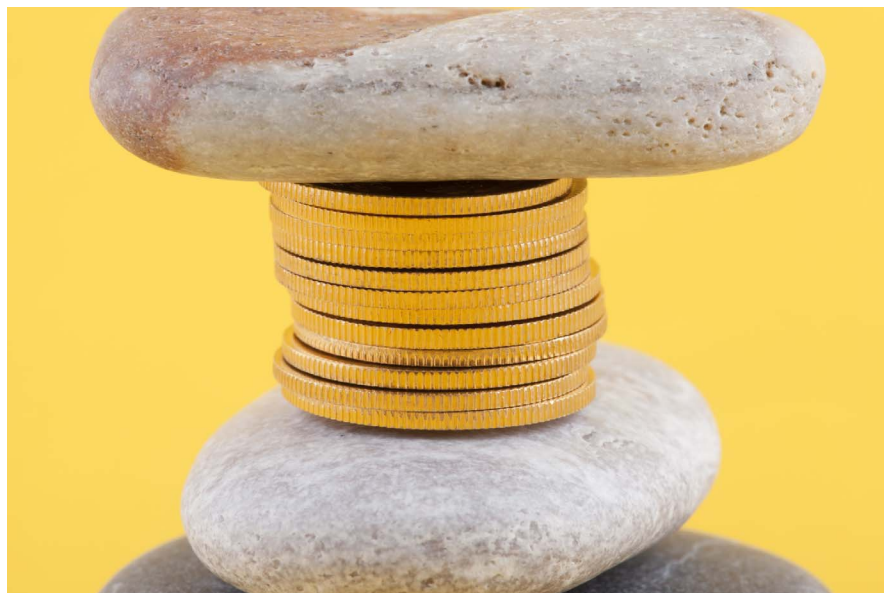




Industry  
**Americas Metals  
and Mining**

Date  
3 June 2013

North America  
United States  
Industrials  
Metals & Mining



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## F.I.T.T. for investors

### NA Gold: the end of Big Gold?; Prescriptives for change

#### Arguments for changes to the NA Gold business model

In this piece, we question if the big cap NA Gold producer model is fundamentally broken, after 8 years of underperformance and expectations that further multi-billion dollar capital raises may be likely in the years ahead, assuming gold price <\$1,500/oz remains. We attempt to dissect the underlying root cause of what ails sector performance and hopefully provide prescriptive remedies for how the industry can “get back to the basics” in terms of focusing on shareholder returns and outperforming the gold price. Failure to do so will, in our view, relegate the industry back to a boutique, non-core sector, which is below the sector’s true potential.



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FITT Research

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## Dissecting root cause of underperformance and solving for break-even gold

Investors have been perplexed by why NA Gold companies have failed to exhibit upside in a rising gold price environment, but have shown downside when gold prices fall. In this report we take a deep dive into historical industry measurement bias, dissect the true costs to produce an ounce of gold on a sustained basis, and more importantly estimate Total Cash Uses of the industry in order to determine a company-by-company break-even price of gold under which they would be cash flow neutral. Further we compare NA Gold’s performance under traditional financial return metrics such as Economic Value Added, Free Cash Flow analysis and Return on Capital Employed metrics.

## Structural changes needed, especially in a sub-\$1,500/oz gold scenario

In our view, there are a number of fundamental issues behind NA Gold’s lackluster performance relative to gold prices, ranging from poor funding and spending choices, the measurement bias embedded in project costs/returns, run-away capex, rising resource nationalism, the misalignment of management compensation and now, the emergence of a declining gold/silver price environment. Under a scenario of \$1,500/oz gold (or lower) we postulate that some NA Gold producers could begin deficit spending by 2H13/2014, possibly implying further equity raises. We believe there is mounting pressure for the break-up of these underperforming conglomerates.

## Change or be changed – the rise of shareholder activism

Across our NA Gold coverage universe, we see 2013 as an inflection point where all-in sustaining costs could peak at ~\$1,100/oz. The recent drop in gold price and continued high costs highlight the pressure on managements to break with historical practices. We have noted a rise in shareholder activism aimed at liberating value trapped inside “conglomerate” structures.

## Valuation wrap and risks

On average, our PTs for NA Gold equities are based on ~0.8x NPV, calculated using a \$1,500/oz 2014E gold price. Risks include direction of metals prices, changing supply/demand dynamics, currency, M&A, raw material and energy costs, execution of projects, legislation, and country risks. The emerging funding gap between cash sources and uses implies high potential for NA Gold producers to issue equity in 2013/14. For further details, see pages 53/54.

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## Companies Featured

Barrick Gold (ABX.N),USD21.12	Hold		
	2012A	2013E	2014E
EPS (USD)	-0.67	2.82	2.73
P/E (x)	–	7.5	7.7
EV/EBITDA (x)	7.4	5.8	5.9
Goldcorp (GG.N),USD29.11	Hold		
	2012A	2013E	2014E
EPS (USD)	1.86	1.25	1.69
P/E (x)	22.2	23.4	17.2
EV/EBITDA (x)	11.9	14.5	11.0
Kinross Gold (KGC.N),USD6.41	Hold		
	2012A	2013E	2014E
EPS (USD)	-2.20	0.37	0.39
P/E (x)	–	17.3	16.4
EV/EBITDA (x)	5.6	5.2	5.2
Newmont Mining (NEM.N),USD34.28	Sell		
	2012A	2013E	2014E
EPS (USD)	3.62	2.38	2.18
P/E (x)	14.2	14.4	15.7
EV/EBITDA (x)	7.5	7.1	7.5



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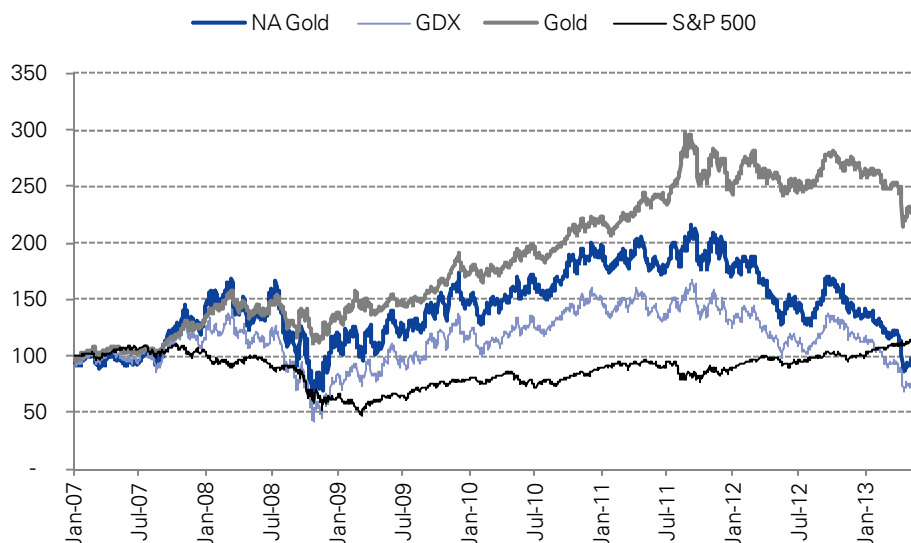
# Executive summary

## The end of Big Gold?

In this piece, we question if the big cap North American (NA) Gold producer model is fundamentally broken, after seven years of underperformance (and 2013 likely to take the number to eight years) and expectations that further multi-billion dollar capital raises may be likely in the years ahead, assuming gold price <\$1,500/oz remains. In this Fundamental, Industry, Thought-leading, Thematic (FITT) report, we attempt to dissect the underlying root cause of what ails NA Gold performance and hopefully provide prescriptive remedies for how the industry can “get back to the basics” in terms of focusing on shareholder returns and outperforming the gold price (i.e., in our view the *raison d’être* of being a publicly-traded gold company). Failure to do so will, in our view, relegate the industry back to a boutique, non-core sector, which is below the sector’s true potential.

*We question if the big cap NA Gold producer model is fundamentally broken, after 8 years of underperformance*

Figure 1: NA Gold equities performance versus gold price (since 2007)



Source: FactSet and Deutsche Bank estimates

Below we highlight Deutsche Bank commodity team’s most recent gold and silver price forecasts set on May 12th which continue to appear elevated relative to current spot.

Figure 2: DB gold and silver price deck

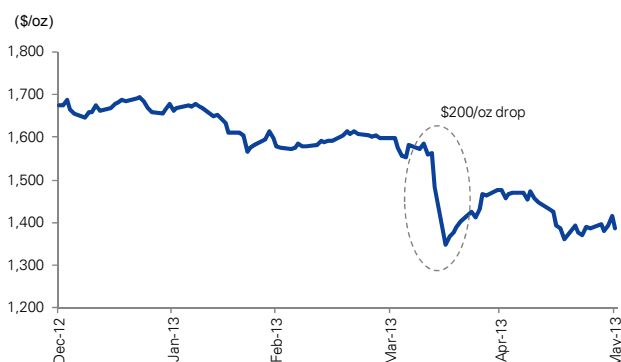
May 31, 2013	Spot price	2013E	2014E	2015E	2016E	2017E	2018E	LT real	LT nominal*
<b>Current forecasts</b>									
Gold (\$/oz)	1,388	1,533	1,500	1,450	1,488	1,525	1,563	1,300	1,600
Silver (\$/oz)	22.26	26.71	26.79	26.36	26.02	25.68	25.34	20.00	25.00

Note: \*LT nominal is for 2019 based on assumed inflation rate of 3.5% per annum; Source: Deutsche Bank estimates and Bloomberg Finance LP

The week of April 15th witnessed a once in a generation move in the gold price. On Monday the 15th, daily losses in the gold price were on a par with the declines that occurred once in January 1980 and once in February 1983. Investors clearly panicked and while theories abound for precious metals’ declines (threat of Cypriot Central Bank selling, liquidation of ETF positions, hawkish Fed, investor rotation into yield assets, etc.), many are questioning whether gold’s 12-year bull-run is over.



Figure 3: Gold prices, 2013 year-to-date



Source: FactSet and Deutsche Bank

Figure 4: NA Gold share price performance scorecard

	6M	12M	YTD	2012	3Y	5Y	10Y
Barrick	(39)	(46)	(40)	(23)	(50)	(48)	18
Goldcorp	(25)	(20)	(21)	(17)	(33)	(27)	153
Kinross	(36)	(20)	(34)	(15)	(63)	(68)	(5)
Newmont	(27)	(27)	(26)	(23)	(37)	(28)	14
<b>NA Gold</b>	<b>(32)</b>	<b>(28)</b>	<b>(30)</b>	<b>(19)</b>	<b>(46)</b>	<b>(43)</b>	<b>45</b>
Gold	(19)	(10)	(16)	8	14	57	282
Silver	(34)	(20)	(25)	6	23	34	400
S&P 500	15	24	14	13	52	16	68

Source: FactSet and Deutsche Bank

## 5 major issues to be resolved by NA Golds

We have identified 5 major issues to be resolved by NA Gold managements:

- **Underperformance** vis-à-vis the gold price and broader market indices.
- **Dis-economies of scale.** Large size appears to inhibit nimble responses and encourages larger risk taking given more access to capital. Large-scale mining projects become targets of resource nationalism and NGOs.
- **Measurement bias** “mine-only” focus accounting masks true operating costs, while “true” capex costs are not well disclosed, leading to poor returns on capital.
- **Poor funding choices.** Over-reliance on equity issuance (direct or indirect) to fund acquisitions and capex leads to mounting shareholder dilution. Tendency of industry to “do deals” at the top, compete with each other for resources, little evidence of co-operation, despite no “direct” competition to each other.
- **Mis-alignment of management compensation** to production scale, revenues and complexity of operations. Large cash pay packages and compensation appear little influenced by stock price performance or returns on capital.

*5 major issues to be resolved by managements: (1) underperformance, (2) dis-economies of scale, (3) measurement bias, (4) poor funding choices, (5) mis-alignment of management compensation*

We have identified three potential outcomes for NA Golds:

- **Status quo** – essentially do nothing to address deep structural issues, wait for rising gold price to “solve” problems. Pay lip service to calls for change. Implies rising likelihood of “Activist” investors to start to interlope (i.e., recent Stillwater case whereby activists took four of eight board seats).
- **Change** – fix issues, but within construct of existing frameworks. Time is clearly running out on this option as the sector has morphed from growth, to dividend, to highly leveraged, alienating various investor groups along the way. To allow current boards/managements another 2-3 years to “fix” underlying problems will, we expect, further strain investor patience, leading to the rise of activism in the sector.
- **Break-up sector** – Smaller companies could be “re-built” on bottom-up basis to better align management incentives. This could aid in achieving true “economies” by mitigating capex, opex risk and provide an offset to rising resource nationalism by flying below the radar. A dividend of regional operations appears most tax efficient and the creation of MLPs for more mature mines appears optimal.

*Three potential outcomes: (1) status quo, (2) change, (3) break-up of sector*



## DB recommendations for NA Gold change

While still early days, new management teams have taken over at Barrick, Kinross and Newmont, which suggest some underlying changes are taking place. While Hold-rated, we highlight both Barrick and Kinross as gold companies that could benefit the most from significant structural changes either due to rising balance sheet overhang, in the case of Barrick, or too much frontier emerging market risk in the case of Kinross. After pursuing several large capex growth projects, Newmont may also benefit from a restructuring and at least a modification of its gold-linked dividend policy, which may start to provide diminishing payouts to shareholders in a declining gold price environment. Goldcorp, by and large, is doing most of the right things and has outperformed its peers on most metrics, but unfortunately has also underperformed the gold price over the past decade, perhaps by issuing too much stock to fund acquisitions. As significant earnings leverage has failed to materialize, we would recommend higher dividends, targeting around 5% yields by NA Golds as a clear differentiating factor vis-à-vis the gold price and even leverage driven share buybacks in cases of extreme undervaluation. Further, we would recommend that companies pursue more creative ways to return cash to shareholders, perhaps through creation of Master Limited Partnerships (MLPs) at more mature operations.

*Barrick and Kinross as gold companies that could benefit the most from significant structural changes*

*In general we would recommend higher dividends and that companies pursue more creative ways to return cash to shareholders*

### Barrick

We review several suggestions to unlock value for Barrick where management has already signaled intentions to divest non-core assets:

- Put Pascua-Lama (PL) gold project on hold and divert funds to improve company's balance sheet position.
- Spin-off or sell its remaining 74% stake in underperforming African Barrick Gold.
- Divest (or spin-off) Australia Pacific (AP) mines, or at least higher cost ones.
- Complete sale of Barrick Energy (BE), which has a \$1.1bn asset value.
- Spin-off or carve-out copper assets acquired through Equinox \$7.4bn purchase.
- Sell, spin-off or carve-out of longer-dated projects such as Donlin Gold (gold project, 50% interest), Reko Diq (copper-gold, 37.5%) and Kabanga (nickel, 50%).

### Goldcorp

Goldcorp has not been immune to challenges particularly in the ramp of new projects. However, the company has developed (is developing) projects that seem to be, by and large, value enhancing. Further, out of the 4 NA Gold producers that we follow, it has been the only one that has not written-off assets in the past two years. Hence, we believe the company would not be a beneficiary of a break-up per se, but could consider the following suggestions in order to differentiate itself from the rest:

- Re-evaluate possibility of higher dividends.
- Consider a share repurchase program.
- Pursue accretive M&A transactions of producing assets that could enhance current cash flow generation on a per share basis.

### Kinross

Given pending Feasibility Study at Tasiast (Mauritania) which could likely push-back first gold to 2016-17, we provide a few suggestions that may liberate trapped value:

- Updating Tasiast resources/ status quarterly.



- Seek JV partner for Tasiast to put “market value” on asset and mitigate risk.
- Sell a stake in Russian assets, a deterrent to most global suitors/ reducing EM exposure.
- Initiate a share buy-back to sop up Red Back issuance overhang via debt issue.
- Bring in new board members experienced in big-cap mining, turnarounds.
- Re-base management compensation to out-performing gold price and peers.

#### Newmont

Despite implementing an innovative gold-linked dividend in 2011 and articulating a path for long-term growth, Newmont’s net debt has been on the rise. This is partly attributed to rising dividend payments and increased capex (despite no clear near-term project development). As a result, we suggest the following measures that could align Newmont’s goals with those of shareholders:

- Shut-down Conga (Peru). Despite halting construction of project, Newmont continues to invest in water systems, in an effort to improve community relations.
- Re-format dividend policy to part-fixed/part-variable in order to regain some flexibility if gold prices remain <\$1,500/oz.
- Consider a share repurchase program.
- Sell or spin-off of Australian/New Zealand assets.





# The rise of activism

## Recent examples of activism on the rise

The underperformance of certain miners, combined with some high profile acquisition and project development misses, is starting to lead to the rise of activist involvement in the mining space. Activists are either aiming to subtly nudge managements to change their *modus operandi* (i.e., voting down executive pay proposals) or through acquiring stakes in companies on a more hostile basis and agitating for outright management and board change-outs. We cite a few recent examples below:

*Activists are aiming to change the modus operandi of the sector*

Two Fish Management, an options-focused Registered Investment Advisor has reached out to Barrick management and board suggesting ideas to “unlock” value, including a break-up of the company into its existing regional business units. Two Fish estimates Barrick is trading at a significant discount to the sum of its parts of over 50% and recommends the following initiatives to enhance shareholder value:

*Two Fish Management suggests a breakup of Barrick and a spin-off of regional units could unleash value*

- Spin-off African Barrick shares
- Sell or spin-off the Global Copper platform
- Sell or spin-off Australian Pacific business unit
- Sale of non-core assets (Barrick Energy, Kabanga Nickel, Donlin Gold)
- Consider a Master Limited Partnership (MLP) listing for Nevada mines
- Pro-forma “New Barrick” (North America & South America)
- Executive compensation to be tied to returns on invested capital (ROIC) and shareholder returns

Figure 5: Two Fish Management: Barrick conglomerate model

Business Segment	Comparable	EBITDA (2012)	Multiple	Valuation
North America	GG	\$ 3,862	7.8	\$ 30,046
South America	AUY	1,771	7.2	12,804
Australia Pacific	NCM.AX	1,446	5.5	7,897
Global Copper	N/A	564	4.3	2,425
African Barrick	ABG.L	244	3.2	772
Barrick Energy	WCP.TO	66	7.9	521
<b>Totals</b>		<b>\$ 7,953</b>	<b>6.8</b>	<b>\$ 54,466</b>
Less Debt (12/31/12)				13,943
Add Back Cash (12/31/12)				2,093
<b>Equity Value</b>				<b>42,616</b>
Shares Outstanding (12/31/12)				1,001
<b>Sum of Parts Value Per Share</b>				<b>\$ 42.57</b>
Market Capitalization				18,569
<b>Over / (Undervalued)</b>				<b>\$ (24,048)</b>
<b>Return to Fair Value</b>				<b>129.5%</b>

Source: Two Fish Management letter dated April 27, 2013



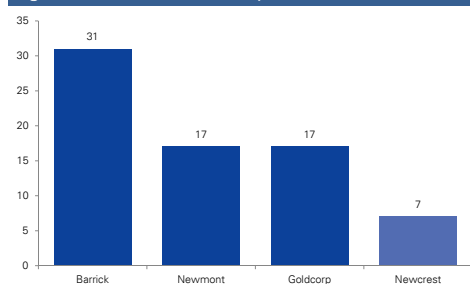


According to Two Fish Management: *Each business unit, has unique political environments, geologies, operating costs, reserve profiles, profitability, capital intensities and growth prospects, with the North American, South American and Australian Pacific regional business units listed independently on their own, would still rank among the top world miners by EBITDA. Two Fish Management suggests that spin-offs would be a more tax efficient approach rather than straight out asset sales in an effort to defer gains on taxes and allow the markets to decide how to value each of the units. The conglomerate rationale does not hold for Barrick, as no synergies have been reaped from developing and acquiring mining assets in newer regions. However, there are significant efficiencies that could be reaped by scaling infrastructure, labor and energy in a geographical approach. Most benefits attained by transitioning from being a junior producer into a senior producer begin to diminish as miners grow in enterprise value.*

*Two Fish Management suggests that spin-offs would be a more tax efficient approach rather than straight out asset sales*

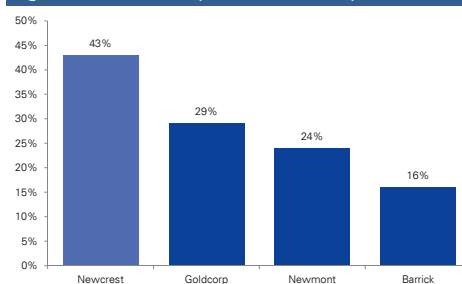
Two Fish illustrates that wide disbursement of geographic operations and diminishing scale in holding smaller mines, offsets the benefits of a holding company structure:

Figure 6: Number of mine provinces



Source: Newcrest Mining

Figure 7: % of mine provinces in "Top 30" Mines



Source: Newcrest Mining

Another example includes the recent replacement of Stillwater Mining's Chairman of the Board, Mr. Frank McAllister, who served as Chairman and Chief Executive Officer (CEO) of the company since 2001. After a fairly public battle of words initiated in December 2012, on May 20, 2013, Stillwater announced the election of Brian Schweitzer, the former Governor of Montana, as Chairman of the Board who had been put forth by the Clinton Group as their choice to succeed Mr. McAllister as Chairman. Mr. McAllister will continue in his role as CEO and President until a suitable replacement is found. Despite the fact the Clinton Group had initially amassed only a 0.5% stake in Stillwater it issued several public letters critical of the company's board and management and put up its own management slate ahead of the company's annual shareholder meeting. The Clinton Group highlighted a series of strategic missteps, including the acquisition of Peregrine Metals (for the Altar copper-gold project in Argentina) in 2011 for \$263 million and Marathon PGM Corp. for \$136 million and suggested their immediate disposal to re-focus Stillwater back on its core palladium/platinum business and management and governance changes. Efforts by the Clinton Group resulted in a reconstitution of the board of directors, with challengers gaining 4 out of the 8 board seats, the expected exit of Mr. McAllister, governance changes and the revocation of some former management compensation.

*Changes at the helm at Stillwater a result of shareholder activism with the Clinton Group's nominees capturing half the board seats*

On June 5, 2012 Barrick hired John Thornton, a former Goldman Sachs President and current Chairman of the Brookings Institution Board of Trustees, as Co-Chairman and a likely successor to Mr. Peter Munk, Barrick's Chairman and founder. In April 2013 a group of Canadian asset managers publicly contested a \$17 million pay package (including \$12m signing bonus) for Mr. Thornton. At its annual general meeting, 85.2% votes were cast against the company's advisory resolution on executive compensation, but results are non-binding. Barrick has not commented if it will proceed with proposed pay package.

*A group of Canadian asset managers publicly contested proposed pay package at Barrick*



We attach an excerpt from “Breaking up is Hard to Do”, Anna Mulholland, DB’s South African Precious Metals Analyst published on March 14, 2013:

As a consequence of the shares’ underperformance throughout 2012 and 2013 to date, and in light of the move by Gold Fields to split itself into two companies by spinning out two South African assets into Sibanye Gold, we expect an increasing number of requests for AngloGold to consider the potential value creation from splitting up the group. Indeed, AngloGold’s largest institutional shareholder, Paulson & Co (with 7.4%) stated in a year-end report that it is exploring ways for AngloGold to improve its valuation. In a quote from the report (cited on Bloomberg News on 1 February 2013), Paulson states “Based on our analysis, AngloGold’s shares could increase by 68% if the company was to split its business into South African and non-South African businesses”. The company then went onto comment that a model along the lines of what Gold Fields is trying to achieve via the spin-off Sibanye could “unlock value”: “AngloGold could also unlock value if it split into two companies: a high growth international business and a mature high-dividend paying South African company”.

*Paulson & Co. has argued AngloGold’s shares could increase by 68% if the company was to split up*

---

## NA Gold conglomerate break-up analysis

Nick Holland, Chief Executive Officer of Gold Fields, has stated that investors are demanding alternate investment choices and failure to provide those will result in lack of liquidity and further stock price deterioration, which could ultimately impact industry funding. At a presentation to the Melbourne Mining Club in July, 2012, he highlighted that “listed” gold miners have typically failed to 1) grow production volume; 2) expand margins (in line with gold prices); 3) optimize capital 4) provide balance sheet leverage with debt; 5) return FCF through dividends, and; 6) provide positive rating multiplier effect.

*Some gold company CEO’s have been openly critical of industry practices*

Prompted by the disappointing performance of Gold Fields, the company initiated the unbundling of two of its three South African (SA) mines (KDC and Beatrix) into a separate entity – Sibanye Gold listed in February 2013. According to management, “the separation of Gold Fields and Sibanye Gold will enable the two independently governed and managed companies to focus on their respective strategic goals and to operate more effectively as separate entities, to the benefit of shareholders, employees and communities.” Management flagged the rationale as follows: 1) Create fit-for-purpose, sustainable, long-life operations; 2) Install a specialist, dedicated and focused management team; 3) Ring-fence SA cash flows for SA projects and dividends; 4) Reverse declining production trends; 5) Optimize extraction of reserves and resources and extend life of mines; 6) Harness technology for challenges of deep level, hard rock, labor intensive mining; 7) Act as catalyst for consolidation in SA gold industry.

*Goldfields initiated the unbundling of two of its South African mines into a separate entity*

While Sibanye’s Initial Public Offering generated some excitement, the sum of Gold Fields and Sibanye’s market caps is still not worth more than the pre-IPO market capitalization of Gold Fields, even after adjusting for the effects of a lower gold price. This, in part, may be based on diminishing dividend expectations due to the higher-cost nature of Sibanye’s assets, which was a key selling point of the unbundling in a period of higher gold prices. So while theoretically, one can argue that break-ups will generate value there are few “real world” examples we can point to thus far where this is empirically the case.

*Thus far there are few “real world” examples of successful unbundling*



Similar to Two Fish Management's analysis we have run conglomerate models for NA Gold companies, but have further incorporated a management "overhead tax". We believe that this holding expense (cost of management, R&D, etc.) would need to be paid even in the event that companies were broken up into regional "parts" so would still have to be borne proportionately by newly listed operating subsidiaries. Arguably, overhead expenses may be proportionately higher as there would be no economies from sharing the parent's listing expenses, legal and other joint functions. On the other hand, salaries may be lower for senior executives and boards of smaller entities.

*We have run conglomerate models for NA Gold companies, but have further incorporated a management "overhead tax"*

**Figure 8: Barrick conglomerate model**

Business Segment	Comparable	EBITDA (2012)*	Multiple	Valuation
North America	GG	3,862	8.4	32,576
South America	AUY	1,771	7.3	12,887
Australia Pacific	NCM.AX	1,446	6.3	9,097
Global Copper	FCX.N	564	4.8	2,713
African Barrick	ABG.L	244	2.5	603
Barrick Energy	WCP.TO	66	9.2	606
Corporate and other	N/A	(582)	5.0	(2,910)
<b>Totals</b>		<b>7,371</b>	<b>7.5</b>	<b>55,572</b>
Less Debt (3/31/13)				14,798
Add back Cash (3/31/13)				2,342
<b>Equity Value</b>				<b>43,116</b>
Shares Outstanding				1,001
<b>Sum of Parts Value Per Share</b>				<b>43.07</b>
Market Capitalization (May 31, 2013)				21,141
<b>Over / (Undervalued)</b>				<b>(21,975)</b>
<b>Return to Fair Value</b>				<b>103.94%</b>

Note: \*attributable; Source: FactSet and Deutsche Bank

**Figure 9: Goldcorp conglomerate model**

Business Segment	Comparable	EBITDA (2012)*	Multiple	Valuation
North America		2,383	8.4	20,101
South America	AUY	658	7.3	4,788
Corporate and other	N/A	(196)	5.0	(980)
<b>Totals</b>		<b>2,845</b>	<b>8.4</b>	<b>23,909</b>
Less Debt (3/31/13)				2,275
Add back Cash (3/31/13)				2,014
<b>Equity Value</b>				<b>23,648</b>
Shares Outstanding				812
<b>Sum of Parts Value Per Share</b>				<b>29.13</b>
Market Capitalization (May 31, 2013)				23,628
<b>Over / (Undervalued)</b>				<b>(20)</b>
<b>Return to Fair Value</b>				<b>0.08%</b>

Note: \*attributable; Source: FactSet and Deutsche Bank

Our analysis suggests that Barrick, Kinross and Newmont have conglomerate discounts of 104%, 78% and 17%, respectively. This analysis, in addition to others performed in this report, suggest it may be beneficial for investors if these companies are split into smaller entities.

