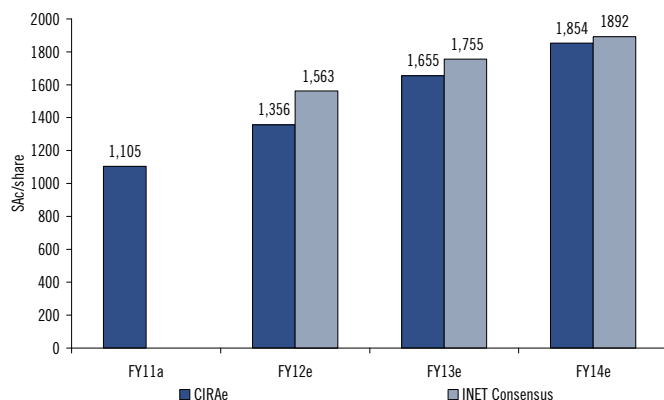
We downgrade our FY12e and 13e earnings expectations to 1,356c (-2%) and 1,655c (-2%) respectively and upgrade our FY14e expectations to 1,854c (+1%), on the back of new PGM price assumptions.

Figure 66. IMP forecast changes

| | FY10a | FY11a | FY12e | FY13e | FY14e |
|----------------------|-------|-------|-------|-------|-------|
| Production - new | 1741 | 1836 | 1832 | 1943 | 2040 |
| Production - old | 1741 | 1836 | 1832 | 1943 | 2040 |
| %change | 0% | 0% | 0% | 0% | 0% |
| Cash costs - new | 10089 | 10867 | 11845 | 12556 | 13309 |
| Cash costs - old | 10089 | 10867 | 11845 | 12556 | 13309 |
| % change | 0% | 0% | 0% | 0% | 0% |
| Earnings (SAC) - new | 786 | 1105 | 1356 | 1655 | 1854 |
| Earnings (SAC) - old | 786 | 1105 | 1384 | 1691 | 1842 |
| % change | 0% | 0% | -2% | -2% | 1% |

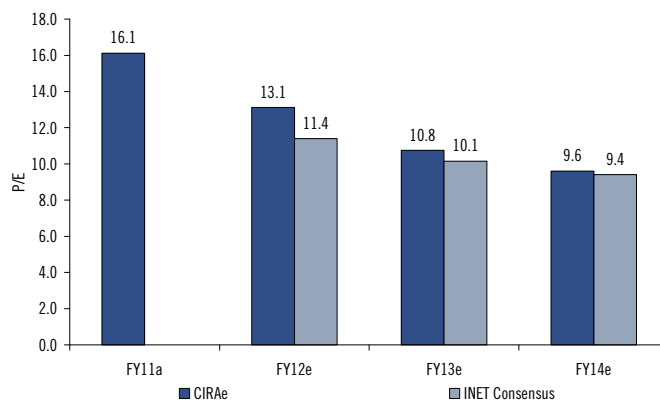
Source: Citi Investment Research and Analysis

Figure 67. Citi HEPS outlook for IMP vs. consensus



Source: Citi Investment Research and Analysis, Inet

Figure 68. Citi PE outlook for IMP vs. consensus



Source: Citi Investment Research and Analysis, Inet

Valuation: Maintain TP R220, Buy

We maintain our TP at R220, Buy. We value IMP on a sum-of-the-parts discounted cash flow (DCF) basis. We derive our valuation by applying a nominal WACC of 11.9% (beta 1.0, ERP 5.0%, RFR 8.5%), discounting cash flows over the life of the group's individual assets. We base our 12-month forward target price on a 1.0x P/DCF exit multiple. This is as we do not expect near- to medium-term PGM prices to rise substantially above our long-term price expectations.

Figure 69. IMP sum-of the parts DCF valuation

| NAV calculation | DCF (Rm) | Exit multiple (x) | Market value (Rm) | % of total |
|--------------------------------------|----------------|-------------------|-------------------|------------|
| Impala | 71,075 | 1.0 | 71,075 | 50 |
| Marula | 5,874 | 1.0 | 5,874 | 4 |
| Zimplats | 25,518 | 1.0 | 25,518 | 18 |
| Mimosa | 6,016 | 1.0 | 6,016 | 4 |
| Two Rivers | 9,272 | 1.0 | 9,272 | 7 |
| Leeuwkop | 3,866 | 1.0 | 3,866 | 3 |
| IRS | 20,750 | 1.0 | 20,750 | 15 |
| Operational value | 142,371 | 1.0 | 142,371 | 100 |
| Net (debt)/cash | 2,700 | 1.0 | 2,700 | |
| Investments | 1,052 | 1.0 | 1,052 | |
| Overhead costs | -1,717 | 1.0 | -1,717 | |
| Financial obligations | 2,035 | | 2,035 | |
| NAV | 144,406 | | 144,406 | |
| Equity value (Rm) | 144,406 | | | |
| Market cap (Rm) | 107,400 | | | |
| Number of shares in issue (m) | 600 | | | |
| CIRA target price (ZAR/share) | 220 | | | |

Source: Citi Investment Research and Analysis

Risks

We rate IMP Medium Risk to reflect the volatile nature of PGM prices offset by the generally stable regulatory environment the company operates in. Our valuation of IMP is exposed to macroeconomic developments affecting PGM prices and exchange rates, operational risks that might affect volumes and input costs, and political and regulatory risks that might affect costs and the company's reputation.

- **Macroeconomic risks:** Our valuation on IMP is highly dependent on input assumptions of the platinum, palladium and rhodium prices, as well as the rand-dollar exchange rate. Downside risks to our view include lower-than-expected PGM prices and a stronger-than-expected rand.
- **Operational risks:** We base our production and cost outlook for IMP's individual mines on management guidance and by applying our discretion to management's guidance and targets. The main downside risk to our view is that significantly more capex would be required in order to sustain current production levels than that assumed in our valuation model. Other operational risks include IMP failing to ramp up its Merensky shafts on time, and a deterioration in the political conditions in Zimbabwe that could prevent further growth for IMP in this country (note that we only include Zimplats phase II into our valuation).
- **Political and regulatory risks:** IMP's operations and future projects are based in SA and Zimbabwe. The company is subsequently exposed to government and regulatory-related risks in these countries. Specific risks include higher-than-expected royalties, production delays from government intervention and labour unrest.

This page is intentionally left blank

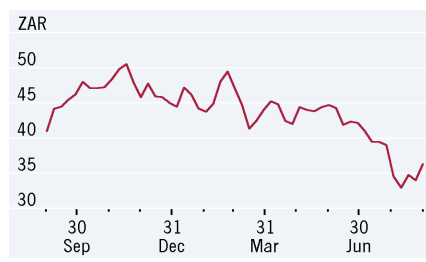
Northam Platinum

Company Focus

- Company Update
- Estimate Change

| | |
|------------------------------|--------------|
| Buy/Medium Risk | 1M |
| Price (31 Aug 11) | R36.28 |
| Target price | R50.00 |
| Expected share price return | 37.8% |
| Expected dividend yield | 1.4% |
| Expected total return | 39.3% |
| Market Cap | R13,874M |
| | US\$1,983M |

Price Performance (RIC: NHMJ.J, BB: NHM SJ)



Northam Platinum (NHMJ.J) Problems “Zondereinde” Priced In – Buy

■ **FY11 was tough, but fundamentals intact** — NHM reported a disappointing set of results, which was impacted by prolonged industrial action, above-average safety delays and geological issues at Zondereinde. These issues have weighed on its share price and attractive upside has emerged. We maintain that NHM is uniquely positioned as a low-cost, medium-term growth story, currently trading at a 39% discount to NPV. Buy, TP R50.

– **Disappointing operating result** — NHM reported a 50% y-o-y decrease in HEPS to 89c, as production decreased 22% to 250,110 ounces (4E) and costs rose 30% to R279,118/kg. These negatives were partly offset by a 6.5% increase in concentrates purchased to 34,797 ounces and higher PGM prices.

– **Potentially more to come** — NHM is the lowest paying SA platinum company on a per-employee basis. As a result, we caution that 1H11’s industrial action and above-industry wage settlement might recur in 1H12. The current geological challenges at Zondereinde are also likely to persist for another 18 months.

– **However, superior growth outlook should not be forgotten** — Booyssendal’s development is on schedule and roughly within budget. It should provide NHM with +50% low-cost growth over the next three years. We also calculate that NHM will have more than sufficient funds to self-fund Booyssendal’s development. Shareholder dilution is highly unlikely, in our view.

■ **Valuation: Maintain Buy, TP R50** — Even though NHM is going through near-term difficulties, we believe it offers superior medium-term earnings growth through the ramp-up of its low-cost Booyssendal project. It also trades 39% below our NPV, Buy. We downgrade our earnings outlook on the back of new PGM prices. Maintain Buy, TP R50. Downside risks include weaker rand-PGM prices, problems at Zondereinde deteriorating and negative deviations from Booyssendal’s feasibility numbers.

Northam Platinum (ZAR)

| Year to 30 Jun | 2010A | 2011A | 2012E | 2013E | 2014E |
|-----------------------|---------|---------|---------|---------|---------|
| Sales (RM) | 3,945.6 | 3,570.6 | 4,149.3 | 5,910.2 | 7,692.6 |
| Net Income (RM) | 639.9 | 324.4 | 686.1 | 1,239.0 | 1,798.4 |
| Diluted EPS (¢) | 177 | 90 | 189 | 341 | 495 |
| Diluted EPS (Old) (¢) | 177 | 90 | 219 | 389 | 499 |
| PE (x) | 20.5 | 40.5 | 19.2 | 10.6 | 7.3 |
| EV/EBITDA (x) | 13.6 | 23.6 | 12.2 | 6.8 | 4.6 |
| DPS (¢) | 40 | 21 | 45 | 81 | 118 |
| Net Div Yield (%) | 1.1 | 0.6 | 1.2 | 2.2 | 3.3 |

| Fiscal year end 30-Jun | 2010 | 2011 | 2012E | 2013E | 2014E |
|--|---------------|---------------|---------------|---------------|---------------|
| Valuation Ratios | | | | | |
| P/E adjusted (x) | 20.5 | 40.5 | 19.2 | 10.6 | 7.3 |
| EV/EBITDA adjusted (x) | 13.6 | 23.6 | 12.2 | 6.8 | 4.6 |
| P/BV (x) | 1.5 | 1.3 | 1.2 | 1.0 | 0.8 |
| Dividend yield (%) | 1.1 | 0.6 | 1.2 | 2.2 | 3.3 |
| Per Share Data (¢) | | | | | |
| EPS adjusted | 177 | 90 | 189 | 341 | 495 |
| EPS reported | 177 | 96 | 189 | 341 | 495 |
| BVPS | 2,449 | 2,717 | 2,993 | 3,666 | 4,655 |
| DPS | 40 | 21 | 45 | 81 | 118 |
| Profit & Loss (RM) | | | | | |
| Net sales | 3,946 | 3,571 | 4,149 | 5,910 | 7,693 |
| Operating expenses | -3,160 | -3,186 | -3,301 | -4,283 | -5,278 |
| EBIT | 785 | 385 | 848 | 1,627 | 2,415 |
| Net interest expense | 167 | 86 | 118 | 118 | 118 |
| Non-operating/exceptionals | 21 | 60 | 0 | 0 | 0 |
| Pre-tax profit | 973 | 531 | 966 | 1,745 | 2,533 |
| Tax | -334 | -182 | -280 | -506 | -735 |
| Extraord./Min.Int./Pref.div. | 0 | 0 | 0 | 0 | 0 |
| Reported net income | 640 | 349 | 686 | 1,239 | 1,798 |
| Adjusted earnings | 640 | 324 | 686 | 1,239 | 1,798 |
| Adjusted EBITDA | 952 | 533 | 1,062 | 1,997 | 2,945 |
| Growth Rates (%) | | | | | |
| Sales | 23.8 | -9.5 | 16.2 | 42.4 | 30.2 |
| EBIT adjusted | -4.0 | -51.0 | 120.4 | 91.8 | 48.4 |
| EBITDA adjusted | -2.7 | -44.0 | 99.2 | 88.0 | 47.5 |
| EPS adjusted | 5.7 | -49.4 | 110.8 | 80.6 | 45.2 |
| Cash Flow (RM) | | | | | |
| Operating cash flow | 863 | 785 | 441 | 1,343 | 2,184 |
| Depreciation/amortization | 167 | 148 | 214 | 369 | 530 |
| Net working capital | 1 | 234 | -458 | -265 | -145 |
| Investing cash flow | -396 | -213 | -1,380 | -1,350 | -1,193 |
| Capital expenditure | -371 | -957 | -2,580 | -1,350 | -1,193 |
| Acquisitions/disposals | -31 | -29 | 0 | 0 | 0 |
| Financing cash flow | -201 | -61 | -191 | -295 | -428 |
| Borrowings | 0 | 0 | 0 | 0 | 0 |
| Dividends paid | -216 | -90 | -191 | -295 | -428 |
| Change in cash | 266 | 510 | -1,129 | -302 | 563 |
| Balance Sheet (RM) | | | | | |
| Total assets | 10,089 | 11,917 | 12,728 | 15,532 | 19,444 |
| Cash & cash equivalent | 1,187 | 1,698 | 568 | 267 | 830 |
| Accounts receivable | 318 | 411 | 281 | 430 | 511 |
| Net fixed assets | 2,002 | 2,848 | 5,215 | 6,195 | 6,857 |
| Total liabilities | 1,256 | 1,814 | 1,282 | 1,515 | 1,642 |
| Accounts payable | 563 | 972 | 440 | 673 | 800 |
| Total Debt | 78 | 84 | 84 | 84 | 84 |
| Shareholders' funds | 8,833 | 10,103 | 11,446 | 14,017 | 17,802 |
| Profitability/Solvency Ratios (%) | | | | | |
| EBITDA margin adjusted | 24.1 | 14.9 | 25.6 | 33.8 | 38.3 |
| ROE adjusted | 7.5 | 3.4 | 6.4 | 9.7 | 11.3 |
| ROIC adjusted | 5.6 | 2.3 | 5.5 | 8.6 | 10.5 |
| Net debt to equity | -12.6 | -16.0 | -4.2 | -1.3 | -4.2 |
| Total debt to capital | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 |

For further data queries on Citi's full coverage universe please contact CIRA Data Services Europe at CIRADataServicesEMEA@citi.com or +44-207-986-4050

Problems “Zondereinde”

NHM's results were negatively impacted by strike action, safety delays and geological challenges at its Zondereinde mine. Even though this could be considered as “one-offs”, we caution that NHM's lower-than-industry average per-employee pay and the challenging geology at Zondereinde might result in a recurrence of these issues going forward. Even by compensating for this, NHM's valuation still looks attractive.

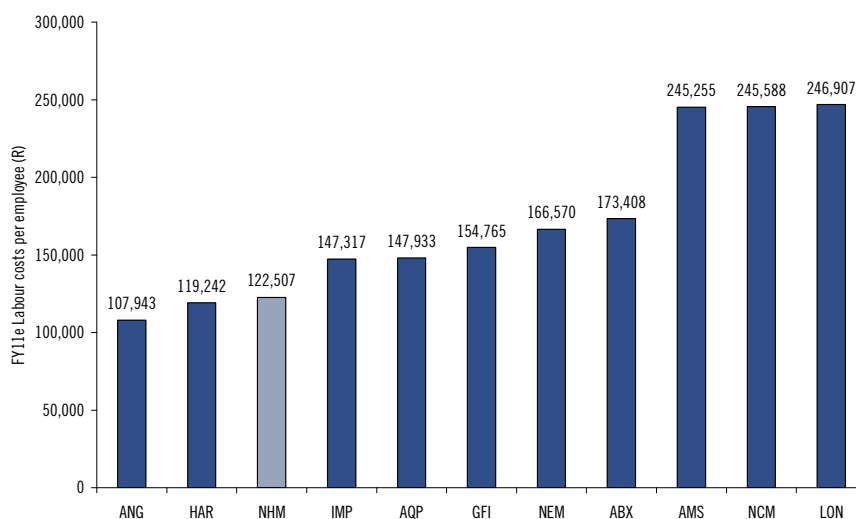
Wage negotiations: Another challenging round ahead

NHM is the lowest paying SA PGM producer

Production at Zondereinde was significantly disrupted in 1H11 by a 6-week long wage negotiation strike, which in the end resulted in a 13% wage increase settlement, well above the industry average of 7.5%.

Even though the increase may appear excessive, we highlight that NHM is still one of the lowest paying SA PGM producer (*Figure 1*), even after taking into account the 13% increase. As a result, we caution that 1H11's challenging wage negotiations might not be a one-off, and might be repeated again in 1H12.

Figure 70. Comparative labour costs (Rand/employee)



Source: Company Reports and CIRA Estimates

Tough conditions

Recovery at Zondereinde tougher than expected

Zondereinde is arguably the most technically complex mine in the SA platinum sector

Zondereinde's depth, fragmented reserves and numerous fault lines probably make it the most complex mine in the SA platinum sector. Historically, these challenges were well offset by a technically competent management team.

Even though we still regard NHM's management team as technically competent, we caution that there might come a time when the complexity of this ore body will outweigh management's ability (the South African gold sector is a good example of such a situation).

We expect the current challenges at Zondereinde to persist for another 18 months.

Revising down our long-term assumptions for Zondereinde

We lower our long-term production outlook for Zondereinde from 320,000 ounces to 300,000 ounces

Given the technical complexity of Zondereinde, we also found it applicable to revise down our long-term production outlook for this mine (please see our note: *"Problems 'Zondereinde' Priced In – Buy"*). Even though we expect Zondereinde to return to its 320,000 ounce p.a. capacity in FY13 and 14, we believe that technical challenges will prevent it from operating consistently at this level over the remaining life-of-mine.

As a result, we reduce our long-term production outlook for Zondereinde from 320,000 ounces to 300,000 ounces (-6%). We also expect a slower than previously expected ramp-up back to 320,000 ounces. Changes to our production assumptions are highlighted in Figure 71 below.

Figure 71. Change in our production and cost assumptions for Zondereinde (excerpt from *"Problems 'Zondereinde' Priced In – Buy"*).

| | FY11a | FY12e | FY13e* | FY14e** |
|-------------------------------|---------|---------|---------|---------|
| Production (000 ounces)- new | 250 | 282 | 377 | 485 |
| Production (000 ounces) - old | 250 | 294 | 390 | 498 |
| %change | 0% | -4% | -3% | -3% |
| Cash costs (USD/ounce) - new | 1241 | 1146 | 988 | 903 |
| Cash costs (USD/ounce) - old | 1241 | 1087 | 913 | 846 |
| % change | 0% | 5% | 8% | 7% |
| Cash costs (R/kg) - new | 278,965 | 259,883 | 256,984 | 252,127 |
| Cash costs (R/kg) - old | 278,965 | 246,317 | 237,398 | 236,290 |
| % change | 0% | 6% | 8% | 7% |

Source: Company reports, Citi Investment Research and Analysis

*Includes 55,000 ounces from Booyssendal

**Includes 163,000 ounces from Booyssendal

Booyseendal on Track

Even though capex has been marginally increased, we highlight that NHM is well positioned to self-fund Booyseendal (and Zondereinde capex). We view shareholder dilution as highly unlikely. Production and cost outlook remained unchanged. NHM still offers investors a superior medium-term low-cost growth outlook, in our view.

Capex creep

Phase I capex up 8%

Scope changes, the finalisation of the design of the slimes dam, and a restatement to FY11 real numbers have resulted in an 8% escalation in capex for Phase I to R3.9bn. NHM now expects to spend peak capex of R2.2bn in FY12, compared to our R1.5bn previous estimates.

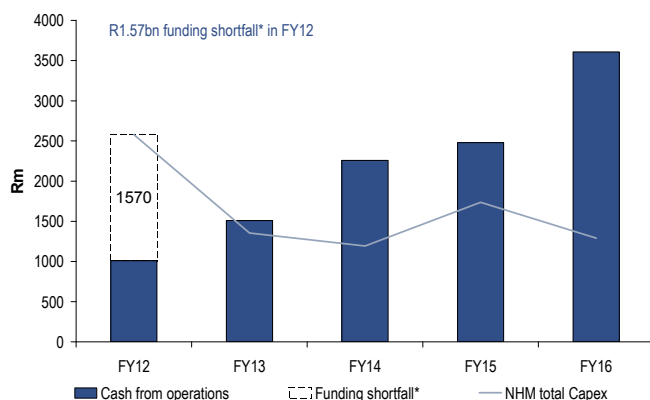
Even so, NHM will comfortably self-fund Booyseendal

Even though NHM's peak capex commitments of R2.58bn (R2.2bn Booyseendal, R0.4bn Zondereinde) in FY12 will likely result in a R1.57bn funding shortfall (expressed as CFO less total capex), we believe it will comfortably self-fund its growth. This is due to:

- A decrease in capex from FY13 onwards, whereafter we expect CFO will cover capex.
- NHM also has R3.9bn in funds at its disposal. This includes: 1) R1.7bn cash on balance sheet; 2) R1.2bn in proceeds from the sale of Booyseendal South which is yet to be received; and 3) a potential R1.0bn credit facility (if at all required).

