



Industry
**Amplats operational
review**

Date
19 March 2012

Sub-Saharan Africa
South Africa

Mining



Anna Mulholland, CFA
Research Analyst
(+27) 11 775-7270
anna.mulholland@db.com

Tim Clark
Research Analyst
(+27) 11 775-7268
tim.clark@db.com

Grant Sporre
Research Analyst
(+44) 207 545-8170
grant.sporre@db.com

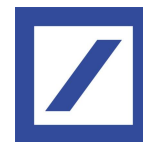
F.I.T.T. for investors

Dealing with Anglo's Bushveld complex

We believe there is significant value locked up in Amplats in its large and unique PGM resource base in South Africa's Bushveld Complex. This value has not, however, been evident over the past three years, leading to parent Anglo American's announcement of an 'operational review'. We look at options for returning Amplats to its former health and conclude that the best route is to sell higher-cost mines, stripping out corporate costs, and bring in new toll-refining ounces. The potential value unlock for Amplats is 13% (R31 per share); we reflect this in our revised TP of R620. For Anglo American, the uplift is 2% to NPV. Whilst this appears low, we believe Anglo shares will react positively to better performance from Amplats, which in turn should close Anglo's P/NPV discount to peers (currently trading at 0.69x). We rate Anglo a Buy. We retain our Hold on Amplats given any process is likely to take 24 months to be fully implemented

Deutsche Securities (Pty) Ltd

All prices are those current at the end of the previous trading session unless otherwise indicated. Prices are sourced from local exchanges via Reuters, Bloomberg and other vendors. Data is sourced from Deutsche Bank and subject companies. Deutsche Bank does and seeks to do business with companies covered in its research reports. Thus, 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. DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED IN APPENDIX 1. MICA(P) 146/04/2011.



Amplats operational review

Dealing with Anglo's Bushveld complex

Anna Mulholland, CFA

Research Analyst
(+27) 11 775-7270
anna.mulholland@db.com

Tim Clark

Research Analyst
(+27) 11 775-7268
tim.clark@db.com

Grant Sporre

Research Analyst
(+44) 207 545-8170
grant.sporre@db.com

Unlocking value through the Amplats "operational review"

We believe there is significant value locked up in Amplats in its large and unique PGM resource base in South Africa's Bushveld Complex. This value has not, however, been evident over the past three years, leading to parent Anglo American's announcement of an 'operational review'. We look at options for returning Amplats to its former health and conclude that the best route is to sell higher-cost mines with off-take agreements, stripping out corporate costs. The potential value unlock for Amplats is R31 per share; we reflect this in our revised TP of R620. For Anglo American, the uplift is 2% to NPV. Whilst this appears low, we believe Anglo shares will react positively to a better performance in platinum, which in turn should close Anglo's P/NPV discount to peers. We rate Anglo a Buy. We retain our Hold on Amplats given any process is likely to take 24 months to be fully implemented.

R31 per share value unlock for Amplats, R5 or GBp80 per share for Anglo

We look at three scenarios for unlocking value: (i) a sale of high-cost Rustenburg mines and a smelter, or exit the JV mines, (ii) unbundle a vertically integrated group, and (iii) monetise the resource base. We conclude that a combination of an exit of the JV mines, new toll-refining ounces and a cut in corporate costs creates the most value for Amplats. Anglo management has commented that an unbundling of Amplats is not the intention, and we conclude it is very unlikely.

An appropriate strategy for a more balanced PGM market

The group's view of the PGM market will clearly influence the outcome of the operational review. A view that a persistent deficit will develop in future would lead to a volume maximisation strategy- this view seems to have been dominant in Amplats over the past decade. However, an alternative "low-demand + zero mined-supply growth" scenario is a strong possibility in our view. In this context, we think the most appropriate strategy is for Amplats to run a very lean organisation, focusing on the highest margin, scaleable and low-capex intensity mines.

Restructuring is not without its challenges

There are large challenges in restructuring the platinum portfolio, in our view. A sale of assets or an unbundling would need a willing and able buyer that would meet with the approval of the SA government and preserve Amplats' BEE credits. In becoming leaner, Amplats would need to overcome the challenges of high fixed processing and centralised costs: the closure of mines burdens the remaining operations with a higher proportion of fixed costs, while the sale of mines without smelting capacity merely reduces Amplats' ability to ensure economic smelter utilisation.

TP up 5% for Amplats to R620; TP up 2% for Anglo to 45000SAc/3850p

We are overweight the diversified mining companies where valuations are cheap (0.8x NPV) and growth is being delivered into a relatively high price environment. We are neutral on the PGM sector - we think the sector is at marginal cost and thus any negative production news will be compensated for in price; when Europe recovers, the PGM sector should be a key exposure. More company valuation and risks are presented on pages 48-49.

Top Picks

Anglo American (AGLJ.J),ZAR313.80	Buy
Anglo American (AAL.L),GBP2,618.00	Buy

Companies Featured

Amplats (AMSJ.J),ZAR550.04	Hold
----------------------------	------

	2011A	2012E	2013E
--	-------	-------	-------

DB EPS (ZAR)	13.54	15.26	17.50
--------------	-------	-------	-------

P/E (x)	45.4	36.0	31.4
---------	------	------	------

EV/EBITA (x)	19.7	27.3	24.0
--------------	------	------	------

Anglo American (AGLJ.J),ZAR313.80	Buy
-----------------------------------	-----

	2011A	2012E	2013E
--	-------	-------	-------

DB EPS (USD)	5.06	5.06	5.55
--------------	------	------	------

P/E (x)	8.8	8.2	7.4
---------	-----	-----	-----

EV/EBITA (x)	6.8	5.8	4.9
--------------	-----	-----	-----

Anglo American (AAL.L),GBP2,618.00	Buy
------------------------------------	-----

	2011A	2012E	2013E
--	-------	-------	-------

DB EPS (USD)	5.06	5.06	5.55
--------------	------	------	------

P/E (x)	8.9	8.2	7.5
---------	-----	-----	-----

EV/EBITA (x)	6.8	5.8	4.9
--------------	-----	-----	-----



Table Of Contents

Executive summary	5
The potential value accretion for shareholders.....	5
Amplats into an 'operational review' – a catalyst to unlock value.....	6
How to return Amplats to its former health?.....	7
We conclude a sale of high-cost assets creates the most value.....	8
Reasons for the review	9
Amplats' contribution to the Anglo American group.....	9
Amplats compared to peers	14
Industry supply-demand dynamics	17
A deficit in the platinum market should not be taken for granted.....	17
Conclusion: Is Anglo American adopting a more muted PGM demand outlook?.....	19
Amplats' portfolio: Options and dilemmas.....	20
Conclusion: Closure of mines is a difficult route to take.....	25
Selling high-cost mines.....	26
Selling high-cost mines & removing costs could more than double FCF.....	26
Two scenarios for sale of high-cost mines / JVs.....	26
Potential uplift to gross profit of 7%; FCF could more than double.....	29
Conclusion: A sale of the JV mine stakes plus Bathopele offers the most potential upside.....	31
Some practical considerations.....	31
Unbundling a vertically integrated group	32
Using Rio Tinto's Pacific Aluminium assets as a case study	32
The similarities between platinum and aluminium	32
Maximising revenue and monetising long-dated growth options	40
Seeking revenue enhancement and cost savings.....	40
Maximising revenue	40
Monetise longer-dated growth options	41
Unbundle from Anglo American	45
Unbundling remains unlikely	45
Anglo American rump (excluding Kumba and Amplats).....	45
Anglo American rump (excluding only Amplats)	46
The support rationale for Amplats unbundling	47
Valuation and risk.....	48
Amplats investment thesis	48
Anglo American investment thesis	49
Appendix A: Amplats' current mines.....	51
Appendix B: Location of mines, smelters and refineries	56



Executive summary

The potential value accretion for shareholders

We believe that the “operational review” of Amplats which Anglo American announced last month affords the group an opportunity to restructure and unlock significant value. We think Amplats can achieve the key goal of mining companies – earning more off a lower-cost asset base. In this note we have assessed two main options for how this can be achieved – (i) a sale of the four deep-level Rustenburg mines and the Waterval smelter, and (ii) an exit of JV mines plus a sale of Bathopele mine. The outcome of each is summarised in Figure 6.

We estimate the potential value unlock in Amplats in two different ways: (i) an NPV of the potential uplift to FCF, discounted at our estimate of Amplats’ WACC, 13%; and (ii) a multiple of the potential uplift to earnings, to which we apply Amplats’ average 2-yr forward PE multiple of 21x (average since April 2009). We would favour the NPV approach as it captures the reduction in the group’s capex burden upon a sale of mines to better effect (depreciation is lagging capex). We therefore include this value unlock in our target price, which increases from R590 to R620, representing 13% upside from the current price.

Figure 1: Potential value unlock for Amplats from our two chosen scenarios

	NPV of FCF uplift	Per share uplift	Previous TP	New TP	Current price	% up/downside
Sale of 4 Rustenburg mines and 1 smelter	8,017	30.7	590	621	550	12.9
Sale of JVs and Bathopele	8,008	30.7	590	621	550	12.8

Rm	Earnings accretion	Average 2-yr fwd PE(x)	Market cap uplift	Current market cap	New market cap	Implied share price	Current price	% up/downside
Sale of 4 Rustenburg mines and 1 smelter	278	21	5,829	143,674	149,504	573	550	4.1
Sale of JVs and Bathopele	319	21	6,704	143,674	150,378	576	550	4.8

Source: Deutsche Bank estimates

Taking the 13% NPV accretion assumed in Amplats into account in Anglo American this equates to US\$2.27bn of additional NPV, 2.1% higher. We have sense checked this accretion with a Gordon’s growth model where Anglo ROEs improve and the expected exit multiple increases from 9.5x to 9.7x. This uplift coincides with the US\$2.27bn accretion assumed. As a result we have increased our Anglo price target from 44500 SAC to 45000 SAC and from 3770p to 3850p.

Though the upside to Anglo’s valuation is relatively limited we see the value more from the turnaround of this underperforming division and ultimately from an uplift to Anglo which is currently trading on a P/NPV of 0.69x, well below the long term average of 1.0x. The turnaround operationally and of the platinum sector is an important catalyst for a rerating off this low base in our view. Anglo management has commented that an unbundling/sale of Amplats is not being considered. Though we find value from unbundling (the rump FY2 PE is 20% lower), we believe management will not go down this route.

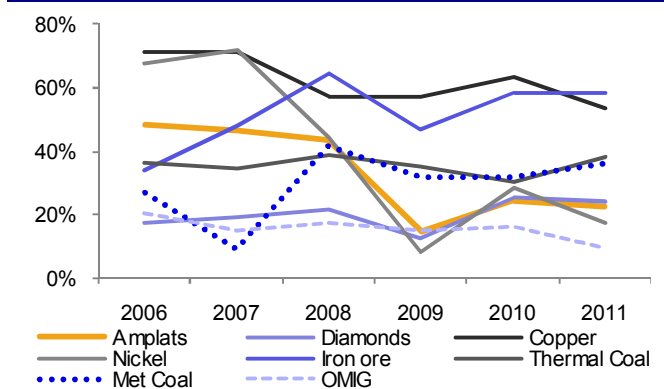


Amplats into an 'operational review' – a catalyst to unlock value

At its FY11 results presentation, Anglo American announced it was 'committed to establishing the optimal structural configuration of the platinum business, reviewing the shape and size of the portfolio in pursuit of maximising shareholder value and returns through the cycle.' Subsequently, Cynthia Carroll has commented: "One thing that isn't on the table is selling it off or demerging, I have been asked that quite a number of times. That isn't what we are doing here." (Dow Jones Newswires, 24 February 2012)

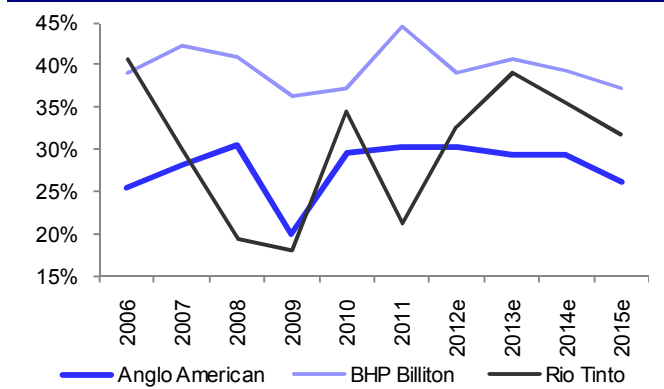
The reason for this review is highlighted in the following charts. From an Anglo American perspective, Amplats was a business that in 2004-08 had an average margin of 40%, above the group average EBITDA margin of 30%. During the financial crisis, all commodities came under pressure; but where other commodities rebounded, platinum remains subdued, especially in Rand terms. From 2009-11, the average platinum EBITDA margin was 21%, materially lower than prior levels. The impact of underperformance is clear, with Amplats contributing 7% to group EBITDA in 2013e (after the De Beers acquisition in 2012), punching well below its weight in our (and clearly Anglo American's) view with a contribution of 17% on NPV.

Figure 2: EBITDA margins over time, Anglo; FY06-11



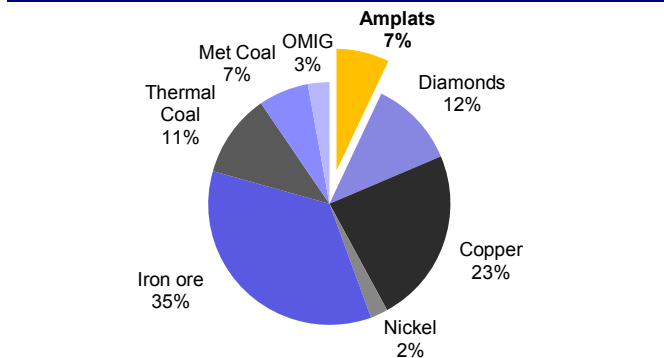
Source: Deutsche Bank

Figure 3: Comparing Anglo to peers, operating margins



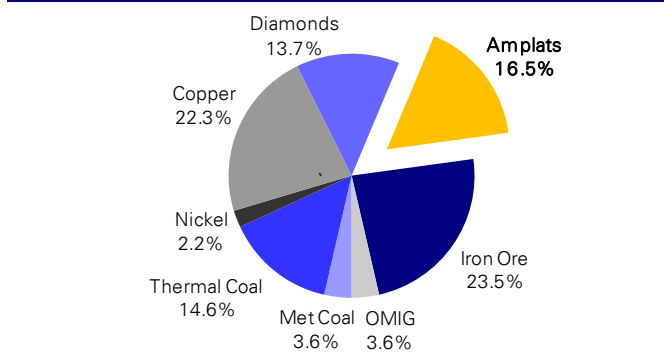
Source: Deutsche Bank

Figure 4: EBITDA contribution to Anglo, FY13



Source: Deutsche Bank

Figure 5: NPV contribution to Anglo



Source: Deutsche Bank



How to return Amplats to its former health?

While we acknowledge that Amplats conducts regular reviews of its portfolio of assets, we believe for Anglo American this 'operational review' represents more than "business as usual". Anglo American management has commented that it views 2008 profitability as a good benchmark for retuning Amplats to its former health. Restructuring and portfolio optimisation is not new to Anglo American, having spent much of the 2000s engaged in these activities. There is also a similar example in the peer group, with Rio Tinto's "transformation" plans for the Rio Tinto Alcan division. With this in mind, we believe Anglo American will review and compare the potential benefits of a number of individual options, or a combination of these alternatives.

Amplats could benefit in becoming:

- A **smaller, higher-margin producer** with production from the higher-grade Dishaba and Tumela mines, the lower-cost Unki and Mogalakwena mines, and from Union mine before its end of life and to utilise its stockpile flexibility;
- A **larger refiner of secondary material** via new recycling contracts and toll-refining to utilise spare smelting and refining capacity;
- More **directly involved in selling its products** to customers, thus maximising margins by by-passing the 'middle-man';
- A **smaller resource owner by monetising its project pipeline** and longer-dated resources.

In considering any potential restructuring of the business, we believe that there are two strong headwinds to capturing full value: (i) the level of corporate or central costs which are currently allocated across all operations; (ii) the level of smelting and refining costs which are also allocated across the portfolio.

Any restructuring which does not include a re-allocation, sale or outright reduction in these costs is a non-starter in our view, especially if Anglo American is intent of returning Amplats to its former health. As such, we believe it will be difficult for Amplats to close down mines without a concurrent reduction in those costs.

We therefore look at three options which Amplats and Anglo could consider in the review:

1. Sell high cost mines and exit joint venture mines (retaining offtake agreements);
2. Unbundle a vertically integrated group;
3. Review its project pipeline and resource base, its customer contracts and its processing capacity.

In practice, Anglo American and Amplats conclusion could involve elements of all three of these.

In addition, we look at the possibility of Anglo American unbundling its 77.3% shareholding in Amplats. Though there is value from unbundling, we believe that this is unlikely and is not Anglo American's intention in performing this review.



We conclude a sale of high-cost assets creates the most value

We conclude the best route for Anglo American to follow for its shareholders would be to sell Amplats' higher-cost mines (retaining off-take agreements) in conjunction with monetising some of the group's longer-dated projects and resource options. In this regard, we look at two scenarios: (i) a sale of the four deep-level Rustenburg mines plus the sale of a smelter, (ii) a sale of Amplats' 50% stakes in its four JV mines (Modikwa, Marikana, Kroondal and Mototolo) plus the Bathopele mine in Rustenburg – our estimates for each are shown in Figure 6.

We believe the best outcome for Amplats shareholders would also be to sell Amplats' higher-cost mines but ensure that capex is then increased and re-allocated to the lower-cost Mogalakwena and Unki mines to secure future lower-cost production growth.

We acknowledge this sort of restructuring would only be conducted with guarantees of preserving BEE credits. As noted above, the main obstacles to any permanent reduction in production, in our view, are that any closure or sale of mines need to be accompanied by a concurrent reduction/sale in the central costs allocated to the mines in question; and that any closure or sale of mines should ideally be accompanied by the closure or sale of the smelting capacity assigned to those mines.

From a macro perspective, we think that a permanent reduction in Amplats' production makes sense if the economic recovery in Europe is likely to take longer than the next 2-3 years.

Figure 6: Summary of two options considered for Amplats' value unlock

Yr end Dec		Current 2012e estimates	Sale of 4 Rustenburg mines and 1 smelter	% chg vs current	Sale of JV stakes plus Bathopele	% chg vs current
Refined platinum production	koz	2,580	2,147	-16.8	2,179	-15.5
New toll-refining ounces	koz		500		500	
Revenue	Rm	51,241	53,263	3.9	60,979	19.0
On-mine cash costs	Rm	25,632	20,420	-20.3	20,622	-19.5
Smelting costs	Rm	3,605	2,403	-33.3	3,605	0.0
Purchase of concentrate costs	Rm	11,232	11,232	0.0	16,534	47.2
Corporate costs	Rm	880	732	-16.8	744	-15.5
Other non-operational costs	Rm	407	0	-100.0	0	-100.0
Total costs	Rm	41,469	43,839	5.7	50,556	21.9
Cash costs per refined Pt oz	R	12,559	8,728	-30.5	9,102	-27.5
Depreciation	Rm	3,739	3,005	-19.6	3,231	-13.6
EBIT	Rm	6,033	6,419	6.4	7,191	19.2
Headline earnings	Rm	4,020	4,297	6.9	4,854	20.7
HEPS	R	1,539	1,645	6.9	1,858	20.7
Capex	Rm	7,938	6,388	-19.5	7,172	-9.6
FCF	Rm	706	1,800	155.0	1,798	154.8

Source: Deutsche Bank estimates



Reasons for the review

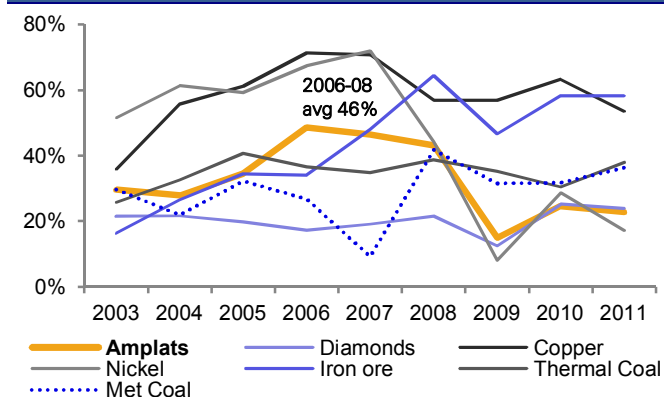
Amplats' contribution to the Anglo American group

One of the key differentiators between Anglo American and the other diversified mining companies is the inclusion of a precious metals/consumer element in the portfolio through Amplats and De Beers. In this section we outline the contribution and change to the contribution of Amplats through time from various perspectives including margins, EBITDA, NPV and copper equivalent production.

Margins over time

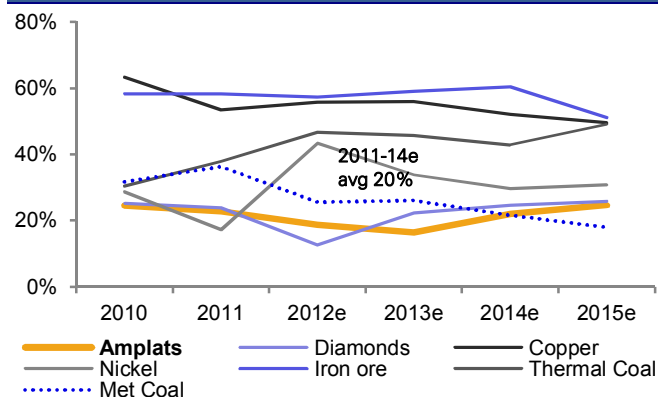
When announcing the review of Amplats, Anglo American cited its intention to return the business to the level of profitability and returns prior to 2008. From 2003-08 Amplats reported average EBITDA margins of 38.3%; from 2006-08 margins were 46.1% and from 2009-11 the EBITDA margin averaged 20.7%. We are forecasting margins to remain around this level to 2014e. This modest level of margin results in considerably weaker free cash flow generation to the group, especially given the high sustaining capex requirements of deep level underground mining.