*Analysis suggests conglomerate discounts at Barrick, Kinross and Newmont*

**Figure 10: Kinross conglomerate model**

Business Segment	Comparable	EBITDA (2012)*	Multiple	Valuation
North America	GG	671	8.4	5,662
South America	AUY	688	7.3	5,006
Australia Pacific	NCM.AX	603	6.3	3,795
Africa	ABG.L	291	2.5	720
Corporate and other	N/A	(293)	5.0	(1,464)
<b>Totals</b>		<b>1,961</b>	<b>7.0</b>	<b>13,719</b>
Less Debt (3/31/13)				2,154
Add back Cash (3/31/13)				1,479
<b>Equity Value</b>				<b>13,044</b>
Shares Outstanding				1,141
<b>Sum of Parts Value Per Share</b>				<b>11.44</b>
Market Capitalization (May 31, 2013)				7,311
<b>Over / (Undervalued)</b>				<b>(5,732)</b>
<b>Return to Fair Value</b>				<b>78.40%</b>

Note: \*attributable; Source: FactSet and Deutsche Bank

**Figure 11: Newmont conglomerate model**

Business Segment	Comparable	EBITDA (2012)*	Multiple	Valuation
North America	GG	1,598	8.4	13,479
South America	AUY	619	7.3	4,503
Australia Pacific	NCM.AX	1,374	6.3	8,648
Africa	ABG.L	479	2.5	1,184
Corporate and other	N/A	(557)	5.0	(2,785)
<b>Totals</b>		<b>3,513</b>	<b>7.1</b>	<b>25,028</b>
Less Debt (3/31/13)				6,389
Add back Cash (3/31/13)				1,378
<b>Equity Value</b>				<b>20,017</b>
Shares Outstanding				499
<b>Sum of Parts Value Per Share</b>				<b>40.11</b>
Market Capitalization (May 31, 2013)				17,106
<b>Over / (Undervalued)</b>				<b>(2,912)</b>
<b>Return to Fair Value</b>				<b>17.02%</b>

Note: \*attributable; Source: FactSet and Deutsche Bank



# Underperformance

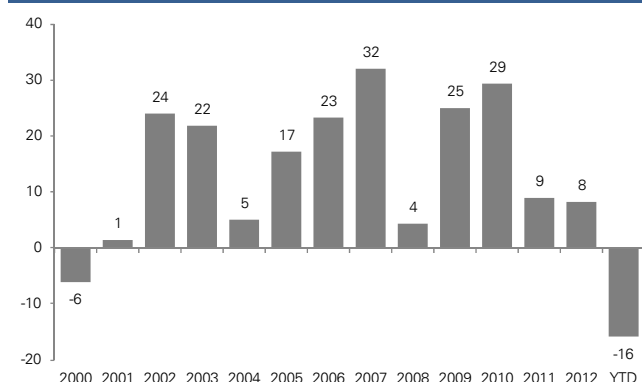
## NA Gold has consecutively underperformed gold since 2006...

At current gold prices, 2013 will most likely mark the first year gold has posted negative annual returns since 2000 apparently ending what had been a positive tailwind (at a CAGR of 16%) for the past 12 years. Despite a favorable gold price environment, NA Gold producers (on average) only outperformed their underlying commodity price in four years of the 12-year period (i.e., one-third of the time), with the outperformance weighted towards the first half of the period (from 2001 through 2005).

*NA Gold producers only outperformed underlying gold price in only 4 out of a 12-year period*

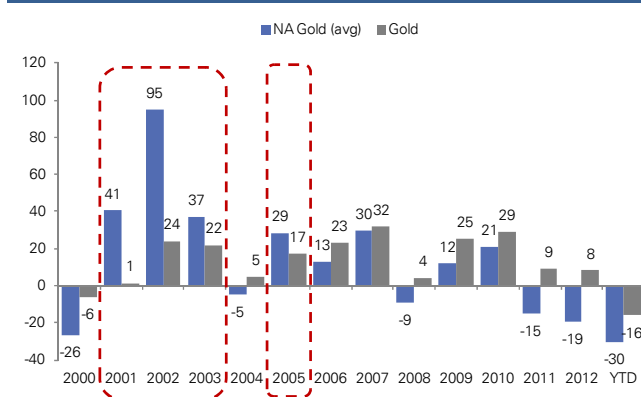
Part of the outperformance in the earlier years can be attributed to the rising gold price (after a decade of lows in the 1990s) but with the introduction of ETFs in 2003 (in Australia and in 2004 in London) investors obtained an additional liquid way to gain gold exposure (other than coins, bars, futures), with equities losing some of their former monopoly. NA Gold producers have consecutively underperformed gold since 2006 (seven years), and 2013 likely to take the total number to eight. Underperformance has been more pronounced in periods of a declining gold price (i.e., 2000 and YTD 2013).

Figure 12: Gold returns since 2000 (%)



Source: FactSet and Deutsche Bank

Figure 13: NA Gold returns vs gold since 2000 (%)



Source: FactSet and Deutsche Bank

On a company basis (not accounting for dividends paid) since 2001 Kinross' share price outperformed gold's rise on five occasions (2001, 2002, 2005, 2006 and 2007), while Goldcorp's outperformed on four (2001, 2002, 2005 and 2006), and was also an outperformer in 2000 (despite gold's 6% decline). Barrick's share price outperformed gold on three occasions (2003, 2007 and 2010), whereas Newmont's shares only outperformed on two (2003 and 2010). Interestingly, while Kinross' and Goldcorp's share prices outperformed gold prices on more occasions, post-World Financial Crisis (WFC), only Barrick and Newmont outperformed gold, but only once during 2010.

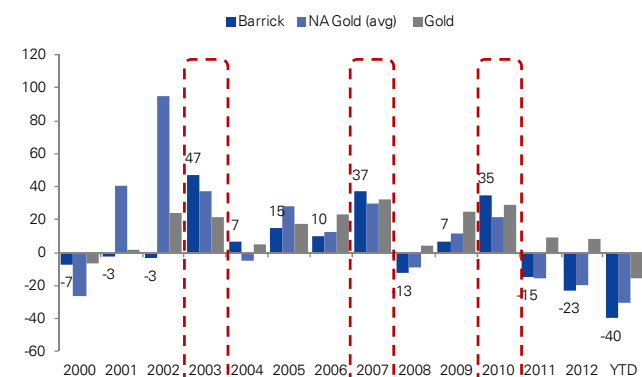
*Post- WFC, only Barrick and Newmont outperformed gold once during 2010*

In 2011 and 2012, NA Gold producers underperformed gold by ~25% each year, while the gold price was up 8-9% each year. During this time period, annual average operating cash cost increased 10-15% per year, resulting in margin compression for the group. In 2013 alone, NA Gold producers have lost 30% of share values, with Barrick and Kinross losing the most (-40% and -34%, respectively) and Goldcorp and Newmont the least (-21% and -26%, respectively).

*In 2011 and 2012, NA Gold underperformed gold by ~25% each year, whereas gold was up 8-9% per year*

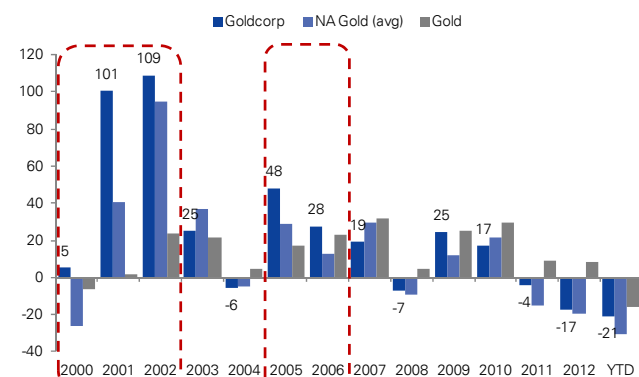


Figure 14: Barrick's returns since 2000 (%)



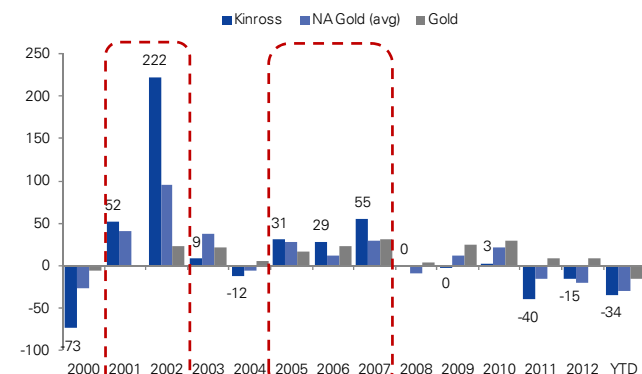
Source: FactSet and Deutsche Bank

Figure 15: Goldcorp's returns since 2000 (%)



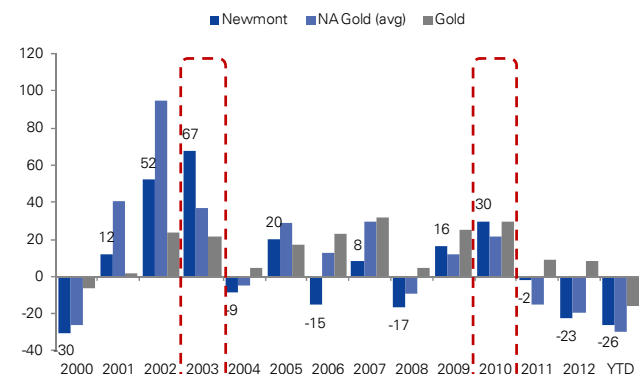
Source: FactSet and Deutsche Bank

Figure 16: Kinross' returns since 2000 (%)



Source: FactSet and Deutsche Bank

Figure 17: Newmont's returns since 2000 (%)

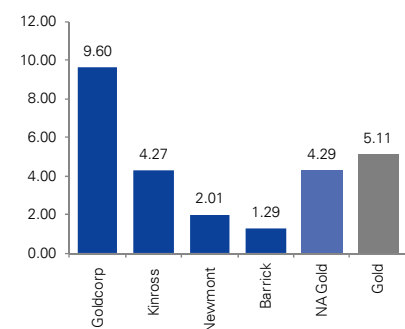


Source: FactSet and Deutsche Bank

Put another way (still excluding dividends), accounting for cumulative year-on-year changes of the past 13 years (including YTD 2013), \$1 invested on January 1, 2001 would now be worth ~\$4.29 had it been invested in a basket containing NA Gold producers (~\$9.60 had it been invested in Goldcorp), while it would be worth ~\$5 had it been invested in gold directly. However, the picture deteriorates significantly if considering more recent periods as \$1 invested on January 1, 2007 in a basket of NA Gold producers would now be worth ~75c (~\$1 for Goldcorp), whereas gold would be worth \$2.21. Even worse, \$1 invested on January 1, 2011 in NA Gold basket would now be worth ~48c compared to roughly flat (ie, ~\$1) if invested in gold.

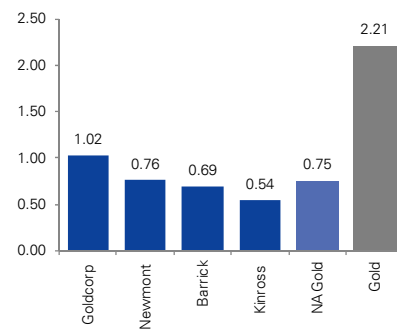
*\$1 invested on January 1, 2007 NA Gold producers basket would now be worth ~75c, gold would be worth \$2.21*

Figure 18: \$1 invested January 1, 2001



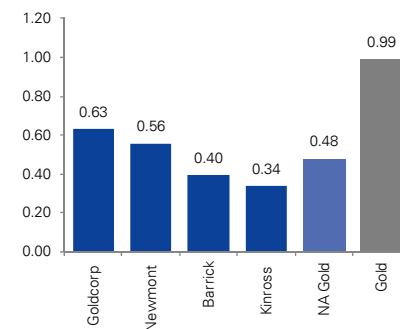
Source: FactSet and Deutsche Bank

Figure 19: \$1 invested January 1, 2007



Source: FactSet and Deutsche Bank

Figure 20: \$1 invested January 1, 2011



Source: FactSet and Deutsche Bank



## ... with valuation multiples de-rating over time

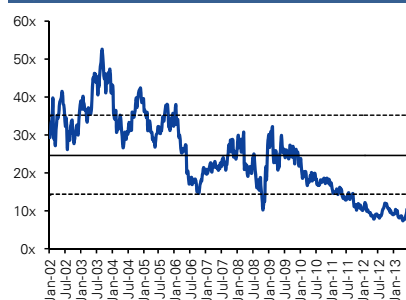
While we cannot discount the rising importance of Gold ETFs, we believe company-specific actions by NA Gold producers explain the better part of the broad sector de-rating over the past decade, despite a supportive gold backdrop. NA Gold 1-year forward PE multiples, which once traded at high-double digits have recently oscillating between a low of 7-8x based on FactSet consensus in the past year, well below the one standard deviation of past 12-year historical average. Similarly, over the past year, the 1-year forward EV/EBITDA multiples for the group traded at 5-6x, versus a 10-15x decade ago range; whereas P/BV multiples now trade <1x (despite “cleaner” book values following asset write-downs of ~\$12 billion in past two years), versus historical highs of ~4x. In other words, the NA Gold multiples converged to those of Industrial Metals exposed miners (which trade at ~10x PE) and at times traded at discounts, while historically NA Golds traded at a substantial premium.

*Despite gold price tailwind for 12 years, NA Gold valuation multiples de-rated over time mainly on company-specific actions*

On DB estimates, which assume a \$1,500/oz gold price in 2014, 1-year forward PEs for NA Gold are closer to ~14x (higher than 11x suggested by consensus). Put another way, NA Gold 1-year forward PE multiple (on our estimates) is now one-half of its 10-year historical average, 1-year forward EV/EBITDA multiples is now two-thirds at ~7x, and P/BV multiples average is now one-third at 0.9x. We note that consensus estimates have yet to fully incorporate the increasing likelihood of a lower gold price environment given the sharp drop which occurred in the past two months.

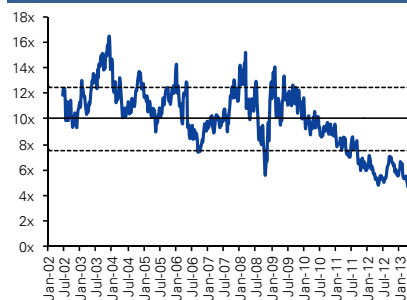
*On DBe gold price of \$1,500/oz for 2014, current PE and EV/EBITDA multiples are higher than past 1-year average*

Figure 21: NA Gold forward PE(x)



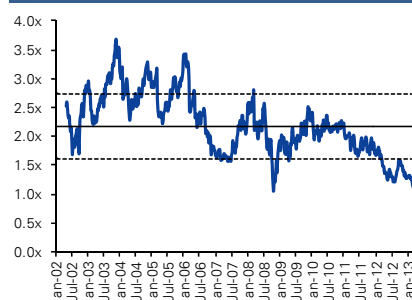
Note: Based on consensus estimates; Source: FactSet and Deutsche Bank

Figure 22: NA Gold forward EV/EBITDA (x)



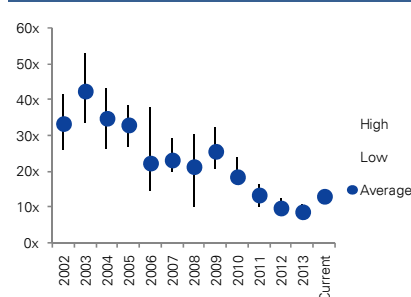
Note: Based on consensus estimates; Source: FactSet and Deutsche Bank

Figure 23: NA Gold P/BV (x)



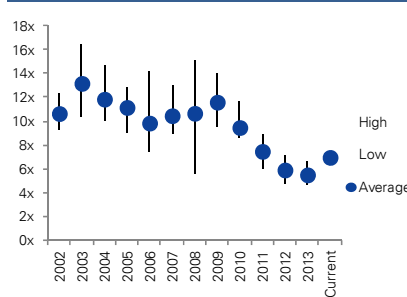
Note: Based on consensus estimates; Source: FactSet and Deutsche Bank

Figure 24: NA Gold forward PE(x)



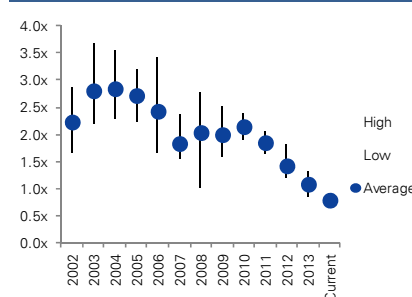
Note: Yearly data based on consensus estimates, current multiple based on DBe estimates @ \$1,500/oz gold; Source: FactSet and Deutsche Bank

Figure 25: NA Gold forward EV/EBITDA (x)



Note: Yearly data based on consensus estimates, current multiple based on DBe estimates @ \$1,500/oz gold; Source: FactSet and Deutsche Bank

Figure 26: NA Gold P/BV (x)

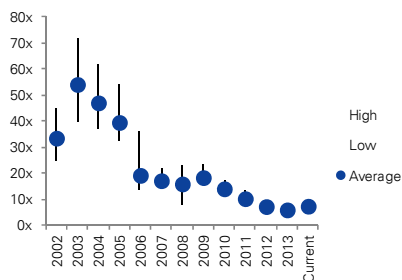


Note: Based on consensus estimates; Source: FactSet and Deutsche Bank

On a relative basis, “growth-oriented” NA Gold producers, Goldcorp and Kinross, have historically traded at premiums to lower-growth peers, Barrick and Newmont. However, the relative relationship has narrowed as multiples have converged with Barrick and Kinross trading at lower multiples than Goldcorp and Newmont.

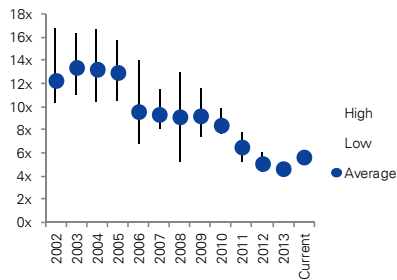


Figure 27: Barrick forward PE (x)



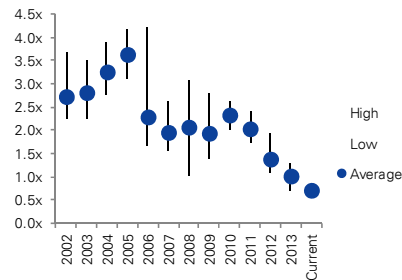
Note: Yearly data based on consensus estimates, current multiple based on DBE estimates @\$1,500/oz gold; Source: FactSet and Deutsche Bank

Figure 28: Barrick forward EV/EBITDA (x)



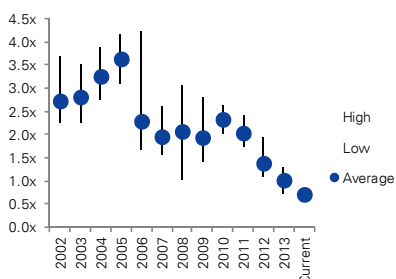
Note: Yearly data based on consensus estimates, current multiple based on DBE estimates @\$1,500/oz gold; Source: FactSet and Deutsche Bank

Figure 29: Barrick P/BV (x)



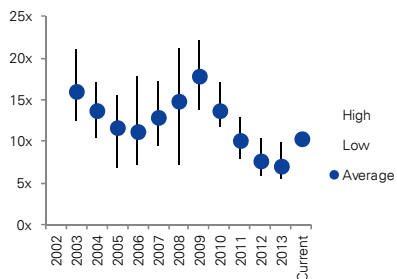
Note: Based on consensus estimates; Source: FactSet and Deutsche Bank

Figure 30: Goldcorp forward PE (x)



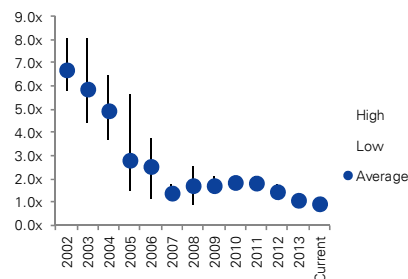
Note: Yearly data based on consensus estimates, current multiple based on DBE estimates @\$1,500/oz gold; Source: FactSet and Deutsche Bank

Figure 31: Goldcorp forward EV/EBITDA (x)



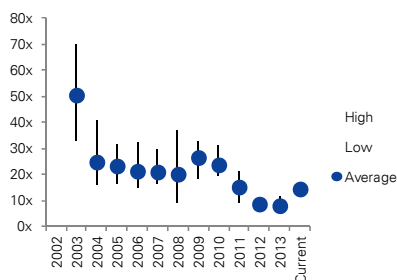
Note: Yearly data based on consensus estimates, current multiple based on DBE estimates @\$1,500/oz gold; Source: FactSet and Deutsche Bank

Figure 32: Goldcorp P/BV (x)



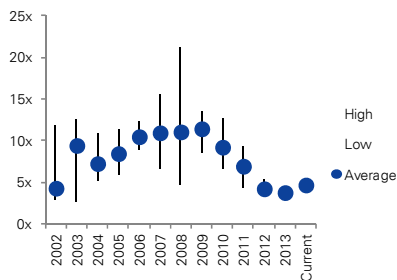
Note: Based on consensus estimates; Source: FactSet and Deutsche Bank

Figure 33: Kinross forward PE (x)



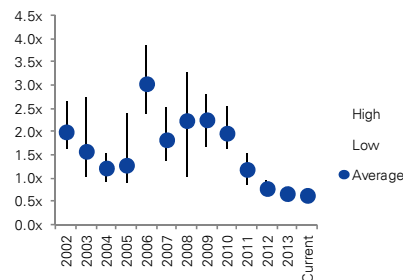
Note: Yearly data based on consensus estimates, current multiple based on DBE estimates @\$1,500/oz gold; Source: FactSet and Deutsche Bank

Figure 34: Kinross forward EV/EBITDA (x)



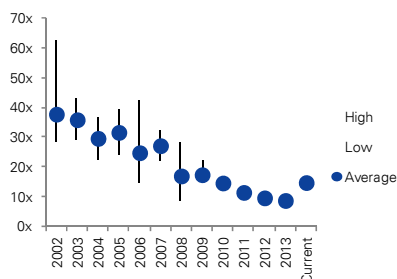
Note: Yearly data based on consensus estimates, current multiple based on DBE estimates @\$1,500/oz gold; Source: FactSet and Deutsche Bank

Figure 35: Kinross P/BV (x)



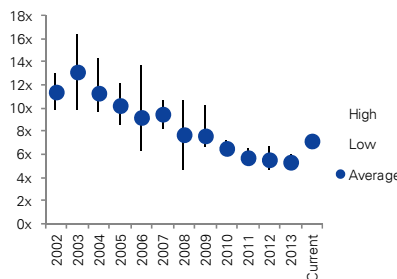
Note: Based on consensus estimates; Source: FactSet and Deutsche Bank

Figure 36: Newmont forward PE (x)



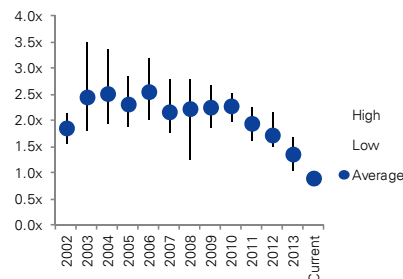
Note: Yearly data based on consensus estimates, current multiple based on DBE estimates @\$1,500/oz gold; Source: FactSet and Deutsche Bank

Figure 37: Newmont forward EV/EBITDA (x)



Note: Yearly data based on consensus estimates, current multiple based on DBE estimates @\$1,500/oz gold; Source: FactSet and Deutsche Bank

Figure 38: Newmont P/BV (x)



Note: Based on consensus estimates; Source: FactSet and Deutsche Bank



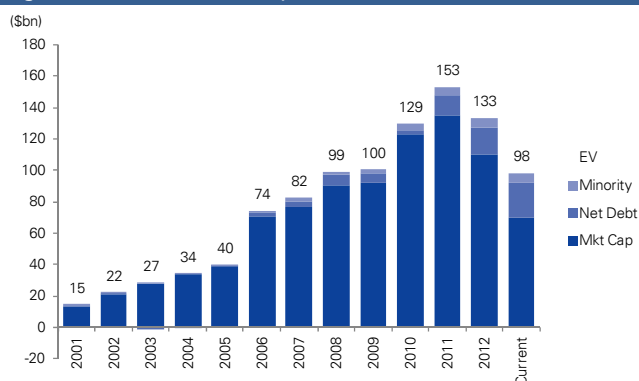


## NA Gold Enterprise Values have become more debt-laden

NA Gold Enterprise Values (EV) in aggregate grew over the course of 10 years from \$15 billion in 2001 to a high of \$153 billion in 2011 (~10x, or at a +25% CAGR). However, 2011 EVs peaked (with gold price reaching a high of ~\$1,900/oz in September) and began to decline sharply thereafter, with EVs now below 2008 levels, despite a gold price of ~\$1,400/oz currently versus the 2008 average of ~\$873/oz. Current market capitalizations (mkt cap) for the group of \$70 billion are even lower than those of 2006, when the average gold price was ~\$600/oz (less than one-half of current levels). What is more surprising is the implied share price (aggregate mkt cap divided by aggregate shares outstanding) of NA Golds, which denote levels last seen in 2003/04, when gold prices were around \$400/oz.

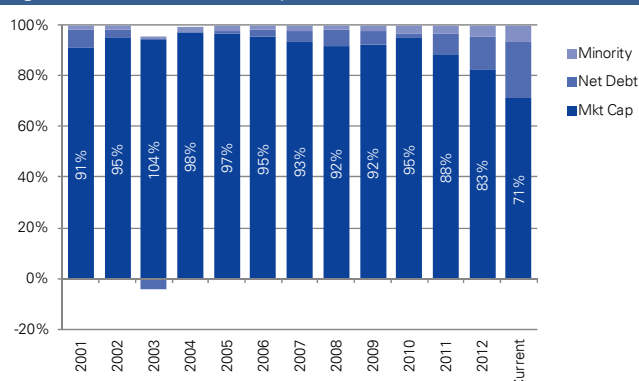
*NA Gold EVs are now below 2008's level, mkt caps are below 2006's level, and implied share prices are below 2003/04 levels*

Figure 39: NA Gold enterprise value breakdown (\$bn)



Source: FactSet company data and Deutsche Bank

Figure 40: NA Gold enterprise value breakdown (%)

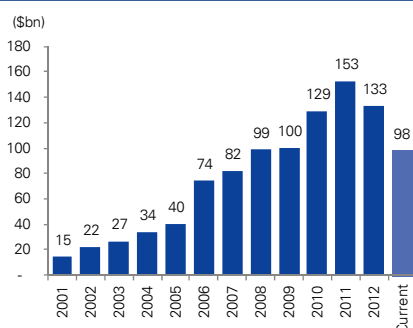


Source: FactSet company data and Deutsche Bank

NA Gold producer's net debt levels have swelled to ~\$22 billion (+3x pre-WFC levels) to fund acquisitions (~\$30 billion worth of deals done by NA Gold producers since 2010), capex and in some cases dividends, and now represent over 20% of EV levels, versus a 10-year historical average of below 5%. Similarly, minority interests (minority) levels have increased to \$7 billion (+2x pre-WFC levels). On a combined basis, net debt and minorities now represent ~30% of EVs, versus a 10-year historical average of <10%, limiting growth in market capitalizations, all else held equal. Simply put there are more claims on consolidated cash flows than in the past, reducing the residual value left for equity holders. Further, NA Golds have massively increased share counts further diluting share prices. Total share count for the group of 3.5 billion shares is ~30% higher pre-WFC level in 2008, and nearly 3.5x the 2001 level.