We therefore view shareholder dilution as highly unlikely.

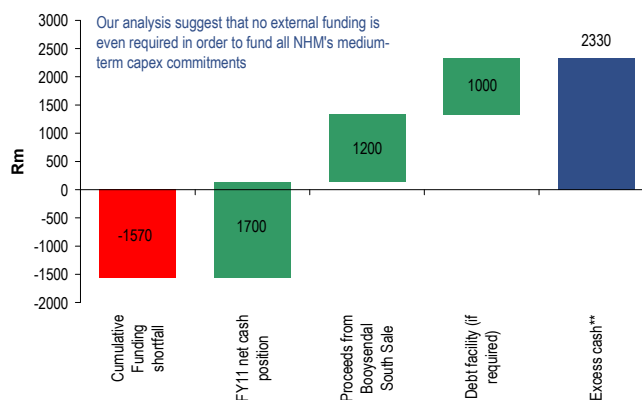
Figure 72. NHM cash flow analysis (Rm)



Source: Citi Investment Research and Analysis

*Cash flow from Zondereinde less total capex (excluding cash on balance sheet)

Figure 73. NHM has sufficient internal sources of cash in order to fund the shortfall* (Rm)



Source: Citi Investment Research and Analysis

**Cash available after funding CFO less capex shortfall

Production and cost outlook unchanged

Phase I to ramp up to 162,000 ounces by 2014

There were no changes to the previously published production and cost numbers and we still expect production from Booyssendal Phase 1 to ramp up to 162,000 ounces (3PGE+Au) by 2014.

We expect Booyssendal to operate at unit cash costs of R455/t in real terms. At steady state, this represents unit costs of R5,055/ounce (3PGE+Au) or USD532/ounce.

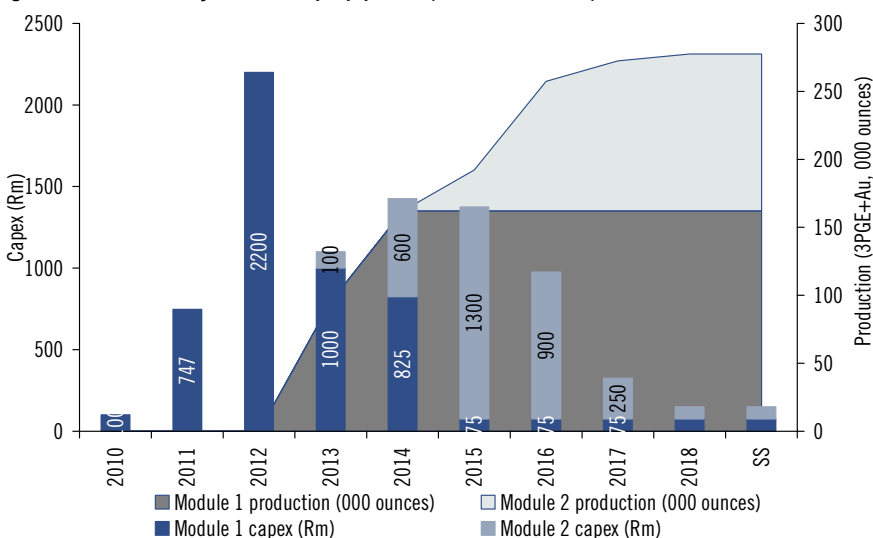
In its feasibility numbers, NHM estimates a reserve head-grade of 2.91g/t (4E) and 3.46g/t (6E), and an average Pt:Pd split of 1.8:1. Prill split estimates (4E) are Pt: 57.7%, Pd: 31.9%, Rh: 9.6%, and Au: 0.7%.

Figure 74. Booyssendal reserve prill splits

| UG2 | Grade (g/t) | 4E % | 6E % |
|-----|-------------|-------|-------|
| Pt | 1.68 | 57.73 | 48.51 |
| Pd | 0.93 | 31.96 | 26.86 |
| Rh | 0.28 | 9.62 | 8.09 |
| Au | 0.02 | 0.69 | 0.58 |
| Ru | 0.46 | | 13.28 |
| Ir | 0.09 | | 2.69 |

Source: Company Reports

Figure 75. CIRAE: Booyssendal ramp-up profile ('000 ounces, Rm)



Source: Company Reports, CIRA Estimates

Phase 2 remains constrained by insufficient electricity

Even though we model Phase 2 in our valuation (to take total production to 277,000 ounces by 2017 with an additional R3.0bn in capex), NHM recently highlighted that Phase 2 is still constrained by the lack of electricity allocation. The company will only know by 2015 whether or not it will receive an additional allocation in order to proceed with Phase 2.

Permitting status

To date, NHM has received all 4 key permits it requires in order to commence bulk construction and mining activities. The only permit still outstanding at this stage is the Dam Safety License. Its permitting status is summarised in Figure 4 below:

Figure 76. Booyensdal permitting status

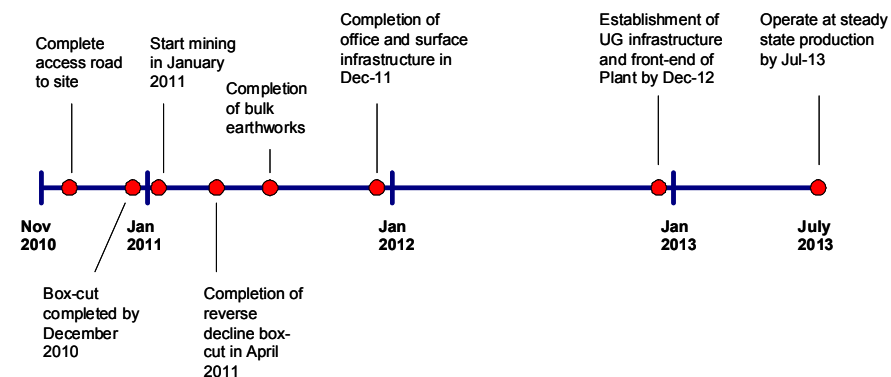
| Permit | Authority | Area of Impact | Received? | Status |
|---------------------------------|---|--|-----------|--------------------------|
| EMP amendment | DMR | All mine infrastructure | ✓ | ROD received Sept-10 |
| EIA (road and pipeline) | LEDET (Limpopo department of economic development, environment and tourism) | Main access road and extension of Lebalelo pipeline | ✓ | ROD received Oct-10 |
| EIA (Mine site) | LEDET (Limpopo department of economic development, environment and tourism) | All mine infrastructure | ✓ | ROD received end of 2010 |
| Integrated Water Use License | DWEA (Department of water and environmental affairs) | Infrastructure that impacts use of or quality of water, e.g. tailings dam, pollution control structures etc. | ✓ | ROD received in 2H11 |
| Dam Safety License (Slimes Dam) | DWEA (Department of water and environmental affairs) | Infrastructure that impacts use of or quality of water, e.g. tailings dam, pollution control structures etc. | ✗ | Awaiting ROD |

Source: Company Reports

Key milestones

NHM has previously identified a number of key interim milestones in order to achieve its overall target of steady-state production from Phase 1 by July 2013. We highlight these below:

Figure 77. Booyensdal Phase 1 key milestones



Source: Company Reports

Remaining challenges

Slimes dam

In its current design, the tailings-dam would be situated against the “valley-wall”. The steep topography of this location would require the construction of a significant side-wall and is likely to make construction more costly and challenging than the typical slimes dam. NHM estimates the capex requirement for the slimes dam as R300m, approximately 8% of total capex.

This slimes dam would have a life of approximately 16 years. NHM is currently investigating additional/alternative sites, including Skaapskraal. However, pumping to Skaapskraal would require additional electricity, something that is a very scarce commodity for Booyssendal.

Electricity allocation

NHM currently has 20 MVA overall electricity allocation, 15 MVA from the Steenberg power station and 5 MVA from AMS's Mototolo. The company would also be installing 5MW of back-up generating capacity, should power failures occur. The back-up power is, however, only sufficient to power emergency circuits and would be unable to support production.

NHM faces the challenge that it would require 22 MVA electricity if it has to pump slimes to Skaapskraal, which implies a potential 2 MVA shortfall.

Social and environmental

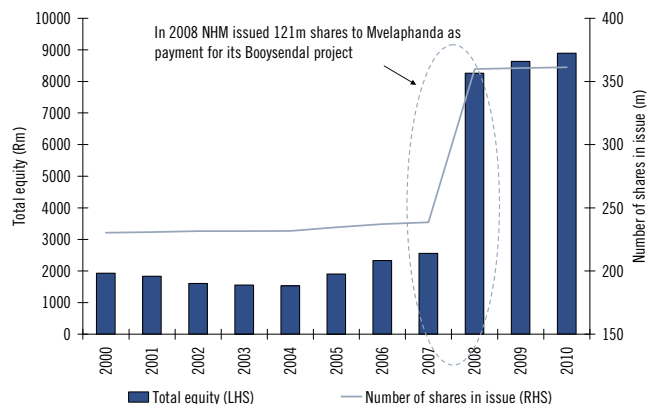
In addition to technical challenges, NHM also still has a number of social and environmental issues to address, including the engagement of some local tribes.

We caution that the nature of some of these issues can be socially sensitive and cannot be ignored as potential downside risks for the project.

ROE & ROIC Analysis

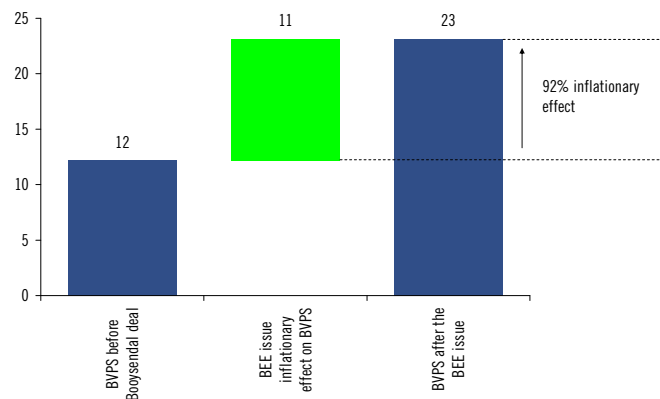
During FY08 NHM issued 121m shares to Mvelaphanda as payment for its Booyensdal project (R5.5bn). The share issue price of R45.50 was above NHM's book value per share of R12 at that stage, which resulted in a 92% increase in book value. Post the share issue, NHM's book value was R23 per share.

Figure 78. NHM's historical equity evolution (Rm, 2000-2010)



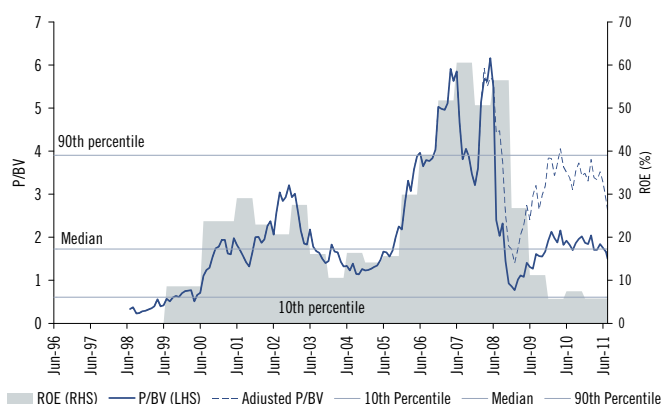
Source: Company reports and Bloomberg

Figure 79. NHM's Booyensdal deal inflated its BV 92%



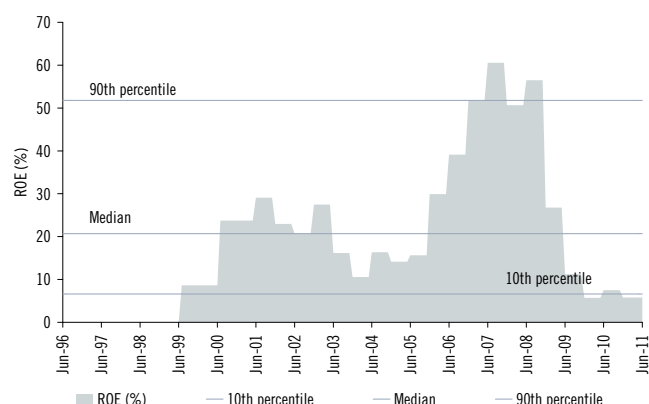
Source: Company reports, CIRA

Figure 80. NHM historical Adjusted P/BV and ROE



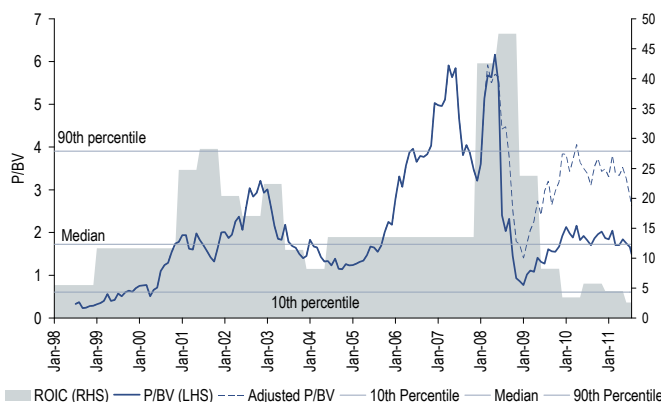
Source: Company reports and Bloomberg

Figure 81. NHM historical ROE



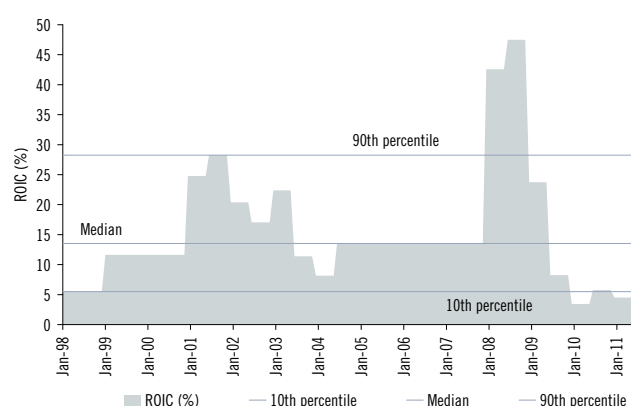
Source: Company reports and Bloomberg

Figure 82. NHM historical Adjusted P/BV and ROIC



Source: Company reports and Bloomberg

Figure 83. NHM historical ROIC



Source: Company reports and Bloomberg

Valuation and Risks

Earnings downgrades

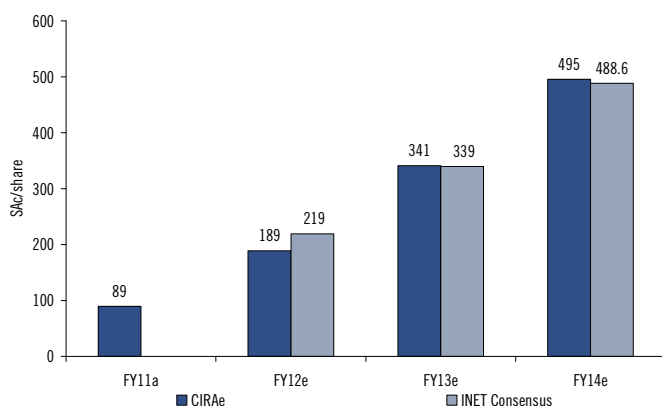
We downgrade our FY12e, 13e and 14e earnings expectations to 189c (-14%), 341c (-12%) and 495c (-1%) respectively on the back of new PGM price assumptions.

Figure 84. NHM forecast changes

| | FY11a | FY12e | FY13e | FY14e |
|-------------------------------|---------|---------|---------|---------|
| Production (000 ounces)- new | 250 | 282 | 377 | 485 |
| Production (000 ounces) - old | 250 | 282 | 377 | 485 |
| %change | 0% | 0% | 0% | 0% |
| Cash costs (USD/ounce)- new | 1241 | 1146 | 988 | 903 |
| Cash costs (USD/ounce) - old | 1241 | 1146 | 988 | 903 |
| % change | 0% | 0% | 0% | 0% |
| Cash costs (R/kg) - new | 278,965 | 259,883 | 256,984 | 252,127 |
| Cash costs (R/kg) - old | 278,965 | 259,883 | 256,984 | 252,127 |
| % change | 0% | 0% | 0% | 0% |
| Earnings (SAc) - new | 89 | 189 | 341 | 495 |
| Earnings (SAc) - old | 89 | 219 | 389 | 499 |
| % change | 0% | -14% | -12% | -1% |

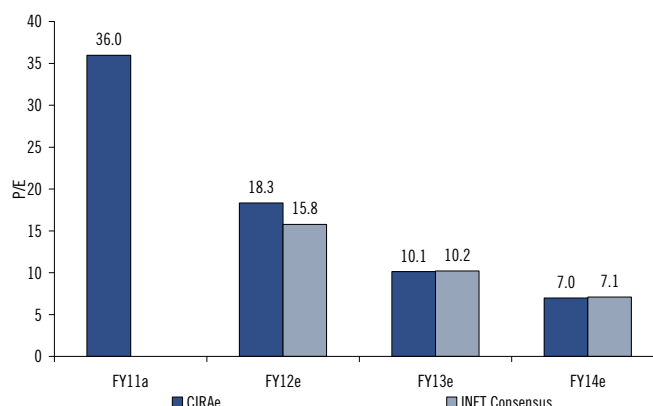
Source: Citi Investment Research and Analysis

Figure 85. Citi HEPS outlook for NHM vs. consensus



Source: Citi Investment Research and Analysis, Inet

Figure 86. Citi PE outlook for NHM vs. consensus



Source: Citi Investment Research and Analysis, Inet

Valuation: Maintain Buy, TP R50

We maintain our view that NHM is uniquely positioned as a low-cost, medium-term growth story. Buy, TP R50.

We value NHM based on a sum-of-the-parts discounted cash flow (DCF) analysis. Our model uses a nominal WACC of 11.9% (beta 1.0, ERP 5.0%, RFR 8.5%) and discounts forecast cash flows over the life of the group's individual assets. We apply a 1.0x P/DCF exit multiple as we do not expect near- to medium-term PGM prices to rise substantially above our long-term price assumptions.

Figure 87. NHM sum-of-the-parts DCF valuation (Rm)

| NAV calculation | DCF (Rm) | Exit multiple (x) | Market value (Rm) | % of total |
|--------------------------------------|---------------|-------------------|-------------------|------------|
| Northam mine | 9,170 | 1.0 | 9,170 | 55 |
| Booysendal | 7,502 | 1.0 | 7,502 | 45 |
| Operational value | 16,672 | 1.0 | 16,672 | |
| Net (debt)/cash | 1,451 | 1.0 | 1,451 | |
| Investments | 341 | 1.0 | 341 | |
| Overhead costs | - | 1.0 | - | |
| Financial obligations | 1,793 | | 1,793 | |
| NAV | 18,465 | | 18,465 | |
| Equity value (Rm) | 18,465 | | | |
| Market cap (Rm) | 16,698 | | | |
| Number of shares in issue (m) | 363 | | | |
| CIRA target price (ZAR/share) | 50 | | | |

Source: Citi Investment Research and Analysis

Risks

We rate NHM Medium Risk to reflect the volatile nature of PGM prices offset by the generally stable regulatory environment the company operates in. Our valuation of NHM is exposed to macroeconomic developments affecting PGM prices and exchange rates, operational risks that might affect volumes and input costs, and political and regulatory risks that might affect costs and the company's reputation. As a junior platinum mining company with attractive low-cost growth potential, our valuation of NHM is also exposed to corporate activity risk.

- **Macroeconomic risks:** Our valuation on NHM is highly dependent on input assumptions of the platinum, palladium, and rhodium prices, as well as the rand-dollar exchange rate. Downside risks to our view include lower-than-expected PGM prices and a stronger-than-expected rand. Conversely, upside risks to our view include higher-than-expected PGM prices and a weaker-than-expected rand.
- **Operational risks:** We base our production and cost outlook for NHM's individual mines on management guidance and by applying our discretion to management's guidance and targets. The main operational downside risks to our view are: 1) a significant delay in the ramp-up of Booysendal; 2) significant escalation in capex requirements for Booysendal; and 3) further unforeseen geological complexities at its Zondereinde mine.
- **Political and regulatory risks:** IMP's operations and future projects are based in SA and Zimbabwe. The company is subsequently exposed to government and regulatory-related risks in these countries. Specific risks include higher-than-expected royalties, production delays from government intervention and labour unrest.