Figure 7: Anglo divisional EBITDA margins, FY03-FY11



Source: Deutsche Bank

Figure 8: Anglo divisional EBITDA margins, FY10-FY15e



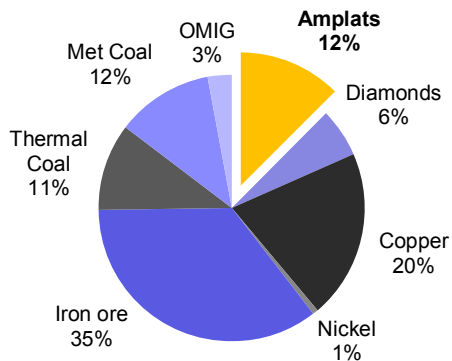
Source: Deutsche Bank



EBITDA contribution

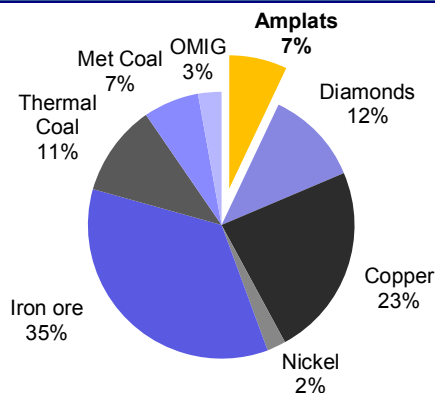
Amplats' contribution to group EBITDA was 12% in 2011, but after taking account of the increased contribution from De Beers (which is reflected in our NPV); Amplats' EBITDA contribution is estimated at 7% of the group. On average, from 2003-08 Amplats contributed 23% of group EBITDA, from 2009-11 the contribution was 12% and we estimate that from 2011-14e, only 9% of EBITDA will come from platinum.

Figure 9: EBITDA contribution to Anglo, FY11



Source: Deutsche Bank

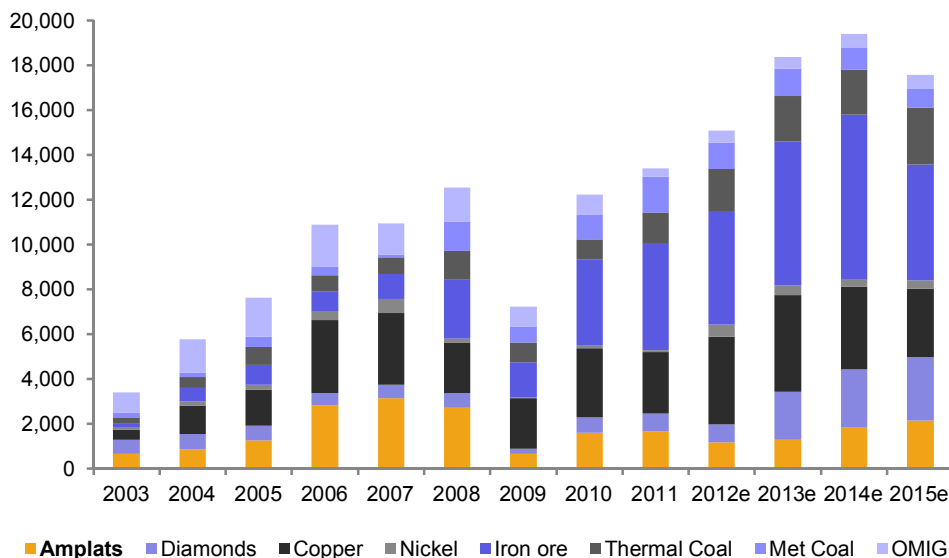
Figure 10: EBITDA contribution to Anglo, FY13e



Source: Deutsche Bank

As illustrated in the chart below the absolute and relative contribution of the platinum division to Anglo American has been reducing through time, a trend we see continuing. Anglo is growing considerably in copper, met coal, iron ore, thermal coal and nickel, and is acquiring a larger stake in De Beers. Platinum is the laggard.

Figure 11: Anglo EBITDA by division, 2003-15e



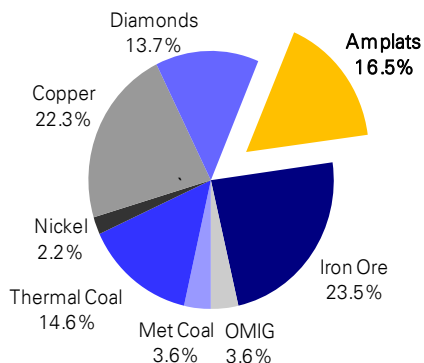
Source: Deutsche Bank



NPV contribution

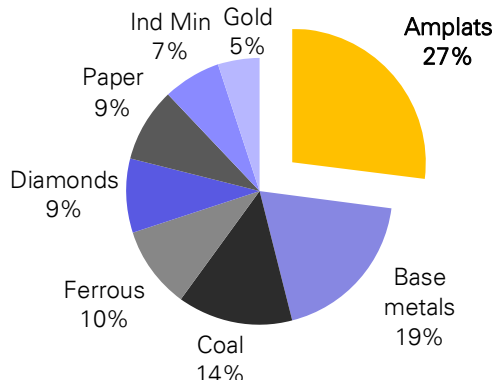
Our main valuation metric is NPV based on a LOM (life-of-mine) DCF. In our assessment Amplats is 16.5% of NPV; which is materially lower than a December 2006 snapshot where our valuation of Amplats was 27% of Anglo American. Anglo American is growing its copper, iron ore and coal divisions, which is, in effect, reducing the NPV contribution of Amplats over time.

Figure 12: Anglo NAV contribution, current



Source: Deutsche Bank

Figure 13: Anglo NAV contribution, Dec 2006



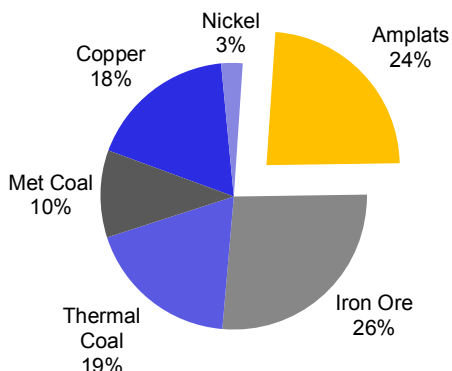
Source: Deutsche Bank

Copper equivalent production

In terms of copper-equivalent production, Amplats was 24% of group copper equivalent production in 2011 (we based copper equivalent production on long-term through-the-cycle prices where platinum prices are higher, hence the relatively high level). In terms of growth, Amplats is expected to contribute 7.1% CAGR over two years, 5.1% over four years and 2.8% over nine years. At the group level, growth is forecast at 13% CAGR over two years, 9.9% over four years and 8.5% over 10 years.

This illustrates the relative importance of the division currently, but also the relatively limited contribution to group growth. For the division to contribute more to the group through time, either higher prices (relative) are required, or some kind of restructuring of the division is needed. To date we believe Anglo American has believed in prices being the driver of value; we think this has recently changed, hence the operational review.

Figure 14: Divisional contribution to copper equivalent production, FY11



Source: Deutsche Bank

Figure 15: Divisional contribution to copper equivalent production growth, sorted by FY11-FY20e CAGR

	2007-11	2011-13e	2011-15e	2011-20e
Iron Ore	9.1%	16.9%	16.4%	14.7%
Nickel	2.5%	46.9%	24.7%	14.6%
Total Production	-0.7%	13.4%	9.9%	8.5%
Copper	-2.0%	21.1%	8.2%	6.6%
Met Coal	2.3%	9.8%	7.7%	5.6%
Thermal Coal	-0.2%	5.1%	5.9%	5.2%
Amplats	-5.9%	7.1%	5.1%	2.8%

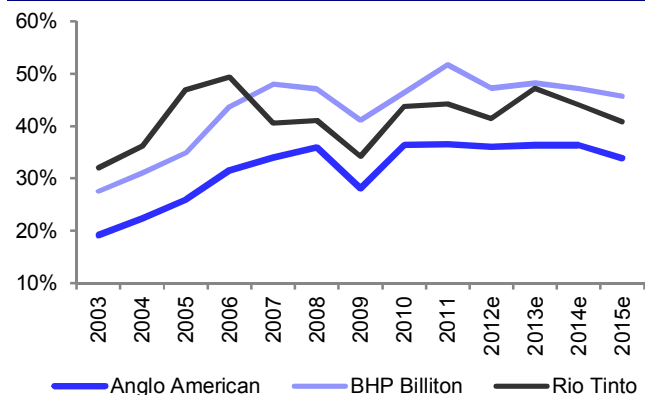
Source: Deutsche Bank



Comparing to the diversified large cap peers

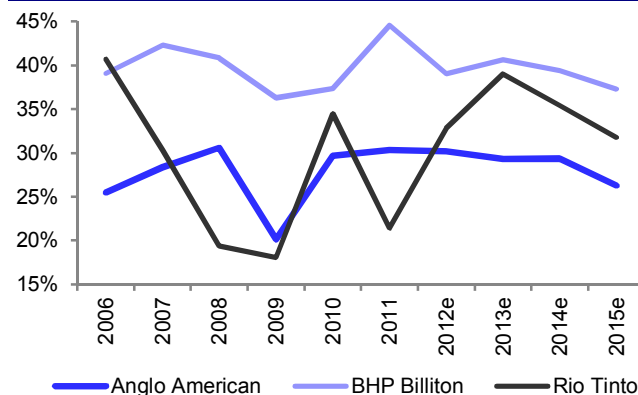
We also think Anglo American is acutely aware of its margins relative to the other large global diversified mining companies. Anglo American aims to be a leading global diversified mining company and in this regard, BHP Billiton and Rio Tinto are the bellwether stocks in the sector. From 2003-11, Anglo American has on average had a 27% lower EBITDA margin than BHP or Rio. Since the financial crisis, Anglo American has had a 26% lower EBITDA margin than BHP and 16% lower than Rio. We think the Amplats review is aimed at addressing this differential by improving the margins of platinum as a significant differentiating segment.

Figure 16: Comparing Anglo to peers, EBITDA margins



Source: Deutsche Bank

Figure 17: Comparing Anglo to peers, operating margins



Source: Deutsche Bank

Commodity exposure

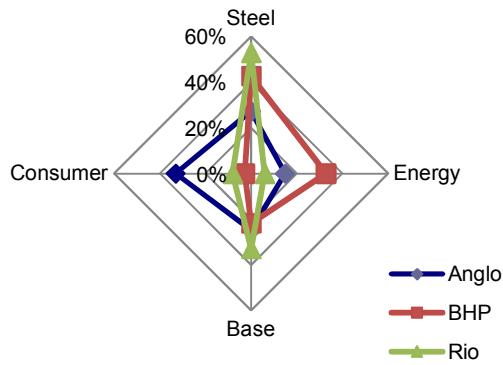
Another interesting differentiator between Anglo American and its peers is its exposure to consumer commodities – diamonds and PGMs. We have categorised the exposure of the different companies in the chart below according to a broad category of use: steel making (iron ore, coking coal and manganese), energy (petroleum, gas, thermal coal and potash), base metals (copper, nickel and zinc) and consumer commodities (PGMs, diamonds and ferroalloys). We have not separated base metals as there is some overlap in use split between infrastructure and consumer goods.

We find that Anglo American has 33% of our NPV from consumer commodities while only 18% of EBITDA in FY11 came from consumer commodities.

The reason this is potentially important in light of the current Amplats review is that consumers globally are somewhat subdued given the global liquidity issues and tight bank lending conditions. A recovery of the US housing market and improved EU economic conditions may well result in a recovery of demand for consumer commodities. In this case, demand will drive the recovery.



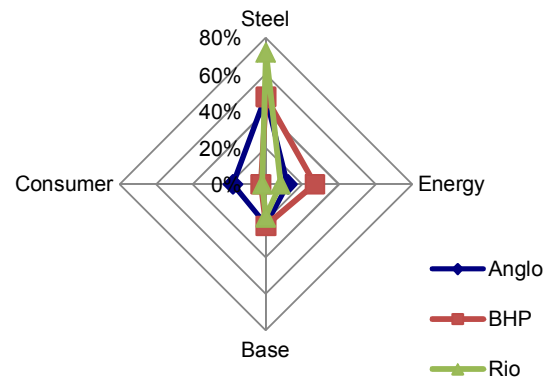
Figure 18: Comparing Anglo to peers, by NPV contribution



	Steel	Energy	Base	Consumer
Anglo	27.4%	14.9%	24.8%	33.1%
BHP	42.8%	32.8%	21.8%	2.8%
Rio	53.0%	6.0%	33.0%	8.0%

Source: Deutsche Bank

Figure 19: Comparing Anglo to peers, by EBITDA contribution, FY11



	Steel	Energy	Base	Consumer
Anglo	48.0%	12.0%	22.0%	18.0%
BHP	47.8%	26.8%	22.8%	2.8%
Rio	72.0%	8.0%	18.0%	2.0%

Source: Deutsche Bank

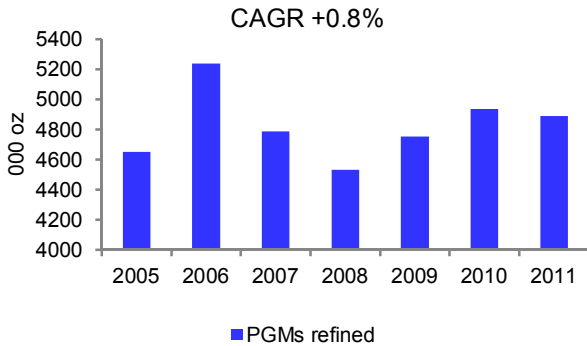


Amplats compared to peers

Amplats' current production base of 2.5m refined platinum ounces makes it the leading producer of platinum globally, with 33% of total supply in 2011 (including recycling supply) or 54% of South African output.

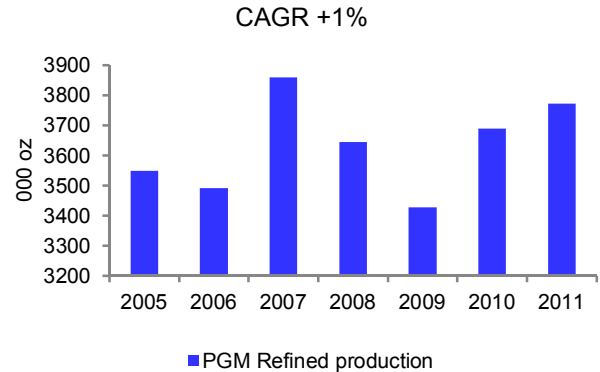
Amplats has had a relatively flat production profile over the last six years, in line with its largest peers Impala, Lonmin and Northam.

Figure 20: Amplats PGM production, 2005-11



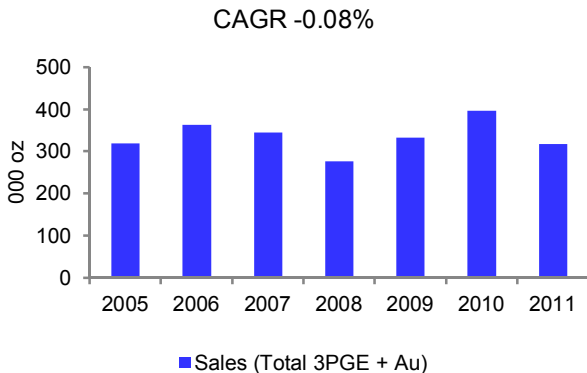
Source: Company data

Figure 21: Impala PGM production, 2005-11



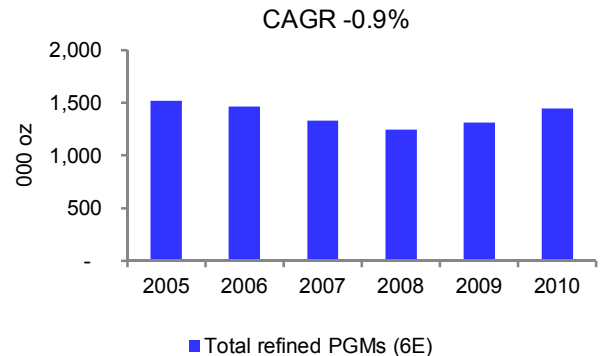
Source: Company data

Figure 22: Northam PGM sales, 2005-11



Source: Company data

Figure 23: Lonmin PGM sales, 2005-11

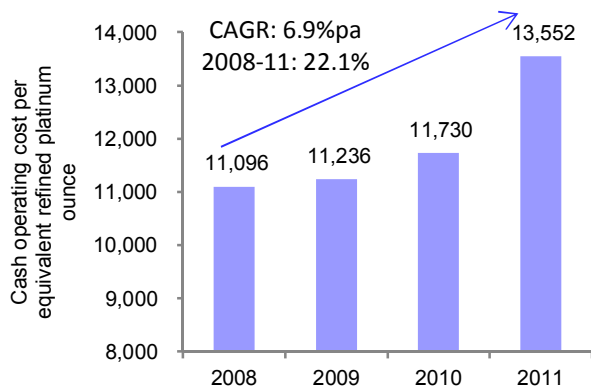


Source: Company data



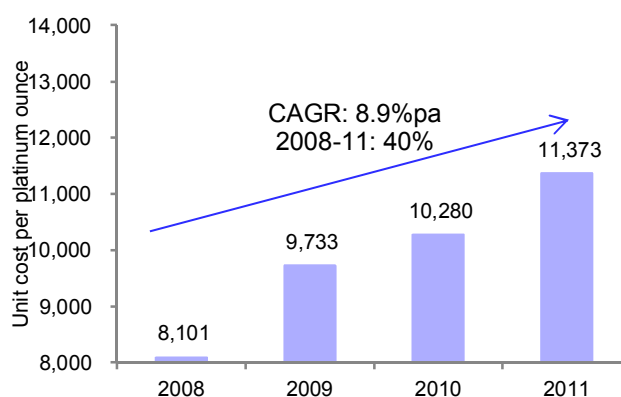
Cash operating costs have, however, increased an average of 7% per year between 2008 and 2011, and 22% directly from the 2008 to the 2011 level.

Figure 24: Amplats growth in cash operating costs 2008-11 (year to December)



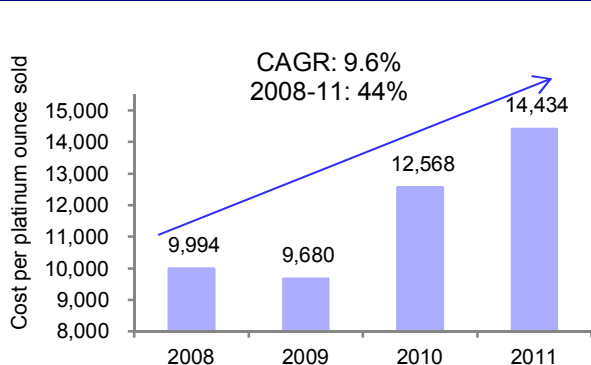
Source: Company data

Figure 25: Impala growth in cash operating costs 2008-11 (year to December)



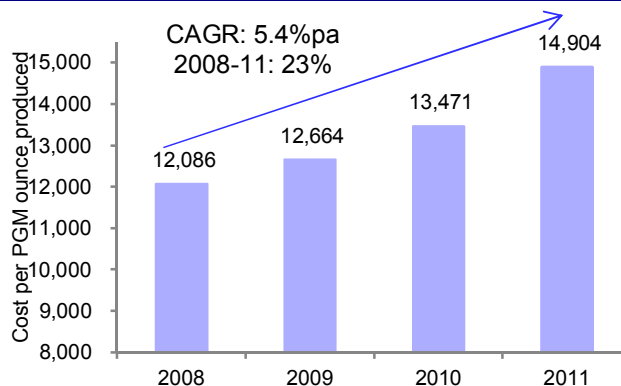
Source: Company data

Figure 26: Northam growth in cash operating costs 2008-11 (year to December)



Source: Company data

Figure 27: Lonmin growth in cash operating costs 2008-11



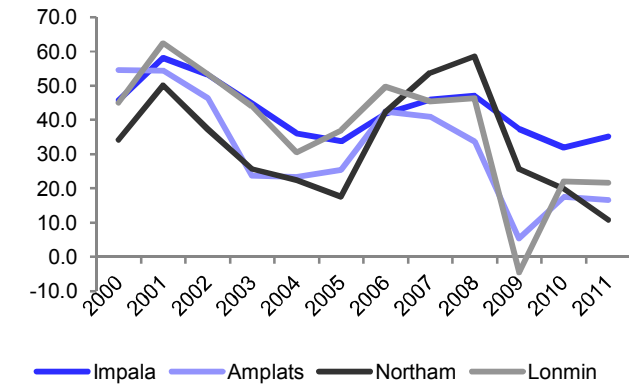
Source: Company data

This cost inflation, combined with no growth in production, has squeezed Amplats' gross profit and EBITDA margins from 2000 levels of 54.7% and 61% respectively, down to 16.7% and 23% respectively. From 2005, gross profit margins have dropped 8.8ppt from 25.5% to 16.7% (Figure 28) and EBITDA margins have dropped 12.1ppt from 36% to 23%.



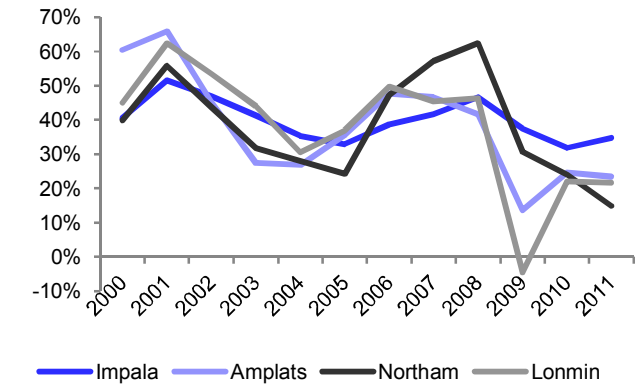
Looking at the 2005-11 period, this margin squeeze compares with an increase in Impala's gross profit margins of 1.3ppt and EBITDA margins of 2ppt, and a drop in Northam's gross margins of 6.8ppt and EBITDA margins of 9.4ppt. In the same period, Lonmin saw a drop in gross margins of 15.3ppt.

Figure 28: Gross profit margin comparison, 2000-11



Source: Deutsche Bank

Figure 29: EBITDA margin comparison, 2000-11



Source: Deutsche Bank



Industry supply-demand dynamics

A deficit in the platinum market should not be taken for granted

In conducting a review of the platinum business, we believe Anglo American will take a fundamental view of the platinum market over the decade. A view that a deficit will develop over the next few years and persist for the remainder of the decade is likely to lead to a volume maximisation strategy with maximum leverage to the rising price environment. In delivering additional volumes, margins and returns would take care of themselves. In this environment, being the largest producer with the most resources is the arguably the best strategy. However, in a more balanced market, we would argue a more effective strategy will be to size the business correctly, and to achieve more sustainable margins and returns across the cycle.