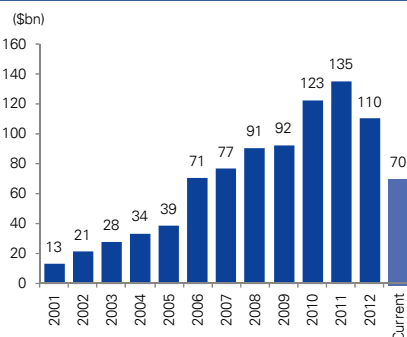
*NA Gold net debt levels are +3x pre-WFC levels, minority is +2x pre-WFC, and shares outstanding +3.5x 2001*

Figure 41: NA Gold enterprise value (\$bn)



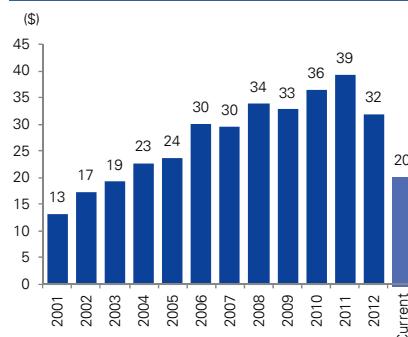
Source: FactSet, company data and Deutsche Bank

Figure 42: NA Gold market cap (\$bn)



Source: FactSet, company data and Deutsche Bank

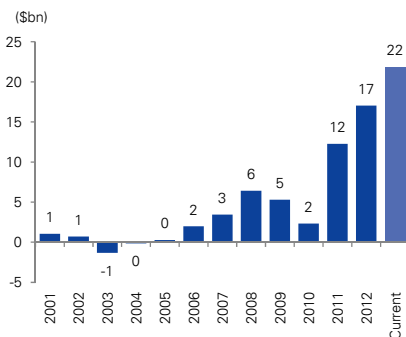
Figure 43: NA Gold implied share price (\$)



Source: FactSet, company data and Deutsche Bank

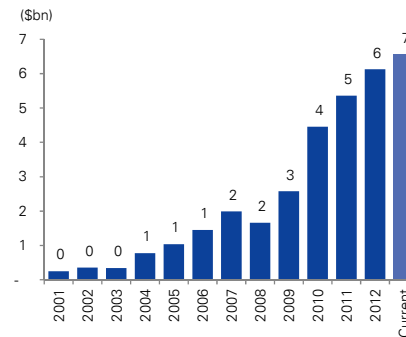


Figure 44: NA Gold net debt (\$bn)



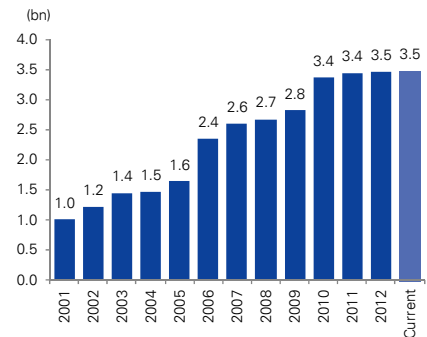
Source: FactSet, company data and Deutsche Bank

Figure 45: NA Gold minority interest (\$bn)



Source: FactSet, company data and Deutsche Bank

Figure 46: NA Gold share count (bn)



Source: FactSet, company data and Deutsche Bank

## NA Gold EV/reserves, resources and production

With gold prices posting increases for 12 consecutive years, it is no surprise that gold producers have aimed to grow and replenish Proven & Probable (P&P) reserves (reserves) and Resources (Measured & Indicated (M&I) resources + Inferred resources) as quickly as possible. In an attempt to deliver meaningful growth, NA Gold producers have increasingly favored the purchase of larger deposits (in known jurisdictions, but increasingly in newer frontiers) rather than smaller (but perhaps higher grade) and safer projects. This was partly justified by the dollar per ounce (\$/oz) reserves and resources were increasingly garnering, with the quadrupling of NA Gold producers EV/reserves (from ~\$100/oz to +\$400/oz) and EV/resources (from ~\$60/oz to ~\$240/oz) from 2001 through 2011.

The push for higher production is best illustrated with the rising EV/production multiples for NA Gold producers, reaching ~\$8,500/oz in 2011 from ~\$1,100/oz in 2001. This +7.5x increase is even higher than that evidenced by the underlying gold price move, which grew ~6-fold. The increase through 2011 can be attributed to the expectation that higher spending would deliver production growth and ultimately deliver higher per share leverage to the gold price. However, current EV/production for NA Gold producers at ~\$5,700/oz is below the 2008 level, a year where production for the group was largely in line with 2013 expectations of ~17 million oz.

Despite multi-billion dollars spent on acquisitions and growth projects, NA Gold producers (as a group) have yet to deliver more ounces than those achieved in 2011 (based on 2012 actual production and 2013 guidance), after previously articulating targets for incremental ounces in a 5-7 year time frame calling into question the net results of the industry's asset gathering push. Further, in addition to write-downs, EV/reserves and EV/resources multiples have begun to drop to current levels of ~\$280/oz and ~\$165/oz, respectively, similar to the 2006/07 levels so arguably large land purchases are no longer worth the acquisition prices paid.

NA Gold's production in 2011 remained the same as in 2006. Overall, NA Gold output grew from ~14 million oz in 2004 to 18 million oz in 2006 (+4 million oz), then declined over the next two years reaching ~17 million oz in 2008, ~18 million oz in 2010 (and remained flat in 2011), then declined again to ~17.4 million in 2012. 2013 is slated to again be lower YoY despite a number of new mines being ramped up (part of decline can be attributed to mine sequencing at some key mines). These trends illustrate the difficulty for the NA Gold producers to post production growth due to ongoing mine depletion (as ore grades deteriorate as existing mines age), let alone factoring dilution caused by share count increases.

*Rising EV/reserves, EV/resources and EV/production multiples likely incited NA gold producers to grow asset base in effort to deliver more ounces*

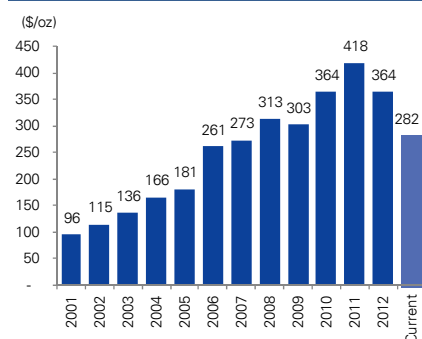
*EV/production multiples of NA Gold increased by +7.5x (2001-2011), while gold prices increased by ~6x*

*NA Gold has yet to deliver more ounces than those achieved in 2011*

*NA Gold production basically remains at 2007 levels*

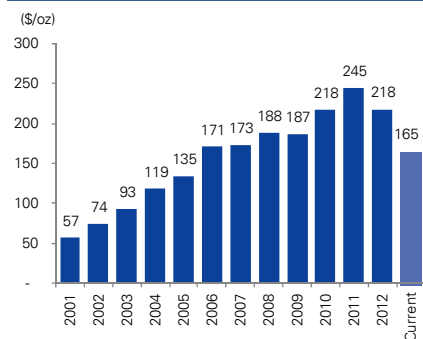


Figure 47: NA Gold EV/reserves



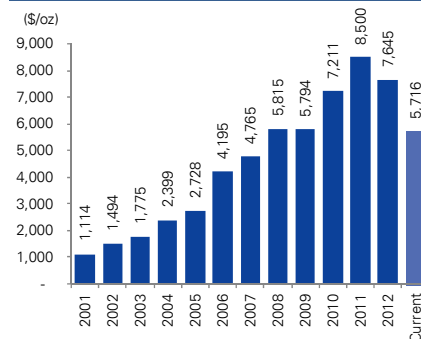
Source: FactSet, Company data and Deutsche Bank

Figure 48: NA Gold EV/resources



Note: figures include P&P reserves, as well as M&I and Inferred resources; Source: FactSet, Company data and Deutsche Bank

Figure 49: NA Gold EV/production

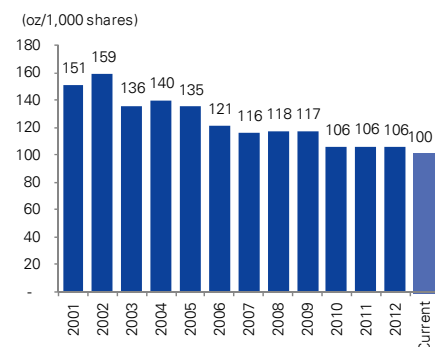


Source: FactSet, Company data and Deutsche Bank

Although NA Gold reserves, resources and production have grown over time, levels have tapered off over the past few years (despite higher gold price estimates used in the case of reserves and resources) and in the case of production, levels have actually declined (despite new mines). However, the picture is less favorable when considering the level of reserves, resources and production on a per share basis (per 1,000 shares) given the number of shares that have been issued throughout the decade. NA Gold reserves and resources per share have declined by 35% and 30% from peak to trough (despite the benefit of purchased ounces) and the picture is less favorable for production per share, which has fallen by ~60% from peak to trough, denoting that "purchased" ounces have yet to translate into meaningful incremental production.

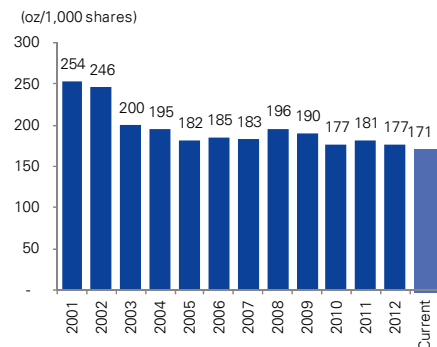
*NA Gold production per share has declined over the past decade, as purchased ounces have yet to translate into meaningful incremental production*

Figure 50: NA Gold reserves/1,000 shares



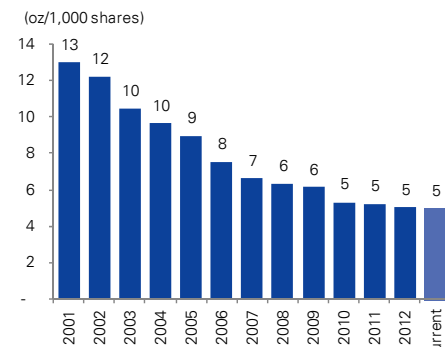
Source: Company data and Deutsche Bank

Figure 51: NA Gold resources/1,000 shares



Note: figures include P&P reserves, as well as M&I and Inferred resources; Source: Company data and Deutsche Bank

Figure 52: NA Gold production/1,000 shares



Source: Company data and Deutsche Bank

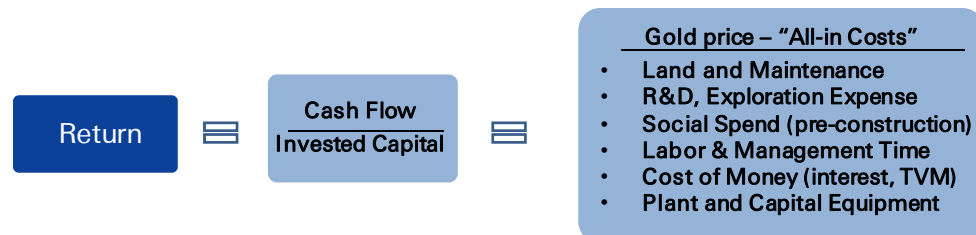


# Measurement bias

In our experience there have been two key short-falls in how the NA Gold measures investment returns (or at least the information they readily focus investors on) which consists of unfortunate short-hand measurement biases on both the numerator and the denominator of a basic returns formula.

*Two key short-falls in how the NA Gold measures investment returns*

Figure 53: Measurement of mining returns requires taking into account many factors



*Note: We employ a simple graphic above to illustrate a point, not to mathematically define returns under a full ROCE calculation: Source: Deutsche Bank*

On the numerator side, managements have historically focused on "mine-only" short-hand accounting which masks the true costs of mining for gold (and therefore true cash flow available to shareholders). So while it is mathematically correct to publish C1 (i.e., mine-level cash costs) in reality there are many more costs attributable to mining gold than are visible under this simplified approach - roughly double the costs in our view. So how can company management, analysts or investors accurately forecast returns when the industry has generally focused on the wrong metrics?

*Historical focus on "mine-only" short-hand masks true gold sector cash flows*

In a positive first step, in 2012 the gold industry (via co-ordination of the World Gold Council) attempted to address this historical measurement mis-focus by a new metric called "All-In Sustaining Costs" (AISC). While arguably AISC method could be applied to all miners, the discrepancy between mine level costs and all-in costs is most acute in the gold mining industry due to shorter-than-average mine lives and higher-than-average maintenance capex per unit of production. This methodology is more fully detailed in the All-in Sustaining Costs section, though still lacks critical information and we have developed our own more complete method of looking at Use of Cash, which tracks all uses of cash essentially on a per ounce basis to essentially derive a "break-even" gold price at which a company would be cash flow neutral.

*All-In Sustaining Costs (AISC) are a positive first step but . . .*

*. . . DB's Use of Cash analysis goes further in solving for full uses of cash*

A second measurement issue has been the accurate tally of what a mining project truly costs to build. The industry focuses on the most "visible" portion of the mine costs, or basically the plant and equipment (i.e., capital equipment cost), but due to the long lead time to develop a large scale mine which can take up to 10 years now, many costs are often ignored such as original land acquisition costs (and banking fees), care-and-maintenance of land (taxes, fees, royalties), engineering and feasibility studies (usually embedded inside corporate R&D expenses), social acceptance spending, any exploration drilling done on the property to move it toward full approval stage, attributable interest expense if purchased with debt, or share dilution charge if purchased for stock and lastly labor and management time which is not cheap. When these costs are added up, they can exceed the "capital cost" of a project but are typically not addressed by managements when discussing a project's costs. Even when historical costs are deemed "impaired", managements often choose to treat as "sunk" costs and apply forward-looking lenses to any future capital spending.

*Difficult to obtain an accurate tally of what mining projects truly costs to build*



## All-in sustaining costs provide a better cash flow picture

*The following section builds on work first published by DB's Australia Precious Metals & Mining team led by Brett McKay and Chris Terry*

The "C1 cash cost" definition has previously been regarded as a decent measure of margins and a read-through for profitability. In a rising price environment, an increasing C1 profile was forgivable as margins generally expanded due to the price rising faster than cost inflation. However, as the gold price fell and investors figured out the C1 cost did not accurately represent the true cost to produce an ounce of gold, a more transparent measure of operating is being called for.

The current definition of the "C1 cash cost" is the costs for (i) mining, processing and administration; (ii) accounting movements for stockpiles and gold-in-circuit (inventory); (iii) adjustments for waste stripping above or below the life-of-mine stripping ratio in open pit mines and (iv) by-product credits. It does not include costs for exploration, mine development, sustaining plant capital, royalties or depreciation and/or amortization charges, although some companies do report cash costs including royalties (e.g., Goldcorp and Kinross). Because of their "mine-level" focus, C1 cash costs do not include charges incurred as Corporate Overhead or Research & Development which can be significant for single-mine companies on a per ounce basis or any financing-related charges on debt taken out either at parent or subsidiary level.

We believe to better understand the true profitability of a gold miner, one has to analyze all the costs incurred and follows the recent push to report "all-in sustaining costs" by global gold majors who, along with the World Gold Council (WGC), are leading a shift in reporting standards to better reflect the true cash margins of gold businesses. Our analysis is based on company-reported figures for previous years and DB forecasts for forward periods and assumptions have been sense-checked with each company wherever possible. Details on company-level analysis can be found in the NA Gold company all-in cost outlook section further ahead.

### Gold industry moving towards a standard definition for reporting of costs

In an attempt to become more transparent, a number of global gold majors are in the process of adopting "all-in sustaining cost" metrics. This new metric is also being considered by the WGC with the view a new definition will offer a standardized way of presenting the costs associated with producing an ounce of gold. Although unlikely to be mandatory, the adoption of this new standard is likely to be widespread, particularly amongst the global gold majors. This will also allow investors to undertake a like-for-like comparison of costs across the gold space. However, with a formal definition yet to be decided, there can be some shortfalls when making relative comparisons at this stage.

For example, Barrick noted in its 4Q12 report that current operating measures do not capture all the "sustaining" expenditures incurred in order to produce gold. The company has been working with the WGC to define an all-in sustaining cost measure, with the expectation that an industry standard will be finalized and approved by the WGC by mid-2013. Barrick expects to conform to the WGC definition. At this point, Barrick has defined "...all-in sustaining cash costs commence with total cash costs and then adds sustaining capital expenditures, corporate general and administrative costs, mine site exploration and evaluation costs and environmental rehabilitation costs. This measure seeks to represent the total costs of producing gold from current operations, and therefore it does not include capital expenditures attributable to projects or mine expansions, exploration and evaluation costs attributable to growth projects, income tax payments, interest costs or dividend payments. Consequently, this measure is not

*C1 cash cost definition has previously been regarded as a decent measure of margins*

*C1 includes: i) mining, processing & administration, ii) inventory movements, iii) waste stripping (above or below the life-of-mine strip ratio) (iv) by-product credits*

*We believe "all-in sustaining costs" provide a more accurate picture*

*To become more transparent a number of global gold majors are adopting an "all-in sustaining cost" measure*

*Industry standard is expected to be finalized and approved by the WGC by mid-2013*



*representative of all of the Company's cash expenditures. In addition, our calculation of all-in sustaining cash costs does not include depreciation expense as it does not reflect the impact of expenditures incurred in prior periods. Therefore, it is not indicative of the Company's overall profitability."*

Goldcorp on the other hand has adopted an "all-in sustaining cash cost" measure it believes more fully defines the costs associated with producing gold, including: *total cash costs (net by-products), corporate administration, exploration and evaluation costs, reclamation cost accretion and sustaining capital expenditures into its definition. Importantly, Goldcorp defines sustaining capital expenditures as "...expenditures that do not increase annual gold ounce production at a mine site and excludes all expenditures at the Company's projects and certain expenditures at the Company's operating sites which are deemed expansionary in nature."*

*Different to Barrick, Goldcorp includes reclamation cost accretion*

## DB definition of all-in sustaining costs

In anticipation of the increasing adoption of an "all-in sustaining cost" by companies and the WGC, we have developed a similar DB definition, which we believe is the best indicator of all costs incurred in mining and maintaining a gold operation. We define all-in sustaining costs to include:

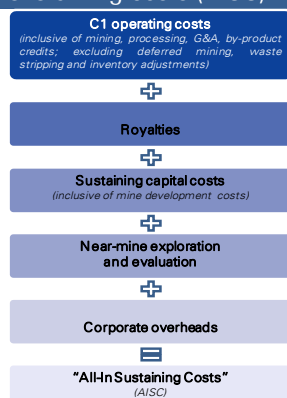
*DB definition of AISC also includes spending on near-mine exploration & evaluation*

- *C1 operating costs (inclusive of mining, processing, G&A, net by-product credits; excluding deferred mining, waste stripping and inventory adjustments)*
- *Royalties*
- *Sustaining capital costs (inclusive of mine development costs)*
- *Near-mine exploration and evaluation*
- *Corporate and administrative expenses*

In our view, once a mine has reached commercial production, any further pre-stripping or cutback development is a requirement for the continuing operation of that asset over time to realize its projected mine life. We therefore exclude deferred mining and waste stripping adjustments from our definition. We do not include expansion capital costs, greenfield exploration, interest or tax. However, most of these "other" uses of cash are accounted for in our Use of Cash section aimed at calculating a break-even gold price, which is different from the "sustaining" nature of all-in cost comparisons. C1 operating costs have been defined on an operational level (wherever possible), with corporate costs spread across operations on a dollars per ounce sold.

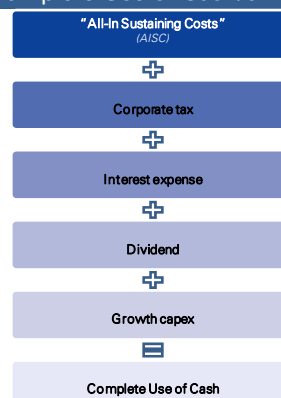
*We exclude deferred mining and waste stripping adjustments from our definition*

Figure 54: All-in sustaining costs (AISC)



Source: Deutsche Bank

Figure 55: DB Complete Use of Cash/oz



Source: Deutsche Bank

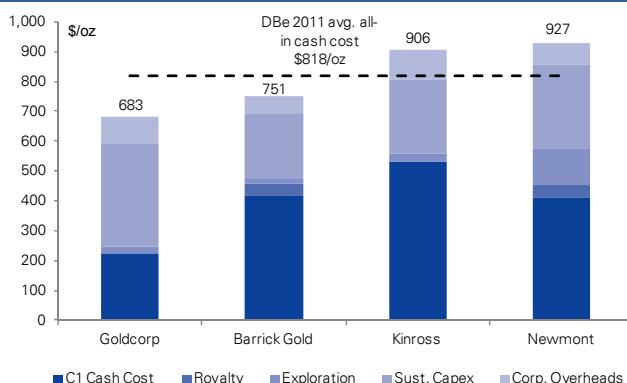


## NA Gold all-in sustaining costs comparison

Within our North American Gold coverage, Goldcorp was the lowest cost producer in 2012 with an AISC of \$873/oz (reported \$874/oz), backed by a portfolio of high quality mines located in stable geographies. Mines such as Peñasquito (Mexico), Marlin (Guatemala) and Alumbrera (Argentina) hold distinctive advantage with negative C1 costs due to high by-product credits. Next in line was Barrick, with 2012 AISC of \$944/oz (reported \$945/oz), followed by Kinross (\$1,088/oz/\$1,099/oz) and Newmont (\$1,150/oz/\$1,149/oz).

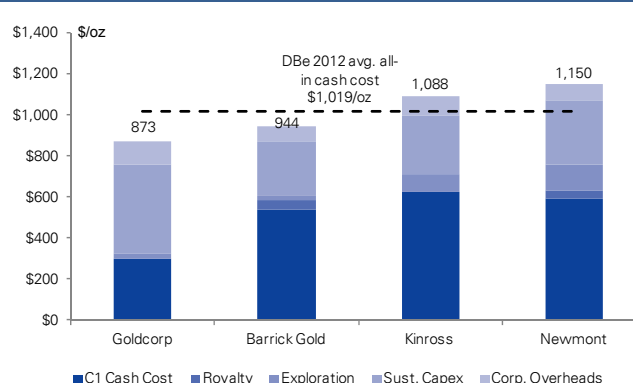
*Within our NA coverage, Goldcorp was the lowest cost producer in 2012 with an AISC of \$873/oz*

Figure 56: NA Gold 2011 AISC



Source: Company data and Deutsche Bank estimates; Note: DBE all-in cash costs are calculated using bottom-up approach (mine by mine basis) and hence does not necessarily match with reported figures.

Figure 57: NA Gold 2012 AISC

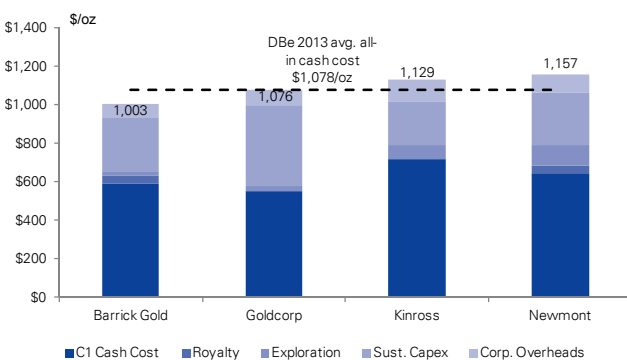


Source: Company data and Deutsche Bank estimates; Note: DBE all-in cash costs are calculated using bottom-up approach (mine by mine basis) and hence does not necessarily match with reported figures.

DB NA Gold's weighted AISC was \$1,019/oz in 2012 (vs gold price of \$1,671/oz or \$652/oz margin), up from \$818/oz achieved in 2011 (+24% YoY). The YoY increase highlights current industry trends wherein miners are hit by a double whammy of rising inflation (consumables and labor) across major producing countries and falling grades (combined production declined 4% YoY). Figure 58 shows our 2013 AISC estimates for NA Gold producers where we estimate the weighted average AISC for the sector to increase ~6% YoY to \$1,078/oz. Barrick appears will have the lowest 2013e AISC at \$1,003/oz (+6% YoY). Goldcorp is next at \$1,076/oz (+23% YoY) on ~\$750 million YoY jump in cash costs due to heavy stripping commitments at Peñasquito, higher Canada costs and lower by-products. Kinross ranks third at \$1,129/oz (+4% YoY) and Newmont last at \$1,157/oz. However, on our estimates, Newmont has the lowest projected increase in AISC (+1%) in 2013, on lower sustaining capital spending.

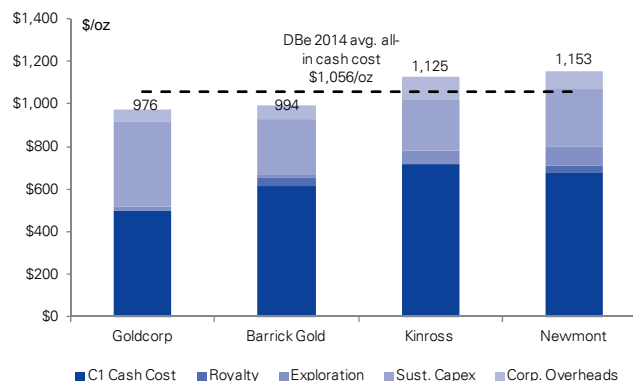
*NA Gold's weighted AISC was \$1,019/oz in 2012*

Figure 58: NA Gold 2013E AISC



Source: Company data and Deutsche Bank estimates; Note: DBE all-in cash costs are calculated using bottom-up approach (mine by mine basis) and hence does not necessarily match with reported figures.

Figure 59: NA Gold 2014E AISC



Source: Company data and Deutsche Bank estimates; Note: DBE all-in cash costs are calculated using bottom-up approach (mine by mine basis) and hence does not necessarily match with reported figures.





Across our NA Gold coverage, we see 2013 as a possible inflection point with average AISC expected to peak at \$1,078/oz, before beginning to gradually decline to \$1,056/oz in 2014 (-2% YoY). This improvement is largely driven by commissioning and ramp of various projects resulting in a net addition of ~1.5 million oz (DBe). The major projects that lead to incremental volumes include Pueblo Viejo (~140k oz, Dominican Republic), Pascua Lama (~250k oz, Chile-Argentina), Cerro Negro (~425k oz, Argentina), Eléonore (38k oz, Canada), Dvoinoye (~150k oz, Russia) and Akyem (~300k oz, Ghana). Also, better cost control and implementation of cost cutting measures through 2013 (as guided by NA Gold management teams) should result in benefits flowing through into 2014. On our estimates Goldcorp is expected to improve significantly in 2014, reclaiming the position as the lowest cost producer with AISC estimated at \$976/oz (-9% YoY). Barrick would move to second position with AISC of \$994/oz (-1% YoY), followed by Kinross (\$1,125/oz, -0.4% YoY) and Newmont (\$1,153/oz, -0.4% YoY).

*We see 2013 as an inflection point when AISC are expected to peak at \$1,078/oz, before declining gradually*

Sustaining capital and exploration expenses account for ~27% and ~5%, respectively, of the average AISC of \$1,078/oz. In the event of a decline in gold price, companies have more flexibility in containing cash costs by deferring some of the mine-site stripping or underground development (part of sustaining capex) and exploration activities. However, companies cannot continue to defer stripping and underground development on an ongoing basis, as these activities are required for un-interrupted functioning of mines.

*Sustaining capital and exploration expenses account for ~27% and ~5% of the average AISC of \$1,078/oz*

Figure 60: NA Gold 2013E AISC breakdown by company

(\$/oz)	C1 cash cost	Royalty	Sustaining capex	Corporate overheads	Exploration	AISC
Barrick	593	41	281	73	15	1,003
Goldcorp	550	-	423	77	26	1,076
Kinross	717	-	227	110	75	1,129
Newmont	645	37	270	93	112	1,157
<b>NA Gold weighted average</b>	<b>619</b>	<b>28</b>	<b>291</b>	<b>85</b>	<b>55</b>	<b>1,078</b>

Source: Deutsche Bank estimates

#### Barrick: Pueblo Viejo and Pascua Lama should drive cost improvement

Barrick reported an AISC of \$945/oz in 2012. On a regional basis, the company's South American mines were most profitable with estimated AISC of \$713/oz. The Lagunas Norte mine in Peru was Barrick's lowest cost producer with all-in cash cost of \$482/oz. The NA mines, which contributed approximately half of total sales volume, came in second with estimated AISC of \$843/oz. Among the NA mines, Cortez (\$699/oz) and Goldstrike (\$799/oz) (both in Nevada) had relatively lower costs benefiting from economies of scale. On the other end of the spectrum, higher cost Australia Pacific (\$1,213/oz) and African mines (\$1,449/oz) weighed on company's overall AISC.

*On a regional basis, Barrick's South American mines are most profitable*

In 2013, we expect Barrick's AISC to rise to \$1,003/oz (+6% YoY), in line with current guidance range of \$950-\$1,050/oz. The YoY increase is primarily driven by lower expected production from Goldstrike (reduced autoclave capacity associated with construction of thiosulphate project), Cortez (mining confined to low grade zone as work is completed on pit stability issues), Lagunas Norte (lower grade and higher sulphide ore), Veladero (lower grade) in Argentina and African Barrick Gold mines, as well as to the appreciation of the Peruvian currency, Argentina inflation, and higher labor and power costs across its African portfolio. These negatives are partly offset by contribution of lower cost ounces from Pueblo Viejo, which is expected to ramp to full capacity in 2H13 with Barrick's share of production anticipated at 500-650k oz (DBe 567k oz) at an AISC of \$525-\$575/oz (\$582/oz).