Royal Bafokeng Platinum

Company Focus

- Company Update
- Estimate Change

| | |
|------------------------------|--------------|
| Buy/Medium Risk | 1M |
| Price (31 Aug 11) | R58.99 |
| Target price | R70.00 |
| Expected share price return | 18.7% |
| Expected dividend yield | 0.0% |
| Expected total return | 18.7% |
| Market Cap | R9,741M |
| | US\$1,392M |

Price Performance (RIC: RBPJ.J, BB: RBP SJ)



Royal Bafokeng Platinum (RBPJ.J) Four Reasons to Buy RBP

- **Buy, despite difficult 1H11** — RBP's share price has decreased 18% y-t-d, in line with the South African (SA) platinum sector. We believe this pull-back provides an attractive entry point for longer-term investors. Its current market valuation does not reflect the full upside from Boschkoppie and Styldrift, in our view. Maintain Buy, TP R70.
- **Low-cost, cash-generative asset** — RBP's Boschkoppie mine is one of the shallowest and highest-grade mines in the SA platinum sector. We also believe that further value unlock is possible at Boschkoppie through a more aggressive cost management approach.
- **Superior long-term growth** — Similar to Boschkoppie, RBP's Styldrift project should be shallower and higher grade than most of its peers. It will provide RBP with 125% (344,000 ounces 4E) low-cost growth by 2017.
- **Geographically well positioned** — RBP's assets are neighboured by three of its peers. Since it holds the key to low-cost long-life mining in the Western Bushveld, we believe it is strategically well positioned to partake in industry consolidation.
- **Attractive valuation** — Our target price for RBP now presents 19% upside from current levels, following the recent pull-back in its market valuation.
- **Valuation and Risks** — We downgrade our FY11-14 earnings outlook on the back of new PGM prices, maintain Buy, TP R70. Our R70 TP for RBP is based on a 1.2x P/DCF exit multiple, which we view as applicable given its favourable strategic position within the SA platinum sector. Barring lower rand-PGM prices, the main downside risk to our view is RBP's management failing to control costs. We believe a more aggressive cost management approach is needed in order to achieve optimal value for shareholders.

Royal Bafokeng Platinum (ZAR)

| Year to 31 Dec | 2009A | 2010A | 2011E | 2012E | 2013E |
|-----------------------|---------|---------|---------|---------|---------|
| Sales (RM) | 1,154.7 | 2,106.1 | 3,149.1 | 3,679.8 | 3,987.3 |
| Net Income (RM) | -122.8 | 271.8 | 458.3 | 593.6 | 714.7 |
| Diluted EPS (¢) | -1,068 | 192 | 280 | 362 | 436 |
| Diluted EPS (Old) (¢) | -1,068 | 192 | 289 | 371 | 467 |
| PE (x) | -5.5 | 30.7 | 21.1 | 16.3 | 13.5 |
| EV/EBITDA (x) | na | 13.3 | 9.9 | 8.4 | 8.0 |
| DPS (¢) | 0 | 0 | 0 | 0 | 0 |
| Net Div Yield (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Fiscal year end 31-Dec | 2009 | 2010 | 2011E | 2012E | 2013E |
|--|--------------|---------------|---------------|---------------|---------------|
| Valuation Ratios | | | | | |
| P/E adjusted (x) | -5.5 | 30.7 | 21.1 | 16.3 | 13.5 |
| EV/EBITDA adjusted (x) | na | 13.3 | 9.9 | 8.4 | 8.0 |
| P/BV (x) | 1.2 | 0.9 | 0.9 | 0.8 | 0.8 |
| Dividend yield (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Per Share Data (¢) | | | | | |
| EPS adjusted | -1,068 | 192 | 280 | 362 | 436 |
| EPS reported | -1,068 | 2,241 | 280 | 362 | 436 |
| BVPS | 4,975 | 6,686 | 6,596 | 7,047 | 7,574 |
| DPS | 0 | 0 | 0 | 0 | 0 |
| Profit & Loss (RM) | | | | | |
| Net sales | 1,155 | 2,106 | 3,149 | 3,680 | 3,987 |
| Operating expenses | -969 | -1,656 | -2,430 | -2,697 | -2,730 |
| EBIT | 185 | 450 | 719 | 983 | 1,257 |
| Net interest expense | -303 | 3 | 0 | -50 | -130 |
| Non-operating/exceptionals | 0 | 2,886 | -73 | -97 | -121 |
| Pre-tax profit | -118 | 3,339 | 645 | 836 | 1,007 |
| Tax | -5 | -172 | -187 | -242 | -292 |
| Extraord./Min.Int./Pref.div. | 0 | -1 | 0 | 0 | 0 |
| Reported net income | -123 | 3,167 | 458 | 594 | 715 |
| Adjusted earnings | -123 | 272 | 458 | 594 | 715 |
| Adjusted EBITDA | 331 | 830 | 1,269 | 1,583 | 1,807 |
| Growth Rates (%) | | | | | |
| Sales | na | 82.4 | 49.5 | 16.9 | 8.4 |
| EBIT adjusted | na | 146.3 | 57.3 | 36.8 | 27.9 |
| EBITDA adjusted | na | 150.9 | 52.8 | 24.8 | 14.2 |
| EPS adjusted | na | 118.0 | 45.4 | 29.5 | 20.4 |
| Cash Flow (RM) | | | | | |
| Operating cash flow | 241 | 785 | 1,130 | 1,317 | 1,382 |
| Depreciation/amortization | 145 | 373 | 550 | 600 | 550 |
| Net working capital | -73 | -51 | 48 | 27 | -3 |
| Investing cash flow | -412 | -880 | -1,567 | -2,311 | -2,906 |
| Capital expenditure | -419 | -719 | -1,567 | -2,311 | -2,906 |
| Acquisitions/disposals | 0 | 0 | 0 | 0 | 0 |
| Financing cash flow | 42 | 943 | 0 | 1,000 | 1,600 |
| Borrowings | 42 | 0 | 0 | 1,000 | 1,600 |
| Dividends paid | 0 | 0 | 0 | 0 | 0 |
| Change in cash | -129 | 847 | -437 | 6 | 77 |
| Balance Sheet (RM) | | | | | |
| Total assets | 7,277 | 18,451 | 18,614 | 20,437 | 22,931 |
| Cash & cash equivalent | 52 | 899 | 462 | 468 | 545 |
| Accounts receivable | 592 | 1,047 | 630 | 736 | 797 |
| Net fixed assets | 3,652 | 7,338 | 8,355 | 10,066 | 12,421 |
| Total liabilities | 462 | 4,099 | 4,411 | 5,496 | 7,127 |
| Accounts payable | 97 | 415 | 726 | 811 | 843 |
| Total Debt | 0 | 0 | 0 | 1,000 | 2,600 |
| Shareholders' funds | 6,815 | 14,352 | 14,203 | 14,942 | 15,804 |
| Profitability/Solvency Ratios (%) | | | | | |
| EBITDA margin adjusted | 28.7 | 39.4 | 40.3 | 43.0 | 45.3 |
| ROE adjusted | na | 3.1 | 4.2 | 5.3 | 6.0 |
| ROIC adjusted | na | 2.4 | 3.1 | 4.0 | 4.7 |
| Net debt to equity | -0.8 | -6.3 | -3.3 | 3.6 | 13.0 |
| Total debt to capital | 0.0 | 0.0 | 0.0 | 6.3 | 14.1 |

For further data queries on Citi's full coverage universe please contact CIRA Data Services Europe at CIRADataServicesEMEA@citi.com or +44-207-986-4050

Four reasons to Buy RBP

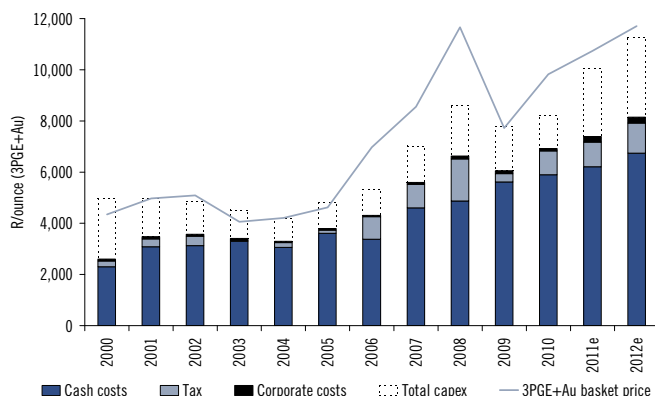
1. Low-cost, cash-generative asset

Boschkoppie has been highly cash generative...

Boschkoppie has been highly cash-flow generative

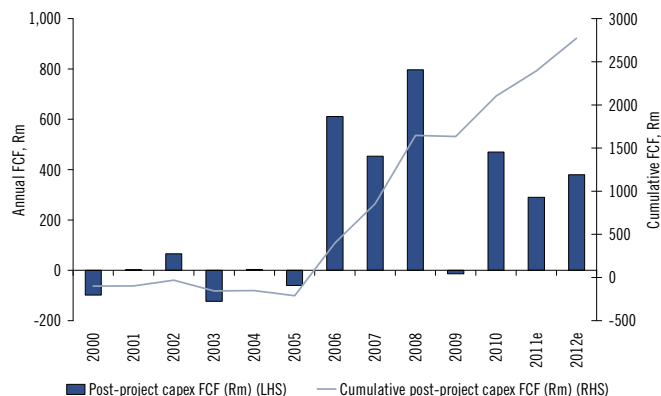
RBP's Boschkopie mine has been highly cash generative over the past decade, especially since 2006. We estimate that it generated a cumulative R2bn in post-project capex free cash flow between 2006 and 2010.

Figure 88. Boschkopie historical "all-in cost" evolution (R/ounce)



Source: Company Reports and CIRA Estimates

Figure 89. Boschkopie historical post-project capex FCF (Rm)

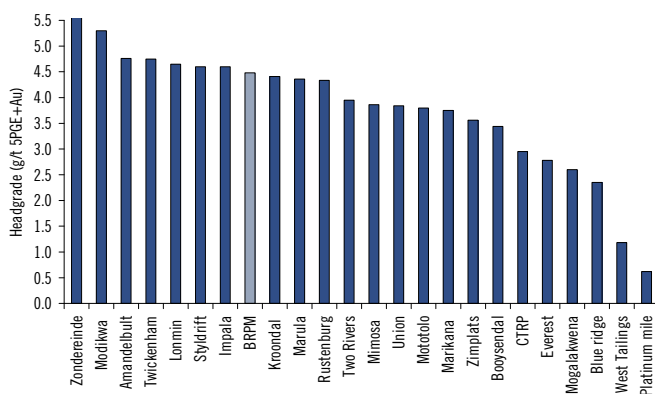


Source: Company Reports and CIRA Estimates

Mainly due to its high-grade reserves, favourable prill split, and shallow mining depths...

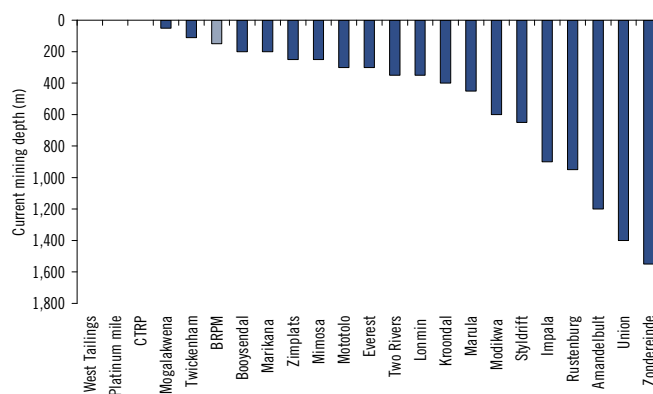
Boschkoppie's cash-generative capacity has been largely due to its high-grade reserves (4.5 g/t, 5PGE+Au), favourable prill split (Pt: 63%, Pd: 28%, Rh: 4%, Au: 5%), and shallow mining depths (150m).

Figure 90. Comparative head grades (5PGE+Au)



Source: Company Reports and CIRA Estimates

Figure 91. Comparative mining depths

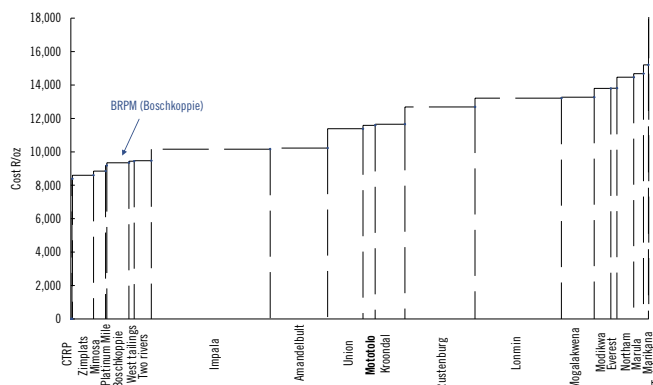


Source: Company Reports and CIRA Estimates

...which earned it a favourable position on the cost curve

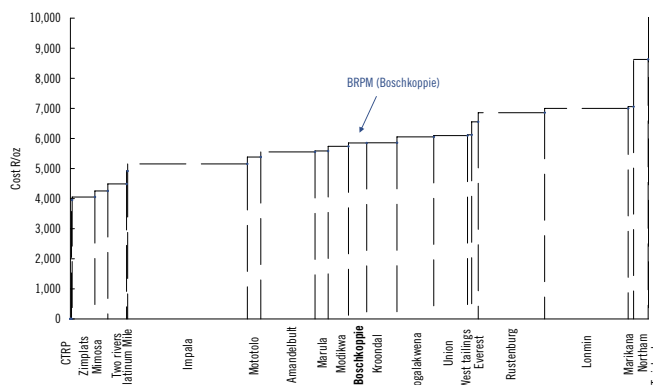
These characteristics have resulted in Boschkopie occupying a favourable position on the global cost curve, especially on a "per-platinum" ounce basis.

Figure 92. 2H10 platinum cash cost curve (R/oz, Pt)



Source: Citi Investment Research and Analysis, Company Reports

Figure 93. 2H10 5PGE+Au cash cost curve (R/oz, 5PGE+Au)



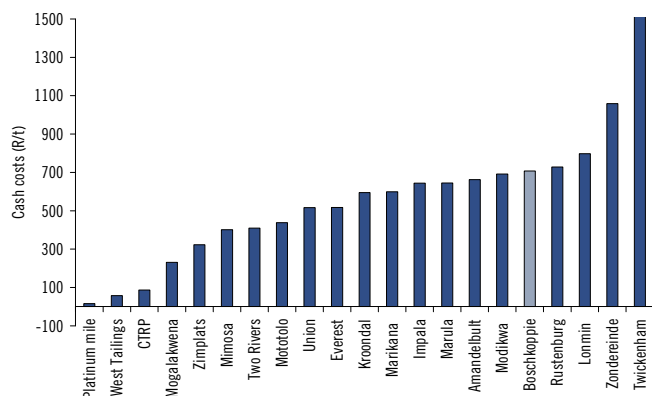
Source: Citi Investment Research and Analysis, Company Reports

...despite previous operational inefficiencies

Boschkoppie's cash-generating capacity was despite historical operational inefficiencies

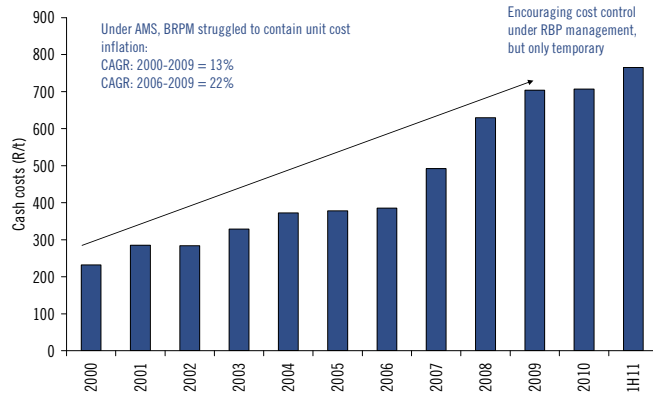
Even though Boschkopie has been highly free cash flow (FCF) generative, we believe it has not performed to its full potential under the previous Anglo Platinum (AMS) management. This is as its 50th percentile cost curve position (on a 5PGE+Au basis) does not fully reflect its Q1 and Q2 positions on a mining depth and grade basis, respectively. In fact, on a R/t basis, Boschkopie ranks in Q3 of the cost curve (Figure 7). This is as it failed to control unit cost inflation in 2006 to 2009, during which period R/t costs increased by a CAGR of 22%.

Figure 94. CY10 unit cash costs (R/t)



Source: Citi Investment Research and Analysis, Company Reports

Figure 95. BRPM (Boschkoppie) historical unit cost evolution (R/t)



Source: Company Reports

We see significant turnaround potential under a more focused management team

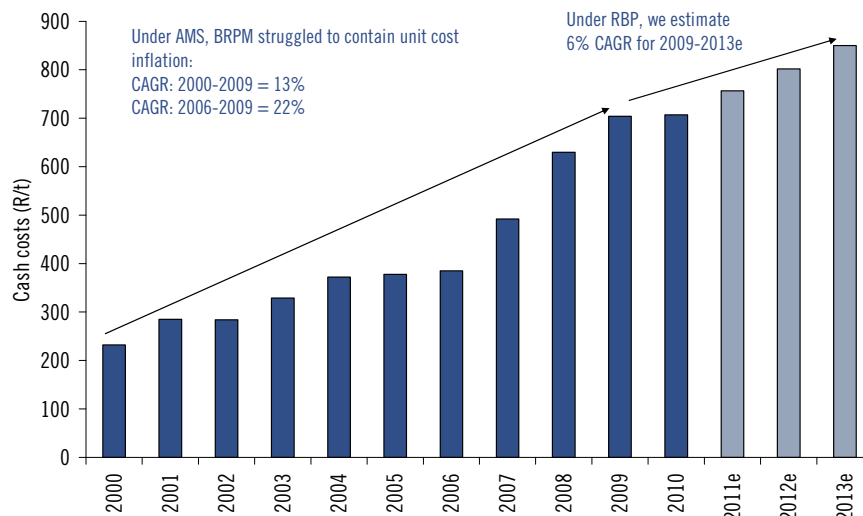
As a result, we believe significant turnaround potential exists through a more focused approach by the RBP management team. To date, however, its turnaround initiatives through Project Kgolo have yielded limited results. Even though 2010 unit costs only increased by 2% y-o-y to R717/tonne, 1H11 escalated by 14% y-o-y to R765/tonne.

“Easy-wins” are available, but more aggressive management approach needed

Through a more aggressive management approach, RBP can rein in costs

We believe that through a more aggressive management approach, RBP can keep costs constant in real terms over the medium term.

Figure 96. BRPM (Boschkoppie) unit cost outlook (R/t)

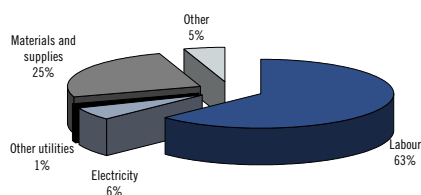


Source: Company Reports and CIRA Estimates

We believe this is achievable, and the biggest lever would be right-sizing its headcount

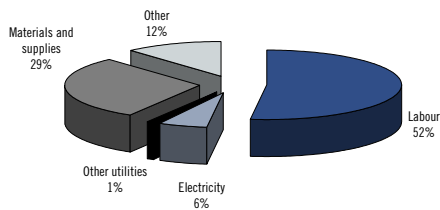
Probably the biggest lever for achieving this would be to right-size its headcount to something more in line with that of its peers. Labour currently forms 63% of RBP's cost base, compared to 49% on average for its peers. Contract labour forms 35% of RBP's labour costs. As a result, right-sizing through reducing contract labour would be a feasible method for reining in costs, in our view.