Our own analysis suggests that a deficit in the platinum market will develop from 2013 onwards. This view is based on a strong rebound in demand in 2013, due to robust autocatalyst demand. Our current forecasts call for a surplus of 285koz in 2012. However, the strike at Impala, along with the higher than normal incidents of Section 54 safety stoppages, has removed c.150koz from the market, which still leaves the market in a surplus but less so. We outline our current forecasts in the table below:

Figure 30: Deutsche Banks' platinum supply-demand balance

Platinum		2008	2009	2010	2011	2012e	2013e	2014e	2015e	2016e	2017e	2018e	2019e	2020e	CAGR 2010 - 20e, %
South African supply	Koz	4,515	4,635	4,635	4,606	4,645	4,997	5,220	5,434	5,576	5,755	5,826	5,819	5,816	2.3
North American supply	Koz	325	260	200	350	335	330	328	315	315	285	290	270	270	3.0
Russian production	Koz	805	785	825	825	825	810	800	800	800	800	800	800	800	-0.3
Zimbabwe	Koz	180	230	280	357	397	420	436	436	436	434	434	434	434	4.5
Other	Koz	115	115	110	115	120	130	135	135	140	145	150	155	160	3.8
Autocat recycling	Koz	1,245	945	1,085	1,200	1,290	1,404	1,534	1,657	1,805	1,954	2,090	2,237	2,395	8.2
Total supply	Koz	7,070	6,855	7,135	7,452	7,613	8,090	8,453	8,777	9,072	9,373	9,591	9,715	9,876	3.3
Supply growth	%	-6.2	-3.0	4.1	4.4	2.1	6.3	4.5	3.8	3.4	3.3	2.3	1.3	1.6	
Total demand	Koz	7,335	6,215	7,160	7,436	7,324	8,319	8,628	8,827	9,133	9,539	9,862	10,157	10,459	3.9
Demand growth	%	-3.5	-15.3	15.2	3.9	-1.5	13.6	3.7	2.3	3.5	4.4	3.4	3.0	3.0	
Autocatalyst	Koz	3,660	2,185	3,075	3,386	3,403	3,885	4,183	4,298	4,418	4,639	4,882	5,112	5,349	5.7
Chemical	Koz	400	290	440	480	478	502	523	546	569	593	616	641	667	4.2
Electrical	Koz	225	180	220	240	231	260	269	278	289	300	312	322	331	4.2
Glass	Koz	315	10	385	435	205	330	315	315	315	315	315	315	315	-2.0
Investment	Koz	555	660	655	385	340	460	270	190	200	210	220	230	240	-9.6
Jewellery	Koz	1,405	2,245	1,685	1,775	1,914	2,063	2,199	2,265	2,336	2,412	2,436	2,442	2,449	3.8
Medical & Biomedical	Koz	245	250	230	235	248	258	269	280	292	303	315	326	338	3.9
Petroleum	Koz	240	205	170	210	190	210	205	210	220	221	222	223	224	2.8
Other	Koz	290	190	300	290	315	350	395	445	495	545	545	545	545	6.2
Market balance	Koz	-265	640	-25	16	289	-229	-176	-50	-61	-165	-271	-441	-584	
Annual average price	US\$/oz	1,576	1,205	1,610	1,730	1,525	1,750	1,800	1,900	2,000	2,100	2,000	2,000	2,000	

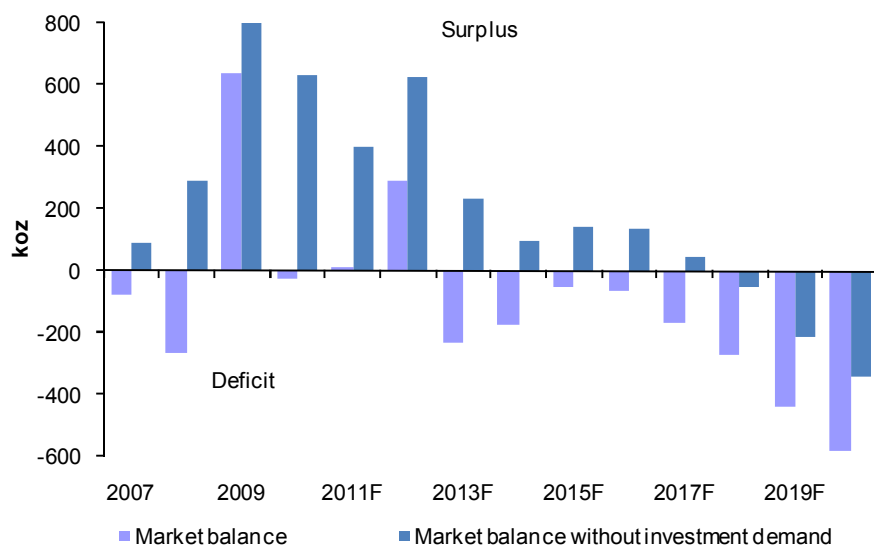
Source: Johnson Matthey, GFMS, Deutsche Bank

Our forecasts are based on 3.9% demand growth, outstripping supply growth of 3.3% over the decade. However, these assumptions are underpinned by 5.7% growth in autocat demand (including off-road and heavy duty diesel applications), a modest 2.3%



growth in South African mined supply and an 8.2% growth in recycling. If we strip out any Investment demand, which is effectively just a movement of stocks, the market looks much more balanced plus over the near term and only moves into a fundamental deficit by 2018.

Figure 31: Platinum surplus / deficits with and without investment demand



Source: Johnson Matthey, Deutsche Bank

In stress testing our assumptions we have looked at longer term demand and supply trends. Figure 32 shows how demand growth for platinum has averaged 4.5% per year from 1983-11, with autocat demand averaging 6.1% growth; platinum supply from recycling averaging 9.1% per year in the same period; and Southern African supply averaging a modest 3.2% supply growth. However, there have been decades when demand growth was lower than the long-term average. As an example, autocat demand growth was only 2.1% during 1990-00.

Figure 32: Yearly growth in platinum demand and recycling supply, 1983-11e

	Demand	Autocat demand	Southern African supply	Recycling
CAGR				
1983-90	8.5%	13.2%	4.2%	
1990-00	4.6%	2.1%	3.2%	8.4%
2000-11e	1.9%	5.4%	2.5%	8.9%
1983-11e	4.5%	6.1%	3.2%	9.1%

Source: Johnson Matthey, Deutsche Bank

If we construct a bearish, but realistic, supply-demand case for platinum, we would assume only modest demand growth of 2%, in line with the low growth decade (2000-10), continued strong growth in recycling at 8.5%, and a mined supply base that manages to offset grade decline. As shown in the last column of Figure 34, the platinum market would be in a constant surplus of c.270-360koz pa over the next decade. In practice, the weak pricing should dampen recycling and the market may move to a more balanced position. From 2011's base, we assume supply will deplete at 3% pa given (i) the ageing orebody in South Africa, and consequent declining grades (Figure 33), (ii) the recent period (2008-10) of capex reductions and project delays due to the global financial crisis; and (iii) the economic and political environment in Zimbabwe, the uncertainty of which is deferring the approval of future projects.



Figure 33: Illustration of grade decline of South African producers

g/t of 4PGE	2005	2006	2007	2008	2009	2010	2005-10 %
Amplats	4.26	4.19	3.98	3.68	3.56	3.47	-4.0
Lonmin	4.85	4.80	4.52	4.50	4.65	4.40	-1.9

Source: Deutsche Bank, Company data

When factoring in depletion, the market will still require 1.2moz of replacement capacity by 2020 (1.5moz by 2025). It is under this low demand growth – zero mined supply growth scenario – that being an industry leader is not necessarily the best strategy in our view. Natural depletion will still require new production, even in a balanced or modestly over-supplied market. We think the most appropriate strategy in this environment is to run a very lean organisation, focusing on the highest margin, scaleable and low capex intensity assets, such as Mogalakwena in the case of Amplats.

Figure 34: A low demand growth – zero mined supply growth scenario

	Demand (less investment)	Recycling	Base mined supply	After depletion	Surplus/(deficit) Pt	Base mined supply	Surplus/(deficit) Pt with static mined supply
Growth rates (%)	2.0	8.5			(3.0)		0.0
Base -2011	7,051	1,200	6,253	6,253	401	6,253	401
2012	7,192	1,301	6,253	6,065	174	6,253	362
2013	7,336	1,412	6,253	5,883	-41	6,253	329
2014	7,483	1,532	6,253	5,707	-244	6,253	302
2015	7,633	1,662	6,253	5,536	-435	6,253	283
2016	7,785	1,804	6,253	5,370	-612	6,253	271
2017	7,941	1,957	6,253	5,209	-775	6,253	269
2018	8,100	2,123	6,253	5,052	-924	6,253	276
2019	8,262	2,304	6,253	4,901	-1,057	6,253	295
2020	8,427	2,500	6,253	4,754	-1,174	6,253	326
2021	8,596	2,712	6,253	4,611	-1,272	6,253	369
2022	8,767	2,943	6,253	4,473	-1,352	6,253	428
2023	8,943	3,193	6,253	4,339	-1,412	6,253	503
2024	9,122	3,464	6,253	4,208	-1,449	6,253	595
2025	9,304	3,759	6,253	4,082	-1,463	6,253	707

Source: Deutsche Bank

Conclusion: Is Anglo American adopting a more muted PGM demand outlook?

In conclusion; when assessing the *'the optimal structural configuration of the platinum business, reviewing the shape and size of the portfolio in pursuit of maximising shareholder value and returns through the cycle'* we think that Anglo American and Amplats will first have to take a view on the market. As outlined above in the event of a demand recovery (from European and heavy haul diesel demand) a "bigger is better" strategy should be followed. On the other hand, in the event of more muted demand growth over time, value will be maximised through being lower cost and smaller.

We think that the operational review potentially indicates a view from within the group that the demand recovery is not materialising as expected and that to maximise value an alternative scale should be considered. We cannot discount that this is a view from within Anglo American more so than from Amplats.

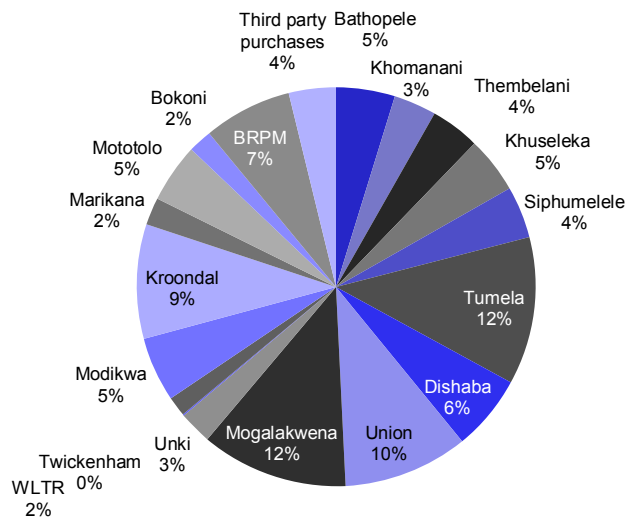


Amplats' portfolio: Options and dilemmas

Amplats 100%-owns and operates 10 mines and one tailings retreatment facility. It has 50% shares in joint venture mines with Aquarius (Kroondal and Marikana), African Rainbow Minerals (Modikwa) and Xstrata (Mototolo). It owns 49% of Anoorag Resource's Bokoni mine and 33% of RBPlat's BRPM mine.

Figure 35 shows the split of estimated 2012 refined platinum production between the mines.

Figure 35: Amplats' split of refined platinum production, 2012e

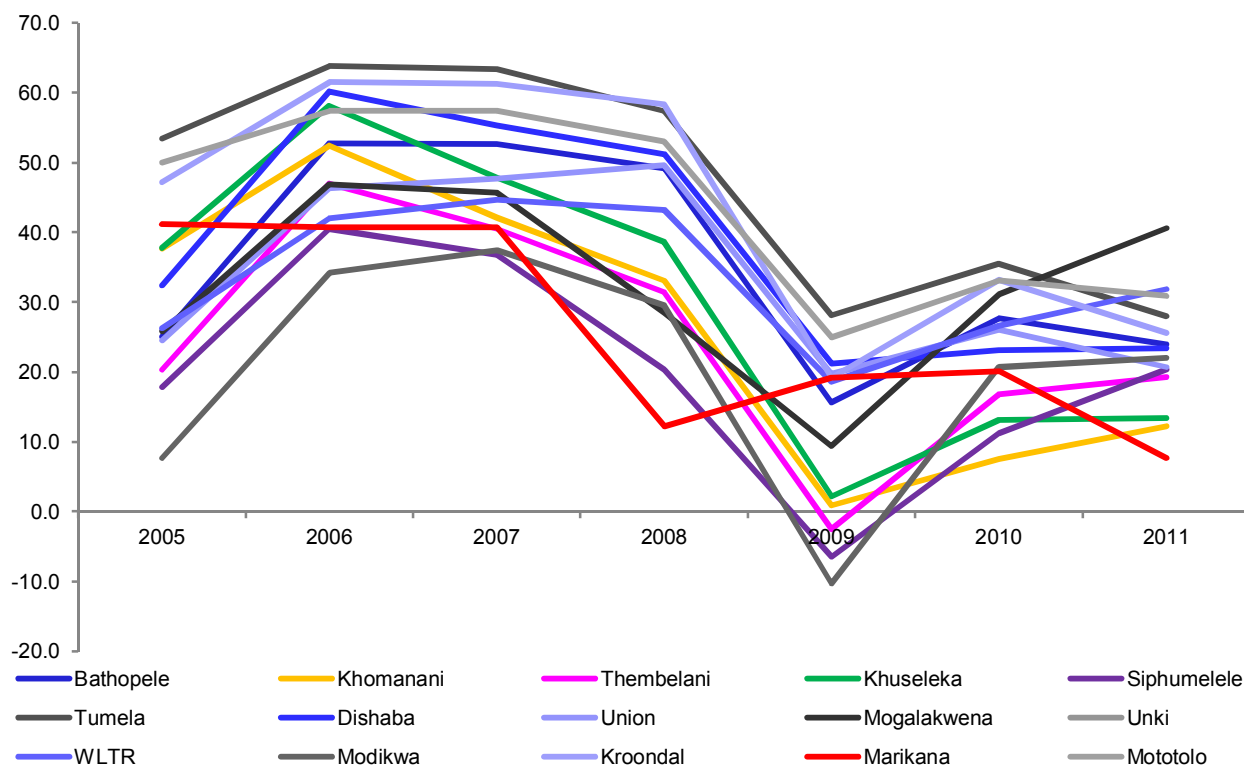


Source: Deutsche Bank estimates

Appendix A shows the production profile, unit costs and productivity trends of each Amplats mine from 2005-11. Figure 36 shows the operating profit margins of the group's mines since 2005, and in Figure 37 we rank the mines by the 2011 operating margin achieved.



Figure 36: Operating margins per mine, 2005-11



Source: Company data

Figure 37: Ranking of mines by 2011 operating margins

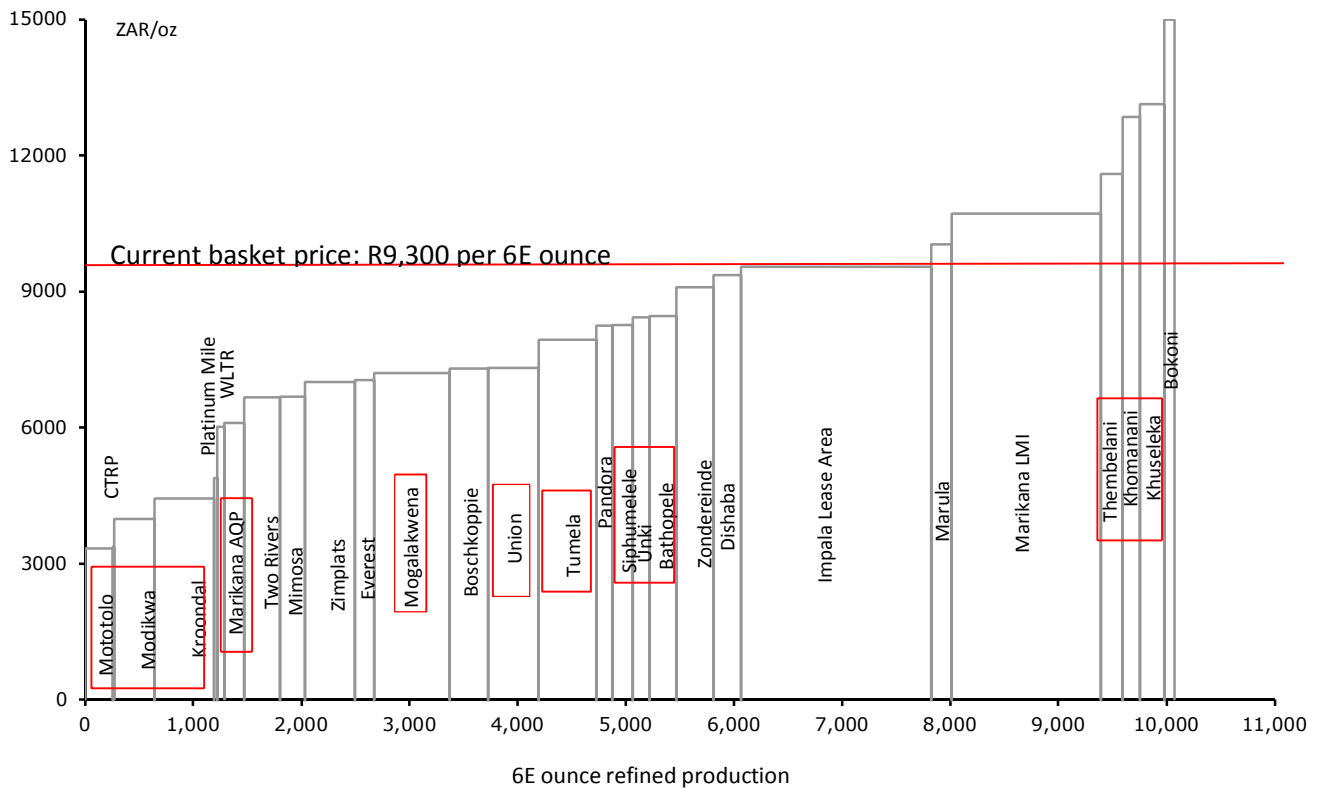
%	2011	Reduction in margin since 2008	Reduction in margin since 2005
Marikana	7.7	-4.5	-33.5
Khomanani	12.2	-20.9	-25.5
Khuseleka	13.4	-25.2	-24.4
Thembelani	19.3	-12.1	-1.0
Siphumelele	20.4	-29.4	-25.4
Union	20.7	-28.9	-3.8
Modikwa	22.0	-7.5	14.3
Dishaba	23.4	-27.8	-9.0
Bathopele	24.0	-25.2	-1.1
Kroondal	25.6	-32.7	-21.6
Tumela	28.0	-29.4	-25.4
Unki	30.4	NM	NM
Mototolo	30.9	-22.1	-19.1
WLTR	31.9	-11.3	5.6
Mogalakwena	40.6	12.1	14.8

Source: Company data

On our 2012 estimates for cash costs plus total capex per 6E ounce, Amplats has mines across the industry cost curve (see Figure 38). The mines in the first quartile are fully or partially mechanised, or open-pit (Mogalakwena). The mines in the second quartile are either high-grade mines (such as Dishaba and Tumela) or mechanised (such as Unki). At the top of the curve sit the non-mechanised Rustenburg-based mines.



Figure 38: 2012e industry cash costs plus total capex per 6E ounce



Source: Deutsche Bank estimates, company data

On this basis, we would expect Amplats to focus on the four deep Rustenburg mines – Siphumelele, Khuseleka, Khomanani and Thembelani – as restructuring candidates.

Figure 39 summarises the operational statistics and infrastructure of the four deep underground Rustenburg mines.



Figure 39: Summary of operations at four Rustenburg mines

	Khomanani	Thembelani	Khuseleka	Siphumelele
Total area	47 square kilometres	31 square kilometres	26 square kilometres	43 square kilometres
Type of mining	Underground	Underground	Underground	Underground
Type of method	1 Shaft: Hybrid - UG2	Conventional Breast Mining (CBM)	Conventional Breast Mining (CBM)	Conventional Breast Mining (CBM)
	2 Shaft: Conventional Breast Mining (CBM) - Mer			
Shaft system	2 Vertical Shafts. 1 x UG2, 1 x Merensky	1 vertical shaft	2 shafts. 1 Vertical & Subdecline & 1 Decline	3 Shafts. 1 on C&M. Vertical and decline
Minimum depth (m)	635	400	300	600
Maximum depth	1,245	900	1,000	1,350
Average stoping width (m)				
- Merensky	1.3	1.4	1.3	1.1
- UG2	1.2	1.3	1.2	1.1
Average dip of reef (degrees)	9-10	10-11	9-10	9-10
Reefs present	MER/UG2	MER/UG2	MER/UG2	MER/UG2
Vertical separation of reefs (maximum, m)	120	120-140	140	90-110
%UG2	42	78.8	57.1	0
Average built-up head grade (g/t)	4.31	4.36	3.8	3.85
Number of employees (incl. contractors)	4,228	4,528	6,329	4,006
Life of mine	2028	2039	2038	2050

Source: Deutsche Bank, Company data

Khomanani, Thembelani, Khuseleka and Siphumelele will account for 16.8% of group total refined platinum production in 2012e:

Figure 40: Four Rustenburg mines as % of group total refined platinum production

	Refined production	% of total
Khomanani	123	4.8
Thembelani	89	3.4
Khuseleka	103	4.0
Siphumelele	117	4.5
Total	432	16.8
Group refined production	2,580	

Source: Deutsche Bank

The impact of closing the four Rustenburg-based mines

We have run through a theoretical exercise of the impact of closing the mines on Amplats production, costs, profitability and FCF – see Figure 40.

In our view, it would be extremely difficult for Amplats to close mines without a concurrent closure of the smelting capacity and cutting of the central costs that are allocated to those mines.

Closing or selling smelting capacity

Amplats has three smelters, the details of which are outlined in Figure 41. Appendix B shows the position in the Bushveld Complex of Amplats mines, smelters and refineries.



Figure 41: Amplats' three smelters

Feed from:	
Waterval smelter	Rustenburg mines Kroondal Marikana BRPM
Mortimer smelter	Amandelbult mines Union
Polokwane smelter	Mogalakwena Unki Bokoni Twickenham Modikwa Mototolo

Source: Company data

Reducing allocated corporate costs and total group non-operational costs

Amplats reported central or 'non-operational' costs of R1.9bn in 2011 – the majority of which was split between corporate (head office and regional office) costs, marketing and 'other' (primarily IT costs, training costs (especially for safety), audit fees and directors fees) (see Figure 42).