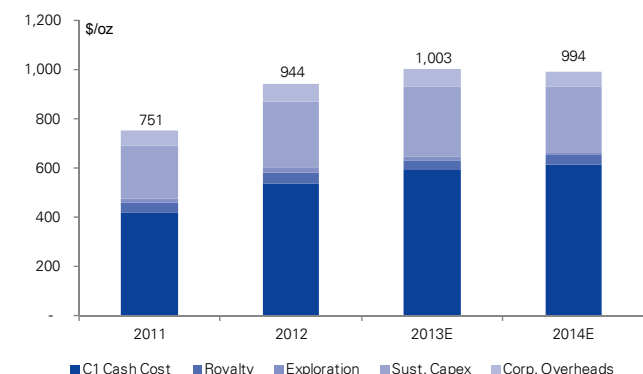
*Pueblo Viejo is expected to ramp to full capacity in 2H13*



For 2014 we estimate Barrick's AISC to reach \$994/oz (-1% YoY) driven by contribution from Pascua-Lama (~250k oz), its first full-year production at Pueblo Viejo (~650k oz) and reversal of some production headwinds (from 2013) at other mines. Thereafter, Pascua-Lama is expected to drive bulk of cash cost improvement (though we have yet to incorporate any potential delay/increase in capex arising from recent legal challenges in Chile). At full capacity, Pueblo Viejo and Pascua-Lama are expected to contribute ~1.5 million oz of gold annually at a very competitive AISC of ~\$300/oz. Part of this new output is expected to replace that of other higher-cost, shorter-life mines, while the rest should be additive in nature, enabling Barrick to attain its stated target of 8 million oz by 2016 (from 7.3 million oz in 2012). Further, management has stated intention to divest higher-cost, non-core mines. Hence, we believe Barrick's AISC profile should improve going forward or at least deteriorate less vis-à-vis peers.

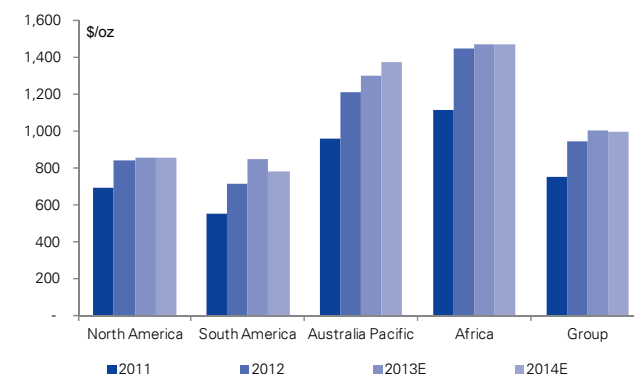
*Due to large low-cost growth projects, Barrick's AISC profile should continue to improve going forward, or deteriorate less vis-à-vis peers*

Figure 61: Barrick's AISC evolution (2011-2014E)



Note: DBE all-in cash costs are calculated using bottom-up approach (mine by mine basis) and hence does not necessarily match with the reported figures. Source: Company data and Deutsche Bank estimates

Figure 62: Barrick's AISC by region (2011-2014E)



Source: Company data and Deutsche Bank estimates

#### Goldcorp: Peñasquito and Alumbra lower grades impact 2013 costs

Among NA Gold producers, Goldcorp had the lowest AISC of \$874/oz in 2012. Goldcorp's North American mines contributed the lion's share of production (~85%) at an estimated AISC of \$994/oz. Peñasquito (Mexico) was the largest cash flow contributor for Goldcorp with a low AISC of \$326/oz (C1 cash cost was negative \$457/oz due to high by-product contribution). The remaining 15% of the group's North American output was contributed by Marlin (Guatemala) and Alumbra (Argentina) at a combined AISC of just \$162/oz, again, driven by by-product credits.

*Goldcorp had the lowest AISC of \$874/oz in 2012*

We expect Goldcorp's 2013 AISC to increase sharply to \$1,076/oz (+23% YoY) on lower grades at both Peñasquito and Alumbra and higher costs in Canada. Additionally, the company's sustaining capital spend is expected to remain elevated (\$423/oz vs sector average of \$291/oz) due to heavy stripping commitments at Peñasquito. However, on the volume front, Goldcorp will be the only NA gold major to post reasonable production growth in 2013 driven mostly by the contribution from newly commissioned Pueblo Viejo mine (Dominican Republic). While the Cerro Negro project (Argentina) is also a low cost, due to a late-year start-up its contribution will be negligible in 2013.

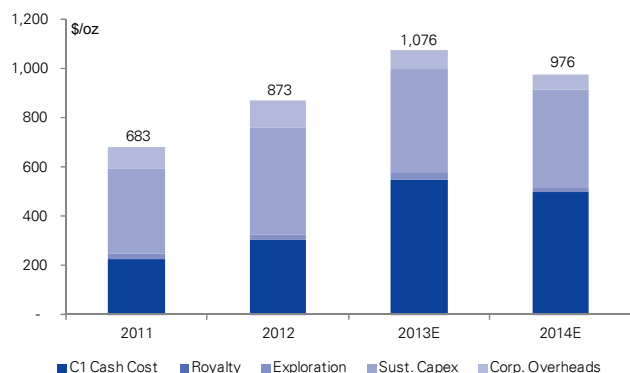
*We expect 2013 AISC to increase sharply to \$1,076 (+23% YoY)*

We look for significant cost turnaround in 2014, with AISC estimated to decline to \$976/oz (-9% YoY), on mining of higher grade pit zones at Peñasquito and full year contributions from Pueblo Viejo (433k oz at \$597/oz) and Cerro Negro (427k oz at \$854/oz), partly offset by marginally higher cost initial production volumes at Éléonore (38k oz at \$1,078/oz). Thereafter, we expect Goldcorp to see further cost reductions on stabilizing operations at Cerro Negro/Éléonore and contribution of new projects; Cochenour (2015) and Camino Rojo (2016). Goldcorp aims to achieve a production of 4.0-4.2 million oz by 2017 (+72% vs 2.4 million oz in 2012).

*We look for significant cost turnaround in 2014*

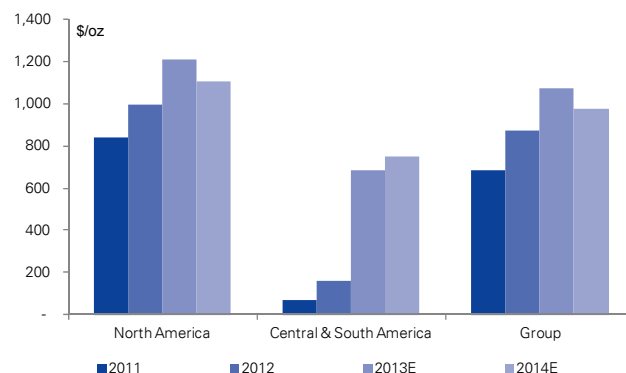


Figure 63: Goldcorp AISC evolution (2011-2014E)



Note: DBE all-in cash costs are calculated using bottom-up approach (mine by mine basis) and hence does not necessarily match with the reported figures. Source: Company data and Deutsche Bank estimates

Figure 64: Goldcorp AISC by region (2011-2014E)



Source: Company data and Deutsche Bank estimates

### Kinross: Dvoinoye a key driver, but Tasiast expansion remains uncertain

Kinross reported an AISC of \$1,099/oz in 2012. Kupol gold-silver mine in Russia, which is Kinross' only mine located in the Asia Pacific region was the most profitable with estimated AISC of \$467/oz. The North American segment ranked second with combined AISC of \$921/oz, followed by South America (\$1,193/oz) and West Africa (\$1,752/oz). Kinross' AISC profile is currently distorted by higher costs at Tasiast (DBE \$2,956/oz, assuming ~40% of total capex spent to be sustaining) where it continues to invest heavily to build shared infrastructure (i.e., tailings pumping system, interim water supply, permanent camp, power station, truck shop, seawater supply system).

*Kupol is Kinross' most profitable mine*

Spending on shared infrastructure for a possible Tasiast Phase II expansion to ~800,000 oz per year from ~200,000 at present is ongoing, despite subject to an ongoing feasibility study (due 1Q14) at which point an official construction decision would be made. Hence, much of the current capex spending is deemed to support either the continuation of the current Phase I (if Phase II is not built), but is clearly being done at a higher-than-normal rate, which leaves Kinross in an atypical position of funding some "growth" capex as part of its current AISC, distorting the numbers upwards in our view. Additionally, the Tasiast mine is witnessing variability in gold grades encountered in the banded iron formation-type ore currently being mined. Notably, Kinross took a non-cash impairment charge of \$3.1 billion in 4Q12 on reduced project economics.

*Kinross in an atypical position of funding some "growth" capex as part of current AISC*

In 2013, we expect Kinross' AISC to increase to \$1,129/oz (+4% YoY) on expected decline in grades at Kupol, Kettle River-Buckhorn and Round Mountain, and planned suspension of production at La Coipa in 2H13 partially offset by increase in Fort Knox heap leach throughput. Kupol production is expected to decline ~9% YoY despite the anticipated commencement of Dvoinoye ore processing in 2H13. DBE AISC is at the lower end of guidance of \$1,100-\$1,200/oz due to higher by-product credits (DBE average silver price of \$26.71 for 2013).

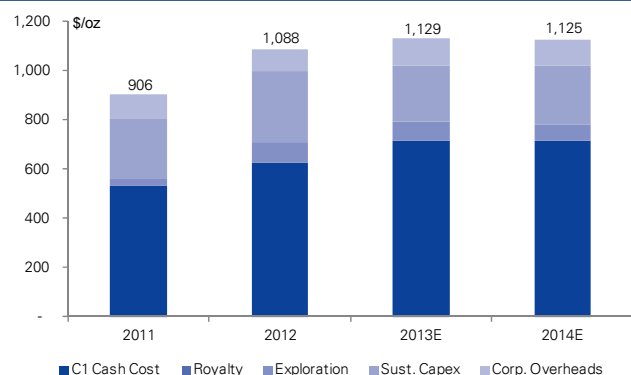
*We expect AISC to increase to \$1,129/oz (+4% YoY) in 2013*

Going forward, Kinross' operational performance is largely tied to a successful ramp-up of Dvoinoye ore processing, stabilization of operations at Tasiast and ultimately a construction decision on Tasiast Phase II. In 2014, we expect group level AISC to decline marginally (-0.4%) to \$1,125/oz. Outside of Tasiast, Kinross appears to have limited growth options to meaningfully alter its future AISC. One option is a Phase 7 at La Coipa. Company appears to be at an impasse on developing the Fruta Del Norte (Ecuador) which would have a low cash cost but higher-than-average taxes.

*Performance is largely tied to ramp-up of Dvoinoye and ultimately a construction decision on a Tasiast Phase II*

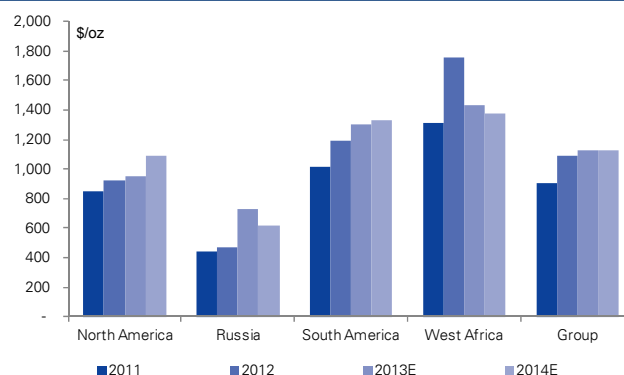


Figure 65: Kinross AISC evolution (2011-2014E)



Source: Company data and Deutsche Bank estimates

Figure 66: Kinross AISC by region (2011-2014E)



Source: Company data and Deutsche Bank estimates

### Newmont: cash costs should remain largely stable in 2013 and 2014

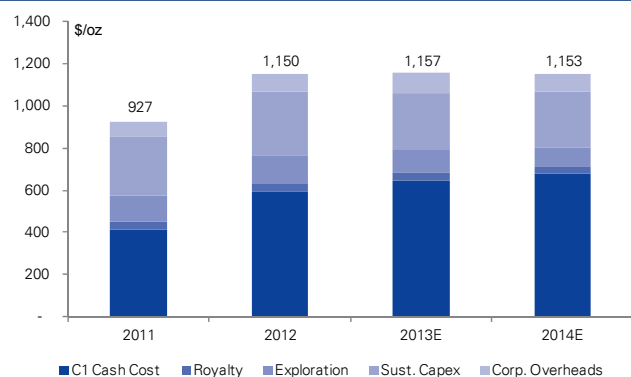
Newmont reported an AISC of \$1,149/oz in 2012, the highest among NA Gold majors, on lower production, higher waste stripping and mill maintenance and elevated exploration expenses. The company spent \$129/oz of gold produced in exploration in 2012, 2x the sector average of \$64/oz. Batu Hijau (Indonesia), which was Newmont's lowest cost mine in 2011 (\$914/oz), saw its AISC jump to \$1,297/oz in 2012 on heavy stripping (Phase 6) and lower production (processing of lower grade stockpiles). On a regional basis, Africa (with currently one operating mine – Ahafo) was the most profitable segment in the group with AISC estimated at \$1,011/oz, followed by South America (\$1,059/oz), North America (\$1,168/oz) and Asia Pacific (\$1,243/oz).

*Newmont spent \$129/oz in exploration in 2012, 2x the sector average*

In 2013 we expect Newmont's AISC to remain flat at \$1,157/oz (+1% YoY), as higher costs at Yanacocha (production to be lower on declining grades and reduced workforce) and Australian mines (lower grades and inflation) are mostly offset by lower sustaining capital. DBE cash cost in line with the current guidance range of \$1,100-\$1,200/oz. Consolidated production is expected to increase 5% YoY to 5.6 million oz in 2014, driven by full year contribution from Akyem (+295k oz) and resumption of mining at Batu Hijau (+105k oz) partly offset by lower production at Yanacocha (-112k oz, reduced mining rates and lower grade) and Jundee (-116k oz, near end of life). Incremental African volumes are expected to offset the impact of rising inflation and lower by-product credits and we look for slight operational improvement in 2014 with group level all-in cash cost forecasted at \$1,153/oz (-0.4% YoY).

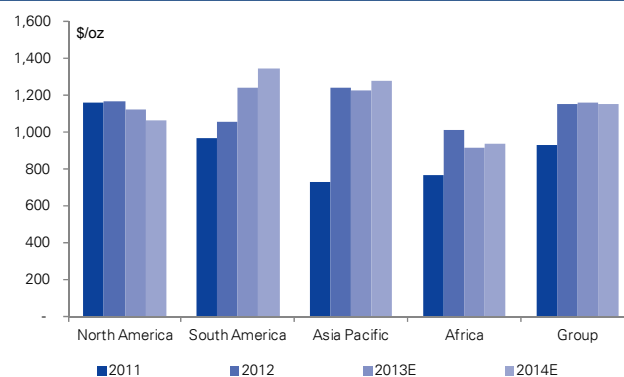
*In 2013 we expect Newmont's AISC to remain flat at \$1,157/oz*

Figure 67: Newmont AISC evolution (2011-2014E)



Source: Company data and Deutsche Bank estimates

Figure 68: Newmont AISC by region (2011-2014E)



Source: Company data and Deutsche Bank estimates

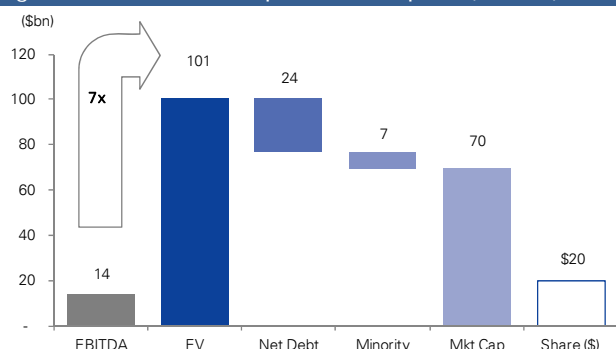


# Funding gap analysis

On DBE gold price estimates for 2014 of \$1,500/oz, NA Gold producers are trading at an EV of ~7x projected sector EBITDA of \$14 billion, which based on net debt and minority levels and current share counts, implies a weighted average composite share price of \$20. If we assume a constant EV multiple, but a lower gold price, market capitalizations would decline by larger percentages than EV, given the more fixed nature of net debt and minority positions. Figure 69 and Figure 70 illustrate the “scissoring effect” for our NA Gold coverage. Assuming no change in EV multiple, if gold prices for 2014 were to average \$1,300/oz (~13% lower than DBE \$1,500/oz base case) the implied NA Gold weighted average share price could decline ~50% compared to a 30% change in EV, or a ratio of ~1.7:1. Put another way, for every ~\$100/oz drop in the average gold price (below \$1,500/oz), at unchanged EV/EBITDA multiples, the implied NA Gold weighted average share price could decline ~25% from current levels.

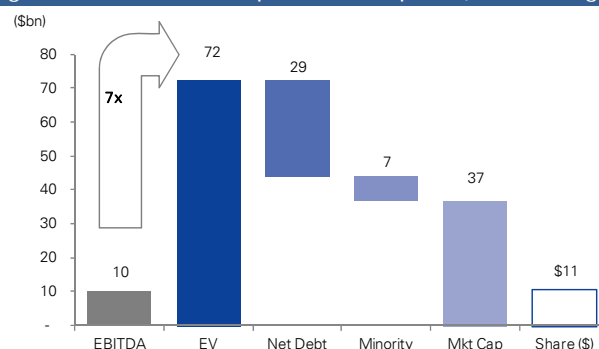
*Every ~\$100/oz drop in average gold price could imply further 25% downside for average sector share price*

Figure 69: NA Gold composite share price (at DBE)



Source: FactSet, company data and Deutsche Bank

Figure 70: NA Gold composite share price (\$1,300/oz gold)



Source: FactSet, company data and Deutsche Bank

## NA Gold sensitivities at \$1,500/oz (DBE) and \$1,300/oz gold

The week of April 15th witnessed a once in a generation move in the gold price. On that Monday daily losses in the gold price were on par with the declines that occurred once in January 1980 and once in February 1983. Investors clearly panicked and while theories abound for precious metals’ decline (threat of Cypriot Central Bank selling, liquidation of ETF positions, hawkish Fed, investor rotation into yield assets, etc.), many are questioning whether gold’s 12-year bull-run is over. Following this sharp correction, DB gold and silver estimates were revised downward in May. For 2013 DB estimates are now \$1,533/oz and for 2014, \$1,500/oz, while silver forecast are \$26.71/oz for 2013 and \$26.79/oz for 2014.

As a result of sharp precious metals price contractions we have run the following updated sensitivities at a bear case scenario of \$1,300/oz which was touched briefly in April. For our base-case estimates of ~\$1,500/oz, we would note this still implies ~\$145/oz (+9%) higher-than-current 2013 estimates (which already include the benefit of \$1,632/oz in 1Q13) and ~\$110/oz in 2014 (+7%).



Figure 71: NA Gold sensitivity analysis (2013-2014E)

Company	Scenario	EBITDA (\$m)		Change (%)		EPS (\$)		Change (%)		NPV (\$/share)	Change (%)
		2013	2014	2013	2014	2013	2014	2013	2014		
ABX	DBe	6,507	6,702			2.90	2.73			36	
	@ \$1,300/oz	5,342	5,141	-18%	-23%	2.13	1.69	-27%	-38%	16	-54%
GG	DBe	1,753	2,339			1.22	1.69			28	
	@ \$1,300/oz	1,330	1,634	-24%	-30%	0.79	0.96	-35%	-43%	11	-59%
KGC	DBe	1,528	1,581			0.38	0.39			6	
	@ \$1,300/oz	1,140	1,034	-25%	-35%	0.17	0.09	-56%	-77%	1	-89%
NEM	DBe	3,458	3,362			2.46	2.18			33	
	@ \$1,300/oz	2,631	2,235	-24%	-34%	1.42	0.76	-42%	-65%	3	-91%
<b>Simple avg.</b>				<b>-23%</b>	<b>-30%</b>			<b>-40%</b>	<b>-56%</b>		<b>-73%</b>

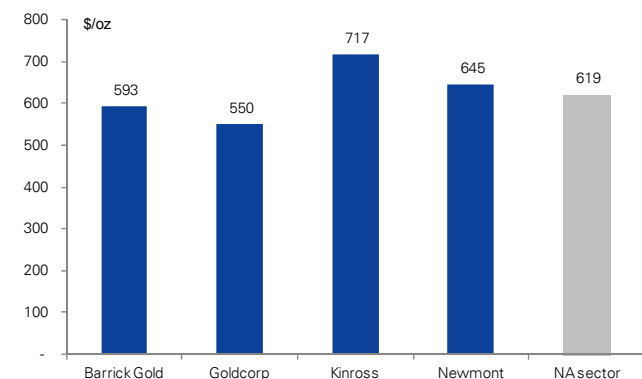
Source: Deutsche Bank estimates

A flat \$1,300/oz gold price and silver scenario of \$20/oz indicate negative outcomes for our NA Gold coverage. At \$1,300/oz gold, the NPVs of our NA gold coverage decline by an average 73%. Under a \$1,300/oz gold scenario a vicious cycle emerges forcing companies to likely raise equity to bridge a growing funding gap until they can "right-size" costs to the new gold price environment. However, even near a \$1,500/oz gold scenario, most NA Gold producers would still need to significantly rein in SG&A, exploration expense, discretionary spending (mine development and growth projects) and close high-cost mines.

We clarify that our estimated NPVs under a \$1,300/oz gold scenario appear too low and may be mis-leading if taken simply at face value, as we are assuming no change to existing mine operations and continued cost inflation. This has the effect of generating negative perpetuity cash flow streams at higher-cost mines which effectively cancel out positive cash flows at lower-cost mines. In the real world, if gold protractedly remains below \$1,500/oz we would expect higher cost mines to be shut which would raise the NPVs for the companies based on remaining assets. However, shutdowns themselves could entail some cash and non-cash charges.

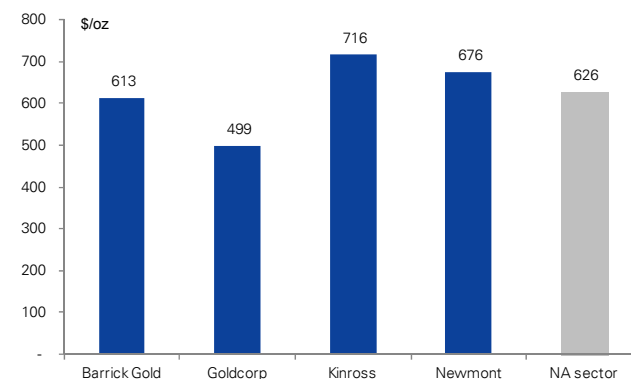
The "C1 cash cost" definition has previously been regarded as a decent measure of margins and a read-through for profitability. The charts below indicate that gold miners are safer and have comfortable margins on a reported basis.

Figure 72: NA Gold C1 cash costs (2013E)



Source: Company data and Deutsche Bank estimates

Figure 73: NA Gold C1 cash costs (2014E)

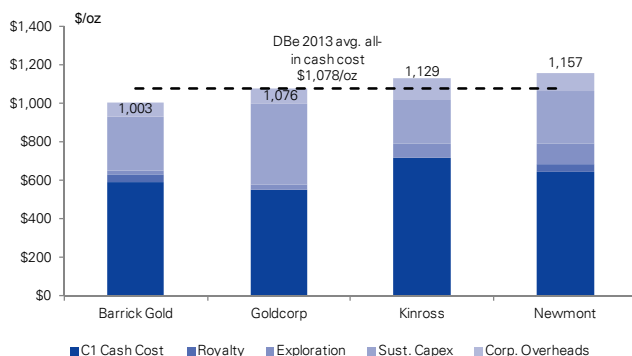


Source: Company data and Deutsche Bank estimates



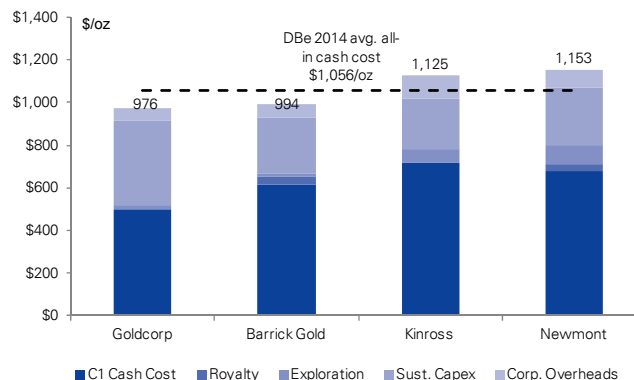
Building upon the traditional C1 cash cost method and moving to the all-in cash cost profile described in the prior section, sustainable cash margins are reduced dramatically, but still appear reasonable. Even at an average all-in cost of \$1,050-\$1,100/oz means that gold miners can still earn a decent margin of \$400-450/oz at a gold price of \$1,500/oz before taxes and interest expense.

Figure 74: NA Gold all-in cash costs (2013E)



Source: Company data and Deutsche Bank estimates

Figure 75: NA Gold all-in cash costs (2014E)



Source: Company data and Deutsche Bank estimates

## NA Gold Use of Cash - funding gap analysis

We believe there is an even better approach to understanding the NA Gold which we have termed a "Use of Cash" analysis. As described in the all-in cost section, we take AISC as our starting point, but layer in all other major uses of cash including taxes (simplified as reported, not "cash taxes", net interest expense (reported and not tax-shield adjusted), dividends (yes, these are medium-term discretionary) and lastly, growth capex. We have not factored in "other" uses of cash (i.e., working capital, severance expenses or fines), nor potential for further capex inflation. Under a Use of Cash analysis all NA Golds appear to be free cash negative over the next two years on current DB estimates.

At low gold prices, a vicious cycle emerges which may force companies to raise equity to bridge a growing funding gap until they can "right-size" costs. Under a scenario of \$1,500/oz gold (or lower) we estimate that NA gold producers could effectively run out of money during 2014 as high capex spending continues and debt levels become too high. At a \$1,500/oz gold price assumption, Barrick would deficit spend \$313/oz (\$317/oz adjusted for copper segment cash flow) during 2013 and \$230/oz in 2014 (\$230/oz). At 7.2 million attributable ounces of 2013E gold sales, this translates into cash flow shortfalls of \$2.3 billion and \$1.8 billion or a total of \$4.0 billion over the next 18 months. A \$1,300/oz gold scenario raises Barrick's funding gap by \$2 billion.

Put another way, the use of cash analysis indicates an implied gold price required by each company in order to remain net debt neutral (i.e., neither raise nor lower net cash going forward). This effective "break even" gold price varies company-by-company and year-by-year depending on each company's operating expense and capital spending program and would be mitigated by the benefits of new production coming on stream (likely to lower cash costs). However, these graphics provide a good illustration of the growing funding gap that is driven by a low gold price vs what's needed and the sub-components of spending that management can address to reduce the shortfall.

*Under a Use of Cash analysis all NA Golds appear to be free cash negative over the next two years*

*Low gold price may force companies to raise equity to bridge a growing funding gap until they can "right-size" costs*

*The effective "break even" gold price varies company-by-company and year-by-year*

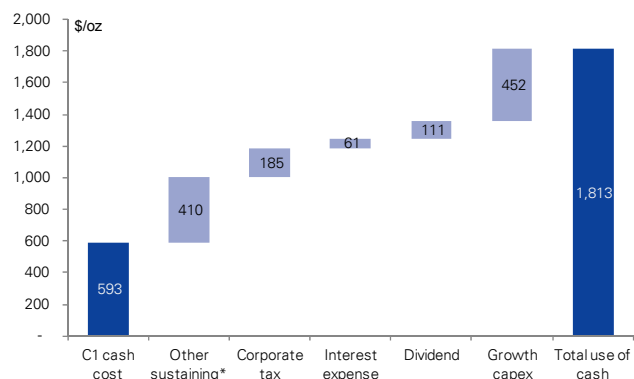




### Barrick

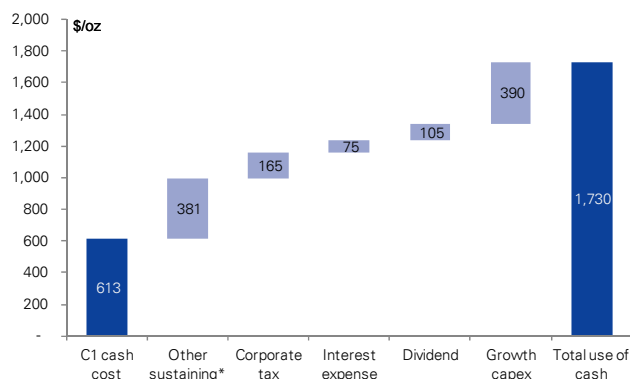
Barrick's use of cash is estimated to be \$1,813/oz in 2013. If gold price average \$1,500/oz in 2013, the company would have to spend \$313/oz or \$2.3 billion over and above the revenue generated from sale of gold. Barrick had a cash balance of \$2.3 billion and debt of \$15 billion, as of 1Q13-end.