Figure 97. RBP cost breakdown



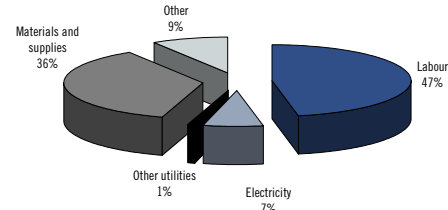
Source: Company Reports

Figure 98. AMS cost breakdown



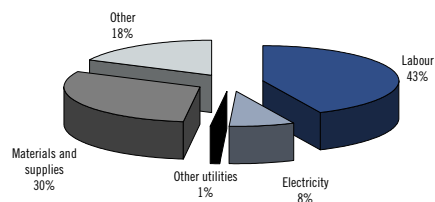
Source: Company Reports

Figure 99. IMP cost breakdown



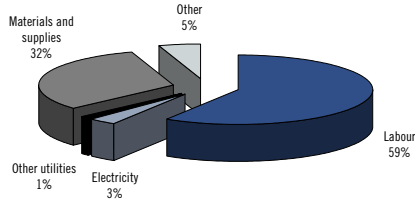
Source: Company Reports

Figure 100. NHM cost breakdown



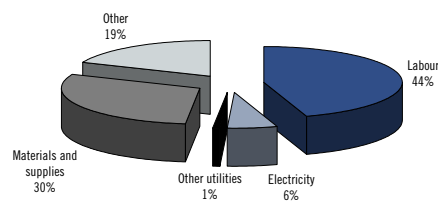
Source: Company Reports

Figure 101. LON cost breakdown



Source: Company Reports

Figure 102. AQP cost breakdown



Source: Company Reports

2. Attractive medium- to longer-term growth outlook

Styldrift will add 344,000 ounces by 2017E

In addition to Boschkoppie, RBP is in the process of developing its Styldrift project, which we estimate will add 344,000 ounces (3PGE+Au) by 2017. We highlight some of the project's parameters in Figure 103 below:

Figure 103. Styldrift project parameters

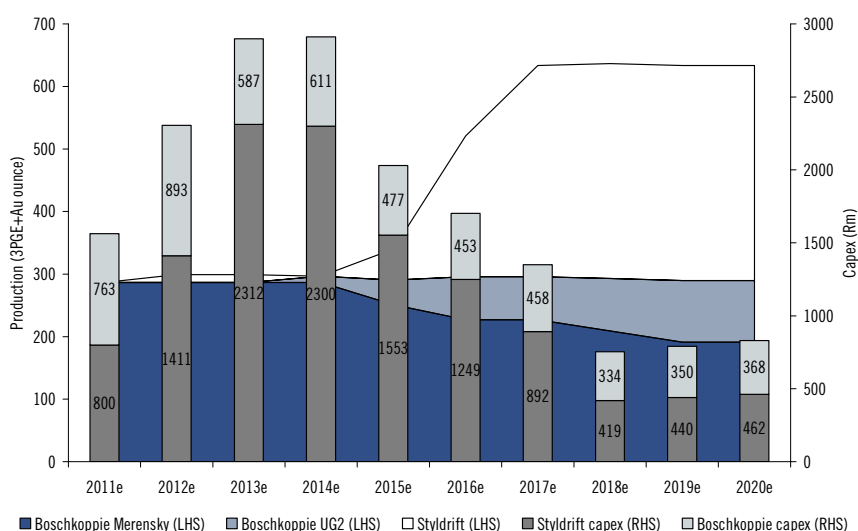
| Project parameter | Units | Value |
|-------------------------------------|--------------|-------|
| Steady-state volumes | 000 tonnes | 2750 |
| Merensky head grade | g/t, 3PGE+Au | 4.45 |
| UG2 head grade | | 4.00 |
| Merensky recovery | % | 86% |
| UG2 recovery | | 78% |
| PGM production | 000 ounces | 344 |
| Platinum production | | 220 |
| Unit cash costs | R/t | 560 |
| Year in which steady-state achieved | year | 2017 |
| Project capex | Rbn | 11.2 |
| Sustaining capex | % of opex | 12% |

Source: Company Reports and CIRA Estimates

The development of Styldrift, together with the expansion projects at Boschkoppie, should result in significant capital requirement for RBP over the next seven years. We estimate peak capex of approximately R3.0bn p.a. in 2013 and 2014, respectively.

Styldrift to add 344,000 ounces by 2017E...

Figure 104. RBP production profile and capex, including Styldrift I



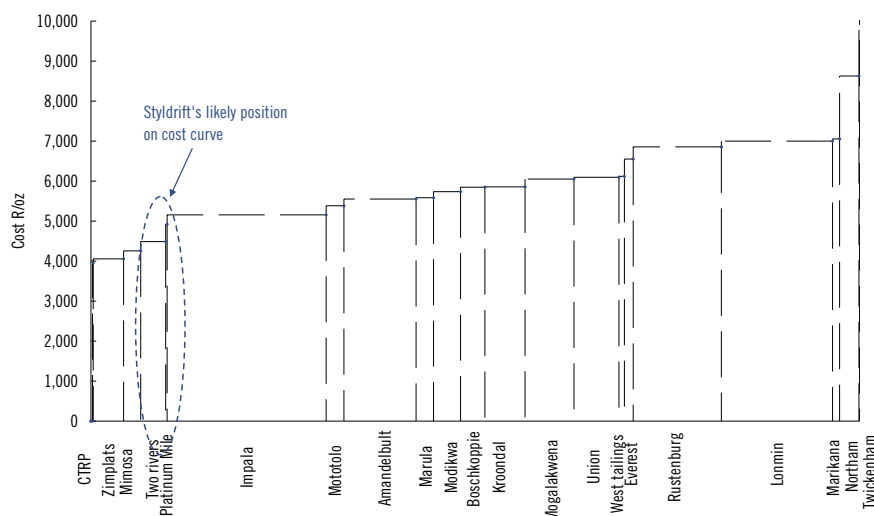
Source: Company Reports and CIRA Estimates

We expect Styldrift to come online in Q1 of the cost curve

Based on the feasibility numbers, we expect Styldrift to produce at steady-state unit costs of R560/t, real. On a per-ounce basis (5PGE+Au), this translates into approximately R4,450/ounce. As a result, we expect Styldrift to be positioned in Q1 of the cost curve.

...and will be positioned in Q1 of the cost curve...

Figure 105. Styldrift's estimated position on the 5PGE+Au cash cost curve, in 2010 real terms (R/ounce, 5PGE+Au)

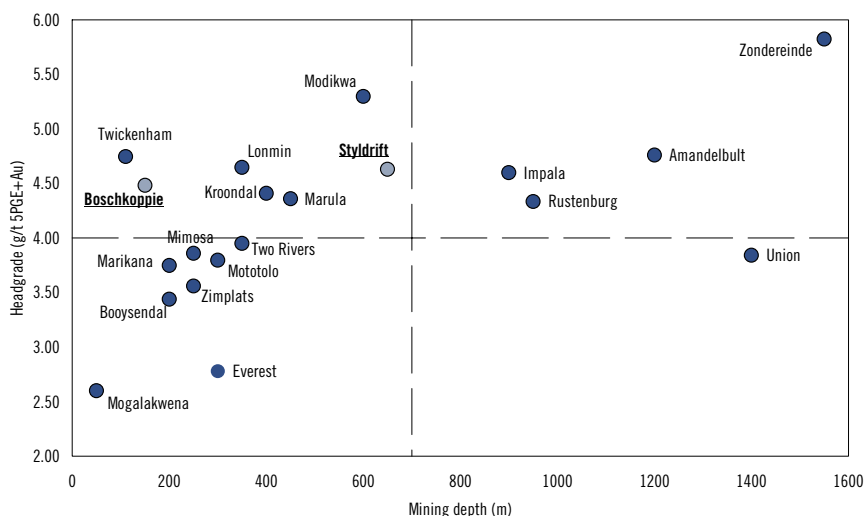


Source: Citi Investment Research and Analysis, Company Reports

...mainly due to its high-grade and shallow reserves

This low-cost position is despite its similar head-grade and deeper mining depth compared to Boschkopie, and mainly due to a broader reef width (Styldrift: 1.3-2.5m, Boschkopie: 80cm) that will lend itself to mechanised mining.

Figure 106. SA platinum mine comparative head-grades and mining depths (5PGE+Au, m)



Source: Company Reports and CIRA Estimates

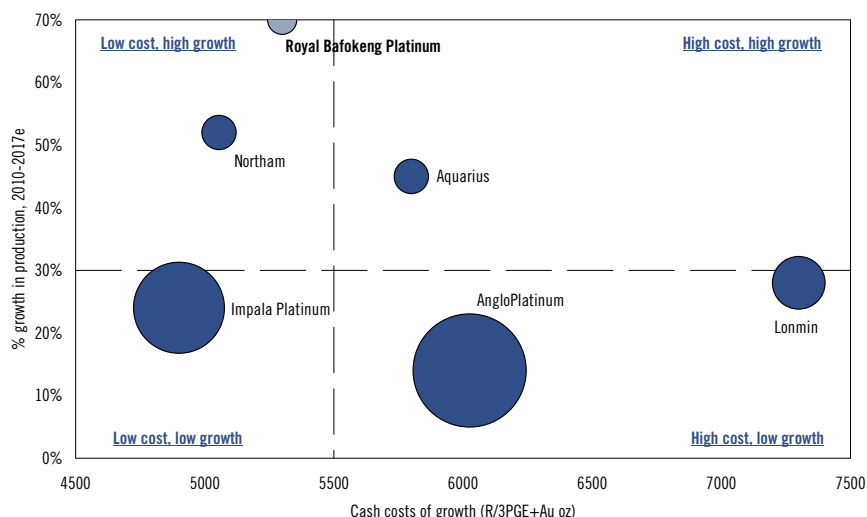
This, together with its favourable head-grade and mining depth, will make Styldrift (and RBP) very cost-competitive relative to its peers.

Relative to its peers, RBP offers a superior 7-year growth outlook...

Styldrift should provide RBP with superior low-cost growth

The ramp-up of Styldrift provides RBP with a superior growth outlook relative to its peers, at attractively low-cost, in our view. We expect RBP to grow production by 120% between 2010-2017, compared to NHM 52%, Aquarius Platinum (AQP) 45%, Lonmin (LON) 28%, IMP 25% and AMS 15%.

Figure 107. Comparative growth* and cost of growth, outlook for SA platinum companies (% R/ounce)



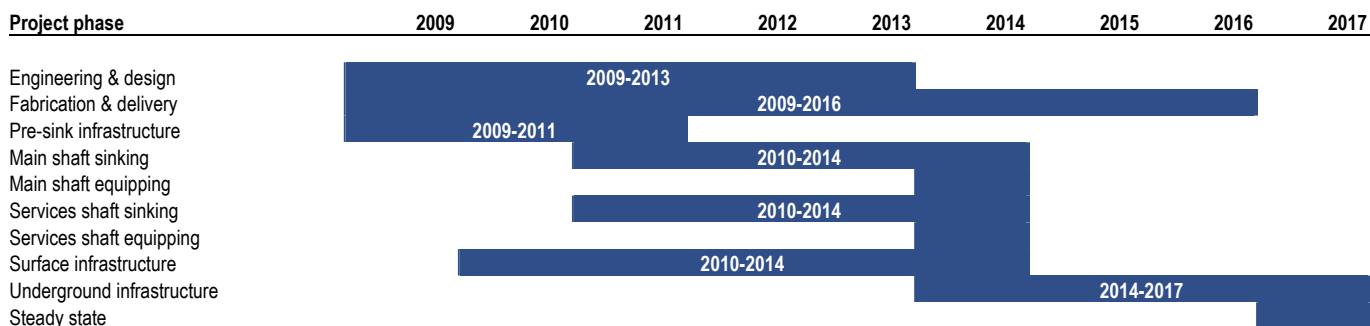
Source: Company Reports and CIRA Estimates

*RBP's growth limited to 70% on this chart for presentation purposes. Actual growth is estimated at 120%

Styldrift I timeline

To date, RBP is on schedule and within budget on Styldrift I. It aims to reduce the initial R11.8bn capex estimate by R1.0bn through capital efficiency improvements.

Figure 108. Styldrift I timetable



Source: Company reports and Citi Investment Research and Analysis

Further longer-term upside exists through Styldrift Phase II

RBP holds additional long-term expansion potential through Styldrift Phase II, which is not incorporated in our outlook at this stage. Styldrift II is currently in conceptual phase and contains an estimated 54m ounces of Measured and Indicated resources, and 21m ounces of Inferred resources (3PGE+Au). The existing drill

programme will continue until the end of 2011. We expect the pre-feasibility study to commence early in 2012 and feasibility in 2013. At best, we expect development to commence in 2015.

The magnitude, capex requirements and cost estimates for Styl drift II are difficult to estimate at this early stage. However, given that it will be deeper than Styl drift I, we expect Styl drift II's unit costs and capital requirements to be higher.

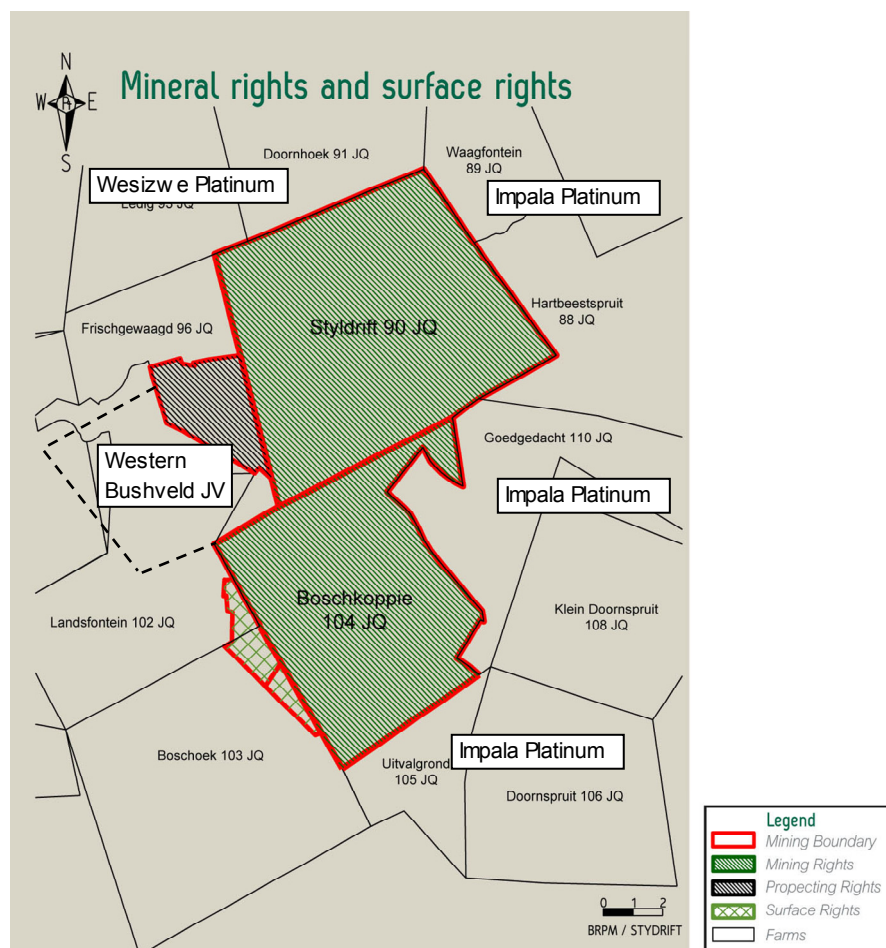
3. Ideally located to partake in industry consolidation

Geographically well positioned...

The BRPM operations and mineral and surface rights are neighboured by three of its peers, namely: 1) IMP from the North East to the South, 2) Wesizwe Platinum (WEZ) in the North, and 3) AMS's Western Bushveld JV (WBJV) with WEZ and Platinum Group Metals in the West.

RBP is geographically well positioned to partake in industry consolidation

Figure 109. RBP mining rights and surrounding companies



Source: RBP/Plat

RBP has already been involved in a number of corporate actions

...as well as strategically

It also holds the key to shallow, low-cost, and long-life mining in the Western-limb complex. These attributes are highly in demand in the SA platinum sector, especially since existing mines are getting deeper and more costly to operate. IMP, in particular, faces this outlook at its lease area, which co-incidentally lies directly adjacent to BRPM.

No wonder it has already been involved in numerous corporate actions

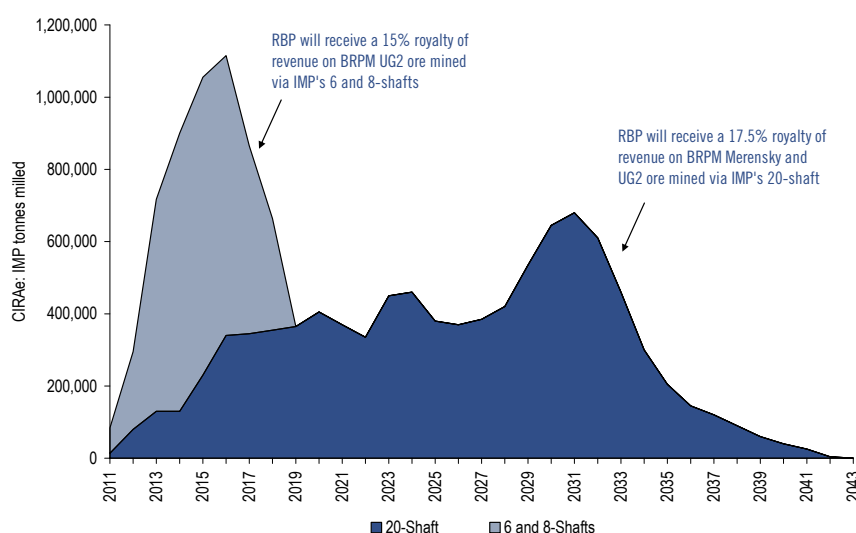
RBP's location and access to low-cost shallow ounces make it strategically well positioned to benefit from value-enhancing JV agreements and the future consolidation of the SA platinum sector.

It is therefore no surprise that it was approached by IMP in a takeover attempt in 2010. This attempt was, however, vetoed by AMS.

To date, RBP has also entered into two value-enhancing royalty agreements with: 1) IMP's 6 and 8-shafts, and 2) IMP's 20-shaft.

- **IMP 6 and 8-shaft royalty agreement:** Pre its listing in November 2010, RBP entered into an agreement with IMP whereby RBP would earn a royalty of 15% of IMP's revenue generated from the mining of the BRPM UG2 ore body in close proximity to IMP's 6 and 8-shafts. The ore body contains approximately 780,000 ounces of 3PGE+Au ounces and will be mined over an eight-year period.
- **IMP 20-shaft royalty agreement:** In 2011, RBP also agreed terms with IMP to mine a further portion of the BRPM Merensky and UG2 resources via IMP's 20-shaft at the far northern section of the Boschkoppe property. The ore body contains approximately 2.2m ounces of 3PGE+Au resources and will be mined over a 30-year period. RBP will receive a royalty from IMP of 17.5% of revenue.

Figure 110. Estimated volume profile of RBP's existing royalty agreements (tonnes)



Source: Company Reports and CIRA Estimates

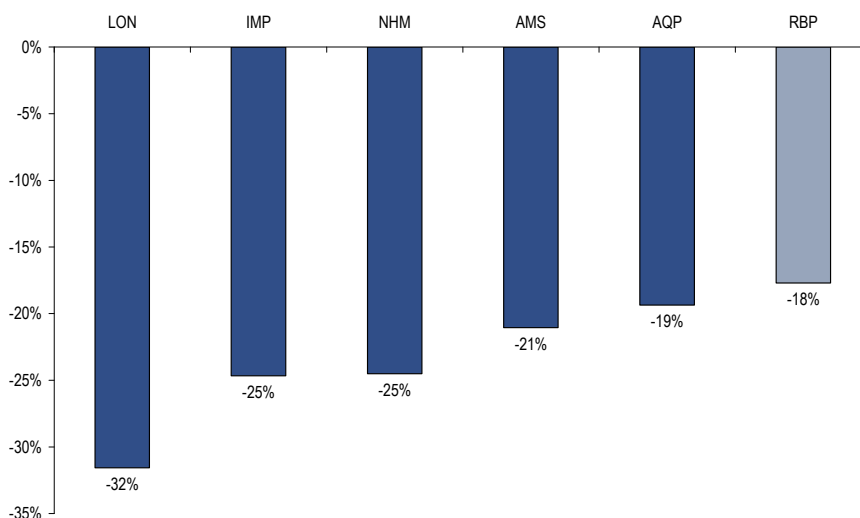
4. Appealing Valuation

Attractive upside

Attractive entry point

RBP's market valuation has decreased 18% y-t-d. Even though it has outperformed its peers, we believe the stock has attractive upside.

Figure 111. Relative share price performances (y-t-d)



Source: Inet

We forecast an expected total return (ETR) of 20% over the next 12 months. Maintain Buy, TP R70.