Figure 42: Non-operational costs 2005-11

Yr end Dec, Rm	2005	2006	2007	2008	2009	2010	2011	% growth 2005-11	CAGR % 2005-11
Corporate costs	157	182	253	267	248	369	471	200.8	20.1
Research	145	211	252	267	238	174	208	43.1	6.1
Exploration - expensed only	136	199	257	291	145	136	187	37.1	5.4
Marketing	214	236	324	378	392	376	408	90.4	11.3
Other	-	-	273	373	154	323	367	NM	NM
Business optimisation costs*	278	204	265	104	261	143	182	-34.6	-6.8
Care & maintenance, project scrapping costs	62	104	82	223	415	211	130	109.7	13.1
Total annual non-operating costs	993	1,137	1,706	1,903	1,853	1,732	1,953	96.7	11.9
Revenue	22,938	39,155	46,616	50,765	36,687	46,025	51,117		
EBITDA	8,354	19,187	21,770	21,151	5,010	11,378	11,997		
EBITDA margin including above costs (%)	36.4	49.0	46.7	41.7	13.7	24.7	23.5		
EBITDA margin excluding above costs (%)	40.7	51.9	50.4	45.4	18.7	28.5	27.3		
Differential (%)	4.3	2.9	3.7	3.7	5.1	3.8	3.8		

Source: Deutsche Bank, Company data

To gauge the effect on group profitability of closing the four mines, we assume:

- keeping each mine on care and maintenance would cost R10m per shaft pa, equating to a total cost of R60m pa;
- the central group costs allocated to the four mines would be reallocated across the remaining mines;
- the smelting costs allocated to the four mines would be reallocated across the remaining mines;
- all other operating costs at the mines in question would be stripped out of the group cost base.



Figure 43: Effect of closing four Rustenburg mines, 2012e

Yr end Dec, Rm	Pre-closure	Post-closure	% chg
Refined platinum production	2,580	2,147	-16.8
Total revenue	51,241	43,524	-15.1
- On mine cash costs	25,632	20,420	-20.3
- Smelting costs	3,605	3,605	0.0
- Treatment and refining costs	3,163	3,163	0.0
- Purchase of concentrate	11,232	11,232	
- Movement in metals inventories	-3,460	-3,460	
- Corporate costs	880	880	0.0
- Other central or group costs	407	407	0.0
- Care and maintenance costs	10	60	500.0
Total costs	41,469	36,306	-12.4
Cash costs per equivalent refined Pt oz	14,480	18,370	26.9
Gross profit	9,772	7,218	-26.1
Gross profit margin (%)	19.1	16.6	
Depreciation	3,739	3,739	
EBIT	6,033	3,479	-42.3
Other costs and expenses	411	411	0.0
PBT	5,622	3,068	-45.4
Tax at 28%	1,574	859	-45.4
Minorities	28	28	0.0
Headline earnings	4,020	2,237	-44.3
HEPS	1,539	856	-44.3
Capex	7,938	6,388	-19.5
Free cash flow*	706	417	-40.9

*EBITDA less cash interest, cash tax and capex
Source: Deutsche Bank

Closing the four Rustenburg mines would reduce production by 16.8%...

...and on-mine cash costs by 20.3%

But there would be no reduction in smelting, refining or corporate costs

As shown above, a 16.8% drop in production should lead to a 20.3% drop in on-mine cash costs. However, this is not enough to offset the impact of re-allocating smelting, refining and corporate costs over the smaller production base and as such, gross profit margins would drop 2.5ppt from 19.1% to 16.6%. Assuming that the production closed is all equivalent refined production would lead to a 27% increase in cash costs per equivalent refined platinum ounce to R18,370. On a cash flow basis, capex would drop 20% (R1.6bn), but free cash flow would still be hit by 41% due to the drop in profitability.

Conclusion: Closure of mines is a difficult route to take

On this basis, we can conclude the closure of mines is likely a difficult route for Anglo American and Amplats to take as it would not permanently reduce the costs allocated across the business. In addition, the necessary reduction in headcount would prove a difficult task in the current environment for employment and industrial relations. Amplats also has BEE credits associated with the community trust set up last year that includes the Rustenburg mines. We believe it is sensible to assume Amplats will in all likelihood want to preserve BEE credits received to date.



Selling high-cost mines

Selling high-cost mines & removing costs could more than double FCF

To address the issue of a permanent reduction in its cost base, we believe Anglo American and Amplats could consider the sale of higher-cost mines, rather than their closure.

In our view, Amplats could deliver a structural increase in margins if it is able to:

- sell high cost mines;
- sell the smelting capacity assigned to those mines;
- cut out or pass on the central/group costs allocated to those mines;
- introduce new ounces to the refinery via toll-refining contracts to spread the refining cost across a larger base.

Delivering the above four things, in addition to cutting out a significant portion of central or 'non-operational' costs, could increase gross profit by 6.7%, HEPS to R18.58 (compared with current DBE of R15.39) and more than double our free cash flow (FCF), 2012 estimates.

Two scenarios for sale of high-cost mines / JVs

In considering the impact of this option on production, unit costs, profitability and FCF, we have modelled a sale of the four deep-level underground Rustenburg mines (discussed above as closure candidates). In a second scenario, we model that Amplats could sell its 50% stakes in its four JV mines also, plus Bathopele mine.

In modelling the two scenarios, we assume:

- All production is sold; but in the case of the sale of JV stakes, the Purchase of Concentrate agreements remain in place;
- One smelter is sold if the Rustenburg mines are sold; the smelter is kept in the case of a sale of JV stakes;
- The operating costs of the mines in question, including depreciation, would be sold;
- The corporate costs allocated to the four Rustenburg mines and the JV mines would be cut or passed on;
- Amplats could cut out some marketing costs as a smaller business; exploration costs could be cut to zero, business optimisation costs (consulting fees) and care and maintenance costs could also be removed from the cost base;
- The refining costs of the group would remain the same;
- 500koz new platinum ounces (830k 4E ounces) would be sought via toll-refining to fill up the spare refining capacity. We assume Amplats would make a 4% margin on refining those new ounces.

The results of our scenarios regarding the impact on production, unit costs, profitability and free cash flow are shown in Figures 44 and 45 and discussed in detail below.



As shown in Figure 44, the four Rustenburg mines in question will account for 16.8% of group refined platinum production in 2012e. For the JVs, we assume Amplats will look to sell its 50% share of its JV mines plus Bathopele mine – on this basis, the five mines account for 15.5% of group refined platinum production in 2012e (Figure 45).

Figure 44: Four Rustenburg mines as % of group total refined platinum production

	Refined production ('000oz)	% of total
Khomanani	123	4.8
Thembelani	89	3.4
Khuseleka	103	4.0
Siphumelele	117	4.5
Total	432	16.8
Group refined production	2,580	

Source: Deutsche Bank

Figure 45: Four JV mines plus Bathopele as % of group total refined platinum production

	Refined production ('000oz)	of total
Modikwa	68	2.6
Kroondal	120	4.6
Marikana	28	1.1
Mototolo	62	2.4
Bathopele	123	4.8
Total	401	15.5
Group refined production	2,580	

Source: Deutsche Bank

In 2012e, we estimate Amplats will have smelting costs of R3.6bn. If we assume the total cost is split equally between the three smelters, we can assume that selling the Waterval smelter would reduce total group smelting costs by one-third or R1.2bn.

For the JV mines, we note that the Purchase of Concentrate agreements (PoC) by which the JV partners sell their 50% of the mined output for smelting in Amplats' smelters would likely have to remain in place. Thus, for modelling a sale of Amplats' 50% stakes in the JV mines, we presume it keeps all three smelters that continue to be fed with 100% of the output from the JV mines via PoC agreements. Any spare capacity would then need to be filled up with recycling or toll ounces. At present, the cost to Amplats of smelting the purchased concentrate is captured in the discount at which Amplats purchases from its JV partners relative to spot PGM prices. Penalties for (unwanted) chrome, if higher than an agreed level in the concentrate, are also captured in the discount to spot. We estimate this discount to be 14% on average.

We assume corporate costs are allocated to the mines relative to the size of their production. As such, in modelling the two scenarios, we take out 16.8% of the corporate costs for the four Rustenburg mines, and then 15.5% of the corporate costs in the scenario selling the JV stakes and Bathopele.

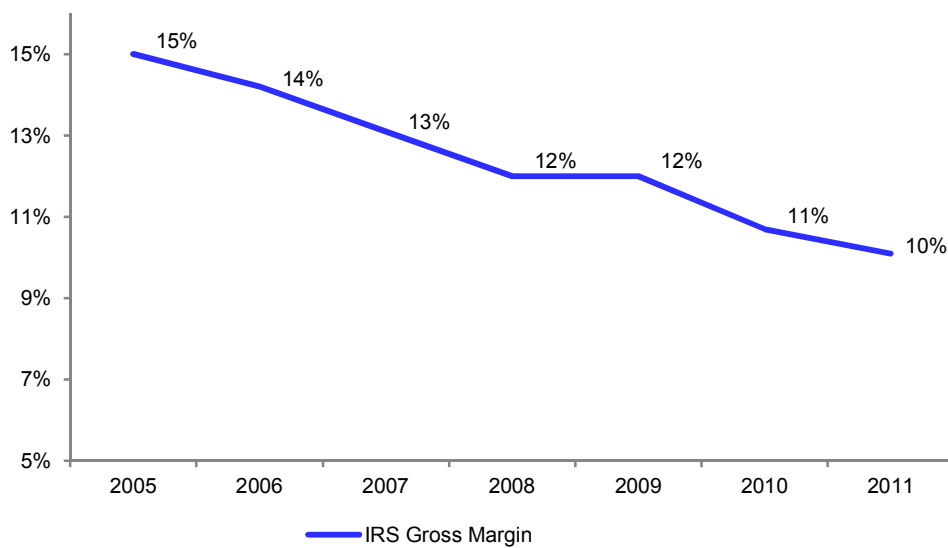
Amplats could take this opportunity to reduce some of its other 'non-operational' costs – in each scenario we assume marketing spend could be reduced by the percentage reduction in production; exploration costs, business optimisation and care and maintenance/project scrapping costs could be all be reduced to zero, in our view.



Amplats has precious metals refining capacity of up to 3moz, in our view

We believe Amplats could fill up its PMR with another 500k platinum ounces over time. We expect in this scenario, the company will seek to agree new contracts to toll-refine on the behalf of other producers. Whilst Impala's Refining Services division, as a guide to the profitability of this sort of business (Figure 46), has made a double-digit margin over time, the IRS also earns a margin on smelting ounces. We therefore assume that Amplats' would make a lower margin (of 4%) on toll-refining ounces only.

Figure 46: Impala Refining Services gross margin 2005-11, year end June



Source: Company data



Potential uplift to gross profit of 7%; FCF could more than double

Our first scenario of selling the Rustenburg operations ex-Bathopele and one smelter yields the following results:

Figure 47: Effect of selling four Rustenburg mines and one smelter, 2012e

Yr end Dec, Rm	Pre-sale	Post-sale	%chg
Refined platinum production	2,580	2,147	-16.8
Total revenue	51,241	43,524	-15.1
New toll-refining ounces (4E) from 2013		830	
DBe basket price (R/oz)		11,733	
New revenue		9,738	
New group total revenue	51,241	53,263	3.9
- On mine cash costs	25,632	20,420	-20.3
- Smelting costs	3,605	2,403	-33.3
- Treatment and refining costs	3,163	3,163	0.0
- Purchase of concentrate	11,232	11,232	
- Movement in metals inventories	-3,460	-3,460	
- Corporate costs	880	732	-16.8
- Other central or group costs	407	0	
- Care and maintenance costs	10	0	
- Refining costs of new ounces		9,349	
Total costs	41,469	43,839	5.7
Cash costs per equivalent refined Pt oz	14,480	17,558	21.3
Cash cost per refined pt oz	12,559	8,728	-30.5
Gross profit	9,772	9,424	-3.6
Gross profit margin (%)	19.1	17.7	-7.2
Depreciation	3,739	3,005	-19.6
EBIT	6,033	6,419	6.4
Net interest and other costs	411	411	0.0
PBT	5,622	6,007	6.9
Tax at 28%	1,574	1,682	6.9
Minorities	28	28	0.0
Headline earnings	4,020	4,297	6.9
HEPS	1,539	1,645	6.9
Capex	7,938	6,388	-19.5
Free cash flow*	706	1,800	155.0

*EBITDA less cash interest, cash tax and capex
Source: Deutsche Bank

Selling the four Rustenburg mines decreases production by 16.8%

We assume 830koz 4E or 500koz Pt as new toll-refining ounces

We assume the Waterval smelter is sold, reducing group smelting costs by 1/3

We estimate 4% gross margin on the new toll-refined ounces

We assume allocated corporate costs will be sold on or cut out of the base

As shown above, selling the four deep-level underground mines would see a 16.8% drop in production but we assume this is then supplemented by 500k platinum ounces from new toll-refining contracts. At a 4% gross margin on these ounces, the increase in processing activity would not, however, compensate for the drop in production from the mine sales. Lower depreciation and tax would result in increased earnings however, with HEPS of R16.45, an increase of 6.9% versus our current estimates. Capex would drop 20%, leading to a large increase in FCF, which goes to R1.8bn.



Our second scenario of Amplats selling its 50% shares in Modikwa, Kroondal, Marikana and Mototolo mines, and the Bathopele mine, results in:

Figure 48: Effect of selling stakes in four JV mines plus Bathopele mine, 2012e

Yr end Dec, Rm	Pre-sale	Post-sale	%chg
Refined platinum production	2,580	2,179	-15.5
Total revenue	51,241	51,241	0.0
New toll-refining ounces (4E) from 2013		830	
DBe basket price (R/oz)		11,733	
New revenue		9,738	
New group total revenue	51,241	60,979	19.0
- On mine cash costs	25,632	20,622	-19.5
- Smelting costs	3,605	3,605	0.0
- Treatment and refining costs	3,163	3,163	0.0
- Purchase of concentrate	11,232	16,534	47.2
- Movement in metals inventories	-3,460	-3,460	0.0
- Corporate costs	880	744	-15.5
- Other central or group costs	407	0	
- Care and maintenance costs	10	0	
- Refining costs of new ounces		9,349	
Total costs	41,469	50,556	21.9
Cash costs per equivalent refined Pt oz	14,480	18,507	27.8
Cash cost per refined pt oz	12,559	9,102	-27.5
Gross profit	9,772	10,423	6.7
Gross profit margin (%)	19.1	17.1	-10.4
Depreciation	3,739	3,231	-13.6
Net interest and other costs	411	411	0.0
PBT	5,622	6,780	20.6
Tax at 28%	1,574	1,898	20.6
Minorities	28	28	0.0
Headline earnings	4,020	4,854	20.7
HEPS	1,539	1,858	20.7
Capex	7,938	7,172	-9.6
Free cash flow*	706	1,798	154.8

*EBITDA less cash interest, cash tax and capex
Source: Deutsche Bank

Selling the JV stakes plus Bathopele results in a 15.5% drop in production, but Amplats now purchases 100% of the JV mines' concentrate

We factor in 830koz 4E or 500koz Pt as new toll-refining ounces, at a 4% gross margin

There would be no reduction in smelting or refining costs, and PoC costs would increase 47%

We assume allocated corporate costs will be sold on or cut out of the base

In this scenario, we assume Amplats sells its 50% of the ounces from each JV mine to its JV partner but keeps its smelters running to take 100% of the mines' output via PoC contracts. We also add in a full sale of the Bathopele mine in this scenario. As above, we assume the production is supplemented with 500k platinum ounces from new smelting and refining contracts. At a 4% gross margin on these ounces, the increase in processing activity would compensate for the drop in production from the mine sales but the increase in Purchase of Concentrate ounces from the now 100% owners of the JV mines would reduce this benefit. Lower depreciation and tax would result in increased earnings however, with HEPS of R18.58, an increase of 20.7% versus our current estimates. Capex would drop 10%, leading to a large increase in FCF, which goes to R1.8bn.



Conclusion: A sale of the JV mine stakes plus Bathopele offers the most potential upside

We conclude Amplats would generate the biggest uplift in gross profit margin, HEPS and FCF if it sold its 50% of its JV mines plus the Bathopele mine, keeping its smelter to smelt 100% of the ounces from the JV mines and Bathopele, and filling up its precious metals refinery with 500koz (4E) of new ounces from toll-refining contracts. It is imperative, however, that the central costs usually allocated to the JV mines be passed on to the buyers or reduced to zero. We believe keeping a smelter to be filled by PoC ounces would keep Amplats' BEE credits from its JV mines secure.

Some practical considerations

- **A seller needs a buyer:** Buyers' appetite for assets, even at what is arguably the low point of the cycle, may be tempered by their location in South Africa, the unionised nature of the workforce, the need to be an 'acceptable' buyer to the SA government, and the risks of taking on higher-cost operations in a difficult safety environment, plus of course the availability of suitable funding.
- **Toll-refining ounces are in short-supply:** We have assumed that Amplats will be successful in filling up its excess refining capacity with new toll-refined ounces but it is unclear how easily and quickly Amplats could source these new contracts, in particular given the decrease in freshly mined ounces from the industry seen recently.
- We have included a sale of Mototolo mine in our analysis, however, we note that Amplats would use the mine's infrastructure in future to access the northern part of the Der Brochen property. As such, the company may be loath to sell this mine. We do consider, later in the note, the viability of Amplats selling the Der Brochen project so it could result in a packaging of Mototolo and Der Brochen in future instead.



Unbundling a vertically integrated group

Using Rio Tinto's Pacific Aluminium assets as a case study

We believe Anglo American and Amplats could consider the option of packaging some of the mines it would like to sell, plus smelting capacity and corporate costs, into a stand-alone vertically integrated group, either for sale or listing. Further cost rationalisation may be required in this case. We have considered the case of Rio Tinto Alcan and its plan to carve out the Pacific Aluminium assets, as a case study of the options in this regard.

In essence, the value creation would likely look similar to the sale of Rustenburg mines that we discussed earlier in the note. Indeed, those mines are probably the most viable candidates for this option given the involvement of numerous JV partners in the other mines we have looked at for sale. The inclusion of a smelter in the spun-off group would have to be considered in the light of other users of the capacity at present: the Waterval smelter, into which Rustenburg mines feed, is also used to smelt concentrate from the BRPM mine (Amplats 33%, RBPlat 67%) and from Kroondal and Marikana (Amplats 50%, Aquarius 50%). We therefore assume that those PoC agreements would have to be kept in place. In addition, we believe this option makes sense only if Amplats can include the corporate costs currently allocated to the mines in question. If not, then Amplats would need to find a way to take those corporate costs out of its remaining base.

We think a listing or sale of a stand-alone package of assets could be a good opportunity for Amplats to introduce BEE partners into the transaction to further increase its BEE credits.

The similarities between platinum and aluminium

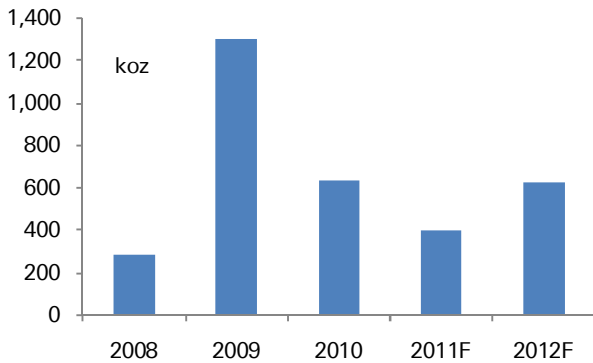
Aluminium (or rather bauxite as it is found in nature) is one of the most abundant materials in the earth's surface, making up 8.3% of the continental crust. Platinum, by contrast, makes up less than 300 parts per billion, making it one of the rarest metals in the earth's crust. Although not intuitively obvious, we believe there are a number of parallels between the platinum and aluminium markets today:

- Both markets are currently in over-supply with rising inventories or above-ground stocks in the near term.

In treating platinum as a purely industrial metal, the market has been in a fundamental surplus over the past four years and we forecast 2012 to be another surplus year. In defining a fundamental surplus we exclude "investment" demand in the form of bars, coins and ETFs from our analysis. Clearly, investment demand has an important impact on pricing when some of the surplus finds a willing holder. In absolute terms, however, above-ground stocks in platinum have been rising from 1.5moz and 2.5 months worth of demand at the end of 2008, to 5.5moz, and nearly nine months worth of demand.

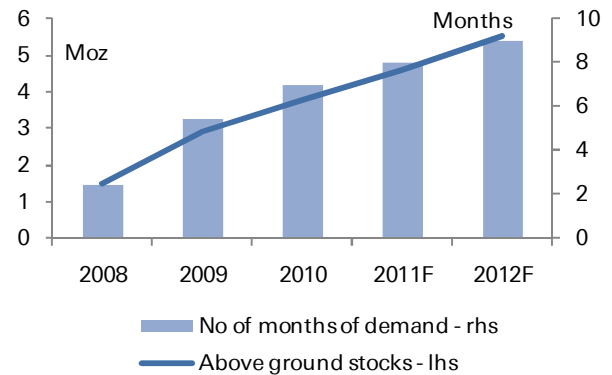


Figure 49: Fundamental platinum surplus since 2008



Source: Johnson Matthey, Deutsche Bank

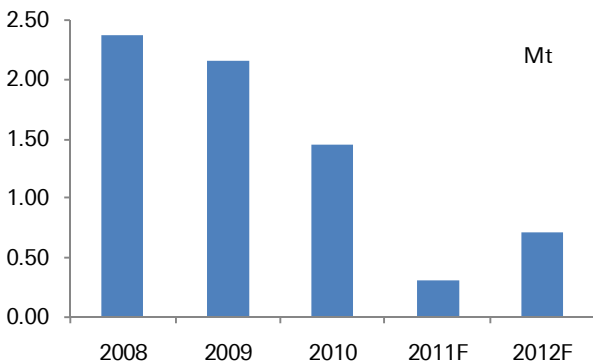
Figure 50: Rising platinum inventories since 2008



Source: GFMS, Deutsche Bank

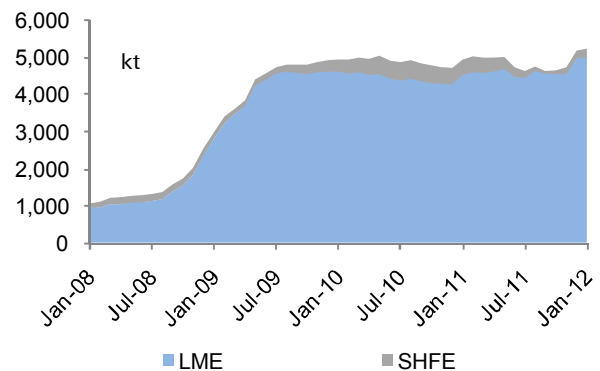
Aluminium has also been in surplus for the past four years, despite significant curtailments post the global financial crisis, with 2012 forecast to be in surplus as well. Despite these curtailments, visible inventories rose from about 1mt to 5mt. We estimate that another 5mt of inventory has built up in off LME storage facilities. 10mt represents about three months worth of global demand.