Figure 76: Barrick 2013E use of cash (\$/oz)



Source: Company data and Deutsche Bank estimates

Figure 77: Barrick 2014E use of cash (\$/oz)

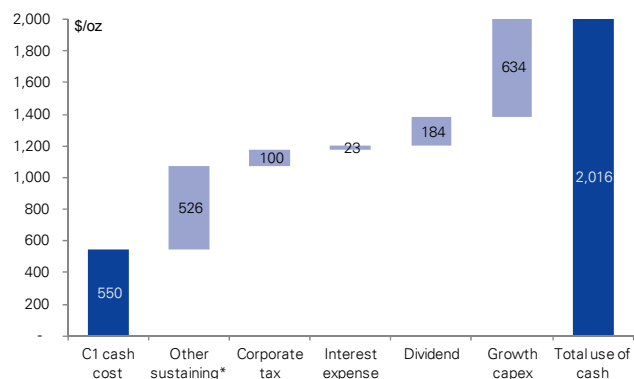


Source: Company data and Deutsche Bank estimates

### Goldcorp

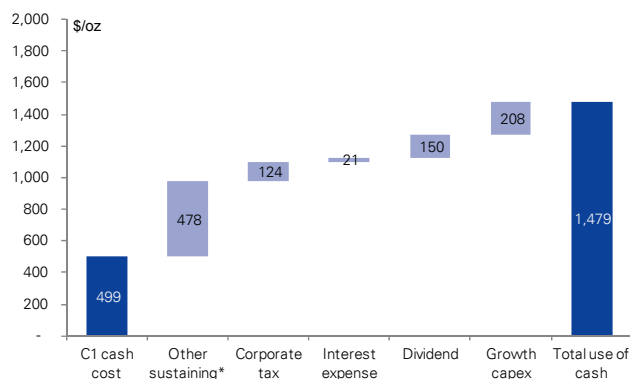
Goldcorp's use of cash is estimated to be \$2,016/oz in 2013. If gold price average \$1,500/oz in 2013, the company would have to spend ~\$500/oz or \$1.4 billion over and above the revenue generated from sale of gold. Goldcorp had a cash balance of ~\$2 billion (of which \$783m is earmarked for redemption of convertible notes in 3Q14) and debt of \$2.3 billion, as of 1Q13-end.

Figure 78: Goldcorp 2013E use of cash (\$/oz)



Source: Company data and Deutsche Bank estimates

Figure 79: Goldcorp 2014E use of cash (\$/oz)



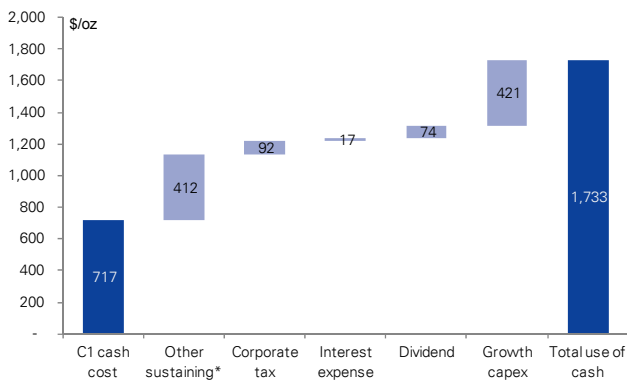
Source: Company data and Deutsche Bank estimates

### Kinross Gold

Kinross' use of cash expense is estimated to be \$1,733/oz in 2013. If gold price average \$1,500/oz in 2013, the company would have to spend ~\$230/oz or \$600 million over and above the revenue generated from sale of gold. Kinross had a cash balance of ~\$1.5 billion and debt of \$2.2 billion as of 1Q13-end.

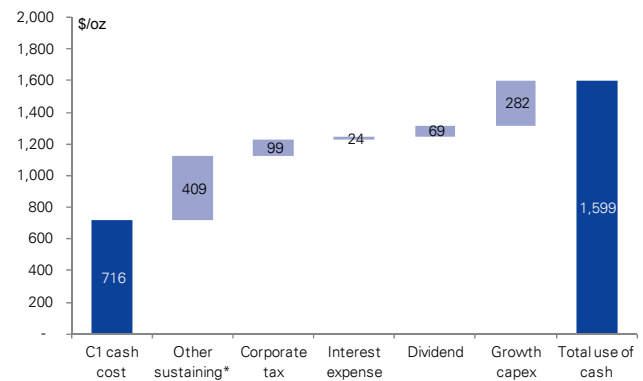


Figure 80: Kinross 2013E total use of cash (\$/oz)



Source: Company data and Deutsche Bank estimates

Figure 81: Kinross 2014E total use of cash (\$/oz)

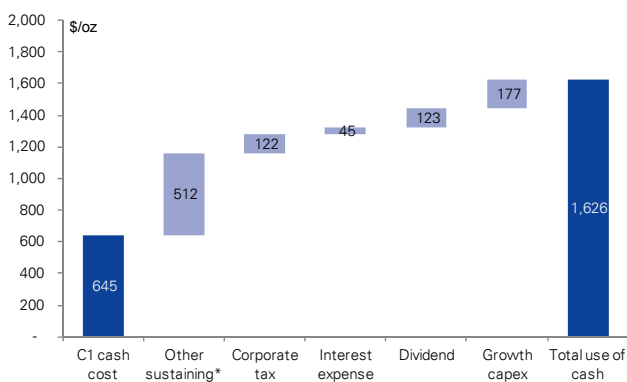


Source: Company data and Deutsche Bank estimates

## Newmont

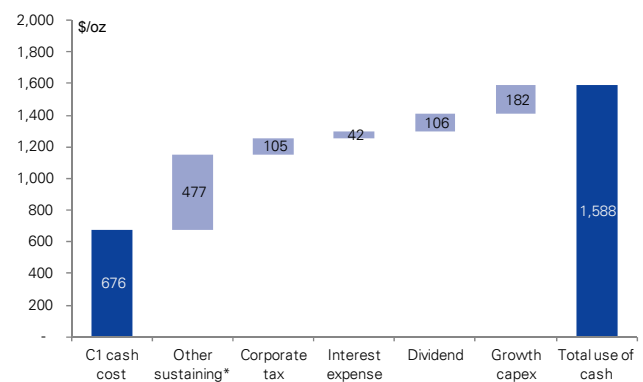
Newmont's use of cash is estimated to be \$1,626/oz in 2013. If gold price average \$1,500/oz in 2013, the company would have to spend ~\$100/oz or \$700 million over and above the revenue generated from sale of gold. Newmont had a cash balance of ~\$1.4 billion and debt of \$6.5 billion as of 1Q13-end.

Figure 82: Newmont 2013E total use of cash (\$/oz)



Source: Company data and Deutsche Bank estimates

Figure 83: Newmont 2014E total use of cash (\$/oz)



Source: Company data and Deutsche Bank estimates

Figure 84 summarizes our calculation in USD terms and in a tabular format. Under a scenario of \$1,500/oz gold, our NA gold coverage universe could generate a cumulate funding gap of ~\$7.3 billion or \$200/oz of gold sold. At \$1,300/oz gold, the sector funding gap could rise to ~\$12.3 billion or \$336/oz. Barrick has the largest funding gap potential of \$4.0 to 6.2 billion, given its sizeable capex commitments over the next two years (~\$12 billion in total), followed by Newmont (\$1.2-2.5 billion), Goldcorp (\$1.3-2.2 billion) and Kinross (\$0.8-1.5 billion). Barrick's outlook is highly contingent on continued deficit spending at Pascua Lama of approximately \$2 billion per year. For example, if this project was completely halted, it would effectively remove most of the company's funding gap potential. Further, as Barrick has already announced its intention to sell non-core assets and even non-core gold mines, this may be another way for the company to stave off the potential need to raise equity. Newmont's spending at Conga is also winding down and future growth projects may also be put on hold, which could also buy them some cover to avoid an equity raise.

*At \$1,500/oz gold our NA gold coverage universe could generate a cumulate funding gap of ~\$7.3bn but may partly offset this by cost-cutting, dividend cuts and asset sales*



Figure 84: NA Gold use of cash - funding gap analysis (2013-2014E)

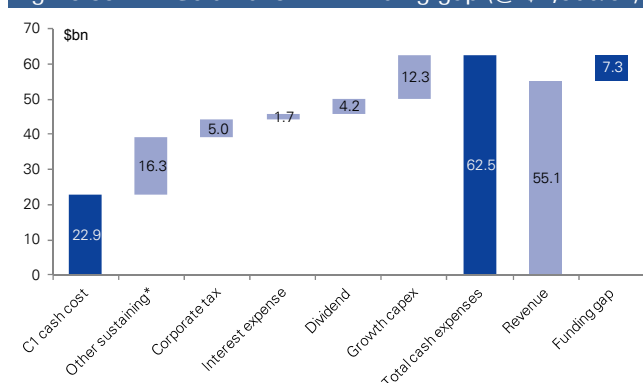
(\$bn)	C1 cash cost	Other sustaining*	Corporate tax	Interest expense	Dividend	Growth capex	Total cash expenses	Revenue	Funding gap	Funding gap (\$/oz)
<b>Base case - gold at \$1,500/oz</b>										
2013E	4.3	2.9	1.3	0.4	0.8	3.2	13.0	10.8	(2.3)	(317)
2014E	4.7	2.9	1.3	0.6	0.8	3.0	13.1	11.4	(1.8)	(230)
<b>ABX</b>	<b>8.9</b>	<b>5.8</b>	<b>2.6</b>	<b>1.0</b>	<b>1.6</b>	<b>6.2</b>	<b>26.2</b>	<b>22.1</b>	<b>(4.0)</b>	<b>(272)</b>
2013E	1.5	1.4	0.3	0.1	0.5	1.7	5.3	4.0	(1.4)	(516)
2014E	1.6	1.5	0.4	0.1	0.5	0.7	4.8	4.9	0.1	21
<b>GG</b>	<b>3.1</b>	<b>2.9</b>	<b>0.7</b>	<b>0.1</b>	<b>1.0</b>	<b>2.4</b>	<b>10.1</b>	<b>8.8</b>	<b>(1.3)</b>	<b>(221)</b>
2013E	1.8	1.0	0.2	0.0	0.2	1.0	4.3	3.7	(0.6)	(233)
2014E	1.9	1.1	0.3	0.1	0.2	0.7	4.2	3.9	(0.3)	(99)
<b>KGC</b>	<b>3.7</b>	<b>2.1</b>	<b>0.5</b>	<b>0.1</b>	<b>0.4</b>	<b>1.8</b>	<b>8.5</b>	<b>7.6</b>	<b>(0.8)</b>	<b>(164)</b>
2013E	3.5	2.7	0.7	0.2	0.7	1.0	8.7	8.0	(0.7)	(126)
2014E	3.8	2.7	0.6	0.2	0.6	1.0	9.0	8.5	(0.5)	(88)
<b>NEM</b>	<b>7.3</b>	<b>5.4</b>	<b>1.2</b>	<b>0.5</b>	<b>1.3</b>	<b>2.0</b>	<b>17.7</b>	<b>16.5</b>	<b>(1.2)</b>	<b>(107)</b>
<b>NA Gold</b>	<b>22.9</b>	<b>16.3</b>	<b>5.0</b>	<b>1.7</b>	<b>4.2</b>	<b>12.3</b>	<b>62.5</b>	<b>55.1</b>	<b>(7.3)</b>	<b>(200)</b>
<b>Bear case - gold at \$1,300/oz</b>										
2013E	4.3	2.9	1.0	0.4	0.8	3.2	12.7	9.3	(3.4)	(468)
2014E	4.7	2.9	0.8	0.6	0.8	3.0	12.7	9.9	(2.8)	(369)
<b>ABX</b>	<b>8.9</b>	<b>5.8</b>	<b>1.8</b>	<b>1.0</b>	<b>1.6</b>	<b>6.2</b>	<b>25.4</b>	<b>19.2</b>	<b>(6.2)</b>	<b>(417)</b>
2013E	1.5	1.4	0.1	0.1	0.5	1.7	5.2	3.4	(1.8)	(670)
2014E	1.6	1.5	0.2	0.1	0.5	0.7	4.6	4.2	(0.4)	(117)
<b>GG</b>	<b>3.1</b>	<b>2.9</b>	<b>0.3</b>	<b>0.1</b>	<b>1.0</b>	<b>2.4</b>	<b>9.8</b>	<b>7.7</b>	<b>(2.2)</b>	<b>(366)</b>
2013E	1.8	1.0	0.1	0.0	0.2	1.0	4.1	3.2	(0.9)	(377)
2014E	1.9	1.1	0.1	0.1	0.2	0.7	4.0	3.4	(0.6)	(225)
<b>KGC</b>	<b>3.7</b>	<b>2.1</b>	<b>0.2</b>	<b>0.1</b>	<b>0.4</b>	<b>1.8</b>	<b>8.1</b>	<b>6.6</b>	<b>(1.5)</b>	<b>(298)</b>
2013E	3.5	2.7	0.4	0.2	0.6	1.0	8.4	7.0	(1.4)	(264)
2014E	3.8	2.7	0.2	0.2	0.4	1.0	8.4	7.3	(1.1)	(191)
<b>NEM</b>	<b>7.3</b>	<b>5.4</b>	<b>0.6</b>	<b>0.5</b>	<b>1.0</b>	<b>2.0</b>	<b>16.8</b>	<b>14.3</b>	<b>(2.5)</b>	<b>(227)</b>
<b>NA Gold</b>	<b>22.9</b>	<b>16.3</b>	<b>2.9</b>	<b>1.7</b>	<b>3.9</b>	<b>12.3</b>	<b>60.1</b>	<b>47.8</b>	<b>(12.3)</b>	<b>(336)</b>

Source: Deutsche Bank estimates

Figure 87 and Figure 88, illustrate the cumulative projected remaining cash flow (defined as projected EBITDA minus interest expense, taxes, capex and dividends), as a proxy for financial flexibility for the NA Golds under DB's price deck, as well as under a flat \$1,300/oz scenario. On DB estimates, NA Gold producers would be short ~\$5 billion over the next 5 years, perhaps delaying growth capex (~\$17 billion) and/or dividends. At \$1,300/oz gold, NA Gold producers could be short ~\$16 billion over the next 5-years (which is 2/3rds of transaction value paid since 2010 of ~\$28 billion) as EBITDA over next 5-years drops to ~\$54 billion (despite lower taxes).

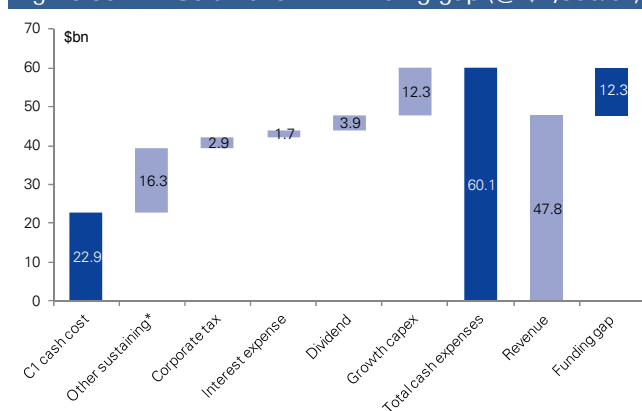
*At \$1,300/oz gold, NA Gold producers could be short ~\$1bn over the next 5-years*

Figure 85: NA Gold 2013-14E funding gap (@ \$1,500/oz)



Source: Company data and Deutsche Bank estimates

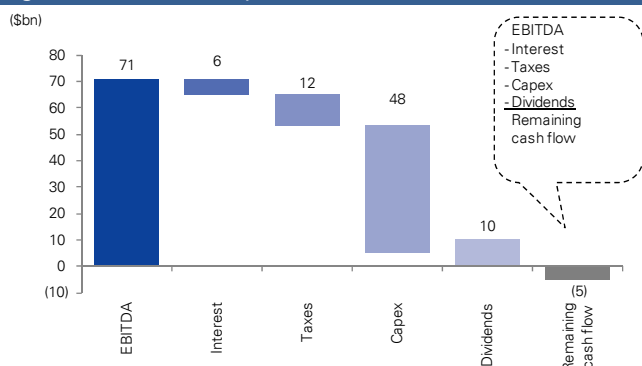
Figure 86: NA Gold 2013-14E funding gap (@ \$1,300/oz)



Source: Company data and Deutsche Bank estimates

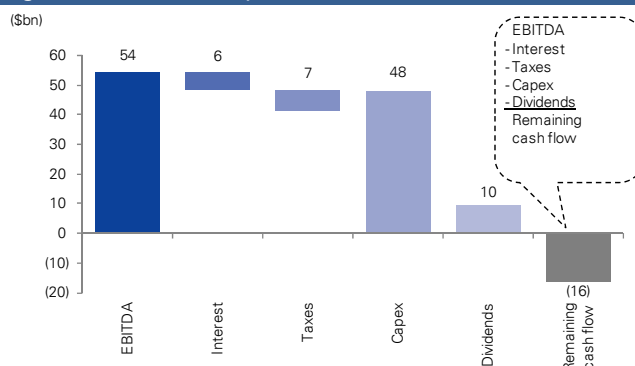


Figure 87: NA Gold 5-yr sources & uses (DBe)



Note: Cumulative projected EBITDA, interest, taxes, capex and dividends for next 5-years (2013E-2017E);  
Source: Company data and Deutsche Bank estimates

Figure 88: NA Gold 5-yr sources & uses (@\$1,300/oz)



Note: Cumulative projected EBITDA, interest, taxes, capex and dividends for next 5-years (2013E-2017E);  
Source: Company data and Deutsche Bank estimates

## NA Gold potential equity dilution estimates

Given the sudden plunge in gold prices and the uncertainty surrounding LT price forecasts, companies could enter a fire-fighting mode and try to cut down their discretionary spending (at least in the near term). We estimate that Barrick can trim its cash expenses by up to \$1 billion in 2013, followed by Newmont (~\$850 million), Goldcorp (~\$400 million) and Kinross (\$250 million). We have assumed a 25% cut to R&D and Other expenses, ~20% for sustaining capex and 75% cut to growth projects that can temporarily be sidelined. In 1Q13 Barrick and Newmont announced 2013E cost/capex reduction of \$500 million and \$100 million, respectively.

Despite the temporary discretionary spending cuts, companies may still need to raise capital if gold prices remain below \$1,500/oz for another year or two. To maintain the current Investment Grade (IG) rating and avoid any possible downgrade from debt rating agencies, companies will likely need to tap the equity markets to fund the shortfall. Assuming a total debt to EBITDA ratio of 2.0x to 2.5x, we have calculated the amount of equity (and resultant dilution) that NA Golds may incur over the next 2 years. Equity issuances could take the form of direct stock offerings, but are not likely given depressed level of investor interest. The issue of warrants is another possible option but also not a popular method in NA. We believe convertible debentures are the most likely route companies could choose as this affords a new group of investors potential equity upside, while giving the companies access to lower-than-market interest rates and bypasses the uncertainty of a straight equity raise offered to existing shareholders.

On our estimates under \$1,500/oz gold scenario, Barrick appears to be the most vulnerable to a potential equity raise (or variance thereof) of \$2-5 billion (given its high net debt load ~\$13 billion) and could incur a dilution to current shareholders of 11-28% over next 18 months. At \$1,300/oz gold price, we estimate Barrick would have to raise equity of \$7.2-\$9.8 billion, resulting in an estimated equity dilution of ~37-51%. At this lower gold price level, Newmont would have to raise equity of \$1.6-2.9 billion, which could lead to an estimated equity dilution of 10-18%. Similarly, Kinross may need to issue equity in the range of \$0.6-1.1 billion (9-17%), followed by Goldcorp with equity needed in the range of \$0.7-1.4 billion (3-6%). Again, this analysis is based on the maintenance of current dividend policies and excludes the impact of large-scale project halts, potential proceeds from non-core asset sales or any material cost-cutting (as yet unannounced).

*Companies could enter a fire-fighting mode*

*Despite the temporary discretionary spending cuts, companies may still need to raise capital*

*Barrick appears to be more vulnerable to equity share issuance*



Figure 89: NA Gold equity dilution analysis 2013-14E (current cash balances)

Company	Cash (\$bn)	Debt (\$bn)	Net debt (\$bn)	EBITDA 2013E (\$bn)	Ratio (x)	Leverage (\$bn)	Equity reqd.* (\$bn)	Share price 5/24/13 (\$)	New shares (m)	Shares outs. (m)	Dilution (%)
<b>Base case - gold at \$1,500/oz</b>											
ABX	2.3	14.8	12.5	6.5	2.5	16.3	2.1	19.2	109	1,001	11%
					2.0	13.0	5.3	19.2	279	1,001	28%
GG	2.0	2.3	0.3	1.8	2.5	4.4	(1.2)	26.8		833	
					2.0	3.5	(0.3)	26.8		833	
KGC	1.5	2.2	0.7	1.5	2.5	3.8	(1.1)	5.8		1,147	
					2.0	3.1	(0.3)	5.8		1,147	
NEM	1.4	6.4	5.0	3.5	2.5	8.6	(1.8)	32.0		499	
					2.0	6.9	(0.1)	32.0		499	
<b>NA Gold</b>	<b>7.2</b>	<b>25.6</b>	<b>18.4</b>	<b>13.2</b>	<b>2.5</b>	<b>33.1</b>	<b>(2.0)</b>	<b>18.4</b>		<b>3,480</b>	
					<b>2.0</b>	<b>26.5</b>	<b>4.6</b>	<b>18.4</b>	<b>250</b>	<b>3,480</b>	<b>7%</b>
<b>Bear case - gold at \$1,300/oz</b>											
ABX	2.3	14.8	12.5	5.3	2.5	13.4	7.2	19.2	373	1,001	37%
					2.0	10.7	9.8	19.2	513	1,001	51%
GG	2.0	2.3	0.3	1.3	2.5	3.3	0.7	26.8	27	833	3%
					2.0	2.7	1.4	26.8	51	833	6%
KGC	1.5	2.2	0.7	1.1	2.5	2.8	0.6	5.8	99	1,147	9%
					2.0	2.3	1.1	5.8	197	1,147	17%
NEM	1.4	6.4	5.0	2.6	2.5	6.6	1.6	32.0	49	499	10%
					2.0	5.3	2.9	32.0	90	499	18%
<b>NA Gold</b>	<b>7.2</b>	<b>25.6</b>	<b>18.4</b>	<b>10.4</b>	<b>2.5</b>	<b>26.1</b>	<b>10.0</b>	<b>18.4</b>	<b>542</b>	<b>3,480</b>	<b>16%</b>
					<b>2.0</b>	<b>20.9</b>	<b>15.2</b>	<b>18.4</b>	<b>826</b>	<b>3,480</b>	<b>24%</b>

Note: Equity required is calculated net of estimated discretionary spends and is based on the assumption that company takes maximum amount of debt allowed under 2.0-2.5 debt to EBITDA multiple and maintain its current cash balance. Source: Deutsche Bank estimates

The analysis in Figure 89 is being done by keeping each company's current cash balances constant. Companies will likely keep cash corpus readily available for working capital, unexpected costs, repayment of debt and opportunistic acquisitions. Minimum cash balances vary based on each management's comfort level, but for simplicity we assume a second scenario under which each company would only keep a \$500 million of cash cushion and draw down remaining liquidity to minimize dilution impact. On this basis we have re-calculated (Figure 90) potential equity raises over the next 2 years and again excluded any proceeds from potential asset sales.

*We have run a second scenario under which each company would only keep a \$500 million cash cushion*

Figure 90: NA Gold equity dilution analysis 2013-14E (minimum cash balance of \$500 million)

Company	Cash (\$bn)	Debt (\$bn)	Net debt (\$bn)	EBITDA 2013E (\$bn)	Ratio (x)	Leverage (\$bn)	Equity reqd.* (\$bn)	Share price 5/24/13 (\$)	New shares (m)	Shares outs. (m)	Dilution (%)
<b>Base case - gold at \$1,500/oz</b>											
ABX	2.3	14.8	12.5	6.5	2.5	16.3	0.3	19.2	13	1,001	1%
					2.0	13.0	3.5	19.2	183	1,001	18%
GG	2.0	2.3	0.3	1.8	2.5	4.4	(2.7)	26.8		833	
					2.0	3.5	(1.8)	26.8		833	
KGC	1.5	2.2	0.7	1.5	2.5	3.8	(2.1)	5.8		1,147	
					2.0	3.1	(1.3)	5.8		1,147	
NEM	1.4	6.4	5.0	3.5	2.5	8.6	(2.7)	32.0		499	
					2.0	6.9	(1.0)	32.0		499	
<b>NA Gold</b>	<b>7.2</b>	<b>25.6</b>	<b>18.4</b>	<b>13.2</b>	<b>2.5</b>	<b>33.1</b>	<b>(7.2)</b>	<b>18.4</b>		<b>3,480</b>	
					<b>2.0</b>	<b>26.5</b>	<b>(0.6)</b>	<b>18.4</b>		<b>3,480</b>	
<b>Bear case - gold at \$1,300/oz</b>											
ABX	2.3	14.8	12.5	5.3	2.5	13.4	5.3	19.2	277	1,001	28%
					2.0	10.7	8.0	19.2	416	1,001	42%
GG	2.0	2.3	0.3	1.3	2.5	3.3	(0.8)	26.8		833	
					2.0	2.7	(0.1)	26.8		833	
KGC	1.5	2.2	0.7	1.1	2.5	2.8	(0.4)	5.8		1,147	
					2.0	2.3	0.2	5.8	29	1,147	2%
NEM	1.4	6.4	5.0	2.6	2.5	6.6	0.7	32.0	21	499	4%
					2.0	5.3	2.0	32.0	62	499	13%
<b>NA Gold</b>	<b>7.2</b>	<b>25.6</b>	<b>18.4</b>	<b>10.4</b>	<b>2.5</b>	<b>26.1</b>	<b>4.8</b>	<b>18.4</b>	<b>259</b>	<b>3,480</b>	<b>7%</b>
					<b>2.0</b>	<b>20.9</b>	<b>10.0</b>	<b>18.4</b>	<b>543</b>	<b>3,480</b>	<b>16%</b>

Note: Equity required is calculated net of estimated discretionary spends and is based on the assumption that company takes maximum amount of debt allowed under 2.0-2.5 debt to EBITDA multiple and maintain target cash balance of \$500 million. Source: Deutsche Bank estimates



## NA Gold C1 cost curves

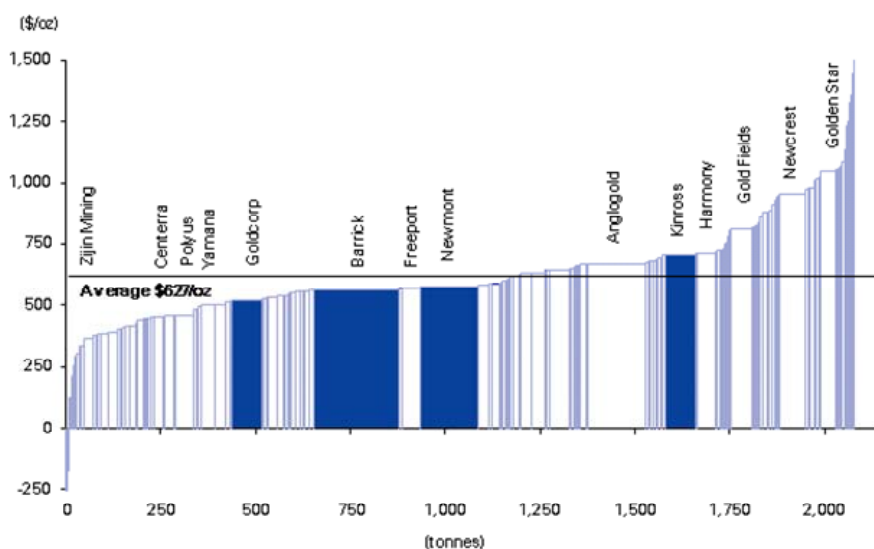
Fundamentally we believe the recent correction in gold is most likely associated with the capitulation in inflationary bias associated with ultra-accommodative monetary policy. Disappointing growth data in China, despite high levels of Social Financing, coincides with low CPI. In the US, economic indicators are mildly disappointing and the Federal Reserve appears to be cooling on its QE stance while at the same time inflation expectations remains very low. The European Central Bank is actually witnessing a contraction in its balance sheet. The contraction in the Western World central bank balance sheet combined with a further decline in the velocity of money represents a key challenge for gold. This is particularly true in US dollar terms as capital flows continue to move towards the US as a place of apparent lower risk yield - particularly US equities.

*Contraction in the WW central bank balance sheet combined with a further decline in the velocity of money represents a key challenge for gold*

DB's commodity team estimates that marginal C1 industry costs for gold mining reside around the \$1,300/oz. While the gold market should not be expected to behave similarly to the base metals in relation to long-term metals pricing at the industry's marginal production costs, we expect that as the gold mining industry is threatened with contraction, the market could see some support around that level if this situation worsens. A look at the global C1 cost curves could provide a brief idea on how gold price will fare over the long term. At present, we do not have the all-in cash cost profile of mines across the globe. Therefore, we present below the company global C1 cash cost profile compiled by Woodmac Research. We note DB's 2013 weighted average all-in cost estimate for NA Gold is \$1,078/oz and is ~\$450/oz higher than average C1 cash cost of \$627/oz. World-wide, due to less capitalized competitors, we believe that all-in costs are ~\$500/oz higher than the industry C1 average of \$627/oz.