Figure 112. CIRA mining valuation comparatives sheet (calendarised)

| | TP Curr. | Rating | Current price | TP % upside | CY11e DY (%) | ETR* (%) | Current P/DCF | P/E | | | EV/EBITDA | | | |
|-------------------|----------|----------|---------------|-------------|--------------|----------|---------------|------|-------|-------|-----------|-------|-------|-----|
| | | | | | | | | CY10 | CY11e | CY12e | CY10 | CY11e | CY12e | |
| Xstrata | GBP | Buy, 1M | 10.66 | 18.01 | 68.9 | 1.9 | 70.9 | 0.5 | 9.9 | 7.9 | 7.0 | 6.1 | 4.9 | 4.4 |
| Barrick gold | USD | Buy, 1M | 50.75 | 78.00 | 53.7 | 0.9 | 54.6 | 2.0 | 15.1 | 10.5 | 9.7 | 9.5 | 6.5 | 6.1 |
| Anglo American | GBP | Buy, 1M | 25.46 | 38.00 | 49.3 | 2.1 | 51.3 | 0.7 | 10.4 | 7.3 | 6.1 | 5.8 | 4.2 | 3.3 |
| BHP Billiton | GBP | Buy, 1M | 20.89 | 30.00 | 43.6 | 3.2 | 46.8 | 0.7 | 10.8 | 7.9 | 7.6 | 6.7 | 5.2 | 5.0 |
| Rio Tinto | GBP | Buy, 1M | 37.51 | 52.00 | 38.6 | 2.0 | 40.7 | 0.7 | 8.5 | 6.5 | 7.0 | 4.5 | 3.2 | 2.9 |
| Northam | ZAR | Buy, 1M | 36.29 | 50.00 | 37.8 | 0.9 | 38.7 | 0.7 | 28.5 | 25.7 | 13.7 | 18.0 | 15.8 | 8.7 |
| Randgold | GBP | Buy, 1M | 64.20 | 86.78 | 35.2 | 0.9 | 36.1 | 1.2 | 68.4 | 22.3 | 11.9 | 45.3 | 13.4 | 7.1 |
| Assore | ZAR | Buy, 1M | 215.51 | 280.00 | 29.9 | 4.9 | 34.8 | 0.8 | 11.5 | 7.7 | 6.9 | 7.5 | 5.2 | 4.6 |
| African Rainbow | ZAR | Buy, 1M | 186.00 | 240.00 | 29.0 | 3.5 | 32.5 | 0.9 | 16.0 | 10.1 | 8.1 | 6.7 | 4.6 | 3.7 |
| Newmont | USD | Buy, 1M | 62.62 | 80.00 | 27.8 | 1.9 | 29.7 | 1.8 | 13.5 | 13.4 | 12.7 | 6.5 | 5.9 | 6.0 |
| Impala Platinum | ZAR | Buy, 1M | 180.25 | 220.00 | 22.1 | 3.4 | 25.5 | 0.7 | 19.9 | 14.5 | 12.0 | 10.1 | 7.4 | 6.3 |
| Aquarius | AUD | Hold, 2H | 3.71 | 4.50 | 21.3 | 2.6 | 23.9 | 0.8 | 23.7 | 16.0 | 12.1 | 9.9 | 8.2 | 6.8 |
| Newcrest | AUD | Buy, 1M | 39.45 | 48.00 | 21.7 | 1.2 | 22.9 | 1.8 | 30.5 | 23.0 | 17.8 | 21.6 | 12.7 | 9.6 |
| RBPlat | ZAR | Buy, 1M | 58.50 | 70.00 | 19.7 | 0.0 | 19.7 | 1.0 | 31.7 | 20.7 | 16.1 | 14.0 | 9.8 | 8.3 |
| AngloGold Ashanti | ZAR | Hold, 2M | 315.41 | 360.00 | 14.1 | 1.4 | 15.5 | 1.6 | -9.6 | 11.6 | 9.2 | 14.0 | 6.0 | 4.9 |
| Exxaro | ZAR | Hold, 2M | 186.19 | 200.00 | 7.4 | 3.8 | 11.2 | 1.2 | 13.5 | 8.7 | 7.4 | 17.4 | 10.4 | 7.9 |
| Lonmin | GBP | Hold, 2M | 12.91 | 13.63 | 5.6 | 1.5 | 7.1 | 1.0 | 27.2 | 17.1 | 10.7 | 9.5 | 6.5 | 4.4 |
| Anglo Platinum | ZAR | Sell, 3M | 584.02 | 610.00 | 4.4 | 1.9 | 6.4 | 1.0 | 27.2 | 21.0 | 15.3 | 14.1 | 10.1 | 7.7 |
| Kumba Iron Ore | ZAR | Sell, 3M | 486.95 | 430.00 | -11.7 | 9.1 | -2.6 | 1.4 | 11.4 | 8.7 | 8.6 | 6.5 | 4.6 | 4.5 |
| Gold fields | ZAR | Sell, 3M | 116.02 | 105.00 | -9.5 | 3.0 | -6.5 | 1.7 | 21.2 | 9.9 | 9.3 | 7.1 | 4.3 | 4.4 |
| Harmony | ZAR | Sell, 3M | 94.18 | 85.00 | -9.7 | 0.0 | -9.7 | 1.8 | 83.5 | 35.9 | 26.0 | 20.3 | 12.7 | 8.5 |

Source: Citi Investment Research and Analysis

Valuation and Risks

Earnings downgrades

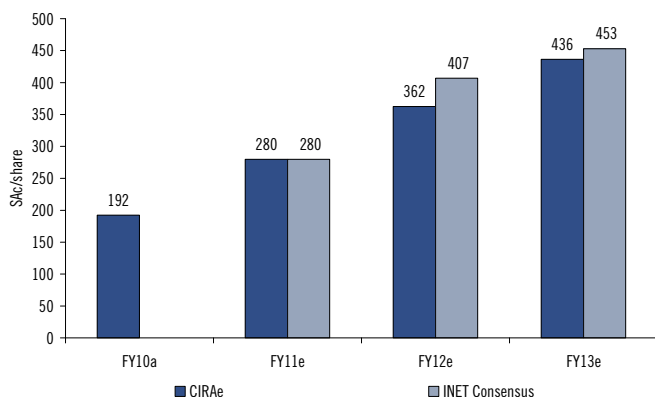
We downgrade our FY11e, 12e and 13e earnings expectations to 280c (-3%), 362c (-2%) and 467c (-7%) respectively on the back of new PGM price assumptions.

Figure 113. RBP forecast changes

| | FY10a | FY11e | FY12e | FY13e |
|----------------------|-------|-------|-------|-------|
| Production - new | 288 | 287 | 299 | 299 |
| Production - old | 288 | 287 | 299 | 299 |
| %change | 0% | 0% | 0% | 0% |
| Cash costs - new | 5907 | 6333 | 6644 | 7043 |
| Cash costs - old | 5907 | 6333 | 6644 | 7043 |
| % change | 0% | 0% | 0% | 0% |
| Earnings (SAC) - new | 192 | 280 | 362 | 436 |
| Earnings (SAC) - old | 192 | 289 | 371 | 467 |
| % change | 0% | -3% | -2% | -7% |

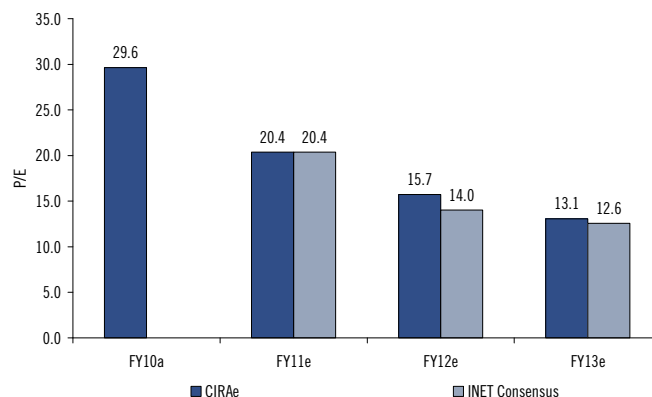
Source: Citi Investment Research and Analysis

Figure 114. Citi HEPS outlook for RBP vs. consensus



Source: Citi Investment Research and Analysis, INET

Figure 115. Citi PE outlook for RBP vs. consensus



Source: Citi Investment Research and Analysis, INET

Valuation: Maintain Buy, TP R70

Maintain Buy, TP R70. We value RBP on a sum-of-the-parts DCF basis. We apply a R-nominal WACC of 11.9% (ERP 5.0%, RFR 8.5%, beta 1.0) to discount the future cash flows from its individual assets over their operational lives. In deriving our R70 TP, we apply a 1.2x P/DCF exit multiple to our valuation of RBP. This represents a 20% premium to our 1.0x benchmark multiple for the SA platinum sector, which is mainly to account for RBP's superior strategic position within the SA platinum space. We believe that this position provides RBP with significant future value-enhancing optionality, something that is not accounted for in our DCF of its current operations. Our valuation is net of cash, investments, and corporate and exploration costs.

Figure 116. RBP sum-of-the-parts DCF valuation

| NAV calculation | DCF (Rm) | Premium/(discount) to DCF | Equity value (Rm) | % of total |
|------------------------------------|--------------|---------------------------|-------------------|-------------|
| BRPM | 4,289 | 20% | 5,147 | 50% |
| Styl drift | 3,314 | 20% | 3,976 | 38% |
| IMP Royalty agreement | 1,018 | 20% | 1,222 | 12% |
| Operational value | 8,621 | 20% | 10,345 | 100% |
| Net (debt)/cash | 1,039 | 0% | 1,039 | |
| Investments | 251 | 0% | 251 | |
| Overhead costs | -393 | 0% | -393 | |
| Financial obligations | 897 | | 897 | |
| NAV | 9,518 | | 11,243 | |
| Equity value (Rm) | 11,243 | | | |
| Number of shares in issue (m) | 164 | | | |
| DCF (R/share) | 58 | | | |
| CIRA target price (R/share) | 70 | | | |

Source: Citi Investment Research and Analysis

Risks

We rate RBP Medium Risk to reflect the volatile nature of PGM prices, offset by the generally stable regulatory environment in which the company operates. Our valuation of RBP is exposed to macroeconomic developments affecting PGM prices and exchange rates, operational risks that might affect volumes and input costs, and political and regulatory risks that might affect costs and the company's reputation. As a mid-tier platinum mining company with attractive low-cost growth potential, our valuation of RBP is also exposed to corporate activity risk.

- **Macroeconomic risks:** Our valuation of RBP is highly dependent on input assumptions of the platinum, palladium, and rhodium prices, as well as the rand-dollar exchange rate. Downside risks to our view include lower-than-expected PGM prices and a stronger-than-expected rand. Conversely, upside risks to our view include higher-than-expected PGM prices and a weaker-than-expected rand.
- **Operational risks:** We base our production and cost outlook for RBP's individual mines on management guidance and by applying our discretion to management's guidance and targets. The main operational downside risks to our view are: 1) a significant delay in the ramp-up of Styl drift, 2) significant escalation in capex requirements for Styl drift, and 3) unforeseen operational disappointments at its Boschkopie mine.
- **Political and regulatory risks:** RBP's operations and future projects are based in SA. The company is consequently exposed to government and regulatory-related risks in this country. Specific risks include higher-than-expected royalties, production delays from government intervention, and labour unrest.
- **Corporate activity risk:** Given that RBP is strategically well positioned to partake in the future consolidation of the SA platinum industry, the main upside risk to our view is a potential buyout of its existing assets and/or projects.
- **Dilution risk:** We forecast a R4-5bn funding gap for RBP over the next 5 years. We believe that part of this gap would likely be funded through equity and therefore caution on dilution risk.

Lonmin

Company Focus

| | |
|------------------------------|-------------|
| Hold/Medium Risk | 2M |
| Price (31 Aug 11) | £13.13 |
| Target price | £13.63 |
| | from £15.35 |
| Expected share price return | 3.8% |
| Expected dividend yield | 0.0% |
| Expected total return | 3.8% |
| Market Cap | £2,661M |
| | US\$4,325M |

Price Performance (RIC: LMI.L, BB: LMI LN)



Lonmin PLC (LMI.L) Still On Track Long Term

- Progress in fits and starts** — If investors drew a straight-line from the Lonmin of 2007 (A) to the current Lonmin (B) then the A>B turnaround would be very impressive indeed. The current management has achieved big mining efficiency gains from the days of full-mechanisation and concentrator recoveries are well up on the bad old days. The problem is that between A and B there have been fits and starts which often act to hide the core progress that is being made. Problems with the smelter in recent years have been unhelpful and more recently the Karee strike was a big setback.
- Recent cost challenges** — LON achieved commendable cost progress in FY 10 but once more the smelter rebuild and the Karee strike have combined to present cost challenges in 2011. Guidance was originally set at 8% but had to be revised up to 11% cost inflation for FY11 after the Karee strike.
- On track long term** — LON continues to guide to production of 850k oz p.a. by 2013. In the longer term, LON sees the most efficient growth coming from the Marikana asset given its considerable resources and reserves. Historically, the Marikana operations including Pandora, have produced 950 k oz p.a platinum and LMI believes that the asset can produce at those levels again. LON further believes that in that growth-process, Marikana can move down the cost curve.
- Benefit of the doubt** — Given management's progress from A to B, we are inclined to give them the benefit of the doubt for the next phase from C to D. Lonmin has stuck to its core principles on mining efficiencies and the smelter problem now seems to be behind it and spare pyromet capacity will in any event give some protection. Matters like the Karee strike are hopefully one-off events and Lonmin should now be able to settle into its stride as it progresses towards its 850ktpa and 950ktpa targets.
- Valuation and risks: TP downgrade to £13.63 (R170)** — We downgrade our TP 11% to £13.63 (R170) on the back of our lower PGM price assumptions. Downgrades to our earnings expectations also reflect new PGM prices. Maintain Hold. Our model now uses a nominal WACC of 9% (reduced from 10.5% previously to reflect movements in the risk-free rate) and discounts forecast cash flows over the life of the group's individual assets. We apply a 1.1x P/DCF exit multiple. This is a modest premium versus the 1.0x that we assume for the South African producers, given that Lonmin has tended to command a premium for its London primary listing. We rate LON Hold/Medium Risk (2M).

Lonmin PLC (USD)

| Year to 30 Sep | 2009A | 2010A | 2011E | 2012E | 2013E |
|-------------------------|----------|---------|---------|---------|---------|
| Sales (\$M) | 1,062.2 | 1,579.3 | 1,926.4 | 2,240.7 | 2,219.0 |
| Profit Before Tax (\$M) | -114.0 | 231.1 | 326.7 | 548.0 | 582.6 |
| Diluted EPS (¢) | -59.0 | 67.7 | 97.8 | 164.4 | 174.8 |
| Diluted EPS (Old) (¢) | -59.0 | 67.7 | 104.0 | 178.6 | 246.3 |
| PE (x) | -36.2 | 31.5 | 21.8 | 13.0 | 12.2 |
| EV/EBITDA (x) | -4,258.3 | 10.7 | 7.9 | 5.2 | 4.8 |
| DPS (¢) | 0.0 | 15.0 | 24.8 | 41.5 | 44.1 |
| Net Div Yield (%) | 0.0 | 0.7 | 1.2 | 1.9 | 2.1 |

| Fiscal year end 30-Sep | 2009 | 2010 | 2011E | 2012E | 2013E |
|--|--------------|--------------|--------------|--------------|--------------|
| Valuation Ratios | | | | | |
| P/E adjusted (x) | nm | 31.5 | 21.8 | 13.0 | 12.2 |
| EV/EBITDA adjusted (x) | nm | 10.7 | 7.9 | 5.2 | 4.8 |
| P/BV (x) | 1.6 | 1.5 | 1.5 | 1.3 | 1.2 |
| Dividend yield (%) | 0.0 | 0.7 | 1.2 | 1.9 | 2.1 |
| Per Share Data (US¢) | | | | | |
| EPS adjusted | -59.0 | 67.7 | 97.8 | 164.4 | 174.8 |
| EPS reported | -58.9 | 67.7 | 97.8 | 164.4 | 174.8 |
| BVPS | 1,342.0 | 1,400.5 | 1,425.7 | 1,582.5 | 1,730.9 |
| DPS | 0.0 | 15.0 | 24.8 | 41.5 | 44.1 |
| Profit & Loss (US\$M) | | | | | |
| Net sales | 1,062 | 1,579 | 1,926 | 2,241 | 2,219 |
| Operating expenses | -1,157 | -1,359 | -1,592 | -1,676 | -1,623 |
| EBIT | -95 | 220 | 334 | 564 | 596 |
| Net interest expense | -19 | 11 | -11 | -16 | -13 |
| Non-operating/exceptionals | 0 | 0 | 3 | 0 | 0 |
| Pre-tax profit | -114 | 231 | 327 | 548 | 583 |
| Tax | -18 | -79 | -99 | -165 | -176 |
| Extraord./Min.Int./Pref.div. | 26 | -21 | -30 | -50 | -53 |
| Reported net income | -106 | 131 | 198 | 333 | 354 |
| Adjusted earnings | -106 | 131 | 198 | 333 | 354 |
| Adjusted EBITDA | -1 | 342 | 455 | 691 | 731 |
| Growth Rates (%) | | | | | |
| Sales | -52.3 | 48.7 | 22.0 | 16.3 | -1.0 |
| EBIT adjusted | -110.0 | 332.0 | 51.9 | 68.8 | 5.6 |
| EBITDA adjusted | -100.1 | nm | 32.9 | 52.0 | 5.7 |
| EPS adjusted | -117.0 | 214.8 | 44.3 | 68.1 | 6.3 |
| Cash Flow (US\$M) | | | | | |
| Operating cash flow | -171 | 505 | 230 | 612 | 520 |
| Depreciation/amortization | 94 | 122 | 120 | 126 | 135 |
| Net working capital | -152 | 218 | -117 | 95 | -13 |
| Investing cash flow | -130 | 111 | -204 | -190 | -200 |
| Capital expenditure | -120 | -164 | -194 | -180 | -190 |
| Acquisitions/disposals | 0 | 285 | 0 | 0 | 0 |
| Financing cash flow | 157 | 333 | -190 | -116 | -140 |
| Borrowings | -300 | 126 | -126 | -50 | -50 |
| Dividends paid | 0 | -22 | -53 | -66 | -90 |
| Change in cash | -144 | 949 | -165 | 306 | 180 |
| Balance Sheet (US\$M) | | | | | |
| Total assets | 4,213 | 4,818 | 4,878 | 5,159 | 5,396 |
| Cash & cash equivalent | 282 | 143 | 53 | 45 | 124 |
| Accounts receivable | 287 | 414 | 208 | 241 | 233 |
| Net fixed assets | 2,036 | 2,199 | 2,452 | 2,634 | 2,818 |
| Total liabilities | 1,411 | 1,742 | 1,603 | 1,566 | 1,502 |
| Accounts payable | 337 | 381 | 301 | 314 | 300 |
| Total Debt | 407 | 523 | 386 | 336 | 286 |
| Shareholders' funds | 2,802 | 3,076 | 3,275 | 3,593 | 3,894 |
| Profitability/Solvency Ratios (%) | | | | | |
| EBITDA margin adjusted | -0.1 | 21.7 | 23.6 | 30.8 | 32.9 |
| ROE adjusted | -4.7 | 5.1 | 7.1 | 10.9 | 10.6 |
| ROIC adjusted | -4.9 | 5.5 | 8.3 | 12.9 | 12.7 |
| Net debt to equity | 4.5 | 12.3 | 10.2 | 8.1 | 4.1 |
| Total debt to capital | 12.7 | 14.5 | 10.5 | 8.6 | 6.8 |

For further data queries on Citi's full coverage universe please contact CIRA Data Services Europe at CIRADataServicesEMEA@citi.com or +44-207-986-4050



Still on Track Long Term

The current Lonmin management has achieved big mining efficiency gains from the days of full-mechanisation and concentrator recoveries are well up on the bad old days. The problem is that progress has come in fits and starts which often act to hide the core progress that is being made. Problems with the smelter in recent years have been unhelpful and more recently the Karee strike was a big setback

Progress in fits and starts

If investors drew a straight-line from the Lonmin of 2007 to the current Lonmin then the turnaround would be very impressive indeed. The current management has achieved big efficiency gains from the days of full-mechanisation, turning around the mining performance at Hossy and Saffy shafts. Concentrator recoveries are well up on the old days (In FY 10 recoveries at the concentrators averaged 84.7%, up a significant 4.9% over FY 09) and management has a satisfying record from point A to point B on a number of fronts.

The problem is that between A and B there have been fits and starts which often act to hide the core progress that is being made. To be fair, many of these problems were inherited by current management. Lonmin has always, for example, had a more restricted spare smelting capacity and so problems with the smelter in recent years (while having little impact on medium-term revenue and earnings generation) have impacted short-term performance and earnings badly at certain points between A & B.

In 2010 the Number One furnace was down for almost 14 weeks, necessitating toll refining and selling part processed material as the backlog was too big to hold in stock. The quantum refined by third parties amounted to some 75,000 platinum ounces and this had a very negative impact on costs. The furnace was taken down at the end of October 2010 for a scheduled rebuild and was re-commissioned in December 2010. That re-build has been successful but management has rightly instituted the insurance plan of adding more back up capacity and work has commenced on building the new 10MW pyromet furnace. This is planned to come into production in Q3 2012 at a capital cost of some R350 million.