Figure 51: Aluminium surplus since 2008



Source: Brook Hunt – A Wood Mackenzie company, Deutsche Bank

Figure 52: Visible aluminium inventories



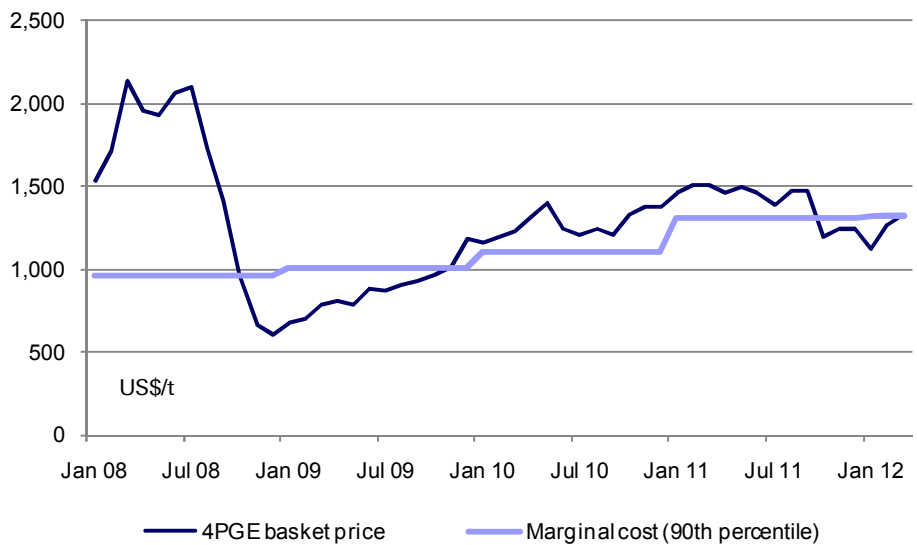
Source: Thomson Financial Datastream, Deutsche Bank

■ Prices have been supported by both marginal cost and investment demand.

Despite the surplus markets over the past four years for both metals, there has been a rising cost trend in both labour (more influential in platinum) and energy (more influential in aluminium). These rising costs have supported prices with the 4PGE basket price falling below the 90th percentile producer for platinum, especially during 2009 and over the past 4-5 months. We show the rising marginal cost producer in the chart below on a total cash cost plus sustaining capex basis given the importance of sustaining capex in the predominately underground platinum mines.



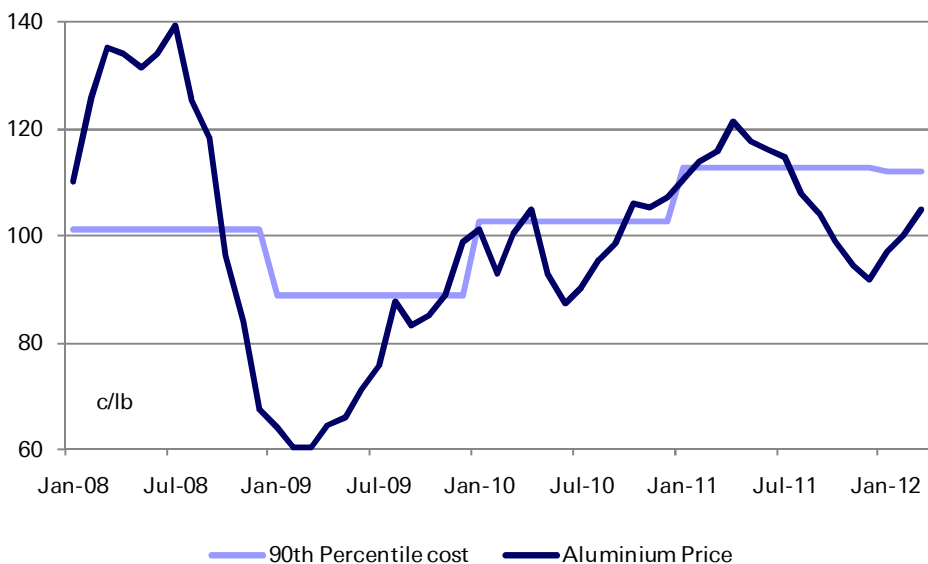
Figure 53: 4PGE basket price versus the marginal cost* since 2008



*TCC plus sustaining capex
Source: GFMS, Thomson Financial Datastream, Deutsche Bank

The marginal cost has arguably been more important in the aluminium industry where the 90th percentile producer has been “cash negative for more of the time than the marginal platinum producer. We estimate the 90th percentile aluminium producer has been cash positive for 38% of the time since January 2008, compared with the 90th percentile platinum producer at 64% of the time.

Figure 54: Aluminium price versus the marginal cost since 2008



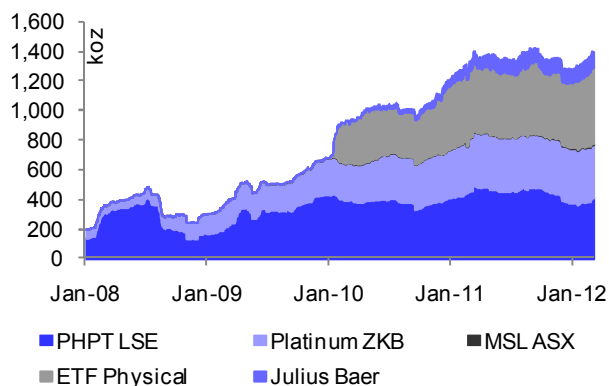
Source: Brook Hunt – A Wood Mackenzie company, Thomson Financial Datastream, Deutsche Bank

Both metals have had some support from investment demand. In platinum, inflows into the various ETFs have, to a certain extent, soaked up surpluses. In aluminium, we estimate that 70% of visible inventories are locked up in financing deals. Due to the shape of the forward curve (in contango), parties that have a low cost of funding and access to low cost storage (like investment banks and large traders) are able to buy physical metal and sell forward to lock in an arbitrage. This has



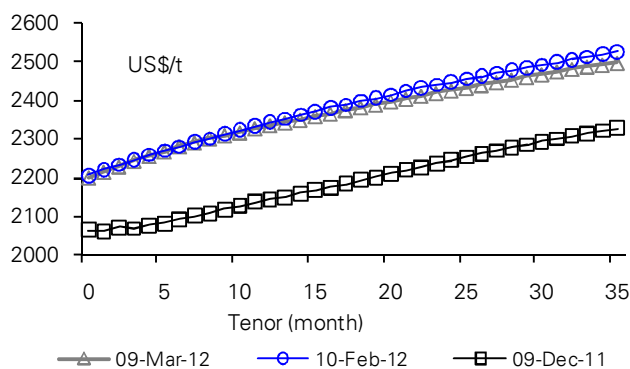
resulted in the physical metal available being much lower than inventory levels would suggest.

Figure 55: Platinum ETF positions



Source: Various ETF issuers, Deutsche Bank

Figure 56: Aluminium forward curve



Source: Bloomberg Financial, Deutsche Bank

■ The barriers to exit in both metals tend to be high.

We believe the platinum miners see a number of barriers to exit or closure of mines even if they are loss-making:

- **Cost and difficulty of headcount reductions:** In response to the 2008 global financial crisis, the platinum miners made good inroads into cutting excess cost and trimming back some marginal production. The deepest cuts were made by Amplats which, in 2008-09, made almost 20,000 employees (mainly contractors) redundant as it placed three shafts onto “care and maintenance”. Since then, and through holding back on growth in mines and projects like Twickenham (Amplats), Everest and Blue Ridge (Aquarius) and Marula (Impala), we believe Amplats and its peers all have fewer excess costs to restructure in response to lower prices. Indeed, the main lever to pull is likely to be production growth as a way of controlling unit costs in a high mining inflation environment. Further large-scale redundancies in the industry also carry the risk of a political backlash given South Africa’s high unemployment rates. Indeed, we note that Amplats employee numbers actually crept back up 8% in 2011 compared with 2010.
- **Fixed cost overheads are the most difficult to cut:** Through the smelting and refining capacity of Amplats, Impala, Lonmin and Northam (in total eight smelters, two precious metals refineries and one base metals refinery), we estimate the industry has the capacity to refine at least another 1moz of platinum – with excess capacity primarily at Amplats’ smelters, its PMR and Impala’s PMR. Closing marginal or loss-making mines without a concurrent closure of smelting and refining capacity – which is almost impossible to do in fractions – is, in our view, not likely to be pursued as a cost-cutting measure by the miners. It is more likely that the platinum miners will continue with plans to grow production into their fixed processing asset bases to generate leverage.
- **Many mines account for BEE credits:** A final significant obstacle to closure of marginal mines, in our opinion, is the involvement of Black Economic Empowerment (BEE) companies, mainly as joint venture partners of the larger miners. It is unclear how South Africa’s Department of Mineral Resources (DMR) would treat the BEE credits of a mining company that closed a marginal mine being managed by a BEE partner or withdrew its financial support (many BEE deals being vendor-financed) to a BEE partner. With such a lack of clarity



and a high degree, we believe, of risk of the loss of BEE credits (particularly before the 2014 deadline), we expect the majors to continue to provide financial support to their BEE partners, even if the mines in question are currently marginal or loss-making.

We believe limited producer discipline in aluminium is largely due to high barriers of closure for smelters.

- **Long-term power contracts:** Smelters typically fix long-term contracts as power accounts for the lion's share of total cost. In an event of shut down, producers still need to service the power contract.
- **Long consultation process:** Rio Tinto's announcement to close the Lynemouth smelter (175ktpa) is subject to a 90-day consultation process with employees and union representatives.
- **Long idling and restarting process:** Shutting aluminium smelters in an orderly process can take a couple of weeks while restarting can take 6-9 months. The restart costs can range from US\$50-75m depending on the size of the smelter, which can prove prohibitive.
- **Power load disruption for residential users:** Chinese aluminium smelters provide large continuous base loads for coal-fired power stations. Shutting the smelters can disrupt remaining peak power loading and affect residential users and other industry users.
- **Employment concerns:** In China, the aluminium smelting industry is relatively labour intensive and needs to meet employment targets set by the provincial governments.

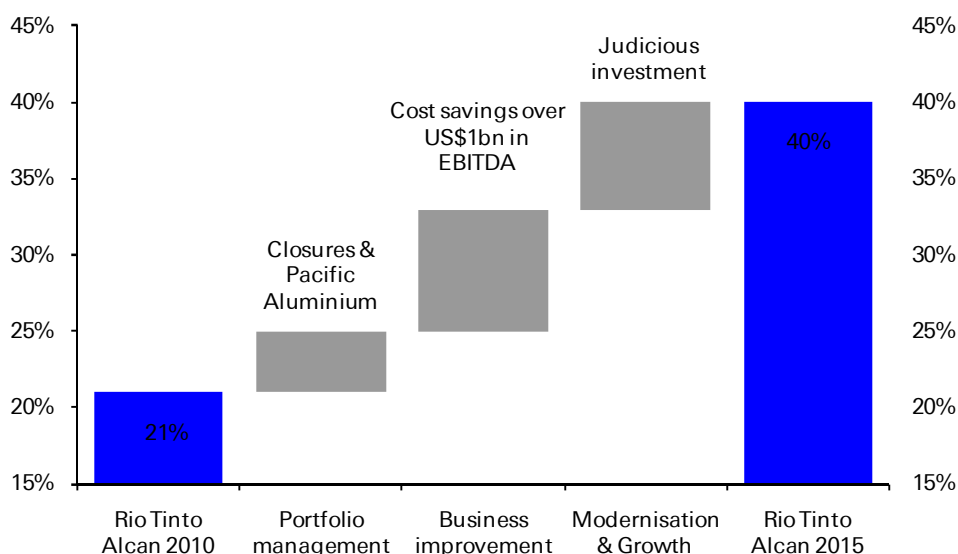
A case study in aluminium: The transformation of Rio Tinto Alcan

Given the similarities between the platinum and aluminium markets, we think Rio's plan to transform Rio Tinto Alcan, including the carve-out of Pacific Aluminium, could provide a template for Amplats. Rio's plan consists of three broad aspects:

1. **Portfolio management:** This includes the closure of the Lynemouth smelter in the UK, and the divestment of 12 assets; many of which are being packaged into Pacific Aluminium;
2. **Business Improvement:** This includes initiatives such as cost and production efficiencies, capacity creep and the optimisation of the product mix;
3. **Investment:** This includes focused capital investment on high-return brownfield projects and modernisation (such as the Kitimat smelter (420ktpa), where the old Soderberg technology is being replaced with modern pre-bake technology at a capex of US\$3.3bn).



Figure 57: RTA's path to a 40% EBITDA margin



Source: Rio Tinto Alcan, Deutsche Bank

In a note entitled "Rio Tinto: Aluminium Division – Taking off" (Clifford et al. 19 September 2011), we attempted to analyse just how Rio Tinto could double EBITDA margins. Our conclusion was that it was possible, but that it would likely take longer (to 2017) and that an improvement in currencies and commodity price would be required. The "new" strategy is to remain long bauxite/alumina and focus on the highest quality assets across the value chain. The key aspects were:

1. **Asset expansions:** The Kitimat, Yarwun 2&3, Alma II, Arvida AP60 Phase 1&2, Sohar 2, and South of Embley bauxite can deliver an additional US\$7bn in value, an average return of 14%, and improve margins by 6.1% by 2017.
2. **Asset closures:** Closing the older and smaller Lochebar and Lynemouth (the closure of Lynemouth has been announced) smelters in the UK, and Shawinigan smelter in Canada respectively, should improve margins a further 0.6%. The closures should take a combined 320ktpa of capacity off-line.
3. **Asset sales:** Higher-cost, non-scalable, short power contracts and/or non integrated assets will likely be sold. We identified the Sebree, Bell Bay, Tomago, Soral, and St Jean De Maurienne smelters as likely to be sold. In addition, the Gardanne specialty alumina refinery in France and other smaller specialty refineries in France and Germany were also likely to be sold for approximately US\$94m. We assumed these assets would be sold in 2013. Margins would likely be improved by a further 2.2% through the asset sale process. The sale of Rio's specialty refineries will reduce alumina output by 0.68mtpa. The assets that were ultimately identified tended to be the higher cost and more problematic operations. In Australia, the Gove bauxite and alumina integrated operation, the Boyne, Tomago and the Bell Bay smelters (DB combined valuation US\$5.4bn) and the Tiwai Point smelter in New Zealand (US\$1.1bn) have been packaged into a new business unit which in our view sets them up for a potential IPO rather than individual sales.

A second group of seven non-core assets was also identified which would either be closed or sold individually. These include three specialty alumina plants and Gardanne (US\$40m), the Sebree smelter in the US (US\$670m) and the Lynemouth smelter in the UK that has subsequently been closed. The addition of bauxite and alumina assets into Pacific Aluminium makes the package more attractive, as the new independent entity would be self sufficient in alumina.



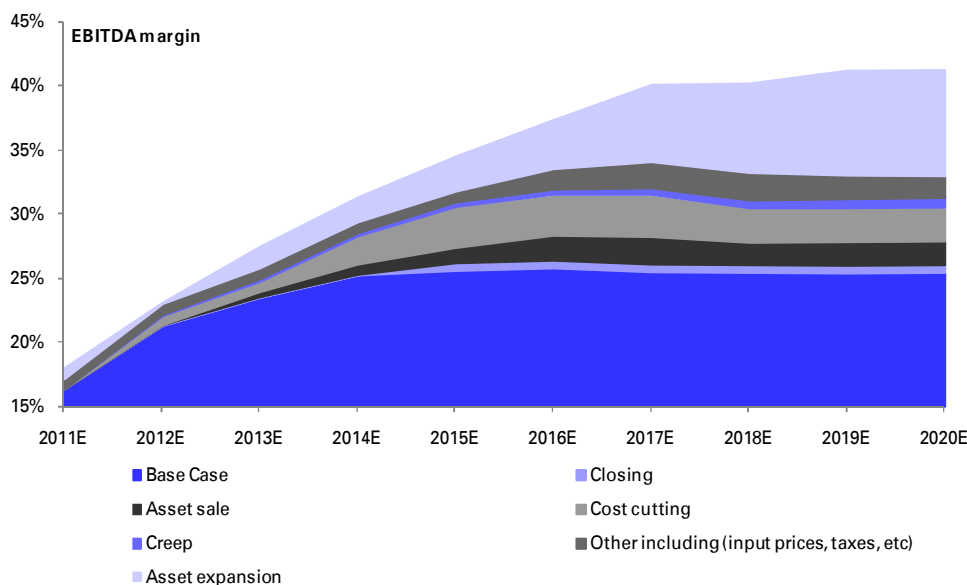
Figure 58: Rio Tinto Alcan portfolio optimisation

Asset	Location	Type	Capacity (100%, kt)	Ownership %	Valuation (US\$m)
Gardanne & Specialty Alumina smelters	France & Germany	Alumina refinery	680	100	40
Tomago	Australia	Aluminium smelter	525	52	716
Tiwai Point	New Zealand	Aluminium smelter	365	79	760
Bell Bay	Australia	Aluminium smelter	180	100	537
Boyne	Australia	Aluminium smelter	560	59	876
Gove	Australia	Bauxite mine	7mtpa	100	728
Gove	Australia	Alumina refinery	2.5mtpa	100	968
Sebree	USA	Aluminium smelter	200	100	670
Pacific Aluminium		Aluminium	1,630		4,585
Total		Aluminium	1,830		5,289

Source: Deutsche Bank

- Cost cutting:** Although hard to quantify the true potential to reduce costs, we have built in an additional and modest US\$500m in cost savings from 2012-16 or US\$125m pa into our model, and expect Rio Tinto to keep these costs out of the business. These savings exclude the potential lowering of the cost base from the sale of high costs assets. Workforce attrition will also assist. At the end of 2009 the aluminium division employed 21,984 people.
- Capacity creep:** By investing in small projects and increasing production at existing projects, further margin gains should be realised. This could increase EBITDA by a further US\$500m although this is difficult to quantify, but translates to c.5% productivity improvement across all assets over the next 10 years. The majority of the capacity creep will be at the newer alumina refineries (Yarwun, Gove) and smelters (Kitimat, Arvida, ISAL, Sohar etc). We have increased our base case capacity creep assumption at the new smelters improving margins by 0.6%.

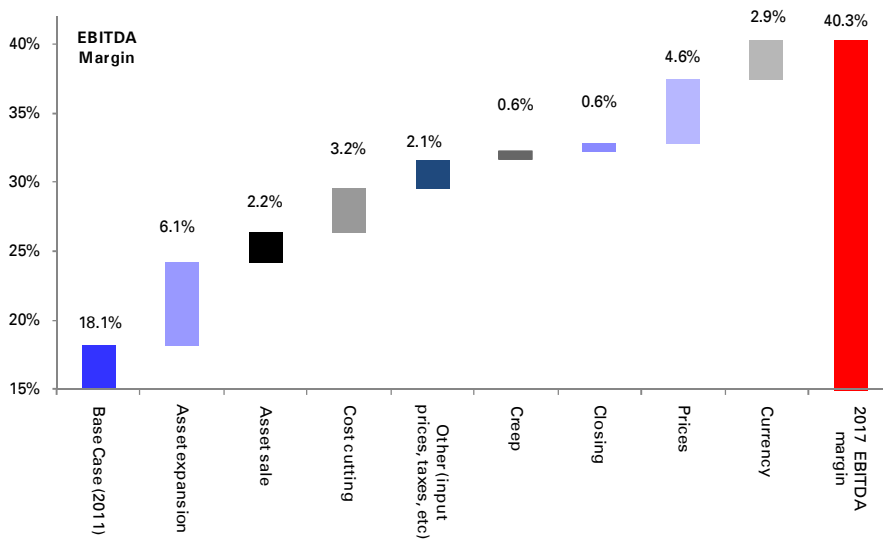
Figure 59: The potential EBITDA margin expansion at Rio Tinto Alcan



Source: Deutsche Bank



Figure 60: EBITDA margin creep by component



Source: Deutsche Bank



Maximising revenue and monetising long-dated growth options

Seeking revenue enhancement and cost savings

We believe the fourth option that Anglo American and Amplats could consider in restructuring the business is a combination of maximising revenue and monetising the longer-dated growth options owned by the group. This option might provide Anglo American and Amplats with a way to restructure Amplats avoiding the potential industrial relations/political ramifications of making large numbers of employees redundant and also avoid any risk to Amplats' BEE credits.

Maximising revenue

In our view there are two major ways that Amplats could seek to grow its revenue:

1. Change the structure of its PGM sales, reducing reliance on 'middle-men';
2. Increase refining of secondary supply through new recycling contracts and/or toll-refining.

Changing its sales structures and customer mix

Amplats wrote in its 2011 Annual Report it has embarked on a review of its marketing and commercial strategy. It says the *"...particular focus [will be on] adding value by better matching our product offering to customer needs. Security of supply, metal quality and product development are integral to this approach. The review will include our customer mix, contractual terms and risk management"*.

At present, Amplats has two long-term volume-based contracts with Toyota and Honda, selling PGMs directly to these two customers. Amplats then sells the majority portion of its product to the five major autocat fabricators and metals traders: Johnson Matthey, BASF, Heraeus, Umicore and TKK. Some of this metal is passed on at this point to other auto companies and also into PGM end markets outside the autocat market. Amplats will then sell some product on the spot market.

Amplats reported sales commission of R367m in 2011; we believe this could be reduced through a restructuring of the way Amplats sells its products, switching to more direct customer selling.

The relationship between Amplats and the five autocat fabricators and metals traders is rather opaque and few, if any, details are publicly available. As such, it is difficult for us to gauge how much leeway Amplats has to change the structure of its sales and its customer mix. At the very least, however, we would expect Amplats to embark on establishing more direct relationships with the end users of PGMs.

Filling up excess processing capacity

In its 2011 Annual Results commentary, Amplats also cited a review of its processing capacity: *"Our production profile indicates excess smelting and refining capacity in the short to medium term and provides an opportunity to improve capital efficiency."*



Following the successful introduction of some secondary material in 2011, we plan to secure additional secondary material to further increase capital utilisation”.

As discussed above, Amplats has three smelters, with around 1moz capacity each. In addition, it has a base metals refinery and a precious metals refinery, the latter with around 3moz capacity. Given Amplats’ current refined production of 2.5moz platinum, it has spare capacity to fill.