*DB's 2013 weighted average all-in cost estimate for NA gold sector is \$1,078/oz, ~\$450/oz higher than C1 costs*

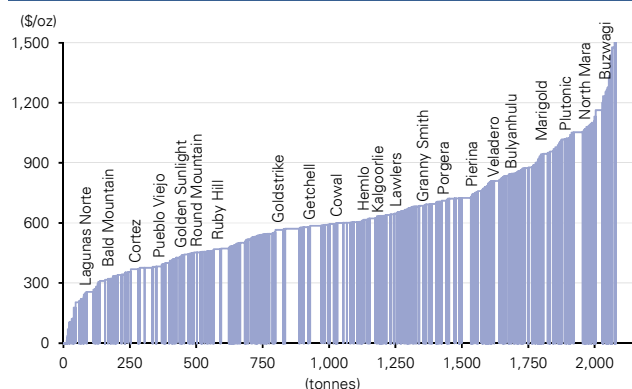
Figure 91: Global C1 gold cash cost curve and major producers, 1Q13E



Source: Wood Mackenzie and Deutsche Bank

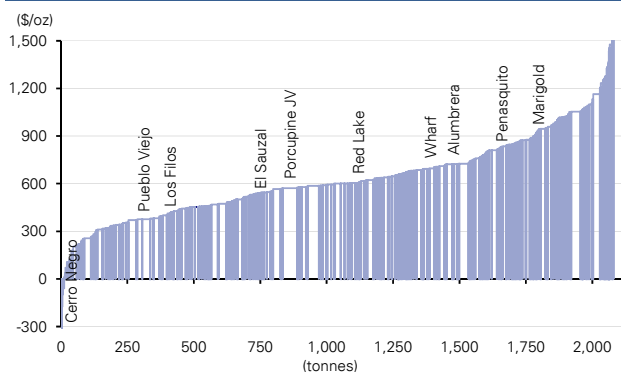


Figure 92: Barrick mines compared to C1 cost curve



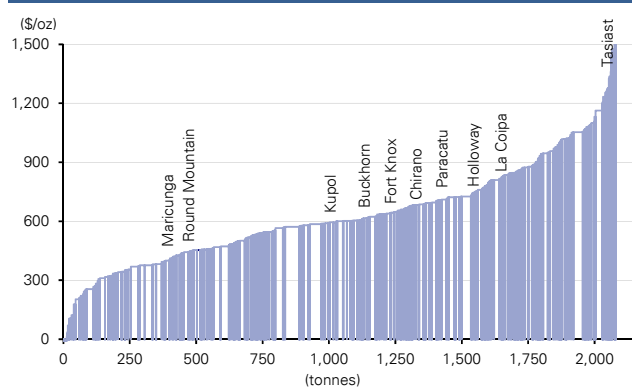
Source: Wood Mackenzie and Deutsche Bank

Figure 93: Goldcorp mines compared to C1 cost curve



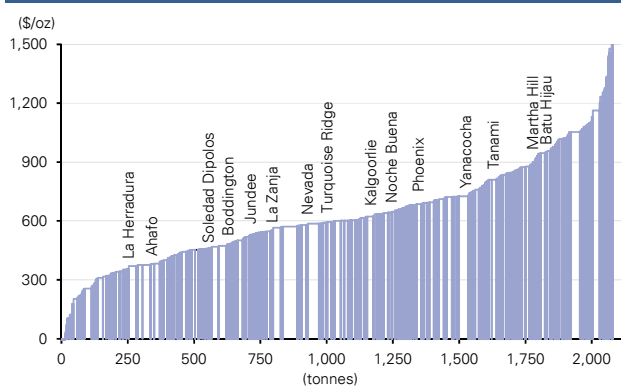
Source: Wood Mackenzie and Deutsche Bank

Figure 94: Kinross mines compared to C1 cost curve



Source: Wood Mackenzie and Deutsche Bank

Figure 95: Newmont mines compared to C1 cost curve



Source: Wood Mackenzie and Deutsche Bank





# Dis-economies of scale

Most industries strive for larger size in order to obtain economies of scale and NA Golds have been no different in this pursuit. However, our experience with NA Golds has indicated few benefits are achieved from larger scale as most mines are run on a local or regional basis and purchasing power or management skills at head office may not be easily translated across the globe, especially when faced with unique political or social challenges of a particular region.

*Our experience with NA Golds has indicated few benefits are achieved from larger scale*

While NA Gold's larger size affords stronger balance sheets and perhaps better access to global capital markets, the flipside has been a push for greater risk-taking as companies pursue larger projects that can move the needle from a production standpoint (i.e., 1 million ounce mines) and increasingly complex technologies (i.e., high altitude mines requiring immense infrastructure investments or refractory gold deposits requiring large investments in processing technology), disperse geographic footprints (pushing into frontier emerging markets). Large size has at times appeared to inhibit nimble management responses when faced with unexpected challenges.

*Size has resulted in greater risk-taking in terms of project size and increasingly complex technology*

We postulate that large size itself can generate unintended consequences such as inflated pay and management structures and that large companies can make easier targets of rising resources nationalism, NGOs objectives and even political targets. These potential negatives must be weighed when viewed in the context of becoming larger simply for the sake of size.

*Large size itself can generate unintended consequences*

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## Resource nationalism on the rise

Resource nationalism can take many forms and does not simply mean a host government's seeking of higher taxes and royalties (in many cases post-contract approval), but increasingly an argument for a larger and more "fair" share of the economic take of a project. For example, many governments are now arguing for a greater share of in-country mineral processing as a way to move their economies ahead to become more value-added processors of a metal and in-turn foster down-stream processing of those ores (i.e., in the case of copper Indonesia is seeking domestic smelting commitments under assumption that greater available in-country metal would foster other down-stream metals processing such as cable and wire processing).

*Resource nationalism is rising, adding a new element of cost and uncertainty*

Governments, especially in emerging and frontier markets will lobby for not only (rightfully) the latest environmental standards, but also significant spending in what can clearly be termed social infrastructure (water purification and sanitation, power, roads, education and training). Social infrastructure is increasingly being viewed as part-and-parcel of what is required to launch a world-class mine in most parts of the world. This has added a higher degree of capital commitment and opened up companies to many more competing claims among various stakeholders, which drives up project costs and complexity. Separately, taking a page from the US legal system, legal challenges by NGOs and local communities have also become a tool to slow development which raises costs. Lastly, new mines can become entwined in local politics given their high visibility and large spending involved. Other forms of resource nationalism can include restrictions on foreign ownership, government free carried interest, requirements for indigenous stakeholder involvement (i.e., mandated use of native corporations for a percentage of workforce or supplies to the mine) but can also include government agitation during wage negotiations or renewal of mine permits.

*Spending on social infrastructure is increasingly being viewed as part-and-parcel of what is required*



In tandem with rising commodity prices, the mining industry saw a raft of tax increases and proposals to raise taxes between 2003 and 2008, as governments sought a larger share of the rising pie. This wave ended abruptly after prices collapsed following the World Financial Crisis, however, since 2009 has gained renewed emphasis. Many of the largest gold producing countries (or those with significant yet-to-be developed gold deposits) have initiated Mining or Resource taxation code reviews under the belief (mistaken in our view) that gold producers are pocketing sizeable profits, based the industry's own historical mis-focus on "cash margins" (i.e., difference between price and C1 cash costs). So while governments may feel politically justified in seeking such re-negotiations, especially in an environment when other countries are taking such measures, their sometimes one-sided nature undermines the rule-of-law which forms a cornerstone of long-term capital investment.

*One-sided contract renegotiations can undermine a cornerstone of long-term capital investment*

Governments in Peru, Indonesia, Ghana as well as Quebec (Canada) have all stated their intentions to seek higher mining taxes and royalties, or to implement royalties for the first time, as in the case of Mexico or raise existing royalties (Brazil). Ghana recently hiked the corporate tax rate to 35% from 25% and cut capital allowances to 20% from 80% for five years, in its 2012 National Budget. A new draft Mining Code is under discussion in the Democratic Republic of the Congo, proposing a new tax on "super profits." Tanzania is also considering the imposition of a windfall profit tax. At the same time, other governments are retaining ownership of mineral resources through either a free-carried interest or a contributed interest, such as South Africa and Zimbabwe.

*Governments in Peru, Indonesia, Ghana, Quebec, Mexico, Brazil, the DRC, Tanzania and South Africa are in various stages of increasing taxes*

The Indonesian government has so far announced separate mandates aimed at extracting more value from the country's exported resources, including announced intentions to (1) ban exports of unprocessed ores from 2014, despite concerns over lack of processing facilities to support the policy; (2) revoke existing mining/export permits as early as May 2012 if ore exporting companies could not demonstrate a viable plan to integrate via processing (smelting/refining) facilities; (3) limits on foreign ownership in domestic mines to 49% within 10th year of start of production/commercial operation, and (4) 25% export tax on coal and base metals in 2012, with an increase to 50% in 2013. While Indonesia has softened its stance amid industry criticism, the regulatory outlook remains far from clear.

*Indonesian has announced numerous proposals and while stance appears to be softening, regulatory outlook remains unclear*

New mining activities in Ecuador have been largely paralyzed since Congress revoked the majority of existing concessions in April 2008. A new Mining Law followed in 2009 included a 70% windfall tax on extraordinary profits, a 5% royalty on the sale of all primary and secondary minerals; a 25% income tax; a 12% tax on profits and a 12% value-added tax, which we estimate implies the government would capture ~55% of the economic profit on new mines. Newly re-elected President Rafael Correa plans to reform the Mining Law so miners are not taxed before they recoup their initial investment. The reform, presented to Congress in July 2012, has yet to be approved and has resulted in projects losing momentum such as Kinross' Fruta del Norte.

*New mining investment in Ecuador has been mostly paralyzed since Congress revoked existing mining concessions in April 2008*

Plans for a 5% mining royalty in Mexico could face a legal challenge over their constitutionality. However, the proposals which were recently approved by Congress in late April, still require Senate approval to be signed into law by newly-elected President Enrique Peña Nieto. Mexico has been one of the few jurisdictions to not charge royalties on mining production or profits (despite a mining history of more than 500 years), with companies paying fees per hectare of land in mining concessions and general corporate taxes. Under the proposed legislation, put forward by the ruling party, the 5% royalty will be calculated on profitability, with the proceeds split between mining Municipalities, States and a Federal fund. Companies have lobbied for credits based on social spending and have highlighted indirect "tax" of higher security costs that some companies incur by operating in areas of high drug traffic crime.

*Plans for a 5% mining royalty in Mexico were recently approved by congress but industry also pays high social and safety expenses which are indirect taxes*



## NA Gold - tallying the results of \$60 billion in spending

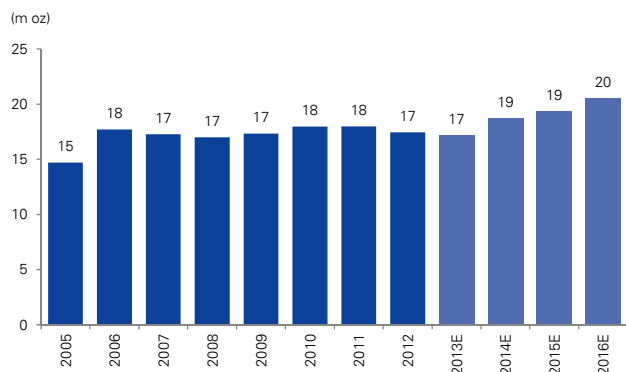
Despite the almost \$45 billion spent on acquisitions and growth projects since 2010 (\$15 billion of capex is still pending), NA Gold producers have not meaningfully increased production. In fact, gold output has steadily declined to ~17 million ounces from ~18 million ounces in 2010, despite new projects coming on stream, with more established producers (Barrick and Newmont) primarily responsible for the decline, now producing a combined ~12 million ounces (from ~13 million ounces previously and peak production of 15 million ounces back in 2006), while growth-oriented miners (Goldcorp and Kinross) have remained steady at a combined 5 million ounces since 2009. Obviously, due to the long-lead nature of mine development, looking at only a two year trailing period is unfair as monies being spent, especially on land packages, will typically not translate into production for several years and we have attempted to measure the returns on spending under various metrics further ahead.

*Despite \$45 billion of actual spending, NA Gold production has actually fallen*

Based on a number of projects being developed, NA Gold producers still aim to grow net production by ~20% to ~20 million ounces in 2016, ~3 million ounces higher than current ~17 million ounce output. Established producers intend to grow net production by 1 million ounces to ~14 million total (~8 million ounces from Barrick and ~6 million from Newmont), whereas growth-oriented miners aim to increase production by a net 2 million ounces to ~7 million ounces (~4 million ounces from Goldcorp, ~3 million from Kinross). It is important to note that even as miners bring on new production, output from existing mines is usually in decline, muddying apples-to-apples comparisons.

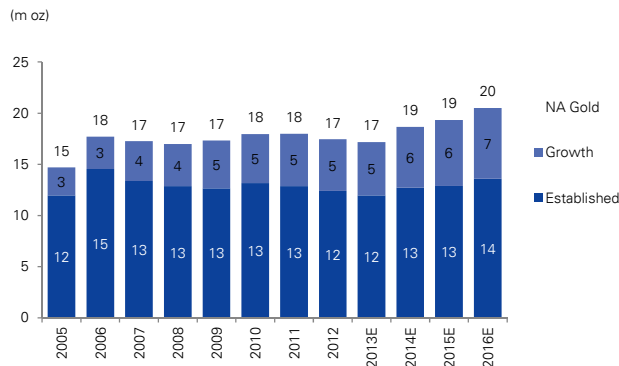
*NA Gold producers still aim to grow production by 20% to 20 million oz in 2016, from current 17 million oz*

Figure 96: NA Gold production (m oz)



Source: Company data and Deutsche Bank

Figure 97: NA Gold production growth (m oz)



Source: Company data and Deutsche Bank

Figure 98: NA Gold production 2005-2016E

(m oz)	2005	2006	2007	2008	2009	2010	2011	2012	2013E	2014E	2015E	2016E
Barrick	5	9	8	8	7	8	8	7	7	8	8	8
Goldcorp	1	2	2	2	2	2	3	2	3	3	4	4
Kinross	2	1	2	2	2	2	3	3	3	3	3	3
Newmont	7	6	5	5	5	5	5	5	5	5	5	6
<b>NA Gold</b>	<b>15</b>	<b>18</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>18</b>	<b>18</b>	<b>17</b>	<b>17</b>	<b>19</b>	<b>20</b>	<b>20</b>
% growth		20%	-3%	-2%	2%	4%	0%	-3%	-1%	9%	5%	5%
Established	12	15	13	13	13	13	13	12	12	13	13	13
Growth	3	3	4	4	5	5	5	5	5	6	6	7

Note: Established producers include Barrick and Newmont, Growth producers include Goldcorp and Kinross; Source: Company data and Deutsche Bank estimates



In addition to the ~\$28 billion spent on acquisitions since 2010 (including Barrick's copper acquisition of Equinox Minerals), NA Gold producers have spent \$16 billion (2010-2012) on growth projects, and still have another \$15 billion to go (2013E-2016E) in order to achieve a combined 20 million ounces of annual output target. Coincidentally, the spending sum of ~\$60 billion is fairly close to the amount of market capitalization (~\$60 billion) the group has shed over the same time period (i.e., once a project is started the pending spending commitment is viewed as basically fixed and discounted in future net debt projections).

*\$60 billion of lost Market Cap  
is = spending/pending capex  
over same period*

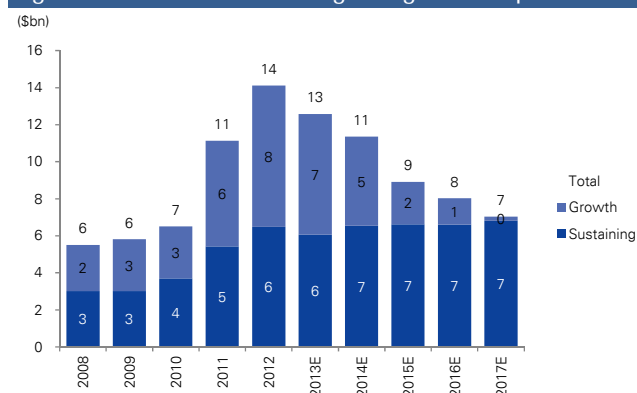
Looking at spending another way, taking into account the ~\$51 billion total to be spent solely on gold (~\$20 billion in acquisitions and ~\$31 billion in growth capex), for an incremental net ~3 million ounces by 2020, equates to ~\$16,000/oz of capex intensity (i.e., invested capital per ounce of annual gold output). If we assume a \$1,500/oz gold price (equal to ~8% of invested capital per ounce) and an AISC of \$1,100/oz, this translates to a \$400 per ounce gross cash margin, or ~2.5% return on investment per annual ounce of production. This back-of-the-envelope calculation is not adjusted for life-of-mine differences on new projects or acquired properties, but also excludes the impact of time value of money. Also, our calculation does not factor the effects of attrition on existing ounces, but neither does it take into account future potential capex or operating expense inflation.

*We estimate a rough 2.5%  
return on investment on  
spending per ounce of net  
new production*

NA Gold total capex (combination of sustaining and growth) more than doubled to ~\$14 billion in 2012 from ~\$6 billion in 2008/09 level, with sustaining capex doubling (to ~\$6 billion from ~\$3 billion) and growth capex quadrupling to ~\$8 billion from ~\$2 billion (more than combined sustaining and growth capex levels from 2008-2010). On our estimates, total capex (sustaining and growth) should start to decline over the years as projects start-up, with sustaining capex eventually representing the bulk of expenditures (~80-90%) by 2015-2016 from current 45-50%. However, with an expected larger gold production base, total sustaining capex should be higher than current levels (~\$7 billion from current ~\$6 billion), or ~\$350/ gold ounce once new steady-state production is achieved.

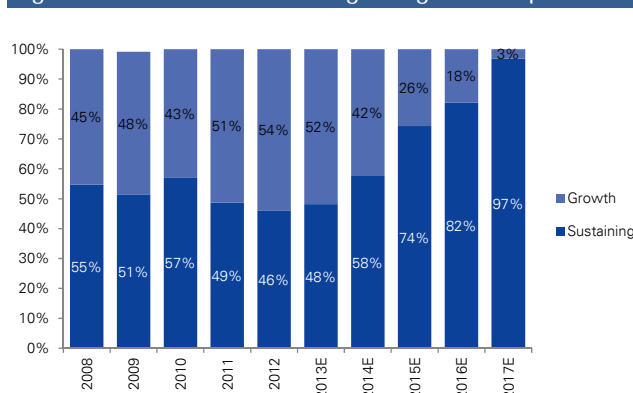
*NA Gold total capex more-  
than-doubled to ~\$14 billion  
in 2012 from ~\$6 billion in  
2008/09*

Figure 99: NA Gold sustaining and growth capex



Source: Company data and Deutsche Bank

Figure 100: NA Gold sustaining and growth capex



Source: Company data and Deutsche Bank



## NA Gold new mines struggle to exceed cost of capital

We have compiled a list of major projects for NA Gold estimating a full capital cost per project (including land package and pending capex). Against this we calculate what incentive gold price would be required in order to generate ROCE of between 5% and 15%. On average, to generate a 15% ROCE's, projects would require gold prices to be at ~\$1,867/oz. In order to achieve a 10% ROCE, a \$1,471/oz gold price would be required. While this is an average rule-of-thumb it varies on a project-by-project basis and each company has a different cost of capital to compare against these "hurdle" rates.

*To generate a 15% ROCE, projects by NA Golds would require ~\$1,900/oz gold*

Figure 101: Capital intensity and incentive price analysis

Company	Project	Start-up	Acquired		Total capital	Capital intensity	P&P	R&R	Capital/resource		Incentive price (\$/oz)			C1 cash cost (\$/oz)	All-in cash cost# (\$/oz)	Annual output (k oz)	Mine life (years)
			cost* (\$m)	Capex (\$m)					P&P (m oz)	R&R (m oz)	5%	10%	15%				
Barrick	Pueblo Viejo	1Q13	930	2,430	3,360	5,169	15.01	24.05	224	140	808	1,067	1,325	325	550	650	25
	Pascua-Lama	2H14	-	8,250	8,250	10,000	17.86	25.81	462	320	625	1,125	1,625	(75)	125	825	25
	Cerro Casale	On Hold	1,244	4,500	5,744	7,294	17.43	24.44	329	235	940	1,304	1,669	225	575	788	22
			<b>2,174</b>	<b>15,180</b>	<b>17,354</b>	<b>7,670</b>	<b>50.30</b>	<b>74.30</b>	<b>345</b>	<b>234</b>	<b>787</b>	<b>1,171</b>	<b>1,554</b>	<b>144</b>	<b>404</b>	<b>2,263</b>	<b>22</b>
Goldcorp	Penasquito	2010	5,288	1,600	6,888	16,207	15.69	20.27	439	340	1,136	1,947	2,757	(457)	326	425	37
	Pueblo Viejo	1Q13	541	1,570	2,111	4,880	10.01	16.04	211	132	794	1,038	1,282	325	550	433	25
	Cerro Negro	late-2013	3,600	1,350	4,950	9,429	5.74	7.07	862	700	1,271	1,743	2,214	350	800	525	11
	Cochenour	1H15	1,264	648	1,912	8,052	-	3.25	-	588	1,353	1,755	2,158	500	950	238	-
	Eleonore	late-2014	420	2,096	2,516	4,193	3.03	7.68	830	328	1,060	1,269	1,479	400	850	600	5
	El Morro	On Hold	513	2,730	3,243	15,443	6.73	10.88	482	298	522	1,294	2,066	(700)	(250)	210	32
Kinross			<b>11,626</b>	<b>9,994</b>	<b>21,620</b>	<b>8,897</b>	<b>41.20</b>	<b>65.19</b>	<b>525</b>	<b>332</b>	<b>1,054</b>	<b>1,499</b>	<b>1,943</b>	<b>141</b>	<b>609</b>	<b>2,430</b>	<b>17</b>
	Dvoinoye	2H13	347	370	717	3,083	1.12	1.32	642	543	1,077	1,231	1,385	588	923	233	7
	Tasiast	On FS	6,500	4,300	10,800	22,737	7.97	15.51	1,356	696	2,047	3,184	4,321	700	910	475	17
	Lobo-Marté	2017	290	900	1,190	3,400	6.03	9.77	197	122	1,070	1,240	1,410	500	900	350	17
	Fruta del Norte	2018	704	1,750	2,454	5,986	6.72	11.03	366	223	1,069	1,369	1,668	370	770	410	16
Newmont	Cerro Casale	On Hold	474	1,500	1,974	7,521	5.81	8.15	340	242	951	1,327	1,703	225	575	263	22
			<b>8,316</b>	<b>8,820</b>	<b>17,136</b>	<b>9,905</b>	<b>45.78</b>	<b>56.17</b>	<b>374</b>	<b>305</b>	<b>1,321</b>	<b>1,816</b>	<b>2,311</b>	<b>494</b>	<b>826</b>	<b>1,730</b>	<b>26</b>
	Long Canyon	2017	895	600	1,495	5,981	-	2.63	569	1,247	1,546	1,845	2,145	448	948	250	-
	Conga	2017*	-	4,800	4,800	7,584	12.58	17.47	382	275	1,304	1,683	2,063	425	925	633	20
NA Gold	Merian	2015	-	738	738	1,844	3.56	4.99	207	148	1,155	1,247	1,339	563	1,063	400	9
	Akyem	2014	129	975	1,104	2,761	7.38	7.69	150	144	1,213	1,351	1,489	575	1,075	400	18
NA Gold			<b>1,024</b>	<b>7,113</b>	<b>8,137</b>	<b>4,835</b>	<b>23.52</b>	<b>32.78</b>	<b>346</b>	<b>248</b>	<b>1,238</b>	<b>1,480</b>	<b>1,722</b>	<b>497</b>	<b>997</b>	<b>1,683</b>	<b>14</b>
			<b>23,140</b>	<b>41,107</b>	<b>64,246</b>	<b>7,926</b>	<b>160.80</b>	<b>228.45</b>	<b>400</b>	<b>281</b>	<b>1,075</b>	<b>1,471</b>	<b>1,867</b>	<b>291</b>	<b>678</b>	<b>8,105</b>	<b>20</b>

Note: \*In case of acquisition of a company with multiple mines/projects, cost is allocated based on attributable ounce of resources. #All-in cash cost is estimated based on average "corporate" sustaining capital spend and may be lower/higher depending on specifics of each project. Source: Company data and Deutsche Bank estimates

Based on our analysis, the average capital intensity per gold ounce (the combination of acquisition costs plus total capital divided by annual expected gold production) for NA Gold projects works out to be ~\$7,900. For new projects based on a NA Gold AISC of \$678/oz, this would yield a gross cash margin of \$822/oz, implying about 9-10 years to recoup invested capital (undiscounted and on a pre-tax basis) at a steady-state gold price of \$1,500/oz. We estimate that a dollar invested in a new gold mine would generate a ROCE of only 6.74% (@ 35% tax rate), basically in line with NA Gold's WACC of 6.3% and not factoring further cost inflation or time delays. As such, given the recent drop in gold, producers are already re-thinking the economics of growth projects. For example, Barrick has already announced that it has no plans to build large new greenfield mines after Pascua-Lama and has also put on hold the Cerro Casale copper-gold project in Chile (~\$4.5 billion project for 750-825k oz/y of attributable gold).

*We estimate new gold mine project ROCEs of only 6.7%, basically in line with NA Gold's WACC of 6.3%*

Figure 102: NA Gold producers WACC estimates

	WACC	Weight		Kd	Kd (after-tax)	Ke	Beta	Market premium	Company premium	Sovereign Spread	US risk	LT growth
		Debt	Equity									
Barrick	6.0%	20%	80%	4.6%	3.2%	6.8%	0.70	5.0%	3.5%	0.8%	2.5%	0.50%
Goldcorp	5.6%	20%	80%	3.2%	2.3%	6.5%	0.74	5.0%	3.7%	0.3%	2.5%	0.50%
Kinross	7.2%	20%	80%	5.0%	3.3%	8.2%	0.83	5.0%	4.2%	1.5%	2.5%	0.50%
Newmont	6.2%	20%	80%	5.2%	3.5%	6.9%	0.78	5.0%	3.9%	0.5%	2.5%	0.50%
NA Gold	6.3%	20%	80%	4.5%	3.1%	7.1%	0.76	5.0%	3.8%	0.8%	2.5%	0.50%

Source: Deutsche Bank



## NA Gold project reviews

### Barrick

- **Pascua-Lama.** Barrick's gold project in Chile-Argentina, Pascua-Lama capital costs are now implied at ~70% higher than prior \$4.7-5.0 billion guidance, or a price tag closer to \$8.0-8.5 billion. Inflationary pressures such as Argentine inflation (unofficially +20% per annum for labor) have impacted cash costs, which are now expected to be \$0 to negative \$150/oz (vs -\$250/oz prior). While we acquiesce that the project scope has changed over the past three years (from expected 750-800k oz of annual gold to 800-850k oz), the project will now require ~3x more capital or an additional \$5 billion versus what was last guided in 2009, lowering returns – we now estimate an ~16% return on capital vs ~29% prior at a \$1,500/oz gold scenario. In April, 2013, Barrick suspended construction work on the Chilean side of its Pascua-Lama project following a preliminary injunction (pending a full hearing) issued by a Chilean court on indigenous communities' environmental objections. Construction activities in Argentina, where majority of critical infrastructure is located (including the process plant and tailings storage facility), remain unaffected. Of remaining ~\$3.5 billion capex, Barrick had earmarked \$2.6 billion for 2013. At this stage it is too early to tell if 4Q14E start-up is impacted as courts may overturn the injunction. On May 24<sup>th</sup> Barrick was fined \$16 million by Chilean environmental authorities for not meeting obligations related to the project construction. On May 30<sup>th</sup> Chilean regulators suggested it may take Barrick 1-2 years to build water discharge requirements sufficient to comply with regulations. Barrick has not yet publicly responded.
- **Pueblo Viejo.** Dominican Republic-based, Pueblo Viejo is jointly owned by Barrick and Goldcorp (60%/ 40%) and achieved commercial production in 1Q13. In the months leading to the project start-up, Dominican Republic politicians launched an aggressive campaign to "re-negotiate" the terms on Pueblo Viejo and even went so far as to suspend gold shipments out of the country on the basis of a paperwork glitch. On May 9<sup>th</sup>, Pueblo Viejo agreed on a revamped contract boosting the government's cut of profits by ~\$1.5 billion over its 30-year life (NPV at 5% discount rate and gold price of \$1,600/oz), in addition to the \$10 billion over the 25+ year life of mine projected in February 2013. The government is slated to receive 50% of the cash flow from the project from 2013-2016 resulting in tax revenues of ~\$2.2 billion over the 3-years, assuming a \$1,600/oz gold price. The changes imply investors will have to wait an extra 10 years to fully recover their capital, extended to 2026 from 2016.
- **Equinox Minerals.** In April 2011 Barrick acquired Equinox in all cash offer of C\$8.15/share or ~C\$7.3 billion, a valuation of ~12x 2010 EBITDA of \$605 million. Equinox's only producing asset at the time was the Lumwana copper mine in Zambia, expected to produce 196 million lbs of copper to Barrick's account for the rest of 2011. De-bottlenecking work at Lumwana was to have been completed by 2012 resulting in copper production of 355 million lbs, however, current run rates indicate 2013 run rates closer to 230 million lbs at a high C1 cash cost of ~\$3/lb. The Equinox purchase also included the Jabal Sayid copper project (Saudi Arabia) slated to start production in 3Q12 and ramp up to full capacity of 132 million lbs annually by 2Q13E. On higher-than-expected costs, Lumwana's EBITDA contribution has been negligible and the hoped for Chimiwungo pit expansion drilling failed to deliver meaningful results at current copper prices. After spending \$400 million on capex, Jabal Sayid's start-up was pushed to 2014 due to non-compliance with local explosives handling regulations.