Figure 117. LMI Production: Tonnes Milled

| | | Jun-Q 11 | Jun-Q 10 |
|-----------|--------------|-------------|-------------|
| Marikana | Underground | 2560 | 2614 |
| | Opencast | 118 | 68 |
| | Total | 2678 | 2682 |
| Pandora | Underground | 92 | 99 |
| LMI Group | Underground | 2652 | 2712 |
| | Grade | 4.48 | 4.6 |
| | Recovery | 85% | 85.10% |
| | Opencast | 118 | 68 |
| | Grade | 2.07 | 2.51 |
| | Recovery | 80.90% | 78.90% |
| | Total | 2770 | 2780 |
| | Grade | 4.37 | 4.55 |
| | Recovery | 84.90% | 85 |

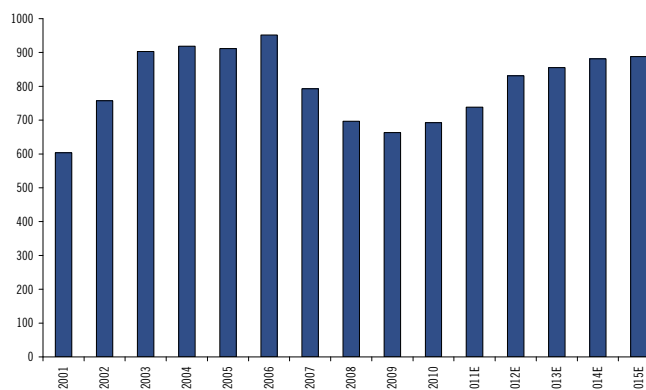
Source: Citi Investment Research and Analysis

While the smelter re-build was successful, Lonmin had hardly recovered from the down-time when May 2011 delivered the challenge of an illegal strike and the need to lay off workers and then recruit and train new workers.

The result was that Marikana underground operations produced 2.4mt in Jun-Q 2011, a decrease of 8.1% from Jun-Q 10. Production at Karee fell by 7.2% due to impact of the illegal strike. However, while that was an event perhaps beyond the control of management, the fact that production at Westerns, Middelkraal and Easterns combined decreased by 8.5% against Jun-Q 10 because of difficult ground conditions and mechanical breakdowns at Saffy and Hossy can be chalked up as another 'pause point' on Lonmin's long road to top-level efficiency.

To be fair, Saffy's growth rate was expected to be lower in 2011 as development work to open up lower levels was being completed and growth rates should accelerate again in 2012. Hossy, like Saffy, had recorded a good FY 2010, reflecting improved productivity on centares per month per suite of mechanised equipment. At Hossy, LMI had decided to continue with the fully mechanised proof of concept project and the average monthly production ramped up to 67,000 tonnes per month in FY 2010 up from 56,000 in FY 09. Lonmin is retaining its target of achieving productivity of 2,200 square metres per month per suite of equipment by the end of FY 11 in fully developed quadrants. The biggest challenge being faced by the mechanised mining team continues to be focused on machine reliability, the availability of replacement parts and the supply of trained artisans

Figure 118. Forecast Platinum Production ('000 ounces)



Source: Company Reports, Citi Investment Research and Analysis

The ups and downs, as noted, have captured the newsflow and tended to suppress real ongoing improvements in Lonmin's core efficiencies. One of the big changes from the old days has been Lonmin's focus on building up adequate reserves once more. Lonmin built up the Marikana ore reserves from 1.65m centares in 1H 2008 to 2.4m centares in 1H 2010 and 2.7 million centares as at the end of FY 10. The FY 10 reserves were a 32% increase from the 2.0 million centares that were available at the end of 2009 and have allowed Lonmin to support future production and to forecast short-term output with greater confidence. The improvement in reserves demonstrates that the health of the ore body has been largely restored. The two deep shafts, K3 and Rowland, increased ore reserves by 59% and 49% respectively over that period, with K3 UG2 still being the laggard. The two shafts in ramp-up, Hossy and Saffy, increased ore reserves by 41% and 14% respectively.

Lonmin achieved commendable cost progress in FY 10 but once more the smelter rebuild and the Karee strike have combined to present cost challenges in 2011. Costs for the 2010 financial year at the core underground conventional operations at Marikana were R532 per tonne, up 8% from 2009. This was achieved despite the continued cost pressures with wage increases of 10% and electricity rate increases of 26%, both well in excess of the published PPI data. The cost per PGM ounce

produced for 2010 was R6,773. This was an increase of only 2.2% compared to 2009. However, rand unit operating costs of R7,372 for H1 2011 per PGM ounce were up 12.8% on H1 2010. Lonmin had initially guided to FY 11 unit cost increase to be broadly in line with the wage inflation increase of 8%. However, because of the strike at Karee, LMI gave fresh guidance for an 11% increase in costs for FY 2011.

However, these short-term setbacks are not detracting from the longer-term direction of Lonmin. The development of K4 remains on track and LON anticipates initial production will take place in the first half of the 2012 financial year, although development ounces will be produced in 2011. By the time K4 ramps up to full production of around 225,000 tonnes per month, LON expects the three shafts will be contributing over 50% of total underground production at Marikana.

Lonmin continues to guide to production of 850k oz p.a. by 2013. In the longer term, Lonmin sees the most efficient growth coming from the Marikana asset given its considerable resources and reserves. Historically, the Marikana operations, including Pandora, have produced 950 k oz p.a. platinum and LMI believes that the asset can produce at those levels again. LMI further believes that in that growth-process, Marikana can gradually move down the cost curve over that period.

Karee will be a significant contributor with increased production from K3 and in particular K4 as it comes into production and ramps up. Production from Middelkraal's Saffy and Hossy shafts will make significant contributions as both shafts ramp up, whilst the continued increase in production at Rowland at Westerns, will likely be offset by the LMI's guided decline at Newman. Within Easterns, Pandora should reach a steady state production level of around 50k oz p.a. platinum by 2013. Opencast will contribute in the initial years, with these operations tailing off by 2014. This growth translates to sustained annual growth of 50,000 Platinum ounces every year until 2015E.

The other assets in the LMI portfolio provide it with future growth options, namely Limpopo which LMI is reviewing, and Akanani which has a significant resource.

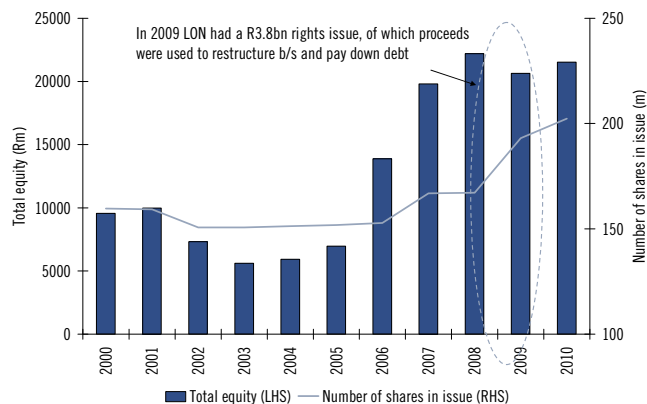
Outside of the core PGM ops, last year Lonmin announced the agreement with Xstrata to construct chrome recovery plants. The commissioning of the first plant commenced in April 2011. LMI expects the remaining two plants to be commissioned by the beginning of Dec-Q 2011. This initiative will generate additional revenue of some \$20-30 million per annum with effect from 2012, dependant on the chrome price. The impact on 2011 will be approximately \$10 million.

Future projects include Akanani, which sits adjacent to and down-dip of AMS's flagship Mogalakwena open cast mine and it has a wide ore body. Lonmin put exploration work at Akanani on the back-burner to conserve cash when the global recession began to bite. The reef under Akanani is over 700m below surface and Lonmin would probably need to invest more than \$1bn in shafts and mining and concentrating assets, even before it considers the need for smelting capacity.

ROE & ROIC Analysis

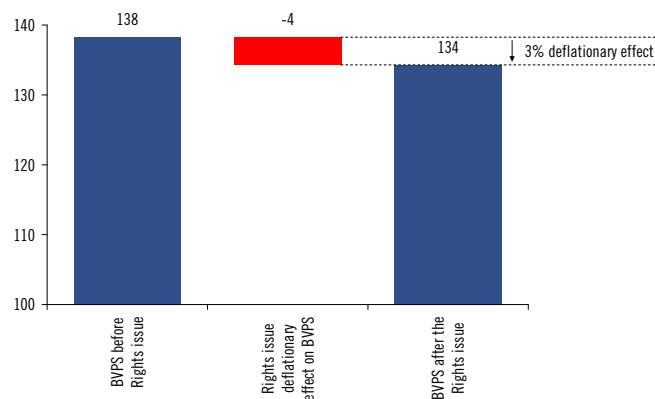
During FY09 LON had a R4bn rights issue, which consisted of 35m shares being issued at R113.04 per share. The rights issue proceeds were used to restructure its balance sheet by paying down high debt levels. Before the rights issue LON had a book value per share of R138 which was deflated 3% to R134 by the rights issue.

Figure 119. LON's historical equity evolution (Rm, 2000-2010)



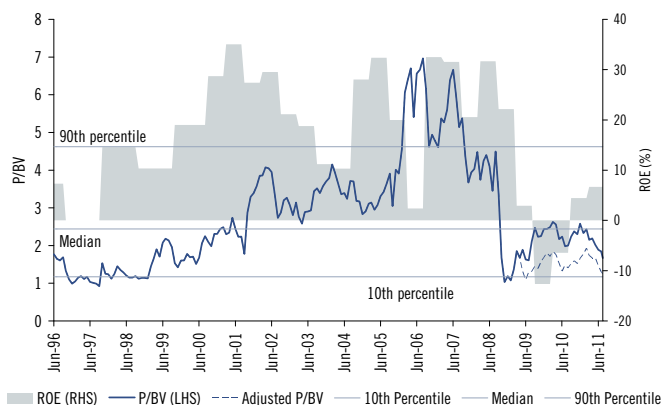
Source: Company reports and Bloomberg

Figure 120. LON's rights issue had a -3% BV deflationary effect



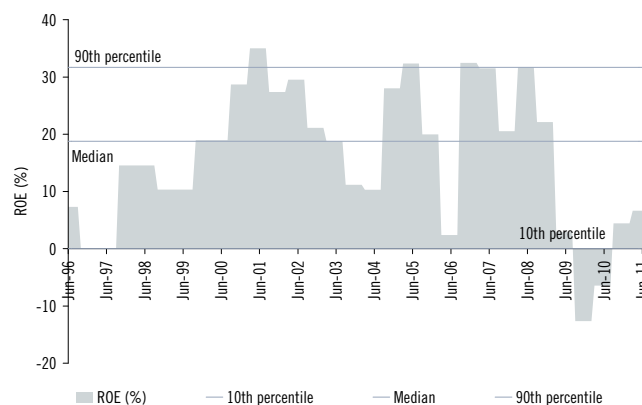
Source: Company reports, CIRA

Figure 121. LON historical Adjusted P/BV and ROE



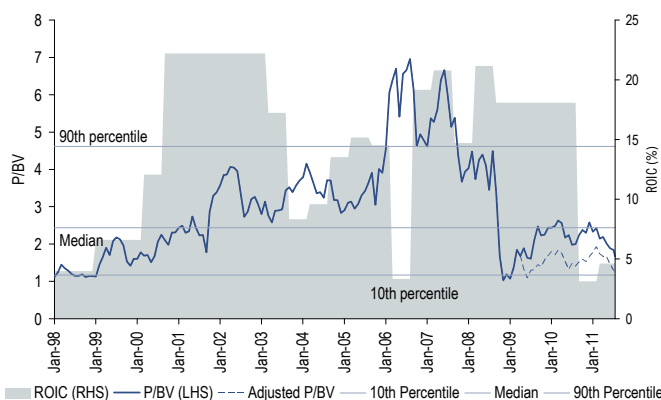
Source: Company reports and Bloomberg

Figure 122. LON historical ROE



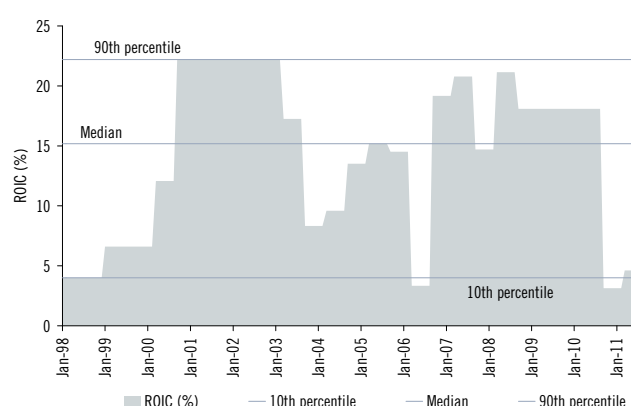
Source: Company reports and Bloomberg

Figure 123. LON historical Adjusted P/BV and ROIC



Source: Company reports and Bloomberg

Figure 124. LON historical ROIC



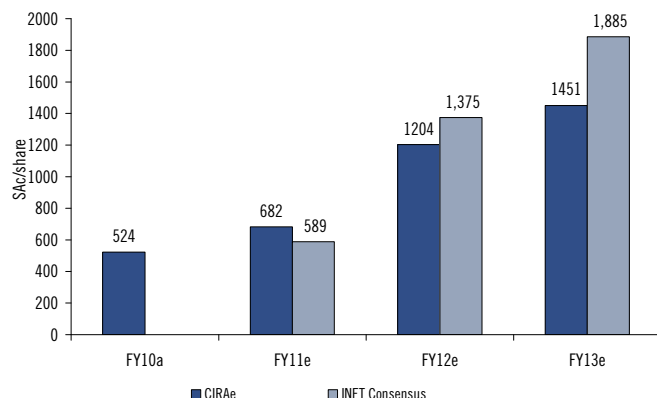
Source: Company reports and Bloomberg

Valuation and Risks

Earnings downgrades

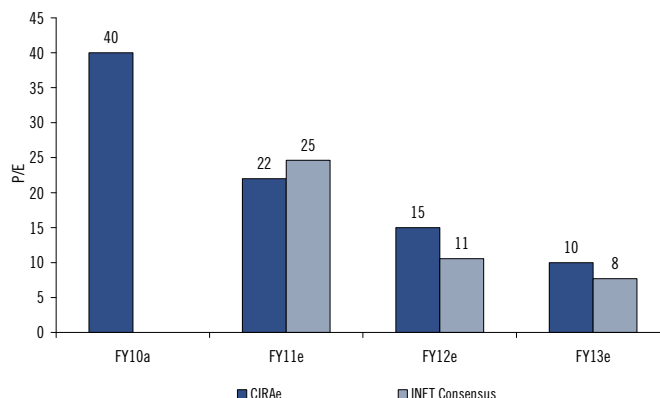
We downgrade our FY11e, 12e and 13e earnings expectations to US97.8c (SA 682c, -6%), US164.4c (SA1,204c, -8%) and US174.8c (SA1,451c, -29%) respectively on the back of new PGM price assumptions.

Figure 125. LON diluted HEPS forecast vs. consensus



Source: Citi Investment Research and Analysis, INET

Figure 126. LON CIRA P/E vs. consensus



Source: Citi Investment Research and Analysis, INET

Valuation: Hold, TP downgrade to £13.63 (R170)

On the back of our new PGM price assumptions, we downgrade our TP 11% to £13.63 (R170). We value Lonmin based on a sum-of-the-parts discounted cash flow (DCF) analysis. Our model uses a nominal WACC of 9% (reduced from 10.5% previously to reflect movements in the risk-free rate) and discounts forecast cash flows over the life of the group's individual assets. We apply a 1.1x P/DCF exit multiple. This is a modest premium versus the 1.0x that we assume for the South African producers, given that Lonmin has tended to command a premium for its London primary listing. We rate LON Hold/Medium Risk (2M).

Figure 127. LON sum-of-the-parts DCF valuation

| WACC | US\$M | GPB | GPB/share | Exit multiple | GPB/share |
|------------------------------|--------------|--------------|--------------|---------------|--------------|
| Marikana | 3,187 | 2,124 | 10.47 | 1.10 | 11.51 |
| Pandora | 153 | 102 | 0.50 | 1.10 | 0.55 |
| Projects/Blue Sky | 80 | 53 | 0.26 | 1.10 | 0.29 |
| Operational value | 3,420 | 2,280 | 11.23 | 1.10 | 12.35 |
| Net Debt | -301 | -201 | -0.99 | | -0.99 |
| Investments | 310 | 207 | 1.02 | | 1.02 |
| Financial obligations | 9 | 6 | 0.03 | | 0.03 |
| NPV per share | 3,429 | 2,286 | | | 12.39 |
| NPV US\$/share | | | 16.89 | | 13.63 |

Source: Citi Investment Research and Analysis

Risks

We rate LON Medium Risk to reflect the volatile nature of PGM prices offset by the generally stable regulatory environment in which the company operates. Our valuation of LON is exposed to macroeconomic developments affecting PGM prices and exchange rates, operational risks that might affect volumes and input costs, and political and regulatory risks that might affect costs and the company's reputation.

- **Macroeconomic risks:** Our valuation of LON is highly dependent on input assumptions for platinum, palladium, and rhodium prices, as well as the rand-dollar exchange rate. Upside risks to our view include higher-than-expected PGM prices and a weaker-than-expected rand. Conversely, downside risks to our view include lower-than-expected PGM prices and a stronger-than-expected rand.
- **Operational risks:** We base our production and cost outlook for LON's individual mines on management guidance and by applying our discretion to management's guidance and targets. The main downside risk to our view is that significantly more capex is required in order to sustain current production levels than that assumed in our valuation model. We also caution downside risk to our generally favourable cost assumptions, given the inflationary environment in which LON operates. The main upside risk to our view is the platinum market moving into deficit, in which case LON might be able to expand production above our forecast levels.
- **Political and regulatory risks:** LON's operations and future projects are based in SA. The company is subsequently exposed to government and regulatory-related risks in SA. Specific risks include higher-than-expected royalties, production delays from government intervention and labour unrest.

This page is intentionally left blank

Company Narratives

Anglo American Platinum Ltd

Company description

Anglo Platinum (AMS) is the world's largest platinum producer, with 41% global market share. The company holds 17 operating assets located in South Africa. The Rustenburg and Amandelbult assets currently make up 43% of AMS's production and constitute 39% of AMS's NAV, on our estimates. AMS holds a strategically important open pit mine, Mogalakwena, which currently forms only 13% of production, but 23% of our NAV estimate.

Investment strategy

We rate AMS Sell/Medium Risk (3M). We see limited volume expansion opportunities for AMS and believe the risks to the achievement of its cost targets are skewed to the downside, given that all the low-hanging fruit has now been picked and significant on-the-ground operational improvements are required going forward. With limited catalysts from here, we view the stock as fully priced at current levels.

Valuation

Our target price for AMS is R610. We value AMS based on a sum-of-the-parts discounted cash flow (DCF) analysis. Our model uses a nominal WACC of 11.9% (beta 1.0, ERP 5.0%, RFR 8.5%) and discounts forecast cash flows over the life of the group's individual assets. In order to account for AMS's leverage to PGM prices and the strategic optionality that its large reserve/resource bases provide, we apply a 15% premium to our valuation of AMS relative to its peers (1.15x P/DCF).

Risks

We rate AMS Medium Risk to reflect the volatile nature of PGM prices offset by the generally stable regulatory environment the company operates in. Our valuation of AMS is exposed to macroeconomic developments affecting PGM prices and exchange rates, operational risks that might affect volumes and input costs, and political and regulatory risks that might affect costs and the company's reputation.

Macroeconomic risks: Our valuation on AMS is highly dependent on input assumptions of the platinum, palladium, and rhodium prices, as well as the rand-dollar exchange rate. Upside risks to our view include higher-than-expected PGM prices and a weaker-than-expected rand. Conversely, downside risks to our view include lower-than-expected PGM prices and a stronger-than-expected rand.

Operational risks: We base our production and cost outlook for AMS's individual mines on management guidance and by applying our discretion to management's guidance and targets. The main downside risk to our view is that significantly more capex would be required in order to sustain current production levels than that assumed in our valuation model. We also caution downside risk to our generally favorable cost assumptions, given the inflationary environment AMS operates in. The main upside risk to our view is the platinum market moving into deficit, in which case AMS will be able to expand production above the current 2.5m ounce (Pt) level.

Political and regulatory risks: AMS's operations and future projects are based in SA and Zimbabwe. The company is subsequently exposed to government and regulatory-related risks in these countries. Specific risks include higher-than-

expected royalties, production delays from government intervention and labour unrest.

If the impact from any of these factors proves to be more negative than we anticipate, the stock will likely have difficulty achieving our financial and price targets. However, if any of these factors proves to have less of an effect than we anticipate, the stock could materially outperform our target.

Impala Platinum

Company description

Impala Platinum (IMP) is the world's second-largest platinum producer, with a 30% global market share. The company is based primarily in South Africa, from which it currently sources 89% of its production. The 11% balance is sourced from its operations in Zimbabwe. In the longer term, Zimbabwe offers strategic low-cost growth potential for IMP, but this is constrained at present by unstable political conditions.