In modelling some of scenarios in this note, we have assumed Amplats would look to source an additional 830k 4E ounces (500koz Pt) for smelting and refining. We think this would have to come from new contracts to process ounces for recycling, likely mainly from autocat recycling. Amplats could also look to source ounces for toll-refining but while fresh supply is being squeezed across the industry, we think this is unlikely to form the majority of the extra ounces Amplats could secure to reduce its excess capacity in this scenario.

Monetise longer-dated growth options

We believe Amplats could use the opportunity of Anglo American’s Operational Review of the business to monetise some of the longer-dated growth options it has in its portfolio of projects and its resource base. In this regard, we see two main options:

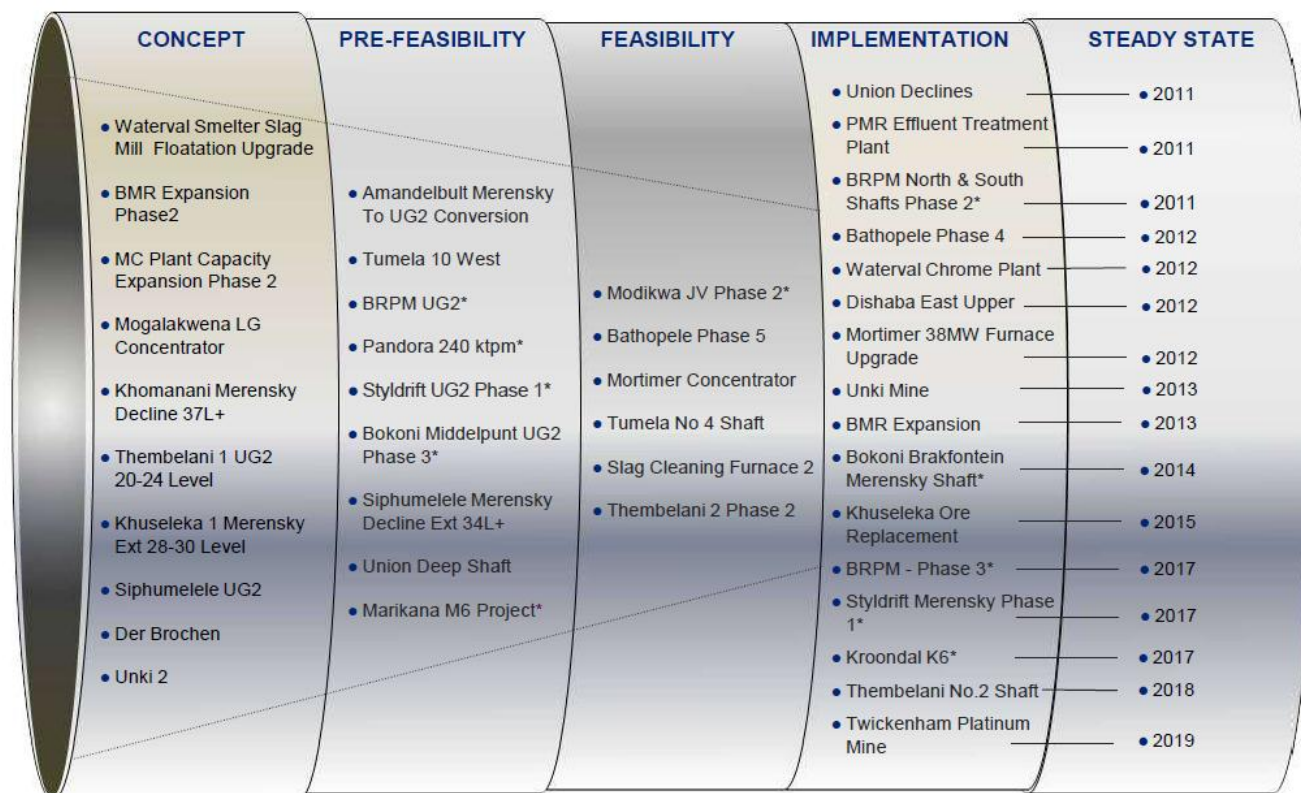
1. Sell or close down current projects;
2. Sell future growth options/monetise some of the resource base.

Sell or close down current projects

As noted in our report of 14 July 2011 (“Reverse Alchemy” Mulholland et al.), Amplats has the fullest project pipeline of the industry in terms of the number and kind of projects. As can be seen in Figure 61, these are at various stages of development from concept studies to implementation.



Figure 61: Amplats project pipeline



*Joint venture

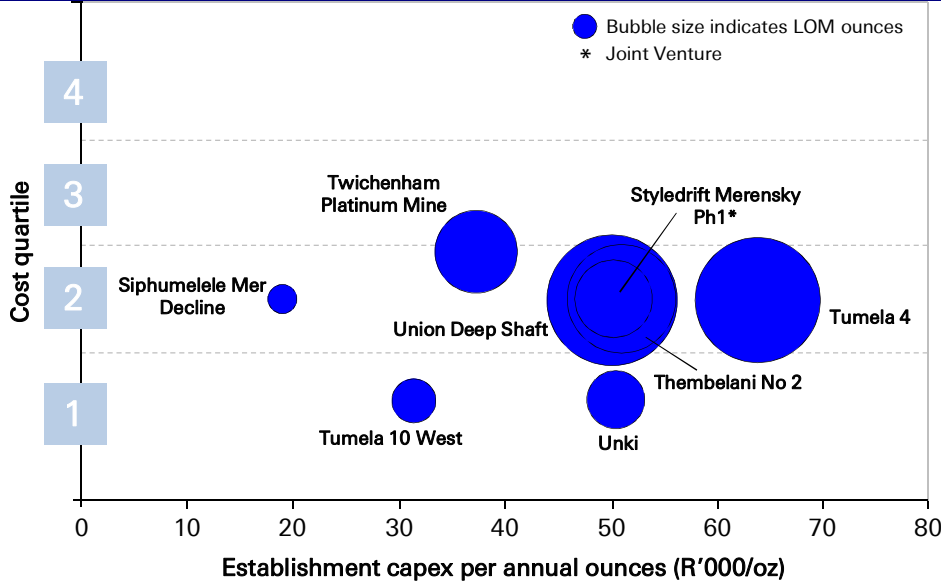
Source: Company data

As discussed above, we think Amplats could consider monetising the projects connected with its JV or associate mines: Modikwa JV Phase 2 (in feasibility), Marikana M6 Project (pre-feasibility) and Pandora 240ktpm (pre-feasibility). Any sale would likely form part of the sale of Amplats’ 50% stakes in the JV mines, for additional consideration.

One final option could be to sell the Twickenham project. Figure 62 shows the cost curve position of some of Amplats’ potential future projects. Twickenham is in the 2nd or 3rd quartile (on Amplats’ estimates) and has been delayed three times since its initial approval as a project in September 2001. This is a sign, in our opinion, that Amplats has other growth options that it prefers to pursue, particularly when the market turns down. We note that Amplats might take the view, however, that the Twickenham mine could be a 2nd quartile mine when it is up and running at steady-state and that it is worth ploughing on with the project from here, given the capital sunk to date.



Figure 62: Cost quartile position of selected future Amplats projects

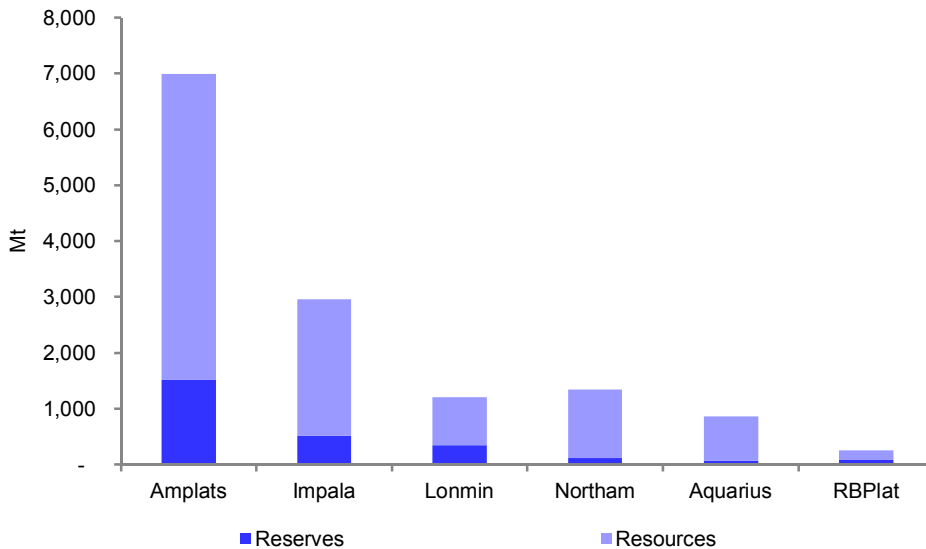


Source: Company data

Monetise the resource base

Amplats has the largest resource base in the industry (Figure 63). On an ounces basis, excluding associates, at the end of 2011, Amplats had reserves and resources of 607m 4E ounces, or 364m platinum ounces. At the current production rate of 2.5moz pa, Amplats could mine platinum for the next 145 years. We therefore believe Amplats could bring forward some of its longer-dated resources to monetise them today.

Figure 63: Comparison of resources and reserves across sector



Source: Company data using the last reported 12-months results per company

In this regard, one of Amplats' larger projects, Der Brochen, remains at concept phase; we believe there could be a chance to sell this project, perhaps to neighbouring miners Mototolo (Amplats 50%, Xstrata 50%), Two Rivers (Impala 45%, ARM 49%), Booyssendal (Northam 100%), or Everest (Aquarius 100%). Der Brochen is a greenfield project in the extreme south of the Eastern Limb of the Bushveld Complex. Exploration work has been in progress on the site since 2001. In 2009, some of the strike length (1.3km) was sold



into the Booyendal property. Amplats envisages that a pre-feasibility study will progress throughout 2013 and a feasibility study in 2014. At the end of 2011, Amplats reported 76.8m 4E oz of measured, indicated and inferred resources, split as 25.4moz Merensky and 51.4moz UG2. 47% of the total resource is in the inferred category.



Unbundle from Anglo American

Unbundling remains unlikely

Anglo American's interests in Amplats and De Beers set it apart from its diversified mining peers. However, given challenges in demand for platinum and the difficult operating environment, this differentiator is not working in Anglo American's favour at present.

The current discrepancy in value versus earnings and cash flow contribution from the listed entity Amplats has resulted in questions being asked as to whether value can be unlocked from unbundling Amplats. The announcement at the recent results that returns in platinum were unacceptable and that Anglo American and the platinum division are performing a review aimed at unlocking shareholder value will again highlight the potential opportunity of unbundling this operation. Management comments of no intention to sell or unbundle refute this possibility, but we think that some shareholders are likely to see unbundling of Amplats as the fastest and simplest way to unlock value and hence we address this as a possibility, though unlikely.

The listed nature of two subsidiaries – Amplats and Kumba – allows the market to assess the value unlock and traded value of the Anglo American rump easily. In the charts below we analyse Anglo American's rump from its size and valuation relative to Anglo American. We also use IBES consensus earnings to remove from earnings and market cap the value of the listed subsidiaries, and hence are able to restate the rump PE.

Anglo American rump (excluding Kumba and Amplats)

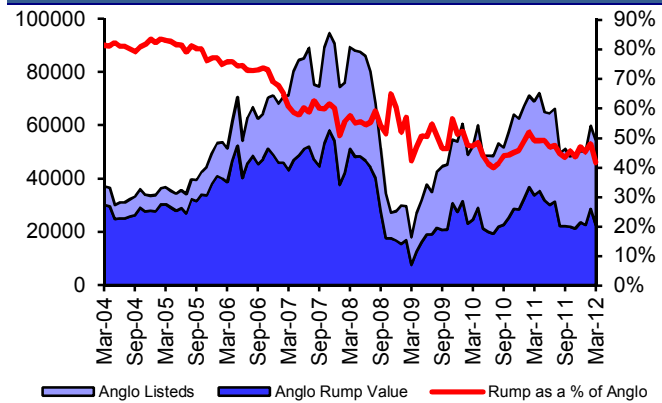
As illustrated in the chart below, the Anglo American rump is currently 42% of the group; thus after a potential unbundling of Amplats and Kumba and assuming no unlock of value, Anglo American would be worth US\$22.4bn. This is a very depressed level compared to the average rump value of US\$31.5bn since January 2011.

Another way of looking at the rump is to back out the value and earnings of the listed subsidiaries and to compare the Anglo American and rump PEs. The right hand chart below is based on IBES consensus earnings and second year forward PEs for illustration. On the basis of F1 PE, Anglo American is trading at 8.1x while the rump is on 5.x, a 38% discount. On the basis of F2 PE (as in the chart below), Anglo American is trading at 6.9x while the rump is on 4.4x, a 37% discount.

Thus on the face of it unbundling of Amplats and Kumba would potentially result in a re-rating with the rump valuation trading at a considerable discount to the sector that is currently trading on between 7-8x FY2.

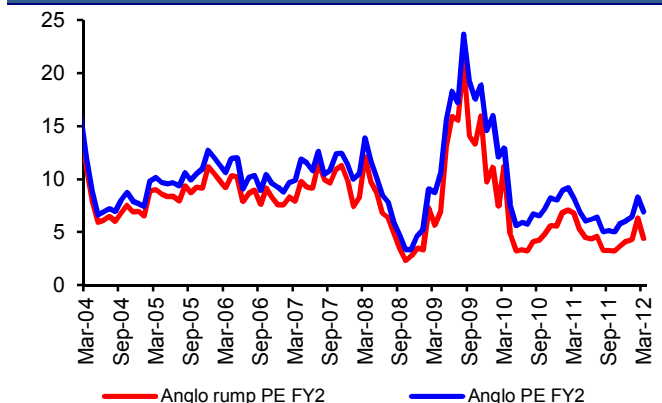


Figure 64: Anglo and Anglo rump value through time (US\$m)



Source: Deutsche Bank, Datastream

Figure 65: Anglo and Anglo rump PE, based on IBES consensus, F2



Source: Deutsche Bank, Datastream

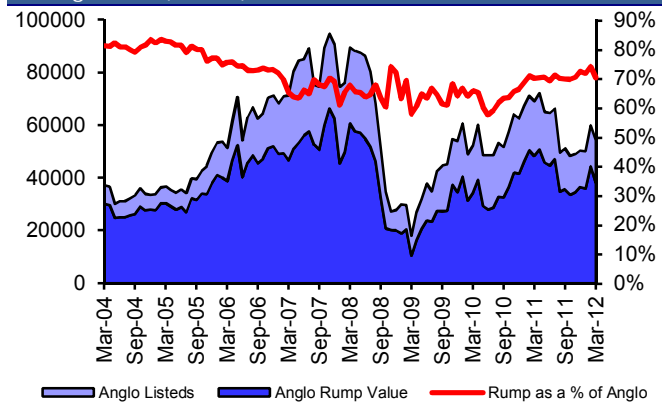
Anglo American rump (excluding only Amplats)

To assess the value of unbundling only Amplats, we present below our Anglo American rump but assume that Kumba is retained in the rump. As illustrated in the chart below, the Anglo American rump is currently 70% of the group; thus after a potential unbundling of Amplats and assuming no unlock of value, Anglo American would be worth US\$38.1bn.

As above on the bases of IBES earnings Anglo American is on an F1 PE of 8.1x while the rump is on 6.2x, a 23% discount. On the basis of F2 PE, Anglo American is trading at 6.9x while the rump is on 5.5x, a 20% discount.

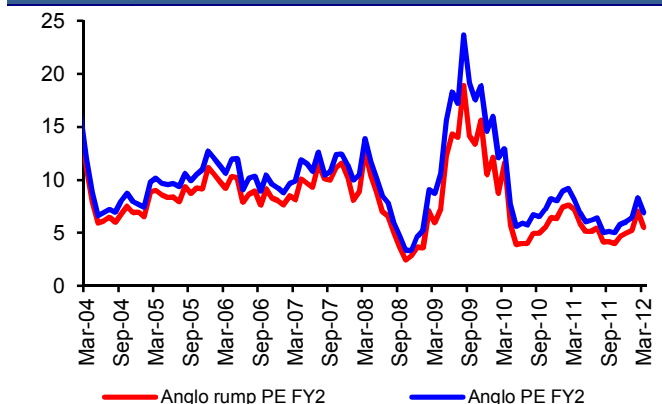
The conclusion from this analysis is that unbundling of Amplats alone does offer value to Anglo American shareholders, excluding the uncertain impact of the overhang of FTSE shareholders that may prefer not to own Amplats directly.

Figure 66: Anglo and Anglo less Amplats rump value through time (US\$m)



Source: Deutsche Bank, Datastream

Figure 67: Anglo and Anglo less Amplats rump PE, IBES consensus, F2



Source: Deutsche Bank, Datastream



The support rationale for Amplats unbundling

Amplats as illustrated extensively above is underperforming at this time. There is no doubt Amplats is a world-class asset (given the long life, extent and quality of resource owned) and has been described by Anglo American management as its Bowen Basin or Pilbara asset.

The reason that some shareholders are supportive of Amplats unbundling is that it is to some extent a poison pill for a take-out of Anglo American at this time. We think investors see value in the Anglo American portfolio and think that the quickest route to realising that value would be through a deal or consolidation. The reasons Amplats is a potential barrier are:

- Amplats with its high exposure to deep level labour-intensive (and relatively unsafe) mining, and in fact the entire platinum industry in South Africa is currently relatively unattractive to other global diversified mining companies. Global diversified mining companies are moving towards mechanised mining and away from less safe and more labour-intensive operating conditions.
- Amplats is underperforming at present, as illustrated above, and the cash flow generation is not supportive of a leveraged buyout.
- Amplats represents US\$16.2bn of Anglo American's US\$54bn market cap. Consolidation is far easier for assets that are smaller; excluding Amplats, Anglo American's market cap at US\$38.1bn is far more attractive to global mining companies, in our view. If an acquirer were able to raise the necessary funding to make an offer for the entire group, there are also exchange control and political hurdles that Anglo American management could use as a defence against an offer.

Conclusion

In conclusion we see the unbundling of Amplats by Anglo American as value accretive but also as a signal that Anglo American would be open to consolidation and that the board would be indirectly acknowledging that the portfolio of growth in Anglo American, as outlined in detail in our 20 September 2011 note 'The tortoise, not the hare', could be better realised by the management team. This seems unlikely.

The recent comments by the Anglo American CEO illustrate clearly this is not Anglo American's intention. For shareholders, an unbundling of Amplats would deliver short term value. We think, though, that the Anglo American board is more focused on longer term value creation from the quality of the group's portfolio and potential growth.



Valuation and risk

Amplats investment thesis

Outlook

We see a balance of potential positives and negatives catalysts for Amplats shares in 2012. With 52% of production from its wholly-owned Western Limb mines, Amplats is one of the most exposed PGM miners to the increased safety focus in the Rustenburg area. Until the further ramp-up of Mogalakwena, Unki and the group's Eastern Limb operations and projects, we believe Amplats will suffer more than peers in delivering production growth. On a more positive note, the next 12 months will likely see Amplats attempt to pursue a lower-cost strategy of growing medium-term production from high-volume, lower-grade operations Mogalakwena and Unki. Also, the market seems to be assigning zero value to Amplats' Unki mine. This is overly negative in our view but Unki is a small part of Amplats's fair value and production. Hold.

Valuation

We value Amplats on a sum-of-the-parts DCF basis, applying a nominal WACC of 13% to cash flows from 2011E-17E (based on nominal commodity prices) and a real WACC of 8% to cash flows from 2018E onwards (based on real commodity prices). We apply a 1x DCF exit multiple to derive our target price. In the next 12 months, we use a platinum price forecast of US\$1,875 per ounce and a ZAR/USD forecast of 7.74. Our target price includes 49% only of Amplats' Zimbabwean mine, Unki, to reflect the risk that the Zimbabwean government's push for indigenous ownership of 51% of the mine is effected this year.

Risks

Upside risks to our price target include a more benign than expected outcome in Zimbabwe regarding indigenisation and a quicker than expected ramp up of Mogalakwena. A quicker than expected conclusion to the Anglo American operational review of Amplats within its group could also be a positive catalyst for the shares.

Downside risks include a more negative-than-expected outcome in Zimbabwe regarding indigenisation; further production interruptions from safety stoppages; and higher-than-forecast capex to sustain higher production levels in the longer term (our base case assumes a peak of R9.5bn in 2013).



Anglo American investment thesis

Outlook

Anglo American is focused on value delivery through optimisation of its portfolio and also on delivering the four major growth projects expected to come on line between 2011 and 2014 (Barro Alto, Los Bronces, Kolomela and Minas Rio). In our opinion, Anglo American will deliver production growth of 35% in delivery of these projects and plans to approve US\$10bn (attributable) of projects over the next three years. In addition, Anglo American has a US\$65-70bn longer term project pipeline of unapproved projects. Anglo American has progressed the sale of non-core businesses and only Scaw SA and Tarmac remain to be sold. Anglo American is now in a strong financial position and given the outlook for cash generation over organic growth spend will we anticipate return excess capital to shareholders through special dividends in time. Given the upside potential based on our valuation we rate Anglo American as a Buy.

Valuation

Our price target reflects a valuation taking into consideration both DCF over life-of-mine (9.5% WACC - Beta 1.25, ERP 4.5%, Rf 5%, COD 6% on a through-the-cycle target gearing of 30%) for core asset valuations and market values or peer group multiples for non-core assets. We value at 1x NPV in line with its long-term average and what we believe is the market's unwillingness to pay for more than approved growth.

Risks

Risks to our view include stronger-than-expected operating currencies (rand, A\$) and lower commodity prices, in particular PGMs, copper and iron ore. More specific risks include potential delays at Minas Rio, the outcome of the legal dispute with Codelco, the delivery of cost controls at Amplats and delays to project approvals.

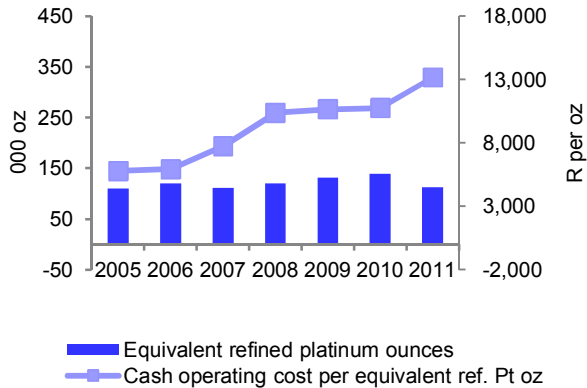


The authors of this report wish to acknowledge the contribution made by Patrick Mann, an employee of Deloitte & Touche.