### Goldcorp

- **Cerro Negro.** We estimate the now \$1.4 billion Cerro Negro project (Argentina) when grossed up for the \$3.6 billion land purchase (Andean Resources) works out to be ~\$9,400/oz of capex intensity per annual ounce of gold output. At this cost, we estimate Cerro Negro will generate an ROCE of ~5% lower than our estimated 5.6% WACC for Goldcorp, but before adjusting for potential mine life extensions and/or potentially lower operating expenditures (i.e., opex inflation pressure would ease under a Peso devaluation scenario). ~\$450 million of capex remains outstanding, indicating capital costs should be in line with latest estimates.





## Kinross

- **Tasiast.** In 2010, Kinross engaged in a transformational deal paying \$7.7 billion in stock (in two tranches) for Red Back Mining (RB) to obtain the Tasiast gold project in Mauritania (sub-Saharan Africa), including ~400,000 oz of existing production at Tasiast and Ghana (Chirano). Initially, Kinross paid a ~15% premium for a 9.4% stake in RB (total ~\$600 million) in May 2010 and shortly later purchased the remaining 90.6% in RB for \$7.1 billion (a ~22% premium to the level paid in May, or +44% of price prior to May's initial stake bought) through the issuance of 425 million shares (+61%). At the time this was viewed as a high premium considering that an additional ~\$2.7 billion had been estimated to expand Tasiast to targeted ~1.5 million oz level by 2014. At December 2011, Kinross management maintained their initial 2H14 time-line at Tasiast, but raised capex estimates to a \$3.2-3.7 billion range (~+30%). January 17, 2012's announcement threw the original project time-line and scope into question, with management stating it would require more time to fully analyze. In August 2012, management stated it would explore pre-feasibility at Tasiast for a 30k tpd mill, which would entail lower capex than the base case \$3.5 billion 60ktpd option (not fully ruled out) with results expected by 1Q13. In April 2013, Kinross released Tasiast's long-awaited pre-feasibility study (PFS) which implies a NPV of \$1.1 billion or ~\$1/ Kinross share at \$1,500/oz gold assumptions. According to the PFS, a smaller Tasiast mill would generate an ~11% IRR and an NPV of \$1.1 billion, assuming a 5% WACC. We estimate a +/- \$100/oz change in gold price could impact project's NPV by ~\$500 million or \$0.50/ Kinross share. During 2013 Kinross will proceed with ~\$450 million of shared infrastructure spending before getting to a go/no-go decision on building a new mill by 1Q14 (i.e., +12 months). By our maths, Tasiast could ultimately cost ~\$11bn, assuming \$2.7bn of remaining capex, \$1.6bn spending-to-date and assigning a rough value to land/original mill-purchase of ~\$6.5bn (cash + equity issuance) and would generate ~\$600m/year of operating cash flow ~3 years from today if built and assuming \$1,500/oz gold. Thus far Kinross has written off \$6.5 billion (\$5.2 billion of GW + \$1.3 billion of PPE) of RB's original investment.
- **Fruta del Norte.** In December 2011, Kinross released initial terms of an agreement in principle with the Ecuadorian government on a potential exploitation contract for Fruta del Norte (FDN) greenfield gold mine. At the time we found FDN's project benefits skewed excessively toward the benefit of the Ecuadorian Government (52% of stated project economics as per Ecuadorian Constitution) and mostly capping benefits of a higher gold price above \$1,650/oz for Kinross. Capping gold price upside is a questionable strategy given world-wide mining cost inflation. This project has been placed under further review while the company continues to discuss the possibilities with the Government and the Government has suggested amendments to its proposed Mining Law.

## Newmont

- **Boddington.** Newmont's newest mine, located in Western Australia was originally slated to produce 1 million oz at a \$2.85 billion capital investment (we are unclear what original land purchase cost). Start-up commenced in 2Q09 and reached full production by mid-2010. Annual production guidance for Boddington began to wane on various operational issues (rock hardness, crushing capacity) and guidance was initially lowered to 825-850k oz, while cash costs began to increase on lower-than-expected ore grades and the appreciation of the Australian dollar. For 2013, Boddington guidance is 700-750k oz of gold production, 25-30% lower than original specs, while C1 cash costs are expected to come in at \$850-950/oz compared to Newmont's company-wide average for the year of \$675-750/oz.
- **Conga.** The 630,000 oz Conga gold project, originally planned as a 2011 start-up, was slated to boost Newmont's production profile by 325,000oz (~7%) on an attributable basis, but completion remains open-ended. Conga's capex is estimated at ~\$4.9 billion (at 100% cost, Newmont's spending/production share is proportionate to its 51.35% interest). Local farmers concerned that the project would impact irrigation water supply boycotted the project which has now become mired in regional Peruvian politics. Following deaths during clashes between protesters and the police, the Peruvian Government commissioned an independent





environmental review in November 2011 but full construction was suspended in the spring of 2012 due to intense local opposition. Approximately \$1.5 billion (100% basis) has been spent to date and ~\$200 million is pending to finish building water reservoirs at which point Conga could be put and care-and-maintenance awaiting a better re-start opportunity. Suggestions made by 3rd-parties to address water impacts could raise the price tag further. Newmont has highlighted that further development of Conga will hinge on generating acceptable returns and obtaining local and Government support. Assuming \$1,500/oz gold and cash cost of \$400/oz, it translates into \$440 million of lost EBITDA or ~\$2 billion in market value (assuming 5x EV/EBITDA).

- **Hope Bay.** In 2010 Newmont highlighted growth projects including Hope Bay, a large undeveloped project in the Nunavut Territory of Canada. Newmont had gained full ownership of the project post the acquisition of Miramar Mining Corporation in March 2008. Its greenstone belt spanned more than 621 miles in the Canadian Arctic, where substantial gold mineralization had been found. In 2011, Newmont again highlighted Hope Bay as one of its strategic priorities in North America, but ultimately opted to take a \$1.6 billion write-down on the asset in 2012 after announcing the project was placed on care and maintenance following further evaluation of its economic feasibility compared to other opportunities in its pipeline. It has been since sold in exchange for shares in a junior miner.
- **Fronteer.** In April 2011, Newmont acquired all of the outstanding common shares of Fronteer Gold (Fronteer) for \$2.3 billion in cash, gaining the exploration stage Long Canyon project, which is located approximately 100 miles from Newmont's existing infrastructure in Nevada. During 2012, the project entered into the selection and confirmation stage, with Newmont submitting a Plan-of-Operations to the BLM in support of its EIS for operations. Progress on the exploration program is ongoing, with the intention to bring the project into production by 2017 (6 years post-acquisition) at an as yet undisclosed capex cost.



# Poor funding and spending choices

## Over-reliance on equity as a funding choice

NA Gold's historical over-reliance on equity issuance (direct or in-direct) as a primary source of funding has resulted in the NA Gold incurring significant shareholder dilution over the past decade. We calculate a weighted share count increase for our NA Gold coverage between 2000 and 2012 of over 4-fold from 811 million shares to a current total of 3.5 billion. Kinross has seen its share-count rise 11-fold between 2000 and 2012! This massive level of share issuance, in part, helps answer the primary question shareholders of why NA Gold stocks have underperformed in a rising gold environment. During a rising gold tide shares have been issued to fund acquisitions, large projects or un-hedge production, while in a falling gold environment (when operating costs are fixed in the short term) the markets pre-discount the possibility of further share issuance to fund pending capex and shore-up balance sheets.

*Over-reliance on equity issuance has resulted in significant shareholder dilution*

Figure 103: NA Gold average shares outstanding over time (2000-2012)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Barrick	396	536	542	534	532	537	856	876	884	912	998	1,001	1,001
Goldcorp	147	165	182	183	190	340	703	709	715	734	747	815	822
Kinross	100	111	136	338	347	345	363	566	629	697	1,138	1,136	1,139
Newmont	168	196	352	390	408	415	452	453	456	487	500	500	499
<b>Total NA Gold</b>	<b>811</b>	<b>1,009</b>	<b>1,213</b>	<b>1,445</b>	<b>1,476</b>	<b>1,637</b>	<b>2,373</b>	<b>2,604</b>	<b>2,684</b>	<b>2,830</b>	<b>3,382</b>	<b>3,452</b>	<b>3,461</b>

Source: Company data and Deutsche Bank

## Pro-cyclical deals, lack of risk-sharing inflates acquisition values

Like many other industries we have noted a tendency of NA Golds to "do deals" at the top of the market, however, this can be especially costly when acquiring early-stage projects (i.e., land purchases) as this can have an out-size effect on the ultimate project returns (see Measurement Bias section). We believe an acquirers' willingness to overpay goes up when an acquisition is based on equity currency (i.e., other people's money), so in a sense the use of equity enhances the pro-cyclicality of acquisition target valuations. Put another way, if companies could only acquire assets on the basis of their internal cash flows and/or straight debt, we believe there would be much lower purchase prices being paid for pre-production assets. However, the historical ease of equity issuance, combined with competition for projects when the acquirers are all simultaneously cash flowing heavily, prices targets at high cycle valuations. Once deals are done, the industry tends to compete with each other for resources leading to cost-overruns as industry talent and capital equipment supplies are strained.

*A tendency of NA Golds to "do deals" at the top of the market*

Despite the fact that most companies are not in classical "direct" competition, given their inability to influence the gold price, we have noted little evidence of co-operation from a risk-sharing perspective (Barrick-Goldcorp's, Pueblo Viejo is a notable exception, however, origins of 60/40 JV were not driven by risk-sharing at the outset). We believe the industry should re-focus on exploring strategic co-operation, project or asset risk-sharing and regional consolidation as opposed to the "go it alone" mantra which seems to dominate. Co-operation on mine development would mitigate risk and provide a counter-point to rising resource nationalism.

*Little evidence of co-operation from a risk-sharing perspective*



## Growth capex: what's not in process should be cancelled

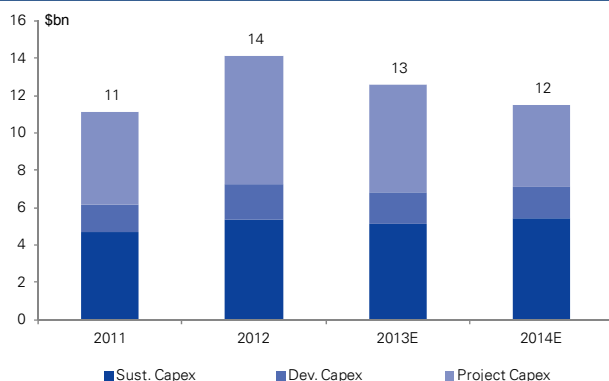
Each of the companies under our coverage has significant growth plans, which in the near term (i.e., next 12 months) are fairly fixed, but in medium term (i.e., +1-2 years out) may still be post-poned or outright cancelled. Given many growth projects have suffered significant capital cost overruns (i.e., Barrick's Pascua Lama, Goldcorp's Cerro Negro, Kinross' Tasiast, and Newmont's Conga) and production timelines continue to get pushed into the future further eroding economics, we believe any projects not already in process should likely be cancelled in the current environment.

*We believe any projects not already in process should likely be cancelled in the current environment*

The poor implementation of growth projects combined with consistent operational underperformance has resulted in de-rating of global gold names. Investor interest in growing gold output has lessened, particularly if the additional ounces are not highly profitable. Capital preservation is now highly desirable, so capital spending associated with growth is more closely scrutinized. Investors are now looking for cost control, operational predictability and strong free cash flow to drive improved profitability. With "blue sky" and exploration upside receiving little value and indications of the market discouraging growth aspirations or acquisition plans, it's clear that the true profitability of operating assets is the key driver of company valuations for the foreseeable future.

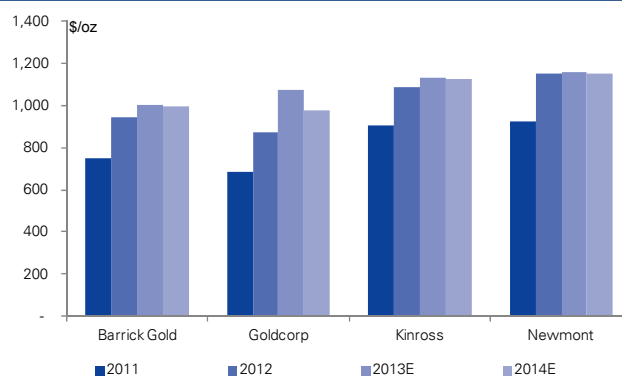
*Investors are no longer paying for "growth" but instead want predictability of cash flows and return of cash*

Figure 104: Capex spent across sector (2011-2014E)



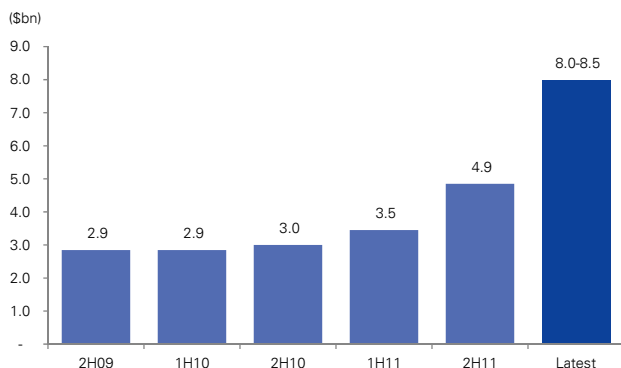
Source: Company data and Deutsche Bank estimates

Figure 105: AISC by company (2011-2014E)



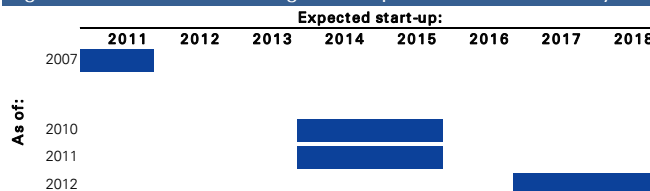
Source: Company data and Deutsche Bank estimates

Figure 106: Barrick's Pascua Lama's capex since 2009



Source: Company data and Deutsche Bank estimates

Figure 107: Newmont's Conga start-up continues to be delayed



Source: Company data and Deutsche Bank estimates



## NA Gold - Economic Value Added (EVA) analysis

Another way to understand the driver of NA Gold underperformance is by analyzing the Economic Value Added (EVA) of companies under our coverage. EVA is a measure of a firm's "economic" profit – the profit earned in excess of the required return of the company's investors (being both equity share holders and debt holders). Simply put, it is the residual wealth of a company calculated by deducting cost of capital from its operating profit (adjusted for taxes).

*EVA is a measure of a firm's "economic" profit*

Figure 108: NA Gold EVA for period 2008-2012

(\$m)	2008	2009	2010	2011	2012	2008-12
Barrick	(274)	(5,315)	1,995	2,473	(2,745)	<b>(3,867)</b>
Goldcorp	636	(573)	485	832	443	<b>1,824</b>
Kinross	(1,097)	15	(6)	(2,855)	(3,232)	<b>(7,175)</b>
Newmont	538	1,301	2,262	(9)	993	<b>5,085</b>
<b>NA Gold</b>	<b>(197)</b>	<b>(4,571)</b>	<b>4,736</b>	<b>441</b>	<b>(4,541)</b>	<b>(4,133)</b>

Source: Company data and Deutsche Bank

Our analysis shows that NA Gold producers have together generated a negative economic return of \$4.1 billion during the period 2008-2012. In fact, they were able to generate positive return only twice (2010 and 2011) in the past 5 years. On a percentage basis, NA gold producers on average generated a shortfall of 2.7% over their cost of capital employed. Our analysis varies sharply on company-by-company basis, and Newmont leads the sector, having generated an EVA of \$5.1 billion (6.5%), followed by Goldcorp with EVA of \$1.8 billion (1.8%). In comparison, Barrick and Kinross posted negative EVA's of \$3.9 billion (-4.2%) and \$7.2 billion (-14.9%) owing to huge write-downs/ impairment charges.

*NA Gold producers have together generated a negative economic return of \$4.1 billion during the period 2008-2012*

Figure 109: NA Gold EVA for period 2008-2012

(%)	2008	2009	2010	2011	2012	2008-12
Barrick	-1.5%	-27.5%	8.5%	6.8%	-7.6%	<b>-4.2%</b>
Goldcorp	4.3%	-3.7%	2.4%	4.0%	1.9%	<b>1.8%</b>
Kinross	-20.7%	0.3%	0.0%	-23.1%	-30.7%	<b>-14.9%</b>
Newmont	4.6%	9.2%	14.0%	-0.1%	4.6%	<b>6.5%</b>
<b>NA Gold</b>	<b>-3.3%</b>	<b>-5.5%</b>	<b>6.2%</b>	<b>-3.1%</b>	<b>-7.9%</b>	<b>-2.7%</b>

Source: Company data and Deutsche Bank

Although rising operating costs (a function of falling grades and increasing labor and consumable costs) and write-downs/ impairment charges (a function of ill-timed/overly optimistic acquisitions) were primarily responsible for NA Gold majors posting negative EVA in the past, one has to also consider the massive capex spent during the past few years. Capital expenditures on growth projects result in higher capital employed (the denominator for our EVA calculation) for a given year, but cash flows from these projects may begin to accrue after 3-5 years (the usual build time for any greenfield project). As a result, it is prudent to look at the projected EVA generated by companies over the next five years when most projects are expected to come online.

*Given heavy current capex spending it is prudent to look at the projected EVA generated by companies over the next five years*

In the following table we have calculated projected EVAs for NA Gold over the period of 2013-2017 for 2 different price scenarios. Unfortunately, based on DB forecasts and \$1,300 constant gold, the sector is not projected to earn a positive EVA going forward, implying a reliance on higher gold price to generate excess returns.



Figure 110: NA Gold EVA for period 2013-2017E

(\$m)	2013E	2014E	2015E	2016E	2017E	20013-17E
On DB gold price forecasts						
Barrick	840	646	429	528	490	<b>2,933</b>
Goldcorp	(573)	(447)	(360)	(339)	(323)	<b>(2,042)</b>
Kinross	(344)	(348)	(595)	(525)	(236)	<b>(2,049)</b>
Newmont	138	(47)	(376)	(133)	(5)	<b>(423)</b>
<b>NA Gold</b>	<b>61</b>	<b>(196)</b>	<b>(901)</b>	<b>(469)</b>	<b>(75)</b>	<b>(1,580)</b>
On \$1,300/oz gold						
Barrick	32	(438)	(281)	(290)	(423)	<b>(1,400)</b>
Goldcorp	(869)	(944)	(825)	(850)	(873)	<b>(4,362)</b>
Kinross	(584)	(690)	(843)	(842)	(648)	<b>(3,606)</b>
Newmont	(423)	(816)	(969)	(816)	(760)	<b>(3,784)</b>
<b>NA Gold</b>	<b>(1,844)</b>	<b>(2,888)</b>	<b>(2,918)</b>	<b>(2,799)</b>	<b>(2,704)</b>	<b>(13,152)</b>

Source: Deutsche Bank estimates

On DB gold price forecasts, we estimate that NA Gold producers can generate a negative EVA of \$1.6 billion (-0.9% shortfall on CE) or ~2% of current combined market capitalization. Barrick appears to be the only company which generates positive EVA consistently. Stress testing it for \$1,300/oz, shows how leveraged the companies are, with EVA declining to a negative ~\$13 billion (-3.1% shortfall on CE). On a relative basis, Kinross appears to be the most leveraged, followed by Goldcorp, Newmont and Barrick.

Figure 111: NA Gold EVA for period 2013-2017E

(\$m)	2013E	2014E	2015E	2016E	2017E	20013-17E
On DBE						
Barrick	2.1%	1.5%	0.9%	1.1%	1.0%	<b>1.3%</b>
Goldcorp	-2.3%	-1.7%	-1.3%	-1.2%	-1.2%	<b>-1.5%</b>
Kinross	-3.0%	-2.9%	-4.7%	-3.8%	-1.7%	<b>-3.2%</b>
Newmont	0.6%	-0.2%	-1.5%	-0.5%	0.0%	<b>-0.3%</b>
<b>NA Gold</b>	<b>-0.7%</b>	<b>-0.8%</b>	<b>-1.6%</b>	<b>-1.1%</b>	<b>-0.5%</b>	<b>-0.9%</b>
On \$1,300/oz gold						
Barrick	0.1%	-1.0%	-0.6%	-0.6%	-0.9%	<b>-0.6%</b>
Goldcorp	-3.5%	-3.6%	-3.0%	-3.1%	-3.2%	<b>-3.3%</b>
Kinross	-5.2%	-5.8%	-6.7%	-6.1%	-4.6%	<b>-5.7%</b>
Newmont	-1.8%	-3.3%	-3.8%	-3.1%	-2.8%	<b>-3.0%</b>
<b>NA Gold</b>	<b>-2.6%</b>	<b>-3.4%</b>	<b>-3.5%</b>	<b>-3.2%</b>	<b>-2.9%</b>	<b>-3.1%</b>

Source: Deutsche Bank estimates

Note: For calculation of EVA we have used reported taxes instead of actual cash tax paid (ie ignoring any change in deferred tax liability).



## NA Gold - Free Cash Flow and Return on Capital analysis

NA Gold producer Free Cash Flows (FCF = EBITDA – taxes – working capital – capex) increased to a peak of \$5 billion in 2010 from nil in 2008. On expectations that FCF would continue on higher gold prices, NA Gold producers embarked on a series of acquisitions (not included in our FCF calculations) in 2010-11 and green lit a number of sizeable growth projects. However, with rising operating costs and capex (sustaining and growth), FCF generation began to decline in 2011, breaking even in 2012 and on our estimates is anticipated to be a negative \$2 billion in 2013. The picture is anticipated to improve in 2014 (basically break-even), and only surpass the \$5 billion level achieved in 2010 by 2017, when additional production is delivered and growth capex falls sharply.

*FCF generation began to decline in 2011, broke even in 2012 and is anticipated to be negative in 2013*

On average, NA Gold producers had an ROCE of 3.2% from 2007 through 2012, with Goldcorp outperforming the group during the time period with an ROCE of 7.1% and Kinross underperforming with an ROCE of -5.4% (negatively impacted by the asset write-down of \$2.9 billion in 2011 and an additional one of \$3.2 billion in 2012). Going forward, we estimate NA Gold producers will have on average an ROCE of 6.3% from 2013 through 2017, with Barrick leading the group with an ROCE of 7.7%, while Kinross is still expected to underperform the group with an ROCE of 3.9%. Newmont is expected to deliver an average ROCE of 6.0% between 2013 and 2017, largely in line with its historical average of 5.9% (between 2007 and 2012), whereas Goldcorp is expected to have an average ROCE of 5.4% (below its historical average).

*NA Gold producers had an ROCE of 3.2% from 2007 through 2012*

Figure 112: NA Gold ROCE evolution (%)

	2007	2008	2009	2010	2011	2012	2013E	2014E	2015E	2016E	2017E	2007-2012	2013E-2017E
Barrick	6.7%	4.4%	-22.7%	16.5%	16.5%	-1.6%	8.8%	7.9%	7.2%	7.4%	7.3%	3.3%	7.7%
Goldcorp	3.5%	10.3%	1.9%	9.2%	9.3%	8.2%	4.7%	5.7%	5.7%	5.6%	5.5%	7.1%	5.4%
Kinross	6.7%	-15.2%	5.8%	8.7%	-16.5%	-21.7%	4.2%	4.2%	2.5%	3.4%	5.5%	-5.4%	3.9%
Newmont	-20.8%	9.7%	12.3%	19.2%	3.5%	11.7%	7.1%	6.1%	4.6%	5.8%	6.4%	5.9%	6.0%
<b>NA Gold</b>	<b>0.2%</b>	<b>5.2%</b>	<b>-7.4%</b>	<b>13.7%</b>	<b>6.6%</b>	<b>0.7%</b>	<b>6.8%</b>	<b>6.5%</b>	<b>5.7%</b>	<b>6.1%</b>	<b>6.5%</b>	<b>3.2%</b>	<b>6.3%</b>

Source: Company data and Deutsche Bank estimates

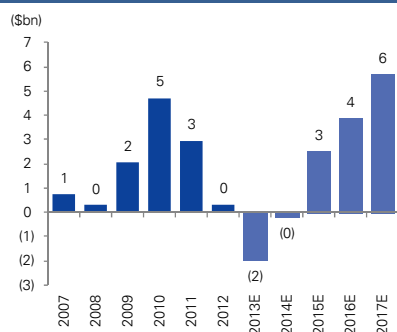
ROCEs for the group peaked at 14% in 2010, after a rather volatile but unimpressive showing between 2007 and 2009 (between -7% and 5%), and dropped to 7% in 2011 (impacted by lower operating results and the sharp increase in net debt) and to 1% in 2012 (impacted by goodwill and asset write-downs). Going forward, we estimate ROCEs of 6-7% for the group on DB's gold price deck (~\$1,500/oz), well below the typical cost of capital for most mining companies.

*We estimate ROCEs of 6-7% for the group on DB's gold price deck (~\$1,500/oz)*

While the expected FCF generation improvement is encouraging (as growth capex phases out), the picture is more somber when taking into consideration anticipated interest expense payments, which result in a shortfall of ~\$5 billion over the next 5-years, if aim to pay ~\$10 billion dividend remain in place.

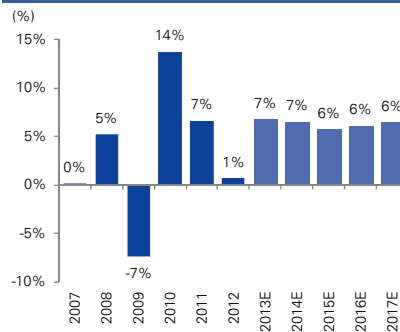


Figure 113: NA Gold FCFs



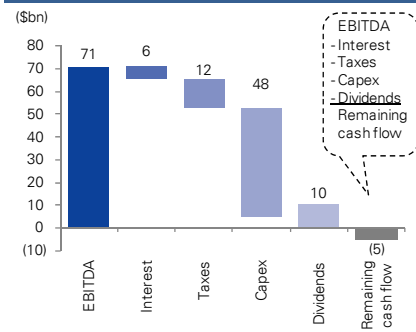
Source: Company data and Deutsche Bank estimates

Figure 114: NA Gold ROCEs



Source: Company data and Deutsche Bank estimates

Figure 115: 5 year sources/uses of cash



Note: Cumulative projected EBITDA, interest, taxes, capex and dividends for next 5-years (2013E-2017E); Source: Company data and Deutsche Bank estimates

## Book Value write-downs, further anticipated write-downs

Among our NA Gold coverage, 4Q12 results were impacted by a series of asset and goodwill (GW) write-downs (WD) amounting to ~\$7 billion, bringing the total tally of write-downs to ~\$12 billion over the past two years. This compares to ~\$28 billion total in acquisitions consummated by four companies within our coverage since the beginning of 2010. Hence, +40% of total acquisition value has been written down based on more up to date expectations by companies. Total write-downs of ~\$12 billion compares to the decline in BV evidenced post announcements, which represent ~22% of the BV's before WDs and ~30% of current market caps of the group.

+40% of total acquisition value has been written down on \$28 billion of deals done over the past 2 years

Figure 116: NA Gold goodwill and asset write-downs

(\$bn)	Write-downs	BV before*	BV after*	Difference	WD as % of BV before	Mkt Cap	WD as % of Mkt Cap
Barrick	4.2	25.2	21.8	(3.3)	17%	18.6	23%
Kinross	6.1	15.1	9.9	(5.2)	40%	6.0	102%
Newmont	1.6	13.9	12.9	(1.0)	12%	15.1	11%
<b>Total</b>	<b>12</b>	<b>54</b>	<b>45</b>	<b>(10)</b>	<b>22%</b>	<b>40</b>	<b>30%</b>

\*Note: BV before for Kinross and Newmont based on 3Q11 (all other based on 3Q12), while BV after for Newmont based on 4Q11 (all other based on 4Q12); Source: Company data and Deutsche Bank estimates

## NA Gold reserve growth has been partly supported by a higher gold price

Working with finite life assets, NA Gold producers consistently increased reserves and resources from 2005 through 2011, via exploration success and acquisitions. A rising gold price assumption has also contributed to the increase in reserves and resources. As of December 31, 2012, gold Proven & Probable (P&P) reserves for the group were 366 million oz (unchanged from 2011) nearly 2x the 2005 level. Within the same time frame, the gold price assumption used to calculate reserves has more than tripled from \$400/oz in 2005 to ~\$1,400/oz in 2012, with price assumptions varying by producers in 2012, with Barrick's at \$1,500/oz, Newmont's at \$1,400/oz, Goldcorp's at \$1,350/oz and Kinross at \$1,200/oz. Measured & Indicated (M&I) and Inferred resources have nearly tripled in size since 2005, with gold price assumptions used averaging ~\$1,575/oz in 2012, from ~\$450/oz in 2005.