Investment strategy

We rate IMP Buy/Medium Risk (1M). We consider IMP to have been the best-in-class SA platinum company over the past 10 years. Despite the near-term operational challenges facing the company, we believe little has changed. Going forward, we think IMP's favourable position on the cost curve and longer-term low-cost growth optionality should continue to drive superior economic value creation.

Valuation

Our target price for IMP is R220. We value IMP based on a sum-of-the-parts discounted cash flow (DCF) analysis. Our model uses a nominal WACC of 11.9% (beta 1.0, ERP 5.0%, RFR 8.5%) and discounts forecast cash flows over the life of the group's individual assets. We apply a 1.0x P/DCF exit multiple as we do not expect near- to medium-term PGM prices to rise substantially above our long-term price assumptions.

Risks

We rate IMP Medium Risk to reflect the volatile nature of PGM prices offset by the generally stable regulatory environment the company operates in. Our valuation of IMP is exposed to macroeconomic developments affecting PGM prices and exchange rates, operational risks that might affect volumes and input costs, and political and regulatory risks that might affect costs and the company's reputation.

Macroeconomic risks: Our valuation on IMP is highly dependent on input assumptions of the platinum, palladium, and rhodium prices, as well as the rand-dollar exchange rate. Downside risks to our view include lower-than-expected PGM prices and a stronger-than-expected rand.

Operational risks: We base our production and cost outlook for IMP's individual mines on management guidance and by applying our discretion to management's guidance and targets. The main downside risk to our view is that significantly more capex would be required in order to sustain current production levels than that assumed in our valuation model. Other operational risks include IMP failing to ramp up its Merensky shafts on time, and a deterioration in the political conditions in

Zimbabwe that could prevent further growth for IMP in this country (note that we only include Zimplats phase II into our valuation).

Political and regulatory risks: IMP's operations and future projects are based in SA and Zimbabwe. The company is subsequently exposed to government and regulatory-related risks in these countries. Specific risks include higher-than-expected royalties, production delays from government intervention and labour unrest.

If the impact from any of these factors proves to be more negative than we anticipate, the stock will likely have difficulty achieving our financial and price targets. However, if any of these factors proves to have less of an effect than we anticipate, the stock could materially outperform our target.

Northam Platinum

Company description

Northam Platinum (NHM) currently holds one operating asset in South Africa (SA) called Zondereinde, which produces approximately 330,000 ounces (4E) under normal conditions (although it is currently facing operational difficulties). The company holds a strategic low-cost project, Booysendal, that is likely to nearly double NHM's production over the next 5 to 6 years.

Investment strategy

We rate NHM Buy/Medium Risk (1M). We believe NHM is uniquely positioned as a low-cost, low-capex, medium-term growth story in a fundamentally attractive PGM market. Its current market valuation does not reflect the full upside potential, in our view.

Valuation

Our target price for NHM is R50. We value NHM based on a sum-of-the-parts discounted cash flow (DCF) analysis. Our model uses a nominal WACC of 11.9% (beta 1.0, ERP 5.0%, RFR 8.5%) and discounts forecast cash flows over the life of the group's individual assets. We apply a 1.0x P/DCF exit multiple as we do not expect near- to medium-term PGM prices to rise substantially above our long-term price assumptions.

Risks

We rate NHM Medium Risk to reflect the volatile nature of PGM prices offset by the generally stable regulatory environment the company operates in. Our valuation of NHM is exposed to macroeconomic developments affecting PGM prices and exchange rates, operational risks that might affect volumes and input costs, and political and regulatory risks that might affect costs and the company's reputation. Given NHM's position as a junior platinum mining company with what we see as attractive low-cost growth potential, our valuation is also exposed to corporate activity risk.

Royal Bafokeng Platinum

Company description

RBP is a mid-tier platinum company listed on the JSE. It currently has one operating mine called Boschkopie and is in the process of developing a greenfield project called Styldrift. RBP is 57% owned by Royal Bafokeng Platinum Holdings, 13% by Anglo Platinum and has 30% free float.

Investment strategy

We rate RBP Buy/Medium Risk (1M). It has a highly cash-generative existing asset base, an attractive low-cost growth project through Styldrift, and is geographically well-located to partake in industry consolidation. Our DCF valuation provides attractive upside. Buy.

Valuation

We value RBP on a sum-of-the parts DCF basis. We apply a R-nominal WACC of 11.9% (ERP 5%, RFR 8.5%, beta 1.0) to discount the future cash flows from its individual assets over their operational lives. In deriving our R70 TP, we apply a 1.2x P/DCF exit multiple to our valuation of RBP. This represents a 20% premium to our 1.0x benchmark multiple for the SA platinum sector, which is mainly to account for RBP's superior strategic position within the SA platinum space. We believe that this position provides RBP with significant future value-enhancing optionality, something that is not accounted for in our DCF of its current operations. Our valuation is net of cash, investments, and corporate and exploration costs.

Risks

We rate RBP Medium Risk based on the industry and company-specific risk profile. Downside risks include a stronger-than-expected rand, weaker-than-expected PGM prices, a worse-than-expected operational performance at Boschkopie, and delays and capex overruns at Styldrift. Other risks include corporate activity and dilution risk given the need to fund the projected funding gap over the next five years. These risks could impede the share price from reaching our target price.

Lonmin PLC

Company description

Lonmin is the world's third-largest primary producer of PGMs. Platinum production is expected to be in the region of 720koz in 2011. Lonmin's operations are located in South Africa.

Investment strategy

We rate Lonmin Hold/Medium Risk (2M). We think that management is steadily gaining market confidence following a consistently improving trend in operational efficiency. However, a strong SA rand is tending to offset the recent strength in the US\$ price of platinum. The entire industry is facing cost challenges. Xstrata owns a 25% stake in the company and could aim to increase its ownership stake.

Valuation

Our target price for Lonmin is £13.63. We value Lonmin based on a sum-of-the-parts discounted cash flow (DCF) analysis. Our model uses a nominal WACC of 9% and discounts forecast cash flows over the life of the group's individual assets. We apply a 1.10 P/NPV multiple to our £12.39 NPV. This compares to the 1.0x valuation which we use for the SA-listed PGM groups. LMI has historically commanded a premium for its UK listing.

Risks

We rate LON Medium Risk to reflect the volatile nature of PGM prices offset by the generally stable regulatory environment in which the company operates. Our valuation of LON is exposed to macroeconomic developments affecting PGM prices and exchange rates, operational risks that might affect volumes and input costs, and political and regulatory risks that might affect costs and the company's reputation.

Macroeconomic risks: Our valuation of LON is highly dependent on input assumptions for platinum, palladium, and rhodium prices, as well as the rand-dollar exchange rate. Upside risks to our view include higher-than-expected PGM prices and a weaker-than-expected rand. Conversely, downside risks to our view include lower-than-expected PGM prices and a stronger-than-expected rand.

Operational risks: We base our production and cost outlook for LON's individual mines on management guidance and by applying our discretion to management's guidance and targets. The main downside risk to our view is that significantly more capex is required in order to sustain current production levels than that assumed in our valuation model. We also caution downside risk to our generally favorable cost assumptions, given the inflationary environment in which LON operates. The main upside risk to our view is the platinum market moving into deficit, in which case LON might be able to expand production above our forecast levels.

Political and regulatory risks: LON's operations and future projects are based in SA. The company is subsequently exposed to government and regulatory-related risks in SA. Specific risks include higher-than-expected royalties, production delays from government intervention and labour unrest.

If the impact from any of these factors proves to be more negative than we anticipate, the stock will likely have difficulty achieving our financial and price targets. However, if any of these factors proves to have less of an effect than we anticipate, the stock could materially outperform our target.

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

Anglo American Platinum Ltd (AMSJ.J)

Ratings and Target Price History Fundamental Research

Analyst: Johann Steyn

Covered since October 12 2010

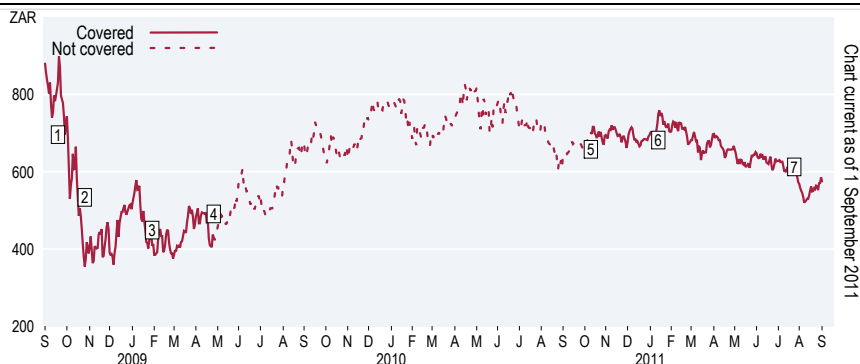


Chart current as of 1 September 2011

| | Date | Rating | Target Price | Closing Price |
|---|-----------|--------|--------------|---------------|
| 1 | 18-Sep-08 | 3M | *743.62 | 831.10 |
| 2 | 27-Oct-08 | 3M | *388.82 | 354.70 |
| 3 | 29-Jan-09 | 3M | *291.62 | 408.31 |

* Indicates change

| | Date | Rating | Target Price | Closing Price |
|---|-----------|---------------------|--------------|---------------|
| 4 | 27-Apr-09 | Coverage terminated | | |
| 5 | 11-Oct-10 | *2M | *730.00 | 701.00 |
| 6 | 13-Jan-11 | *3M | *650.00 | 750.00 |

| | Date | Rating | Target Price | Closing Price |
|---|-----------|--------|--------------|---------------|
| 7 | 25-Jul-11 | 3M | *610.00 | 600.00 |

Rating/target price changes above reflect Eastern Standard Time

Anglo American Platinum Ltd (AMSJ.J)

Ratings and Target Price History Best Ideas Research Relative Call (3 Month)

Analyst: Johann Steyn

Covered since October 12 2010

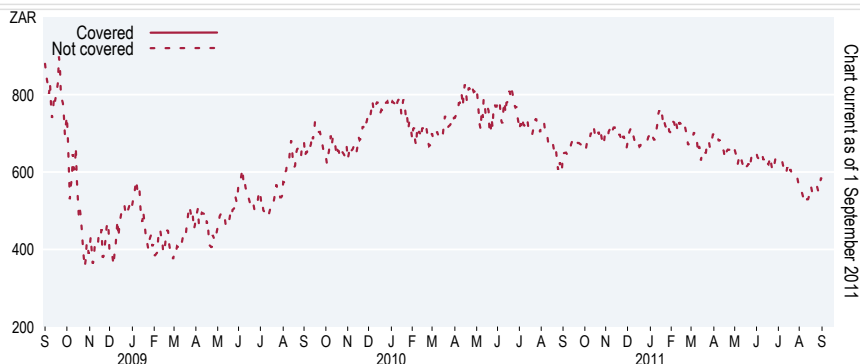


Chart current as of 1 September 2011

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Impala Platinum (IMPJ.J)

Ratings and Target Price History Fundamental Research

Analyst: Johann Steyn

Covered since October 12 2010

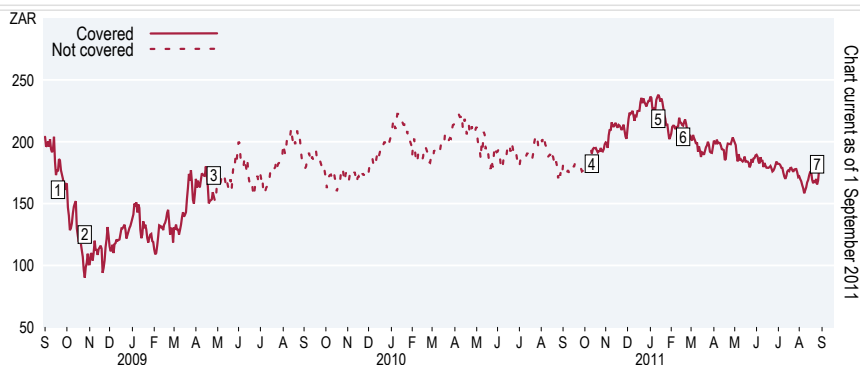


Chart current as of 1 September 2011

| | Date | Rating | Target Price | Closing Price |
|---|-----------|---------------------|--------------|---------------|
| 1 | 18-Sep-08 | 3M | *162.00 | 176.00 |
| 2 | 27-Oct-08 | 3M | *90.00 | 90.15 |
| 3 | 27-Apr-09 | Coverage terminated | | |

* Indicates change

| | Date | Rating | Target Price | Closing Price |
|---|-----------|--------|--------------|---------------|
| 4 | 12-Oct-10 | *1M | *230.00 | 190.50 |
| 5 | 13-Jan-11 | *2M | *240.00 | 238.05 |
| 6 | 17-Feb-11 | *1M | 240.00 | 213.00 |

| | Date | Rating | Target Price | Closing Price |
|---|-----------|--------|--------------|---------------|
| 7 | 25-Aug-11 | 1M | *220.00 | 165.50 |

Rating/target price changes above reflect Eastern Standard Time

Impala Platinum (IMPJ.J)

Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

Analyst: Johann Steyn
Covered since October 12 2010

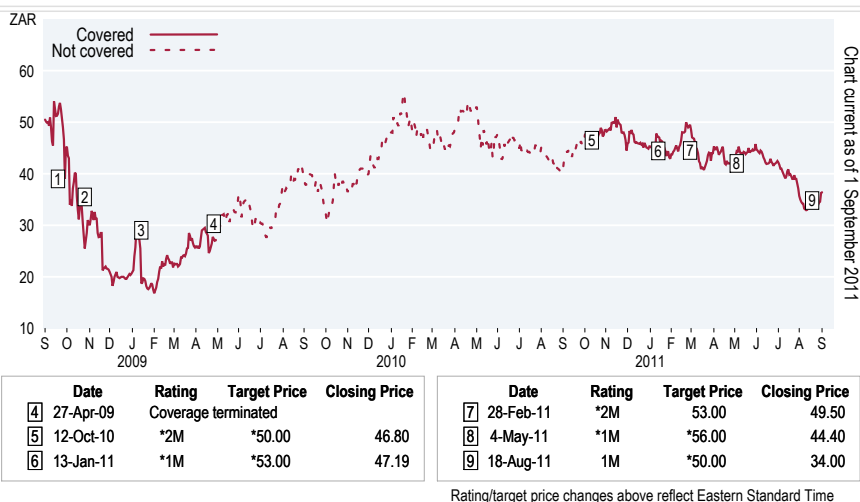


Northam Platinum (NHMJ.J)

Ratings and Target Price History

Fundamental Research

Analyst: Johann Steyn
Covered since October 12 2010



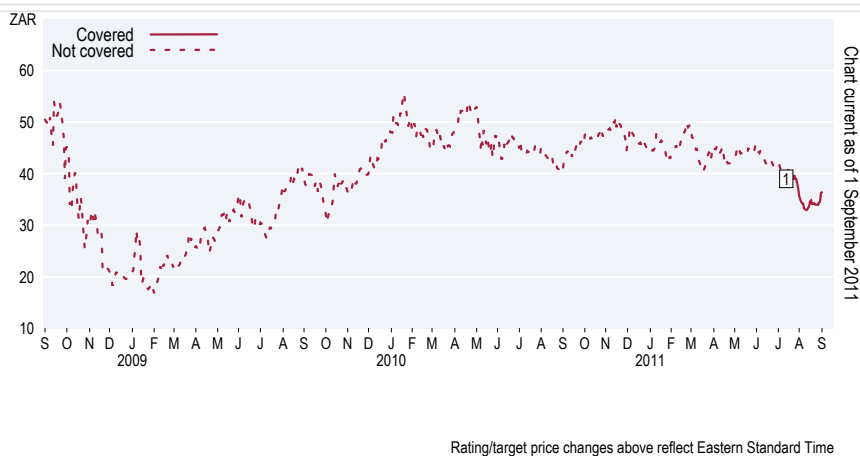
Northam Platinum (NHMJ.J)

Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

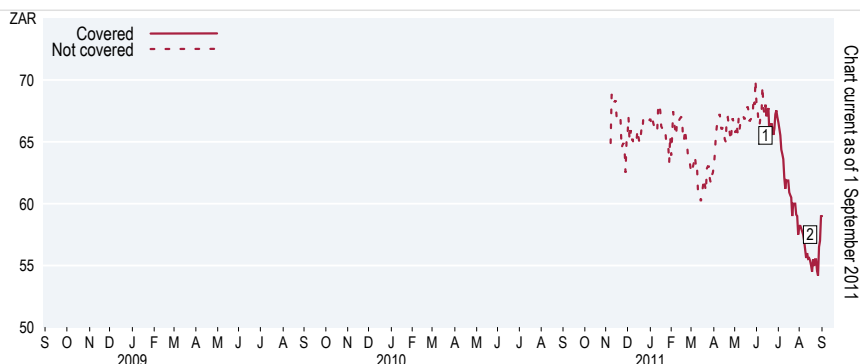
Analyst: Johann Steyn
Covered since October 12 2010



Royal Bafokeng Platinum (RBPJ.J)

Ratings and Target Price History Fundamental Research

Analyst: Johann Steyn
Covered since June 15 2011



| | Date | Rating | Target Price | Closing Price |
|---|-----------|--------|--------------|---------------|
| 1 | 14-Jun-11 | *2M | *70.00 | 68.00 |

* Indicates change

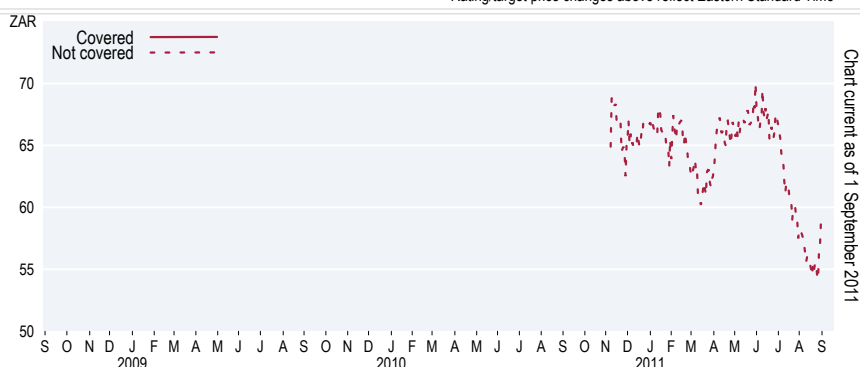
| | Date | Rating | Target Price | Closing Price |
|---|-----------|--------|--------------|---------------|
| 2 | 16-Aug-11 | *1M | 70.00 | 55.39 |

Rating/target price changes above reflect Eastern Standard Time

Royal Bafokeng Platinum (RBPJ.J)

Ratings and Target Price History Best Ideas Research Relative Call (3 Month)

Analyst: Johann Steyn
Covered since June 15 2011



* Indicates change

Rating/target price changes above reflect Eastern Standard Time

An employee of Citigroup Global Markets or its affiliates is a non - executive director of Anglo American Plc.

One or more directors of Grupo Mexico, S.A. de C.V. is a member of the board of directors of an affiliate of Citigroup Global Markets Inc.

DMBH is a market maker in the publicly traded equity securities of KGHM Polska Miedz SA. DMBH rating distribution versus Investment Banking service provision in the past 12 months as at 30 June 2011 is as follows: Buy (1) representing 30% of the DMBH coverage 0% of which are IB clients, Hold (2) representing 36% of the DMBH coverage 0% of which are IB clients, Sell (3) representing 34% of the DMBH coverage 0% of which are IB clients.

One or more directors of Southern Copper Corporation SA is a member of the board of directors of an affiliate of Citigroup Global Markets Inc.

Johann Steyn, Analyst, holds a long position in the securities of Anglo American PLC.

Pradeep Mahtani, Analyst, holds a long position in the securities of Sterlite Industries (India).

Citigroup Global Markets Inc. or its affiliates beneficially owns 1% or more of any class of common equity securities of Jiangxi Copper, China Shenhua Energy, Arch Coal, Freeport-McMoRan Copper & Gold Inc., Fortescue Metals Group Ltd, Macarthur Coal Ltd, Newcrest Mining Ltd, Newmont Mining, Whitehaven Coal Ltd. This position reflects information available as of the prior business day.

Within the past 12 months, Citigroup Global Markets Inc. or its affiliates has acted as manager or co-manager of an offering of securities of Anglo American Platinum Ltd, China Shenhua Energy, China Coal Energy, Anglo American PLC, Barrick Gold, Arch Coal, AngloGold Ashanti Ltd, Antofagasta PLC, Cliffs Natural Resources Inc., Gold Fields Ltd, Hindustan Zinc, Kumba Iron Ore Ltd, Rio Tinto PLC.