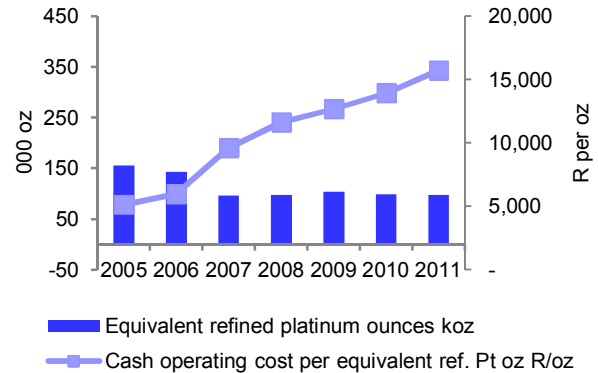
Appendix A: Amplats' current mines

Figure 68: Bathopele mine



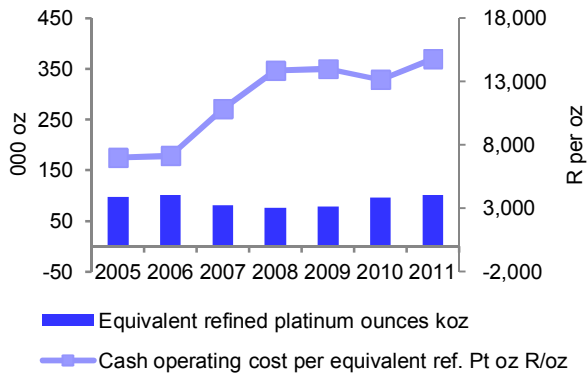
Source: Deutsche Bank

Figure 69: Khomanani mine



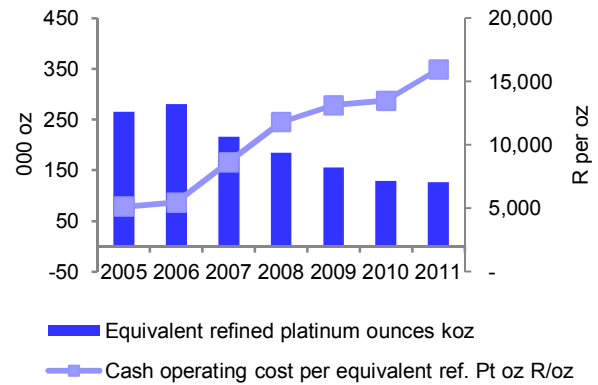
Source: Deutsche Bank

Figure 70: Thembelani mine



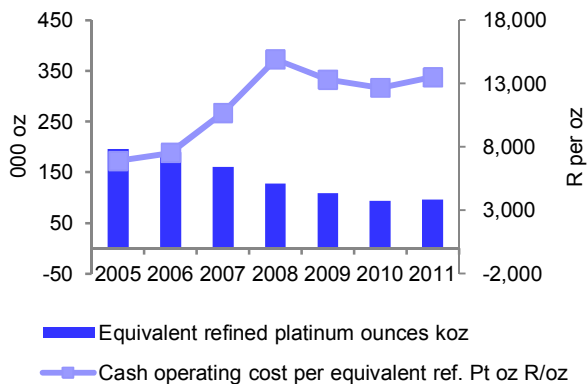
Source: Deutsche Bank

Figure 71: Khuseleka mine



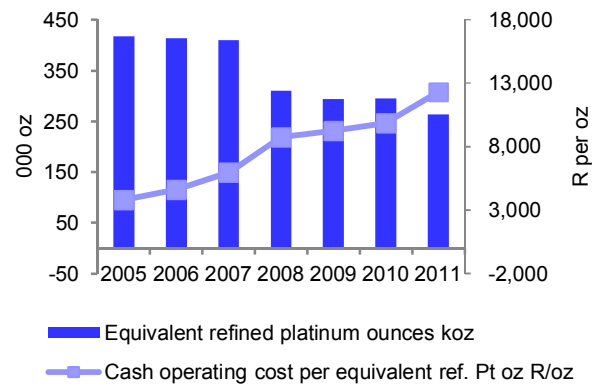
Source: Deutsche Bank

Figure 72: Siphumelele mine



Source: Deutsche Bank

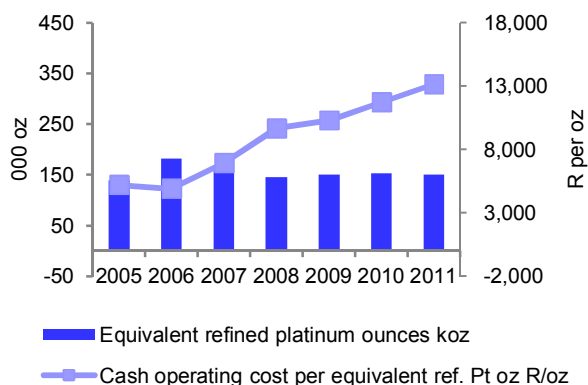
Figure 73: Tumela mine



Source: Deutsche Bank

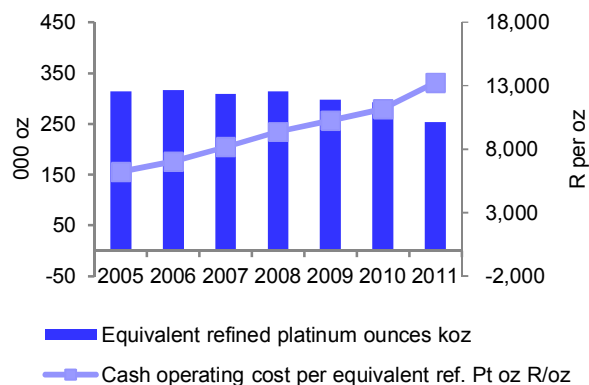


Figure 74: Dishaba mine



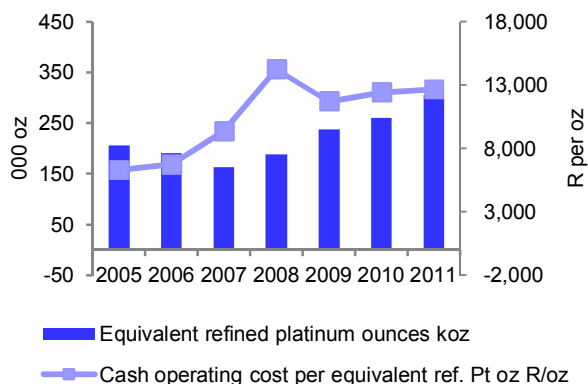
Source: Deutsche Bank

Figure 75: Union mine



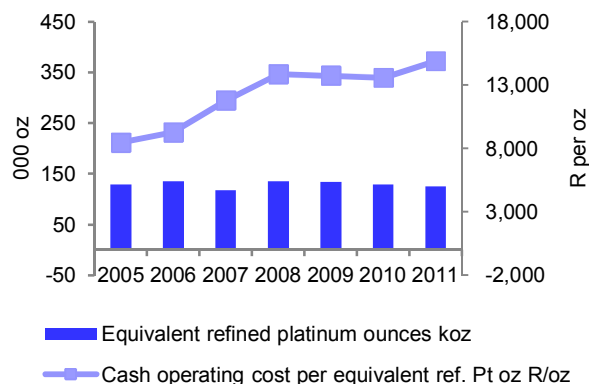
Source: Deutsche Bank

Figure 76: Mogalakwena mine



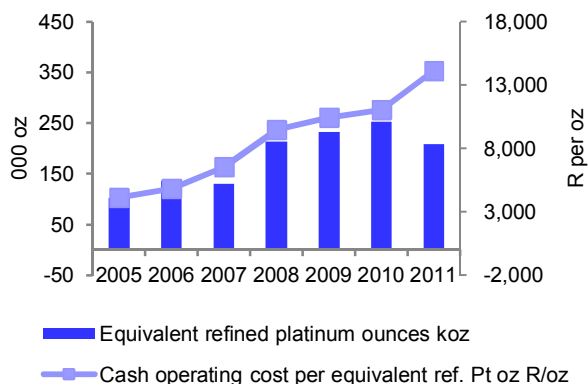
Source: Deutsche Bank

Figure 77: Modikwa mine



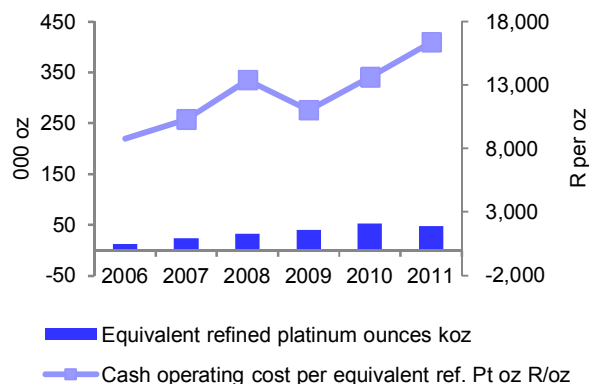
Source: Deutsche Bank

Figure 78: Kroondal mine



Source: Deutsche Bank

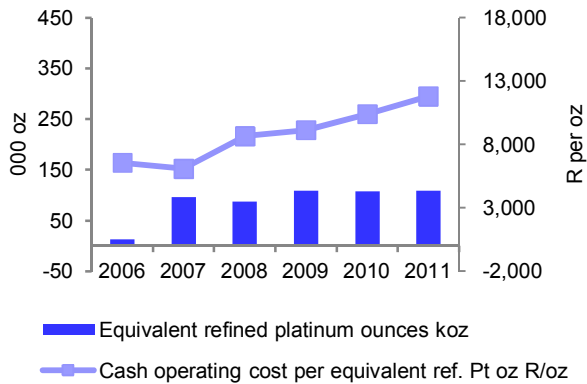
Figure 79: Marikana mine



Source: Deutsche Bank

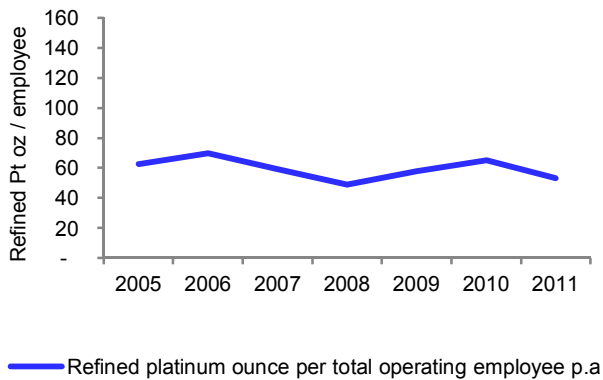


Figure 80: Mototolo mine



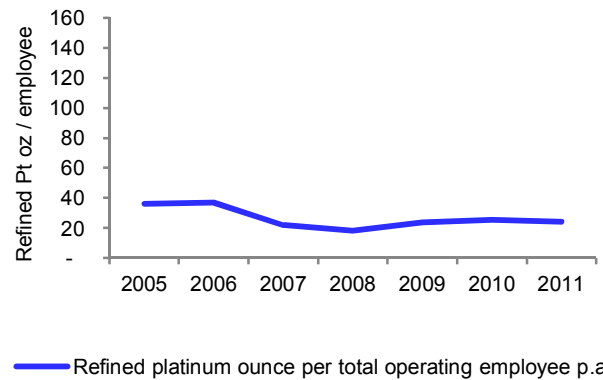
Source: Company data

Figure 81: Bathopelle productivity trend



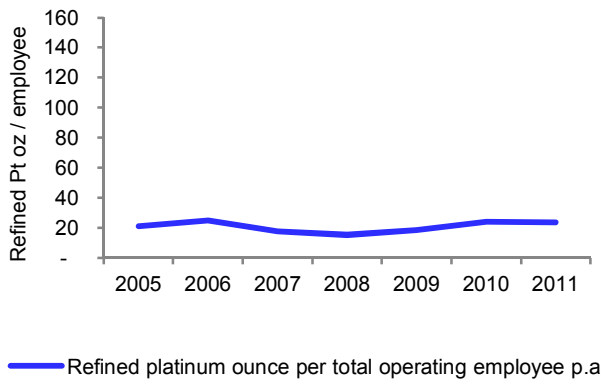
Source: Company data

Figure 82: Khomanani productivity trend



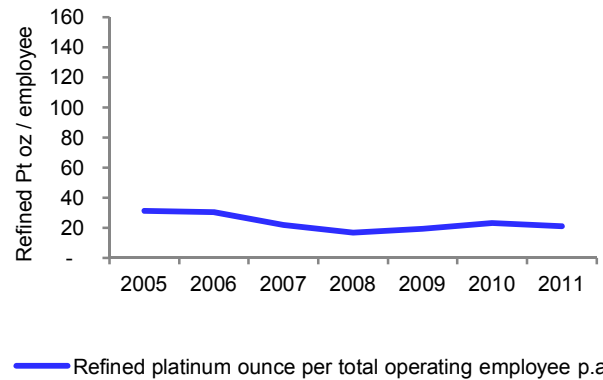
Source: Company data

Figure 83: Thembelani productivity trend



Source: Company data

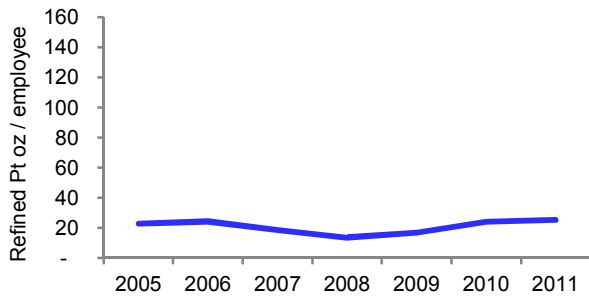
Figure 84: Khuseleka productivity trend



Source: Company data



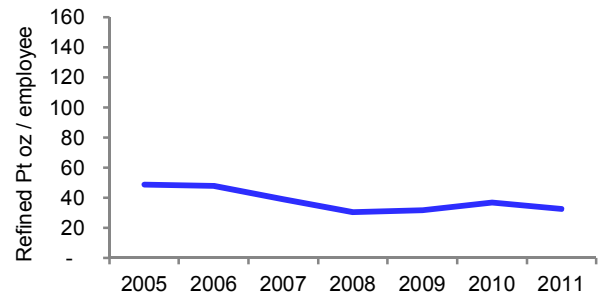
Figure 85: Siphumelele productivity trend



— Refined platinum ounce per total operating employee p.a

Source: Company data

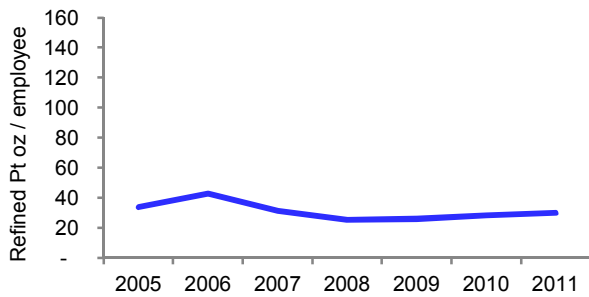
Figure 86: Tumela productivity trend



— Refined platinum ounce per total operating employee p.a

Source: Company data

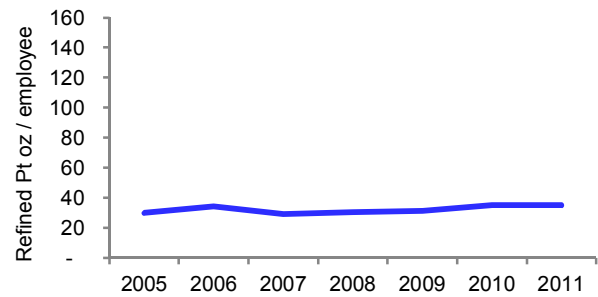
Figure 87: Dishaba productivity trend



— Refined platinum ounce per total operating employee p.a

Source: Company data

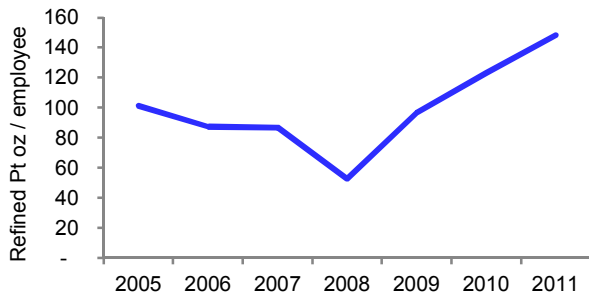
Figure 88: Union productivity trend



— Refined platinum ounce per total operating employee p.a

Source: Company data

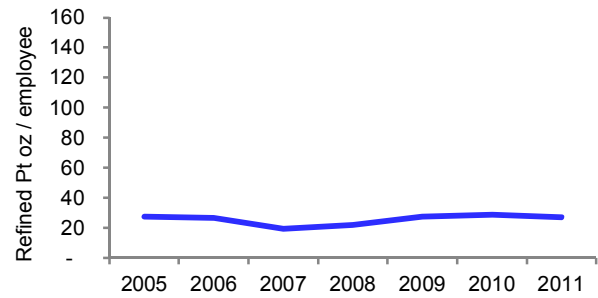
Figure 89: Mogalakwena productivity trend



— Refined platinum ounce per total operating employee p.a

Source: Company data

Figure 90: Modikwa productivity trend

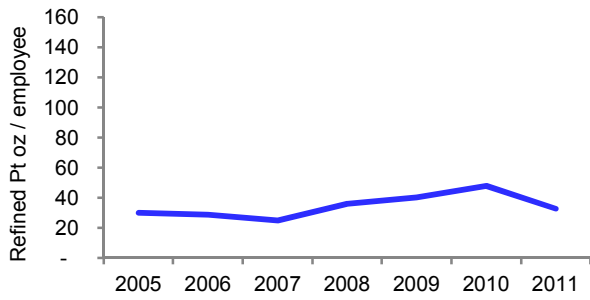


— Refined platinum ounce per total operating employee p.a

Source: Company data



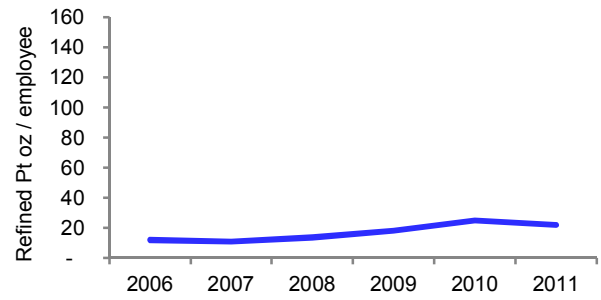
Figure 91: Kroondal productivity trend



— Refined platinum ounce per total operating employee p.a

Source: Company data

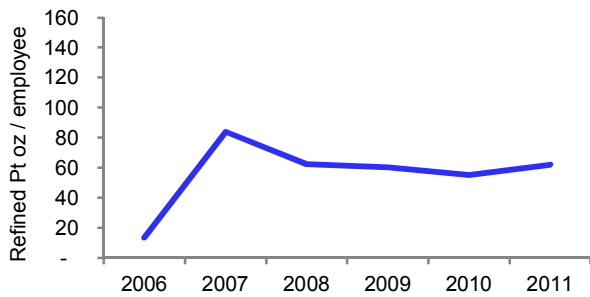
Figure 92: Marikana productivity trend



— Refined platinum ounce per total operating employee p.a

Source: Company data

Figure 93: Mototolo productivity trend



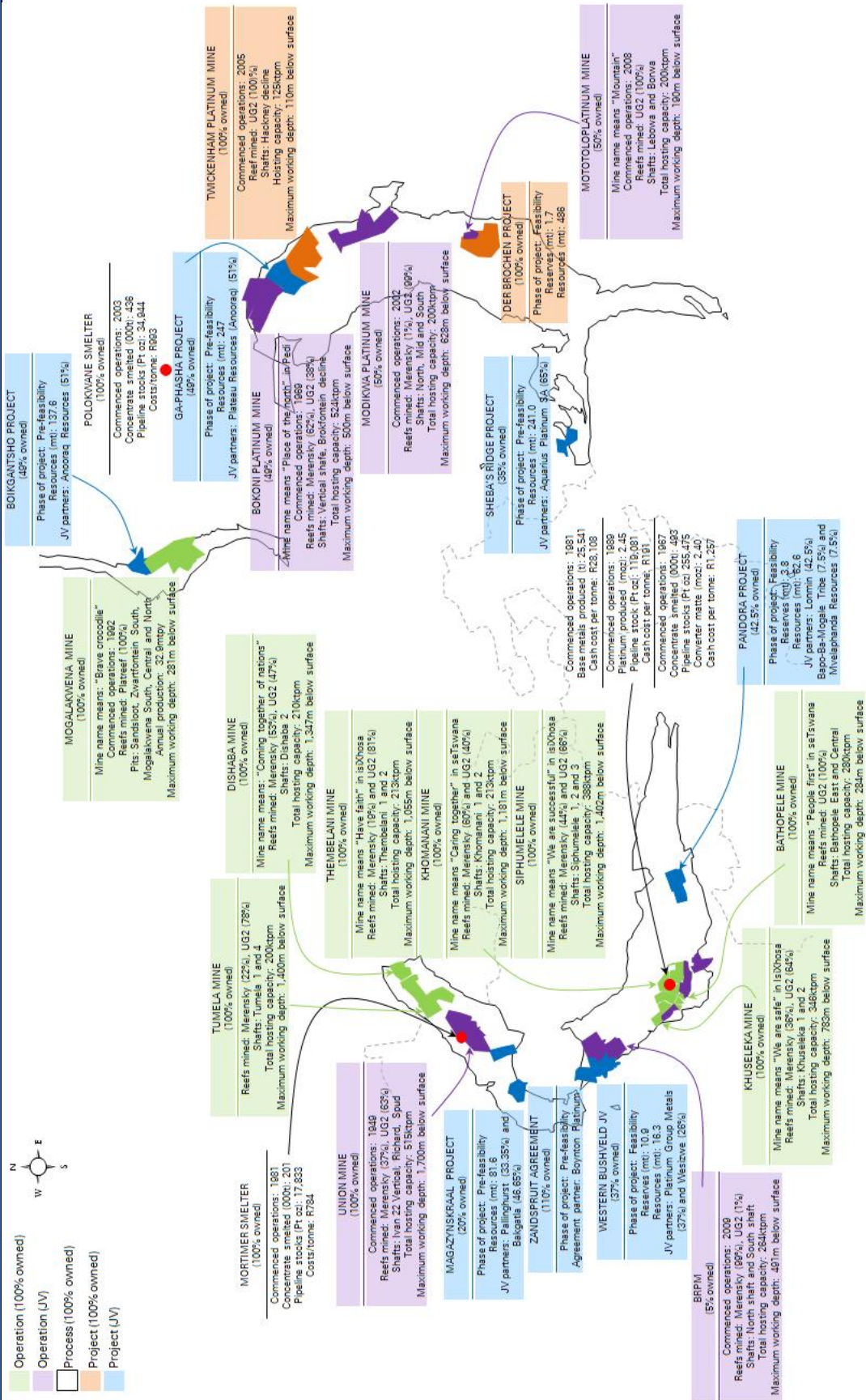
— Refined platinum ounce per total operating employee p.a

Source: Company data



Appendix B: Location of mines, smelters and refineries

Figure 94: Amplats location of assets



Source: Company data



Appendix 1

Important Disclosures

Additional information available upon request

Disclosure checklist

Company	Ticker	Recent price*	Disclosure
Amplats	AMSJ.J	550.04 (ZAR) 16 Mar 12	4,8,14
Anglo American	AGLJ.J	313.80 () 16 Mar 12	2,8,14,17
Anglo American	AAL.L	2,605.00 (GBP) 16 Mar 12	2,8,14,17

*Prices are sourced from local exchanges via Reuters, Bloomberg and other vendors. Data is sourced from Deutsche Bank and subject companies

Important Disclosures Required by U.S. Regulators

Disclosures marked with an asterisk may also be required by at least one jurisdiction in addition to the United States. See Important Disclosures Required by Non-US Regulators and Explanatory Notes.

2. Deutsche Bank and/or its affiliate(s) makes a market in securities issued by this company.
4. The research analyst(s) or an individual who assisted in the preparation of this report (or a member of his/her household) has a direct ownership position in securities issued by this company or derivatives thereof.
8. Deutsche Bank and/or its affiliate(s) expects to receive, or intends to seek, compensation for investment banking services from this company in the next three months.
14. Deutsche Bank and/or its affiliate(s) has received non-investment banking related compensation from this company within the past year.

Important Disclosures Required by Non-U.S. Regulators

Please also refer to disclosures in the Important Disclosures Required by US Regulators and the Explanatory Notes.

2. Deutsche Bank and/or its affiliate(s) makes a market in securities issued by this company.
4. The research analyst(s) or an individual who assisted in the preparation of this report (or a member of his/her household) has a direct ownership position in securities issued by this company or derivatives thereof.
17. Deutsche Bank and or/its affiliate(s) has a significant Non-Equity financial interest (this can include Bonds, Convertible Bonds, Credit Derivatives and Traded Loans) where the aggregate net exposure to the following issuer(s), or issuer(s) group, is more than 25m Euros.

For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at <http://gm.db.com/ger/disclosure/DisclosureDirectory.eqsr>

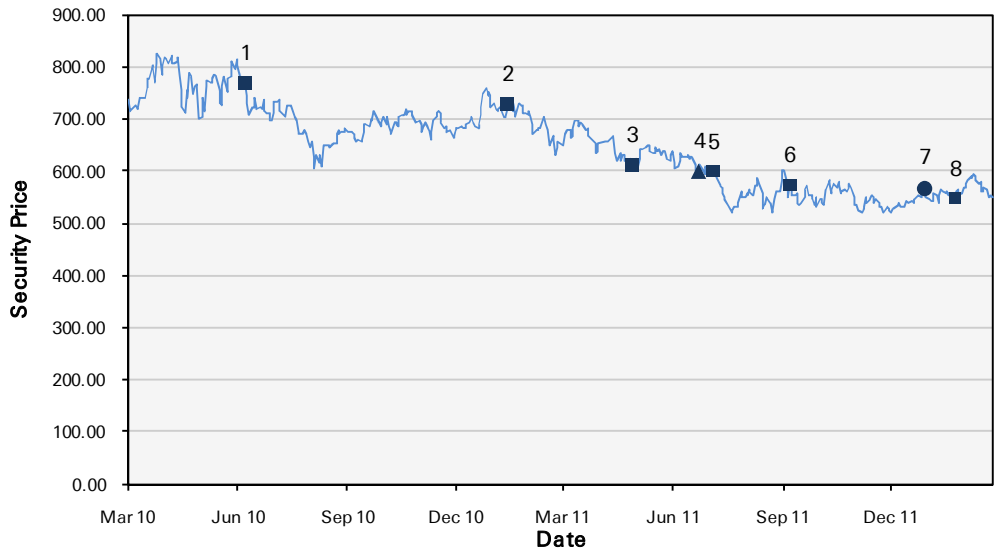
Analyst Certification

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst about the subject issuers and the securities of those issuers. In addition, the undersigned lead analyst has not and will not receive any compensation for providing a specific recommendation or view in this report. Anna Mulholland/Tim Clark/Grant Sporre



Historical recommendations and target price: Amplats (AMSJ.J)

(as of 3/16/2012)



Previous Recommendations

- Strong Buy
- Buy
- Market Perform
- Underperform
- Not Rated
- Suspended Rating

Current Recommendations

- Buy
- Hold
- Sell
- Not Rated
- Suspended Rating

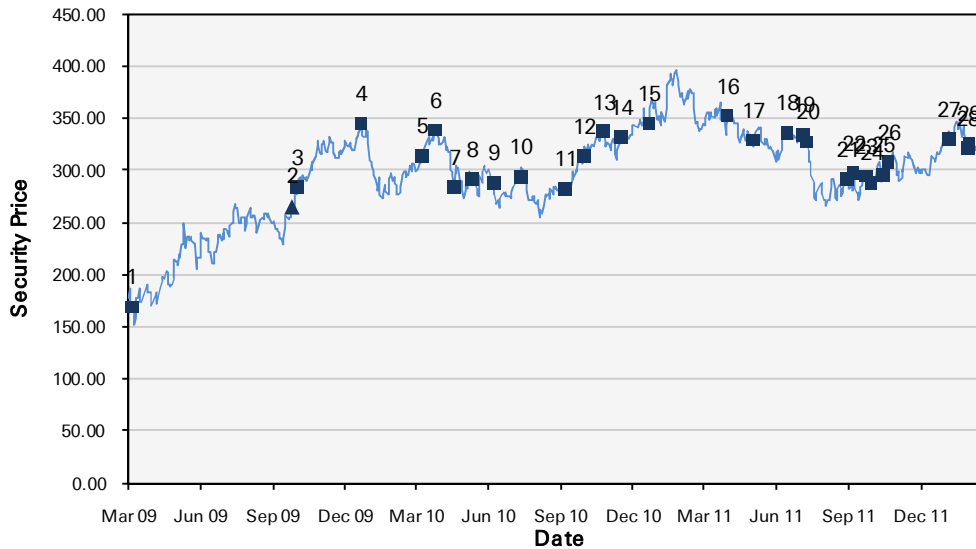
*New Recommendation Structure
as of September 9,2002

1.	29/06/2010:	Hold, Target Price Change ZAR845.00	5.	26/07/2011:	Buy, Target Price Change ZAR740.00
2.	04/02/2011:	Hold, Target Price Change ZAR720.00	6.	28/09/2011:	Buy, Target Price Change ZAR725.00
3.	19/05/2011:	Hold, Target Price Change ZAR705.00	7.	19/01/2012:	Downgrade to Hold, Target Price Change ZAR615.00
4.	14/07/2011:	Upgrade to Buy, Target Price Change ZAR740.00	8.	14/02/2012:	Hold, Target Price Change ZAR590.00



Historical recommendations and target price: Anglo American (AGLJ.J)

(as of 3/16/2012)



Previous Recommendations

- Strong Buy
- Buy
- Market Perform
- Underperform
- Not Rated
- Suspended Rating

Current Recommendations

- Buy
- Hold
- Sell
- Not Rated
- Suspended Rating

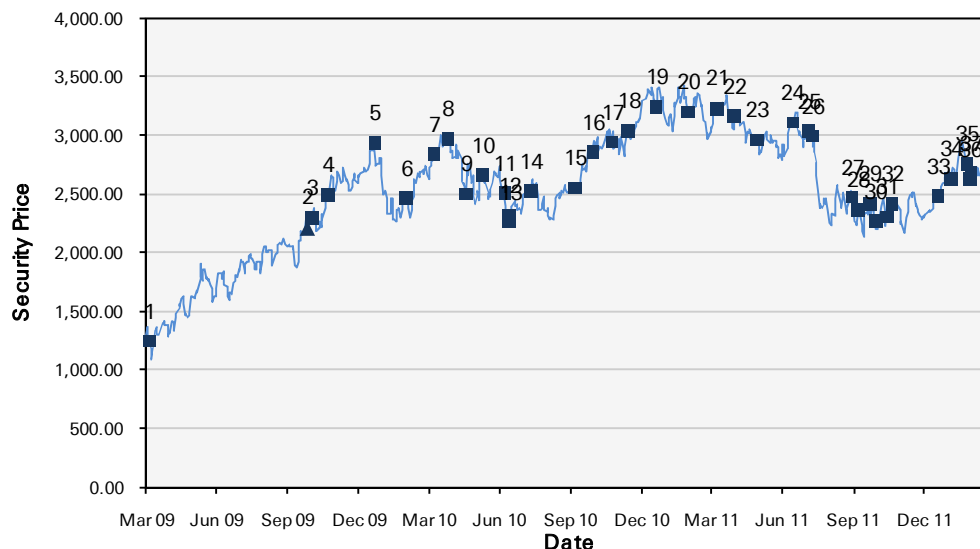
*New Recommendation Structure
as of September 9,2002

1.	27/03/2009:	Hold, Target Price Change ZAR175.00	16.	21/04/2011:	Buy, Target Price Change ZAR465.00
2.	16/10/2009:	Upgrade to Buy, Target Price Change ZAR310.00	17.	23/05/2011:	Buy, Target Price Change ZAR450.00
3.	23/10/2009:	Buy, Target Price Change ZAR315.00	18.	05/07/2011:	Buy, Target Price Change ZAR440.00
4.	12/01/2010:	Buy, Target Price Change ZAR385.00	19.	26/07/2011:	Buy, Target Price Change ZAR445.00
5.	30/03/2010:	Buy, Target Price Change ZAR395.00	20.	31/07/2011:	Buy, Target Price Change ZAR440.00
6.	16/04/2010:	Buy, Target Price Change ZAR400.00	21.	20/09/2011:	Buy, Target Price Change ZAR450.00
7.	10/05/2010:	Buy, Target Price Change ZAR405.00	22.	28/09/2011:	Buy, Target Price Change ZAR430.00
8.	01/06/2010:	Buy, Target Price Change ZAR415.00	23.	13/10/2011:	Buy, Target Price Change ZAR440.00
9.	29/06/2010:	Buy, Target Price Change ZAR420.00	24.	20/10/2011:	Buy, Target Price Change ZAR435.00
10.	02/08/2010:	Buy, Target Price Change ZAR410.00	25.	04/11/2011:	Buy, Target Price Change ZAR450.00
11.	28/09/2010:	Buy, Target Price Change ZAR405.00	26.	11/11/2011:	Buy, Target Price Change ZAR455.00
12.	21/10/2010:	Buy, Target Price Change ZAR400.00	27.	26/01/2012:	Buy, Target Price Change ZAR450.00
13.	15/11/2010:	Buy, Target Price Change ZAR405.00	28.	19/02/2012:	Buy, Target Price Change ZAR440.00
14.	07/12/2010:	Buy, Target Price Change ZAR410.00	29.	21/02/2012:	Buy, Target Price Change ZAR445.00
15.	11/01/2011:	Buy, Target Price Change ZAR470.00			



Historical recommendations and target price: Anglo American (AAL.L)

(as of 3/16/2012)



Previous Recommendations

- Strong Buy
- Buy
- Market Perform
- Underperform
- Not Rated
- Suspended Rating

Current Recommendations

- Buy
- Hold
- Sell
- Not Rated
- Suspended Rating

*New Recommendation Structure
as of September 9,2002

1.	27/03/2009:	Hold, Target Price Change GBP1,210.00	20.	21/02/2011:	Buy, Target Price Change GBP3,960.00
2.	17/10/2009:	Upgrade to Buy, Target Price Change GBP2,520.00	21.	30/03/2011:	Buy, Target Price Change GBP4,000.00
3.	23/10/2009:	Buy, Target Price Change GBP2,550.00	22.	21/04/2011:	Buy, Target Price Change GBP3,970.00
4.	13/11/2009:	Buy, Target Price Change GBP2,660.00	23.	20/05/2011:	Buy, Target Price Change GBP3,850.00
5.	12/01/2010:	Buy, Target Price Change GBP3,110.00	24.	05/07/2011:	Buy, Target Price Change GBP3,760.00
6.	22/02/2010:	Buy, Target Price Change GBP3,100.00	25.	26/07/2011:	Buy, Target Price Change GBP3,790.00
7.	30/03/2010:	Buy, Target Price Change GBP3,290.00	26.	31/07/2011:	Buy, Target Price Change GBP3,730.00
8.	16/04/2010:	Buy, Target Price Change GBP3,320.00	27.	20/09/2011:	Buy, Target Price Change GBP3,810.00
9.	10/05/2010:	Buy, Target Price Change GBP3,350.00	28.	28/09/2011:	Buy, Target Price Change GBP3,670.00
10.	01/06/2010:	Buy, Target Price Change GBP3,445.00	29.	13/10/2011:	Buy, Target Price Change GBP3,760.00
11.	29/06/2010:	Buy, Target Price Change GBP3,500.00	30.	20/10/2011:	Buy, Target Price Change GBP3,690.00
12.	05/07/2010:	Buy, Target Price Change GBP3,490.00	31.	04/11/2011:	Buy, Target Price Change GBP3,790.00
13.	06/07/2010:	Buy, Target Price Change GBP3,520.00	32.	11/11/2011:	Buy, Target Price Change GBP3,890.00
14.	02/08/2010:	Buy, Target Price Change GBP3,450.00	33.	09/01/2012:	Buy, Target Price Change GBP3,880.00
15.	28/09/2010:	Buy, Target Price Change GBP3,400.00	34.	26/01/2012:	Buy, Target Price Change GBP3,860.00
16.	21/10/2010:	Buy, Target Price Change GBP3,380.00	35.	15/02/2012:	Buy, Target Price Change GBP3,830.00
17.	15/11/2010:	Buy, Target Price Change GBP3,410.00	36.	19/02/2012:	Buy, Target Price Change GBP3,730.00
18.	06/12/2010:	Buy, Target Price Change GBP3,430.00	37.	20/02/2012:	Buy, Target Price Change GBP3,770.00
19.	11/01/2011:	Buy, Target Price Change GBP3,920.00			



Equity rating key

Equity rating dispersion and banking relationships

Buy: Based on a current 12- month view of total shareholder return (TSR = percentage change in share price from current price to projected target price plus projected dividend yield) , we recommend that investors buy the stock.

Sell: Based on a current 12-month view of total shareholder return, we recommend that investors sell the stock

Hold: We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.

Notes:

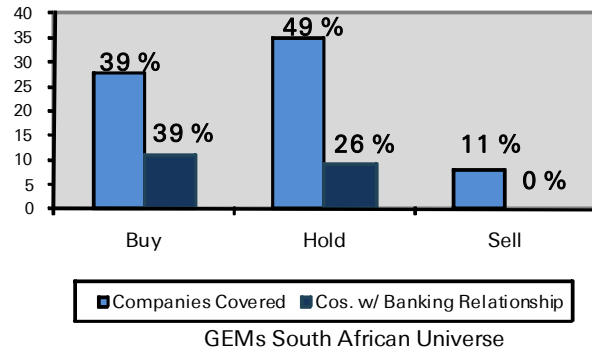
1. Newly issued research recommendations and target prices always supersede previously published research.

2. Ratings definitions prior to 27 January, 2007 were:

Buy: Expected total return (including dividends) of 10% or more over a 12-month period

Hold: Expected total return (including dividends) between -10% and 10% over a 12-month period

Sell: Expected total return (including dividends) of -10% or worse over a 12-month period





Regulatory Disclosures

1. Important Additional Conflict Disclosures

Aside from within this report, important conflict disclosures can also be found at <https://gm.db.com/equities> under the "Disclosures Lookup" and "Legal" tabs. Investors are strongly encouraged to review this information before investing.

2. Short-Term Trade Ideas

Deutsche Bank equity research analysts sometimes have shorter-term trade ideas (known as SOLAR ideas) that are consistent or inconsistent with Deutsche Bank's existing longer term ratings. These trade ideas can be found at the SOLAR link at <http://gm.db.com>.

3. Country-Specific Disclosures

Australia and New Zealand: This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act and New Zealand Financial Advisors Act respectively.

Brazil: The views expressed above accurately reflect personal views of the authors about the subject company(ies) and its(their) securities, including in relation to Deutsche Bank. The compensation of the equity research analyst(s) is indirectly affected by revenues deriving from the business and financial transactions of Deutsche Bank.

EU countries: Disclosures relating to our obligations under MiFID can be found at <http://www.globalmarkets.db.com/riskdisclosures>.

Japan: Disclosures under the Financial Instruments and Exchange Law: Company name - Deutsche Securities Inc. Registration number - Registered as a financial instruments dealer by the Head of the Kanto Local Finance Bureau (Kinsho) No. 117. Member of associations: JSDA, Type II Financial Instruments Firms Association, The Financial Futures Association of Japan, Japan Securities Investment Advisers Association. Commissions and risks involved in stock transactions - for stock transactions, we charge stock commissions and consumption tax by multiplying the transaction amount by the commission rate agreed with each customer. Stock transactions can lead to losses as a result of share price fluctuations and other factors. Transactions in foreign stocks can lead to additional losses stemming from foreign exchange fluctuations. "Moody's", "Standard & Poor's", and "Fitch" mentioned in this report are not registered credit rating agencies in Japan unless "Japan" or "Nippon" is specifically designated in the name of the entity.

Russia: This information, interpretation and opinions submitted herein are not in the context of, and do not constitute, any appraisal or evaluation activity requiring a license in the Russian Federation.





Deutsche Securities (Pty) Ltd

South African locations

Deutsche Securities (Pty) Ltd. 3 Exchange Square 87 Maude Street Sandton 2196 Tel: (27) 11 775 7000	Deutsche Securities (Pty) Ltd. 2E Nautica The Water Club Beach Road Granger Bay 8005 Tel: (27) 21 419 4235
--	--

International locations

Deutsche Bank Securities Inc. 60 Wall Street New York, NY 10005 United States of America Tel: (1) 212 250 2500	Deutsche Bank AG London 1 Great Winchester Street London EC2N 2EQ United Kingdom Tel: (44) 20 7545 8000	Deutsche Bank AG Große Gallusstraße 10-14 60272 Frankfurt am Main Germany Tel: (49) 69 910 00	Deutsche Bank AG Deutsche Bank Place Level 16 Corner of Hunter & Phillip Streets Sydney, NSW 2000 Australia Tel: (61) 2 8258 1234
Deutsche Bank AG Filiale Hongkong International Commerce Centre, 1 Austin Road West, Kowloon, Hong Kong Tel: (852) 2203 8888	Deutsche Securities Inc. 2-11-1 Nagatacho Sanno Park Tower Chiyoda-ku, Tokyo 100-6171 Japan Tel: (81) 3 5156 6770		

Global Disclaimer

The information and opinions in this report were prepared by Deutsche Bank AG or one of its affiliates (collectively "Deutsche Bank"). The information herein is believed to be reliable and has been obtained from public sources believed to be reliable. Deutsche Bank makes no representation as to the accuracy or completeness of such information.

Deutsche Bank may engage in securities transactions, on a proprietary basis or otherwise, in a manner **inconsistent** with the view taken in this research report. In addition, others within Deutsche Bank, including strategists and sales staff, may take a view that is **inconsistent** with that taken in this research report.

Opinions, estimates and projections in this report constitute the current judgement of the author as of the date of this report. They do not necessarily reflect the opinions of Deutsche Bank and are subject to change without notice. Deutsche Bank has no obligation to update, modify or amend this report or to otherwise notify a recipient thereof in the event that any opinion, forecast or estimate set forth herein, changes or subsequently becomes inaccurate. Prices and availability of financial instruments are subject to change without notice. This report is provided for informational purposes only. It is not an offer or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy. Target prices are inherently imprecise and a product of the analyst judgement.

As a result of Deutsche Bank's March 2010 acquisition of BHF-Bank AG, a security may be covered by more than one analyst within the Deutsche Bank group. Each of these analysts may use differing methodologies to value the security; as a result, the recommendations may differ and the price targets and estimates of each may vary widely.

In August 2009, Deutsche Bank instituted a new policy whereby analysts may choose not to set or maintain a target price of certain issuers under coverage with a Hold rating. In particular, this will typically occur for "Hold" rated stocks having a market cap smaller than most other companies in its sector or region. We believe that such policy will allow us to make best use of our resources. Please visit our website at <http://gm.db.com> to determine the target price of any stock.

The financial instruments discussed in this report may not be suitable for all investors and investors must make their own informed investment decisions. Stock transactions can lead to losses as a result of price fluctuations and other factors. If a financial instrument is denominated in a currency other than an investor's currency, a change in exchange rates may adversely affect the investment. Past performance is not necessarily indicative of future results. Deutsche Bank may with respect to securities covered by this report, sell to or buy from customers on a principal basis, and consider this report in deciding to trade on a proprietary basis.

Unless governing law provides otherwise, all transactions should be executed through the Deutsche Bank entity in the investor's home jurisdiction. In the U.S. this report is approved and/or distributed by Deutsche Bank Securities Inc., a member of the NYSE, the NASD, NFA and SIPC. In Germany this report is approved and/or communicated by Deutsche Bank AG Frankfurt authorized by the BaFin. In the United Kingdom this report is approved and/or communicated by Deutsche Bank AG London, a member of the London Stock Exchange and regulated by the Financial Services Authority for the conduct of investment business in the UK and authorized by the BaFin. This report is distributed in Hong Kong by Deutsche Bank AG, Hong Kong Branch, in Korea by Deutsche Securities Korea Co. This report is distributed in Singapore by Deutsche Bank AG, Singapore Branch, and recipients in Singapore of this report are to contact Deutsche Bank AG, Singapore Branch in respect of any matters arising from, or in connection with, this report. Where this report is issued or promulgated in Singapore to a person who is not an accredited investor, expert investor or institutional investor (as defined in the applicable Singapore laws and regulations), Deutsche Bank AG, Singapore Branch accepts legal responsibility to such person for the contents of this report. In Japan this report is approved and/or distributed by Deutsche Securities Inc. The information contained in this report does not constitute the provision of investment advice. In Australia, retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product. Deutsche Bank AG Johannesburg is incorporated in the Federal Republic of Germany (Branch Register Number in South Africa: 1998/003298/10). Additional information relative to securities, other financial products or issuers discussed in this report is available upon request. This report may not be reproduced, distributed or published by any person for any purpose without Deutsche Bank's prior written consent. Please cite source when quoting.

Copyright © 2012 Deutsche Bank AG