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from Anglo American Platinum Ltd, China Shenhua Energy, China Coal Energy, Anglo American PLC, Barrick Gold, Arch Coal, AngloGold Ashanti Ltd, BHP Billiton PLC, Peabody Energy, Cliffs Natural Resources Inc., Freeport-McMoRan Copper & Gold Inc., Gold Fields Ltd, Norilsk Nickel, Hindustan Zinc, Kazakhmys Plc, Kumba Iron Ore Ltd, Lonmin PLC, Rio Tinto PLC, Sterlite Industries (India), Xstrata PLC.

Citigroup Global Markets Inc. or its affiliates expects to receive or intends to seek, within the next three months, compensation for investment banking services from China Shenhua Energy, China Coal Energy, Peabody Energy, Cliffs Natural Resources Inc., Norilsk Nickel, Hindustan Zinc, Newmont Mining, Sterlite Industries (India), Xstrata PLC.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Anglo American Platinum Ltd, China Shenhua Energy, China Coal Energy, Anglo American PLC, Barrick Gold, Arch Coal, AngloGold Ashanti Ltd, Antofagasta PLC, African Rainbow Minerals, BHP Billiton PLC, Peabody Energy, Cliffs Natural Resources Inc., Companhia Siderurgica Nacional, Exxaro Resources Limited, Freeport-McMoRan Copper & Gold Inc., Fortescue Metals Group Ltd, First Quantum Minerals Ltd, Gold Fields Ltd, Grupo Mexico, Norilsk Nickel, Hindustan Zinc,

Impala Platinum, Kazakhmys Plc, KGHM Polska Miedz SA, Kumba Iron Ore Ltd, Lonmin PLC, Newcrest Mining Ltd, Newmont Mining, Rio Tinto PLC, Randgold Resources Ltd, Southern Copper Company, Sterlite Industries (India), Xstrata PLC in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as investment banking client(s): Anglo American Platinum Ltd, China Shenhua Energy, China Coal Energy, Anglo American PLC, Barrick Gold, Arch Coal, AngloGold Ashanti Ltd, BHP Billiton PLC, Peabody Energy, Cliffs Natural Resources Inc., Freeport-McMoRan Copper & Gold Inc., Fresnillo Plc, Gold Fields Ltd, Grupo Mexico, Norilsk Nickel, Hindustan Zinc, Kazakhmys Plc, Kumba Iron Ore Ltd, Lonmin PLC, Newmont Mining, Rio Tinto PLC, Sterlite Industries (India), Xstrata PLC.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, securities-related: Anglo American Platinum Ltd, China Shenhua Energy, China Coal Energy, Anglo American PLC, Barrick Gold, Arch Coal, AngloGold Ashanti Ltd, Antofagasta PLC, BHP Billiton PLC, Peabody Energy, Cliffs Natural Resources Inc., Companhia Siderurgica Nacional, Exxaro Resources Limited, Freeport-McMoRan Copper & Gold Inc., Fortescue Metals Group Ltd, First Quantum Minerals Ltd, Gold Fields Ltd, Grupo Mexico, Norilsk Nickel, Harmony Gold Mining Co. Ltd, Hindustan Zinc, Impala Platinum, Kazakhmys Plc, KGHM Polska Miedz SA, Kumba Iron Ore Ltd, Lonmin PLC, Newcrest Mining Ltd, Newmont Mining, Rio Tinto PLC, Randgold Resources Ltd, Southern Copper Company, Sterlite Industries (India), Xstrata PLC.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, non-securities-related: Anglo American Platinum Ltd, China Shenhua Energy, China Coal Energy, Anglo American PLC, Barrick Gold, Arch Coal, AngloGold Ashanti Ltd, Antofagasta PLC, African Rainbow Minerals, BHP Billiton PLC, Peabody Energy, Cliffs Natural Resources Inc., Companhia Siderurgica Nacional, Exxaro Resources Limited, Freeport-McMoRan Copper & Gold Inc., Fortescue Metals Group Ltd, Gold Fields Ltd, Grupo Mexico, Norilsk Nickel, Hindustan Zinc, Kazakhmys Plc, KGHM Polska Miedz SA, Kumba Iron Ore Ltd, Lonmin PLC, Newcrest Mining Ltd, Newmont Mining, Rio Tinto PLC, Randgold Resources Ltd, Southern Copper Company, Sterlite Industries (India), Xstrata PLC.

Citigroup Global Markets Inc. or an affiliate received compensation in the past 12 months from Cliffs Natural Resources Inc., Arch Coal.

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability which includes investment banking revenues.

The Firm is a market maker in the publicly traded equity securities of Anglo American Platinum Ltd, Jiangxi Copper, China Shenhua Energy, China Coal Energy, Anglo American PLC, Antofagasta PLC, Peabody Energy, Companhia Siderurgica Nacional, Exxaro Resources Limited, Fortescue Metals Group Ltd, First Quantum Minerals Ltd, Gold Fields Ltd, Norilsk Nickel, Impala Platinum, Newcrest Mining Ltd, Randgold Resources Ltd, Xstrata PLC.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Investment Research & Analysis product ("the Product"), please contact Citi Investment Research & Analysis, 388 Greenwich Street, 28th Floor, New York, NY, 10013, Attention: Legal/Compliance. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at www.citigroupgeo.com. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

Citi Investment Research & Analysis Ratings Distribution

Data current as of 30 Jun 2011

| | 12 Month Rating | | | Relative Rating | | |
|--|-----------------|------|------|-----------------|------|------|
| | Buy | Hold | Sell | Buy | Hold | Sell |
| Citi Investment Research & Analysis Global Fundamental Coverage | 54% | 36% | 11% | 10% | 81% | 10% |
| % of companies in each rating category that are investment banking clients | 45% | 41% | 42% | 50% | 42% | 44% |

Guide to Citi Investment Research & Analysis (CIRA) Fundamental Research Investment Ratings:

CIRA's stock recommendations include a risk rating and an investment rating.

Risk ratings, which take into account both price volatility and fundamental criteria, are: Low (L), Medium (M), High (H), and Speculative (S).

Investment ratings are a function of CIRA's expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating.

Analysts may place covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and/or trading in the company's securities (e.g. trading suspension). Stocks placed "Under Review" will be monitored daily by management. As soon as practically possible, the analyst will publish a note re-establishing a rating and investment thesis.

To satisfy regulatory requirements, we correspond Under Review to Hold in our ratings distribution table for our 12-month fundamental rating system. However, we reiterate that we do not consider Under Review to be a recommendation.

Relative three-month ratings: CIRA may also assign a three-month relative call (or rating) to a stock to highlight expected out-performance (most preferred) or under-performance (least preferred) versus the geographic and industry sector over a 3 month period. The relative call may highlight a specific near-term catalyst or event impacting the company or the market that is anticipated to have a short-term price impact on the equity securities of the company. Absent any specific catalyst the analyst(s) will indicate the most and least preferred stocks in the universe of stocks under consideration, explaining the basis for this short-term view. This three-month view may be different from and does not affect a stock's fundamental equity rating, which reflects a longer-term total absolute return expectation. For purposes of NASD/NYSE ratings-distribution-disclosure rules, most preferred calls correspond to a buy recommendation and least preferred calls correspond to a sell recommendation. Any stock not assigned to a most preferred or least preferred call is considered non-relative-rated (NRR). For purposes of NASD/NYSE ratings-distribution-disclosure rules we correspond NRR to Hold in our ratings distribution table for our 3-month relative rating system. However, we reiterate that we do not consider NRR to be a recommendation.

For securities in developed markets (US, UK, Europe, Japan, and Australia/New Zealand), investment ratings are: Buy (1) (expected total return of 10% or more for Low-Risk stocks, 15% or more for Medium-Risk stocks, 20% or more for High-Risk stocks, and 35% or more for Speculative stocks); Hold (2) (0%-10% for Low-Risk stocks, 0%-15% for Medium-Risk stocks, 0%-20% for High-Risk stocks, and 0%-35% for Speculative stocks); and Sell (3) (negative total return).

For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings are: Buy (1) (expected total return of 15% or more for Low-Risk stocks, 20% or more for Medium-Risk stocks, 30% or more for High-Risk stocks, and 40% or more for Speculative

stocks); Hold (2) (5%-15% for Low-Risk stocks, 10%-20% for Medium-Risk stocks, 15%-30% for High-Risk stocks, and 20%-40% for Speculative stocks); and Sell (3) (5% or less for Low-Risk stocks, 10% or less for Medium-Risk stocks, 15% or less for High-Risk stocks, and 20% or less for Speculative stocks).

Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

NON-US RESEARCH ANALYST DISCLOSURES

Non-US research analysts who have prepared this report (i.e., all research analysts listed below other than those identified as employed by Citigroup Global Markets Inc.) are not registered/qualified as research analysts with FINRA. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The legal entities employing the authors of this report are listed below:

| | |
|--|--|
| Citigroup Global Markets (Pty) Ltd | Johann Steyn; Craig Irwin; Johann Pretorius |
| Citigroup Global Markets Ltd | Jon H Bergtheil; Anindya Mohinta; Heath R Jansen |
| Citigroup Global Markets Asia | Scarlett Y Chen, CFA; Aaron Ge, CFA |
| Citicorp Pty Ltd | Clarke Wilkins; Craig Sainsbury |
| Citigroup Global Markets Inc | Alexander Hacking, CFA; Brian Yu, CFA |
| PT Citigroup Securities Indonesia | Kim Kwie Sjamsudin, CFA |
| ZAO Citibank | Mikhail Seleznev, CFA |
| Citigroup Global Markets India Private Limited | Pradeep Mahtani |
| Dom Maklerski Banku Handlowego SA | Rafal Wiatr, CFA |

OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 31 August 2011 05:00 PM on the issuer's primary market.

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Anglo American PLC, Barrick Gold, Arch Coal, Peabody Energy, Cliffs Natural Resources Inc., Exxaro Resources Limited, Freeport-McMoRan Copper & Gold Inc., Lonmin PLC, Newmont Mining, Rio Tinto PLC, Sterlite Industries (India), Xstrata PLC. (For an explanation of the determination of significant financial interest, please refer to the policy for managing conflicts of interest which can be found at www.citigroupgeo.com.)

Citigroup Global Markets Inc. or its affiliates beneficially owns 2% or more of any class of common equity securities of Freeport-McMoRan Copper & Gold Inc., Fortescue Metals Group Ltd, Whitehaven Coal Ltd.

Citigroup Global Markets Inc. or its affiliates beneficially owns 10% or more of any class of common equity securities of Macarthur Coal Ltd, Newcrest Mining Ltd.

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers' financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the issuer(s) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

Citigroup Global Markets Inc. or its affiliates acts as a corporate broker to BHP Billiton PLC, Kazakhmys Plc, Lonmin PLC.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citi Investment Research & Analysis (CIRA) does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of CIRA to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus.

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for

exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

Important Disclosures for Morgan Stanley Smith Barney LLC Customers: Morgan Stanley & Co. Incorporated (Morgan Stanley) research reports may be available about the companies that are the subject of this Citi Investment Research & Analysis (CIRA) research report. Ask your Financial Advisor or use smithbarney.com to view any available Morgan Stanley research reports in addition to CIRA research reports.

Important disclosure regarding the relationship between the companies that are the subject of this CIRA research report and Morgan Stanley Smith Barney LLC and its affiliates are available at the Morgan Stanley Smith Barney disclosure website at www.morganstanleysmithbarney.com/researchdisclosures. The required disclosures provided by Morgan Stanley and Citigroup Global Markets, Inc. on Morgan Stanley and CIRA research relate in part to the separate businesses of Citigroup Global Markets, Inc. and Morgan Stanley that now form Morgan Stanley Smith Barney LLC, rather than to Morgan Stanley Smith Barney LLC in its entirety. For Morgan Stanley and Citigroup Global Markets, Inc. specific disclosures, you may refer to www.morganstanley.com/researchdisclosures and https://www.citigroupgeo.com/geopublic/Disclosures/index_a.html.

This CIRA research report has been reviewed and approved on behalf of Morgan Stanley Smith Barney LLC. This review and approval was conducted by the same person who reviewed this research report on behalf of CIRA. This could create a conflict of interest.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in **Australia** through Citigroup Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992), participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in **Australia** to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in **Brazil** by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBID - Associação Nacional dos Bancos de Investimento. Av. Paulista, 1111 - 11º andar - CEP. 01311920 - São Paulo - SP. If the Product is being made available in certain provinces of **Canada** by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. This product is available in **Chile** through Banchile Corredores de Bolsa S.A., an indirect subsidiary of Citigroup Inc., which is regulated by the Superintendencia de Valores y Seguros. Agustinas 975, piso 2, Santiago, Chile. The Product is made available in **France** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 1-5 Rue Paul Cézanne, 8ème, Paris, France. The Product is distributed in **Germany** by Citigroup Global Markets Deutschland AG ("CGMD"), which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). CGMD, Reuterweg 16, 60323 Frankfurt am Main. Research which relates to "securities" (as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong)) is issued in **Hong Kong** by, or on behalf of, Citigroup Global Markets Asia Limited which takes full responsibility for its content. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Research is made available through Citibank, N.A., Hong Kong Branch, for its clients in Citi Private Bank, it is made available by Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citibank N.A. is regulated by the Hong Kong Monetary Authority. Please contact your Private Banker in Citibank N.A., Hong Kong, Branch if you have any queries on or any matters arising from or in connection with this document. The Product is made available in **India** by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. The Product is made available in **Indonesia** through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. The Product is made available in **Israel** through Citibank NA, regulated by the Bank of Israel and the Israeli Securities Authority. Citibank, N.A., Platinum Building, 21 Ha'arba'ah St, Tel Aviv, Israel. The Product is made available in **Italy** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. Foro Buonaparte 16, Milan, 20121, Italy. The Product is made available in **Japan** by Citigroup Global Markets Japan Inc. ("CGMJ"), which is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. If the Product was distributed by SMBC Nikko Securities Inc. it is being so distributed under license. In the event that an error is found in an CGMJ research report, a revised version will be posted on the Firm's Global Equities Online (GEO) website. If you have questions regarding GEO, please call (81 3) 6270-3019 for help. The Product is made available in **Korea** by Citigroup Global Markets Korea Securities Ltd., which is regulated by the Financial Services Commission, the Financial Supervisory Service and the Korea Financial Investment Association (KOFIA). Citibank Building, 39 Da-dong, Jung-gu, Seoul 110-180, Korea. KOFIA makes available registration information of research analysts on its website. Please visit the following website if you wish to find KOFIA registration information on research analysts of Citigroup Global Markets Korea Securities Ltd. <http://dis.kofia.or.kr/fs/dis2/fundMgr/DISFundMgrAnalystPop.jsp?companyCd2=A03030&pageDiv=02>. The Product is made available in **Malaysia** by Citigroup Global Markets Malaysia Sdn Bhd, which is regulated by Malaysia Securities Commission. Menara Citibank, 165 Jalan Ampang, Kuala Lumpur, 50450. The Product is made available in **Mexico** by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, Integrante del Grupo Financiero Banamex ("Accival") which is a wholly owned subsidiary of Citigroup Inc. and is regulated by Comisión Nacional Bancaria y de Valores. Reforma 398, Col. Juárez, 06600 Mexico, D.F. In **New Zealand** the Product is made available through Citigroup Global Markets New Zealand Ltd. (Company Number 604457), a Participant of the New Zealand Exchange Limited and regulated by the New Zealand Securities Commission. Level 19, Mobile on the Park, 157 Lambton Quay, Wellington. The Product is made available in **Pakistan** by Citibank N.A. Pakistan branch, which is regulated by the State Bank of Pakistan and Securities Exchange Commission, Pakistan. AWT Plaza, 1.1. Chundrigar Road, P.O. Box 4889, Karachi-74200. The Product is made available in the **Philippines** through Citicorp Financial Services and Insurance Brokerage Philippines, Inc., which is regulated by the Philippines Securities and Exchange Commission. 20th Floor Citibank Square Bldg. The Product is made available in **Poland** by Dom Maklerski Banku Handlowego SA an indirect

subsidiary of Citigroup Inc., which is regulated by Komisja Nadzoru Finansowego. Dom Maklerski Banku Handlowego S.A. ul. Senatorska 16, 00-923 Warszawa. The Product is made available in the **Russian Federation** through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in **Singapore** through Citigroup Global Markets Singapore Pte. Ltd. ("CGMSPL"), a capital markets services license holder, and regulated by Monetary Authority of Singapore. Please contact CGMSPL at 1 Temasek Avenue, #39-02 Millenia Tower, Singapore 039192, in respect of any matters arising from, or in connection with, the analysis of this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore Branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Please contact your Private Banker in Citibank N.A., Singapore Branch if you have any queries on or any matters arising from or in connection with this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). This report is distributed in Singapore by Citibank Singapore Ltd ("CSL") to selected Citigroup/Citigold Private Clients. CSL provides no independent research or analysis of the substance or in preparation of this report. Please contact your Citigroup/Citigold Private Client Relationship Manager in CSL if you have any queries on or any matters arising from or in connection with this report. This report is intended for recipients who are accredited investors as defined under the Securities and Futures Act (Cap. 289). Citigroup Global Markets (Pty) Ltd. is incorporated in the **Republic of South Africa** (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in **Spain** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 29 Jose Ortega Y Gasset, 4th Floor, Madrid, 28006, Spain. The Product is made available in the **Republic of China** through Citigroup Global Markets Taiwan Securities Company Ltd. ("CGMTS"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan and/or through Citibank Securities (Taiwan) Company Limited ("CSTL"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan, subject to the respective license scope of each entity and the applicable laws and regulations in the Republic of China. CGMTS and CSTL are both regulated by the Securities and Futures Bureau of the Financial Supervisory Commission of Taiwan, the Republic of China. No portion of the Product may be reproduced or quoted in the Republic of China by the press or any third parties [without the written authorization of CGMTS and CSTL]. If the Product covers securities which are not allowed to be offered or traded in the Republic of China, neither the Product nor any information contained in the Product shall be considered as advertising the securities or making recommendation of the securities in the Republic of China. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security or financial products. Any decision to purchase securities or financial products mentioned in the Product must take into account existing public information on such security or the financial products or any registered prospectus. The Product is made available in **Thailand** through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in **Turkey** through Citibank AS which is regulated by Capital Markets Board. Tekfen Tower, Eski Büyükdere Caddesi # 209 Kat 2B, 23294 Levent, Istanbul, Turkey. In the **U.A.E.**, these materials (the "Materials") are communicated by Citigroup Global Markets Limited, DIFC branch ("CGML"), an entity registered in the Dubai International Financial Center ("DIFC") and licensed and regulated by the Dubai Financial Services Authority ("DFSA") to Professional Clients and Market Counterparties only and should not be relied upon or distributed to Retail Clients. A distribution of the different CIRA ratings distribution, in percentage terms for Investments in each sector covered is made available on request. Financial products and/or services to which the Materials relate will only be made available to Professional Clients and Market Counterparties. The Product is made available in **United Kingdom** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in **United States** by Citigroup Global Markets Inc, which is a member of FINRA and registered with the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority.

Pursuant to Comissão de Valores Mobiliários Rule 483, Citi is required to disclose whether a Citi related company or business has a commercial relationship with the subject company. Considering that Citi operates multiple businesses in more than 100 countries around the world, it is likely that Citi has a commercial relationship with the subject company.

Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to CIRA's Products can be found at www.citigroupgeo.com.

Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations.

The Product may have been distributed simultaneously, in multiple formats, to the Firm's worldwide institutional and retail customers. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would not be permitted.

Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. The Product does not purport to identify the nature of the specific market or other risks associated with a particular transaction. Advice in the Product is general and should not be construed as personal advice given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. Prior to acquiring any financial product, it is the client's responsibility to obtain the relevant offer document for the product and consider it before making a decision as to whether to purchase the product. CIRA concurrently disseminates its research via proprietary and non-proprietary electronic distribution platforms. Periodically, individual analysts may also opt to circulate research to one or more clients by email. Such email distribution is discretionary and is done only after the research has been disseminated via the aforementioned distribution channels.

The level and types of services provided by CIRA analysts to clients may vary depending on various factors such as the client's individual preferences as to the frequency and manner of receiving communications from analysts, the client's risk profile and investment focus and perspective (e.g. market-wide, sector specific, long term, short-term etc.), the size and scope of the overall client relationship with Citi and legal and regulatory constraints.

© 2011 Citigroup Global Markets Inc. Citi Investment Research & Analysis is a division of Citigroup Global Markets Inc. Citi and Citi with Arc Design are trademarks and service marks of Citigroup Inc. and its affiliates and are used and registered throughout the world. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure of this report (the "Product"), including, but not limited to, redistribution of the Product by electronic mail, posting of the Product on a website or page, and/or providing to a third party a link to the Product, is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient to any third party. Where included in this report, MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, redisseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the extent to which the Product refers to website material of the Firm, the Firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in anyway form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST

EU10902D