With finite asset lives, NA Gold producers consistently seek to increase reserves

In a declining gold price environment, we believe the NA Gold could face some write-downs of its Reserve and Resource base, a function of higher cut-off grade being used than in previous years. Again, this is dependent on what price has been employed to determine a resource. For example, Barrick calculates its Proven & Probable reserves based on a \$1,500/oz cut-off grade and its Resources on a \$1,650/oz long-term gold prices. If gold prices are below \$1,400/oz by year-end 2013, auditors may recommend

In a declining gold price environment, we believe the NA Gold could face some write-downs of its Reserve and Resource base



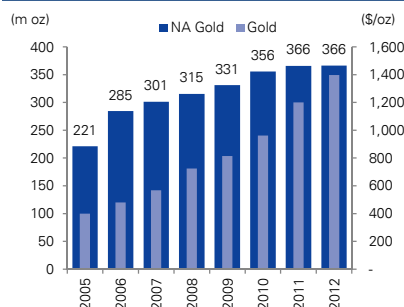


taking write-downs on the carrying value of properties or projects to maintain conservatism. Barrick's management has stated a change in \$300/oz in the gold price assumption used to calculate reserves would result in a decline of less than 10% in its total reserve base.

Another potential impact of low gold price could be further write-downs of Goodwill or possibly project carrying value impairments based on either on lower gold prices reducing a resource, project economics or possibly higher applied discount rates. Current low interest rates (which factor into discount rates) have been a support for land values. For example, most companies discount expected gold cash flows at low rates of 5.0%, regardless of jurisdiction so represent a source of potential write-downs if interest rates and ultimately funding costs for the sector start to rise.

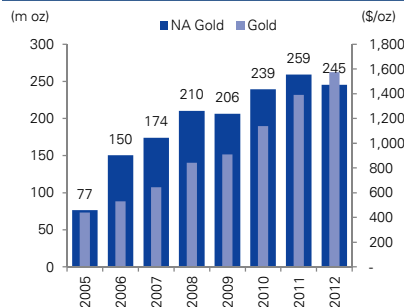
*Further write-downs of Goodwill or possibly project carrying value impairments are possible*

**Figure 117: NA Gold reserves (m oz)**



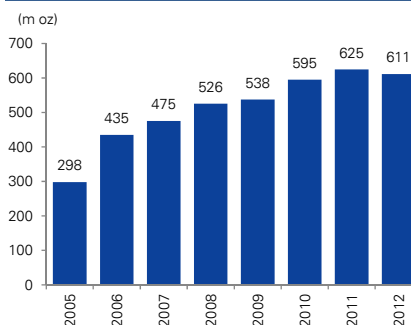
Source: Company data and Deutsche Bank

**Figure 118: NA Gold resource (m oz)**



Note: figures only include M&I and Inferred resources; Source: Company data and Deutsche Bank

**Figure 119: NA Gold total (m oz)**



Note: figures include P&P reserves, as well as M&I and Inferred resources; Source: Company data and Deutsche Bank



# Compensation mis-alignment

## Pay is high and not driven sufficiently by share price performance

Our analysis indicates NA Gold management teams (as a group) have not outperformed the gold price, have generated low ROCEs and negative EVA over the past five years. However, NA Gold managements' pay rose by 47% (including "one-off" exit/signing bonuses) in 2012 (4% excluding one-offs) and 3% in 2011 while NA Gold share prices fell 20% in 2012 and 15% in 2011. To be fair there have been 3 Chief Executive Officer departures and others within our coverage (Barrick, Kinross and Newmont), however, absolute pay continues to be high by most standards and even in the case of forced departures, managements are typically granted full exit packages.

*Executive pay seems unaffected by key performance metrics*

Reviewing the data for 2012 provides some insights into incentive alignment:

- Barrick's executive management was paid \$57 million (cash + stock), +148% higher than 2011 and compares to 23% drop in share price. Even removing exit package (Aaron Regent ~\$11 million) and signing bonuses (Co-chairman John Thornton ~\$12 million and new CFO, Ammar Al-Joundi ~\$2 million), combined remuneration stood at \$32 million (+39% YoY).
- Kinross' executives received \$39 million, 54% higher YoY and compares to 15% drop in share price. This despite operating a \$5 billion market cap company, one quarter the size of Barrick. However, excluding exit packages for Tye Burt (former CEO) and Paul Barry (CFO), total compensation was down 17% YoY to \$21 million.
- Newmont management pay grew to \$30 million (+31% YoY) vs -23% stock performance.
- Bucking the trend was Goldcorp, where executive compensation fell 26% YoY, which was greater than its 17% decline in stock price. Also, Goldcorp had the highest ratio of stock to cash at 64% of total compensation.

*Barrick management was paid \$57 million +148% YoY including "one-offs", despite a lower stock price*

*One positive outlier was Goldcorp's management*

Figure 120: NA Gold management compensation details

Year	Company	Compensation			Change	Share performance
		Cash	Stock	Total		
2012	Barrick	35.33	21.49	56.81	148%	-23%
	Goldcorp	7.91	13.89	21.80	-26%	-17%
	Kinross	27.28	12.02	39.30	54%	-15%
	Newmont	15.11	15.14	30.25	31%	-23%
	<b>NA Gold</b>	<b>85.62</b>	<b>62.54</b>	<b>148.16</b>	<b>47%</b>	<b>-20%</b>
2011	Barrick	10.78	12.10	22.88	-1%	-15%
	Goldcorp	8.55	20.76	29.31	18%	-4%
	Kinross	8.75	16.75	25.51	17%	-40%
	Newmont	9.68	13.46	23.14	-17%	-2%
	<b>NA Gold</b>	<b>37.76</b>	<b>63.07</b>	<b>100.83</b>	<b>3%</b>	<b>-15%</b>
2010	Barrick	10.20	12.96	23.16		35%
	Goldcorp	8.40	16.41	24.81		17%
	Kinross	11.06	10.68	21.73		3%
	Newmont	9.29	18.47	27.75		30%
	<b>NA Gold</b>	<b>38.95</b>	<b>58.51</b>	<b>97.46</b>		<b>21%</b>

Source: Company filings and Deutsche Bank



## Pay should reflect financial metric and gold outperformance

While arguably management performance must be judged on many metrics (many of which are non-financial) such as maintaining a safe work environment, growing production, keeping host governments and multiple-stakeholders satisfied, we believe in addition to basic measures like EVA and generating a ROCE in excess of their WACC, out performing the gold price (through capital appreciation + dividends) is a key metric which should be considered and does not appear to be a factor for NA Gold executive pay. Put another way, executive pay appears to have been buoyed by a rising gold price over the past few years. However, we would question how much pay is driven by increases in EBITDA which are basically commodity-price driven, compared to key areas where management has control: operating cost containment, delivering projects on time and on-budget, making non-dilutive acquisitions?

A recent example of pay out of touch with investor sentiment includes:

- On June 5, 2012 Barrick hired John Thornton, a former Goldman Sachs Group Inc. President and Chairman of the Brookings Institution Board of Trustees, as Co-Chairman and a likely successor to Mr. Peter Munk (Barrick's founder). However investors expressed anger over proposed signing bonus (~\$12 million out of \$17 million total compensation for 2012) being paid to Mr. Thornton. At its AGM, 85.2% votes were cast against the company's advisory resolution on Executive compensation, but the results of this vote are non-binding. Barrick has not commented if it will proceed with proposed pay package.

While a bit older examples, even when faced with dismissal, exit pay packages have been generous:

- Aaron Regent was dismissed as CEO of Barrick on June 6, 2012 but received an \$11 million dollar severance package.
- On August 1, 2012, Kinross announced that Tye Burt would be stepping down as CEO. Mr. Burt's severance package totaled a reported \$14.5 million.

## Industries can and do change pay practices – Boards should lead

Many industries go through periods of "right-sizing" their pay packages (think Dotcom bust, Pharmaceutical industry). Wall Street has been through its own period of right-sizing and has introduced measures to reduce not only the absolute level of compensation, but attempting a closer alignment with shareholder objectives, and in the event that executives leave behind a hidden problem "claw-backs" are now common industry practice. We believe NA Gold pay structures need to reflect an increasing element of "pay for performance" and ensure executives have higher equity exposures as part of their overall pay packages.

Ultimately, NA Gold's boards of directors need to be held more accountable as managements, being rational human beings, will operate within the constraints they are granted. We cannot fault anybody for attempting to make as much money as the market (or their company) will bear, however, we also believe that the role of boards needs to be put under closer scrutiny. We would argue that staffing boards with members that will have a more adversarial relationship with management could be a healthy process generating debate as opposed to the apparent trend of rubber-stamping management growth plans and pay packages without apparent consequence for the directors signing off on these plans.

*Management needs be judged on outperforming financial metrics*

*Investors expressed anger over proposed Barrick signing bonus with 85% opposed*

*Exit pay appears overly generous*

*We believe pay structures need to reflect "pay for performance"*

*Ultimately, NA Gold's boards need to be held more accountable for both pay and performance*



# Investment thesis, financial models and Rtn data

Figure 121: NA Gold investment thesis

## Barrick (ABX.N, HOLD, PT \$22.5)

<b>Outlook</b>	Barrick Gold Corporation (ABX) based in Toronto, Canada, is the world's largest gold mining company with operations in the Americas, Africa and Asia-Pacific. Barrick also has exposure to copper and silver, and holds interests in platinum and nickel development projects, as well as in oil and gas properties. Performance has been lackluster following Barrick's unexpected decision to acquire copper producer Equinox Minerals for \$7.4bn in April 2011, which was not well received by the market. Medium-term growth depends on the successful integration of Equinox, ramp-up of Pueblo Viejo and execution of Pascua-Lama project, which are estimated to increase attributable gold production from 7.4m oz in 2012 to ~8m oz in 2016. Annual copper production is expected to increase from 468m lbs in 2012 to ~600m lbs by 2015. Despite preliminary injunctions in Chile issued (pending a full hearing) halting construction activities on the Chilean side of \$8.5bn Pascua-Lama project, construction activities in Argentina (where majority of infrastructure is located) remains ongoing and unaffected. Thereafter, other projects could provide additional opportunities for growth. However, given the current challenging environment, Barrick has no plans to build any new mines. The company has also initiated a global portfolio optimization process wherein it plans to divest its non-core assets including Barrick Energy. Given our more cautious view on the gold sector, we have a Hold rating on Barrick given the company's larger debt position, high capex commitments over the next few years, more limited near-term cash flow generation and increasing probability of an equity issuance should funding gap emerge.
<b>Valuation</b>	Our 12-month PT for Barrick is based on 0.6x our NPV calculated under a DCF methodology (6.0% WACC with 6.8% Ke and 3.2% after-tax Kd, 0.5% terminal growth rate [based on our knowledge of the asset base and expectations of long-term growth]).
<b>Risks</b>	Given Barrick's ~90% revenue exposure to gold, the main upside/downside risk to our outlook is higher/lower-than-expected gold prices. With ~10% copper exposure, higher/lower-than-expected copper prices could pose additional risk. Upside/downside risks also include lower/higher-than-expected raw material and other operating cost pressures, currency fluctuations in key producing countries given the geographical diversity of assets, project delays and cost overruns, and geopolitical risks given production and exploration sites in Tanzania, Dominican Republic, Papua New Guinea, Zambia and Argentina. Exploration and drilling activities carried out by the company may not produce any new reserves, leading to shortened mine lives if current production is sustained, or adjusted production levels. Project execution risk in the form of delays could increase costs and not lead to any increases in new production. Legal challenges at Pascua-Lama could derail potential start-up and affect latest capex budget. Further M&A cannot be ruled out. Possible gold asset sales may reduce debt position at the expense of lower gold volumes in the future.

## Goldcorp (GG.N, HOLD, PT \$28)

<b>Outlook</b>	Goldcorp, headquartered in Vancouver, Canada, is amongst the largest gold mining companies in the world with operating mines and development projects throughout the Americas - including Canada, the US, Mexico, the Dominican Republic, Guatemala, Chile and Argentina. In addition to gold, the company produces silver, copper, zinc and lead. Recent performance has been driven by rising gold prices and successful execution in bringing online additional projects, as well as its successful \$3.6bn acquisition of Andean Resources, which adds to its long-term growth profile. The company's growth hinges on the successful execution of a number of projects (Pueblo Viejo, Cerro Negro, Eleonore and Cochenour), which in conjunction with other advanced-stage mines, should increase gold production by ~70% to 4.2m oz in 2017 from 2.4m oz in 2012. While Goldcorp has an industry leading growth profile in stable geographies and potential for dividend upside, we rate the company as Hold on valuation.
<b>Valuation</b>	Our 12-month PT for Goldcorp is based on 1.0x our NPV calculated under a DCF methodology (5.6% WACC with 6.5% Ke and 2.3% after-tax Kd, 0.5% terminal growth rate [based on our knowledge of the asset base and expectations of long-term growth]).
<b>Risks</b>	Given Goldcorp's ~85% revenue exposure to gold and silver, the main upside/downside risk to our outlook includes higher/lower-than-expected gold and silver prices. Upside/downside risks also include lower/higher-than-expected raw material and other operating costs, currency depreciation/appreciation in key producing countries given the geographic diversity of assets, project delays and cost overruns, and geopolitical risks given production and exploration sites in Central and South America. Litigation on El Morro could impede anticipated development of the project and affect estimates. Aggressive M&A activity in the gold sector could result in possible overpayment for assets. Exploration and drilling activities carried out by the company may or may not produce any new reserves, leading to extended/shortened mine lives if current production is sustained or adjusted production levels. Project execution risk at Cochenour, Eléonore, Pueblo Viejo, Cerro Negro, El Morro and Cerro Blanco, in the form of delays, could increase costs and not lead to anticipated increases in new production.

Source: Deutsche Bank



Figure 122: DB Gold companies' investment thesis

**Kinross Gold (KGC.N, HOLD, PT \$6)**

<b>Outlook</b>	Kinross Gold Corporation (KGC) based in Toronto, Canada operates mines and development projects in the US, Brazil, Chile, Ecuador, Russia, and following its ~\$8.7bn stock acquisition of Red Back Mining in 2010, West Africa. Recent performance has been driven by increased risk associated with its sharp diversification into West Africa (Ghana and Mauritania). Near-term growth is dependent on remediation of issues at Tasiast (Mauritania) and successful execution of Dvoinoye (Russia). Longer-term, Kinross' outlook hinges on projects such as Tasiast expansion, Lobo Marte (Chile) and Fruta del Norte (Ecuador), which have the potential to increase gold equivalent production to ~3.6m oz by 2018 (from 2.6m oz in 2012). Given our cautious view on the gold sector, we have a Hold rating on Kinross as expected upside from current levels do not compensate for higher-than-average execution/country risk nor for higher relative cost structure than other gold producers in our coverage universe.
<b>Valuation</b>	Our 12-month PT for Kinross is based on 1.0x our NPV calculated under a DCF methodology (7.2% WACC with 8.2% Ke and 3.3% after-tax Kd, 0.5% terminal growth rate [based on our knowledge of the asset base and expectations of long-term growth]).
<b>Risks</b>	Given Kinross' ~90% exposure to gold, main upside/downside risk to our outlook includes higher/lower-than-expected gold prices. Other upside/downside risks include higher raw material and other operating cost pressures, currency fluctuations in main producing countries given the geographical diversity of assets, project delays and cost overruns, and geopolitical risks given production and exploration sites particularly in Russia, Ecuador, Ghana and Mauritania. Exploration and drilling activities carried out by the company may not produce any new reserves, leading to shortened mine lives if current production is sustained, or adjusted production levels. Project execution risk at Tasiast, Lobo Marte, Fruta del Norte and Cerro Casale could increase costs and envisioned capital investments and not lead to any increases in new production.

**Newmont Mining (NEM.N, SELL, PT \$24)**

<b>Outlook</b>	Newmont Mining Corporation (NEM), based in Denver, Colorado, is the world's 2nd-largest gold mining company and produces copper as a by-product. Newmont has mining operations in the US, Canada, Mexico, Peru, Australia, New Zealand, Indonesia and Ghana. Recent performance has been driven by gold prices and gold-linked dividend. Medium-term performance should be driven by Akyem (Africa), resumption of Phase 6 mining at Batu Hijau (Indonesia), Ahafo mill expansion, Merian (Suriname) project and Long Canyon (Nevada) project, which should boost gold output from 5.0m oz in 2012 to ~5.6m oz in 2018. Newmont's Conga project (Peru) has potential to add 325k oz, but is facing opposition from the local community. Given our cautious view on the gold sector, we have a Sell rating based on the company's limited near-term growth opportunities and relatively higher cost structure than other gold producers in our coverage.
<b>Valuation</b>	Our 12-month PT for Newmont is based on 0.7x our NPV of calculated under a DCF methodology (6.2% WACC with 6.9% Ke and 3.5% after-tax Kd, 0.5% terminal growth rate [based on our knowledge of the asset base and expectations of long-term growth]).
<b>Risks</b>	Given Newmont's ~90% revenue exposure to gold, the main upside risk is higher-than expected gold prices. Higher-than-expected copper prices would increase the benefit from by-product credits, which would lead to lower-than-expected costs. Upside risks also include lower-than-expected raw material and other operating costs. Other risks include currency fluctuations in main producing countries given the geographical diversity of assets. An unfavorable resolution at its Conga project (Peru), which has been strongly opposed by the local community (forcing a temporary suspension) could in theory raise the possibility of M&A if organic growth targets cannot be met.

Source: Deutsche Bank



## Barrick

Figure 123: Barrick operational summary

Operational assumptions	2010A	2011A	2012A	2013E	2014E	2015E	2016E
<b>DB commodity prices</b>							
DB Gold (\$/oz)	1,226	1,570	1,671	1,533	1,500	1,450	1,488
DB Copper (\$/lb)	3.43	4.00	3.61	3.57	3.40	3.26	3.29
DB Silver (\$/oz)	20.19	35.22	31.27	26.71	26.79	26.36	26.02
<b>Volumes</b>							
<b>North America</b>							
<b>Gold (000 oz)</b>	<b>3,110</b>	<b>3,381</b>	<b>3,491</b>	<b>4,008</b>	<b>4,214</b>	<b>4,284</b>	<b>4,284</b>
<b>Gold (000 oz) - attributable</b>	<b>3,110</b>	<b>3,381</b>	<b>3,491</b>	<b>3,630</b>	<b>3,781</b>	<b>3,851</b>	<b>3,851</b>
Goldstrike	1,241	1,087	1,174	921	970	1,000	1,000
Round Mountain (50%)	178	179	186	172	180	160	120
Bald Mountain	58	92	161	148	180	180	180
Cortez	1,140	1,421	1,370	1,257	1,240	1,320	1,360
Golden Sunlight	-	61	98	94	80	80	80
Turquoise Ridge (75%)	124	135	144	155	160	160	160
Hemlo	243	228	206	197	200	180	180
Other	125	178	87	120	121	121	121
Pueblo Viejo (60%)	-	-	65	567	650	650	650
<b>South America</b>							
<b>Gold (000 oz)</b>	<b>2,120</b>	<b>1,873</b>	<b>1,631</b>	<b>1,323</b>	<b>1,638</b>	<b>2,036</b>	<b>2,330</b>
Pierina	191	153	110	95	100	80	80
Lagunas Norte	807	763	754	580	680	700	750
Veladero	1,121	957	767	648	600	650	750
Pascua-Lama	-	-	-	-	258	606	750
<b>Asia Pacific</b>							
<b>Gold (000 oz)</b>	<b>1,962</b>	<b>1,879</b>	<b>1,822</b>	<b>1,794</b>	<b>1,680</b>	<b>1,440</b>	<b>1,240</b>
Porgera (95%)	518	500	436	457	480	480	480
Plutonic	136	115	112	119	80	-	-
Yilgarn South	337	372	452	397	320	240	200
Kalgoorlie (50%)	394	398	327	314	320	320	320
Kanowna	250	225	227	233	240	160	-
Cowal	299	269	268	274	240	240	240
<b>Africa</b>							
<b>Gold (000 oz)</b>	<b>701</b>	<b>689</b>	<b>627</b>	<b>595</b>	<b>681</b>	<b>708</b>	<b>735</b>
<b>Gold (000 oz) - attributable</b>	<b>564</b>	<b>509</b>	<b>463</b>	<b>440</b>	<b>503</b>	<b>523</b>	<b>543</b>
Bulyanhulu	207	193	175	133	200	220	240
North Mara	172	127	143	183	185	185	185
Buzwagi	151	146	122	120	118	118	118
Tusker (Nyanzaga)	-	-	-	-	-	-	0
Copper (m lbs)	-	159	178	235	235	235	235
Lumwana	0	159	178	235	235	235	235
<b>Gold sales (000 oz)</b>	<b>7,754</b>	<b>7,550</b>	<b>7,381</b>	<b>7,605</b>	<b>8,213</b>	<b>8,468</b>	<b>8,589</b>
<b>Gold sales (000 oz) - attributable</b>	<b>7,754</b>	<b>7,550</b>	<b>7,292</b>	<b>7,136</b>	<b>7,602</b>	<b>7,850</b>	<b>7,964</b>
<b>Copper sales (m lbs)</b>	<b>391</b>	<b>443</b>	<b>473</b>	<b>512</b>	<b>542</b>	<b>632</b>	<b>643</b>
<b>Silver sales (000 oz)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4,531</b>	<b>21,239</b>	<b>36,500</b>	<b>41,750</b>
<b>Cash costs</b>							
North America gold (\$/oz)	487	428	498	503	520	533	552
South America gold (\$/oz)	245	357	462	551	531	443	478
Asia Pacific gold (\$/oz)	615	621	803	883	961	1,009	1,059
Africa gold (\$/oz)	632	694	947	945	1,026	1,108	1,197
<b>Operating cash cost (\$/oz)</b>	<b>448</b>	<b>460</b>	<b>584</b>	<b>629</b>	<b>652</b>	<b>640</b>	<b>660</b>
By-product credit (\$/oz)	117	118	75	104	135	167	176
<b>Net cash cost (\$/oz)</b>	<b>332</b>	<b>339</b>	<b>510</b>	<b>525</b>	<b>517</b>	<b>474</b>	<b>485</b>
<b>Net cash margin (\$/oz)</b>	<b>899</b>	<b>1,238</b>	<b>1,157</b>	<b>1,007</b>	<b>983</b>	<b>976</b>	<b>1,003</b>

DB anticipates gold prices to trade at ~\$1,500/oz in near term

New projects Pueblo Viejo and Pascua Lama to add ~1m oz by 2015

Attributable gold sales to reach ~8.0m oz by 2015, from 7.3m oz in 2012

Lower cost ounces from new projects to partially offset the impact of inflation and lower grades at older mines

Source: Company data and Deutsche Bank



Model updated: 10 May 2013

### Running the numbers

#### North America

#### Canada

#### Metals & Mining

### Barrick Gold

Reuters: ABX.N

Bloomberg: ABX US

### Hold

Price (31 May 13) USD 21.12

Target Price USD 22.50

52 Week range USD 17.59 - 42.86

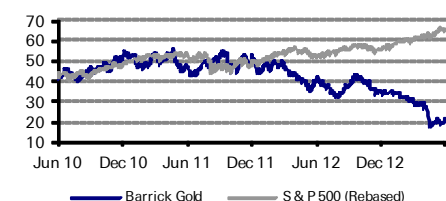
Market Cap (m) EURm 16,268

USDm 21,141

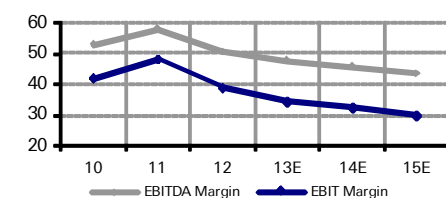
### Company Profile

Barrick Gold Corp (ABX), based in Toronto, Canada, is the world's largest gold company by production and reserves. Barrick produced 7.4m oz of gold in 2012 and controls 140m oz of gold reserves. Barrick has 4 regional business units: North America (47% of 2012 production), South America (22%), Australia Pacific (25%) and Africa (6%). Barrick is also a meaningful copper producer following its acquisition of Equinox Minerals in 2011. Barrick produced 468m lbs of copper in 2012. The company's main listing is the NYSE, trading under the symbol ABX.N.

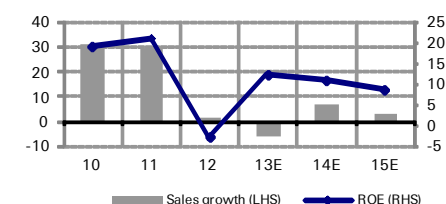
### Price Performance



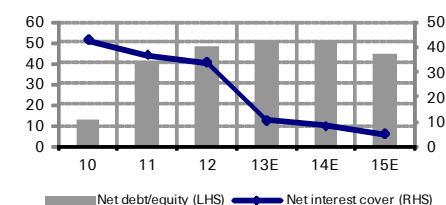
### Margin Trends



### Growth & Profitability



### Solvency



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Fiscal year end 31-Dec

### Financial Summary

	2010	2011	2012	2013E	2014E	2015E
DB EPS (USD)	3.28	4.48	-0.67	2.82	2.73	2.35
Reported EPS (USD)	3.28	4.48	-0.66	2.82	2.73	2.35
DPS (USD)	0.44	0.51	0.75	0.80	0.80	0.80
BVPS (USD)	19.11	23.35	21.82	24.05	26.17	27.89

### Valuation Metrics

Price/Sales (x)	4.0	3.4	2.7	1.5	1.4	1.4
P/E (DB) (x)	13.4	10.9	nm	7.5	7.7	9.0
P/E (Reported) (x)	13.4	10.9	nm	7.5	7.7	9.0
P/BV (x)	2.8	1.9	1.6	0.9	0.8	0.8
FCF yield (%)	2.4	1.9	3.0	nm	nm	12.1
Dividend yield (%)	1.0	1.0	1.9	3.8	3.8	3.8
EV/Sales	4.3	4.3	3.7	2.8	2.7	2.5
EV/EBITDA	8.2	7.4	7.4	5.8	5.9	5.9
EV/EBIT	10.3	8.9	9.6	8.0	8.3	8.5

### Income Statement (USDm)

Sales	11,011	14,312	14,547	13,693	14,646	15,131
EBITDA	5,806	8,303	7,358	6,507	6,702	6,555
EBIT	4,610	6,884	5,636	4,705	4,751	4,518
Pre-tax profit	4,638	6,855	-913	4,323	4,181	3,603
Net income	3,274	4,484	-665	2,828	2,729	2,350

### Cash Flow (USDm)

Cash flow from operations	4,302	5,862	7,556	5,044	5,320	5,521
Net Capex	-3,262	-4,925	-6,351	-5,778	-5,482	-2,964
Free cash flow	1,040	937	1,205	-734	-162	2,558
Equity raised/(bought back)	177	10	0	0	0	0
Dividends paid	-436	-509	-750	-801	-801	-801
Net inc/(dec) in borrowings	-107	-186	-166	-440	-570	-914
Other investing/financing cash flows	373	-8,152	-1,515	61	198	172
Net cash flow	1,047	-7,900	-1,226	-1,913	-1,334	1,015
Change in working capital	-117	-154	-38	-130	-127	47

### Balance Sheet (USDm)

Cash and cash equivalents	3,968	2,745	2,093	1,535	201	1,216
Property, plant & equipment	17,751	28,979	28,717	33,135	36,666	37,593
Goodwill	5,287	9,626	8,837	8,835	8,835	8,835
Other assets	6,316	7,534	7,635	7,718	8,129	7,976
Total assets	33,322	48,884	47,282	51,223	53,831	55,620
Debt	6,692	13,369	13,943	15,298	15,298	15,298
Other liabilities	5,896	9,961	8,831	9,010	9,294	9,189
Total liabilities	12,588	23,330	22,774	24,308	24,592	24,487
Total shareholders' equity	20,734	25,554	24,508	26,915	29,239	31,133
Net debt	2,724	10,624	11,850	13,763	15,097	14,082

### Key Company Metrics

Sales growth (%)	31.0	30.0	1.6	-5.9	7.0	3.3
DB EPS growth (%)	na	36.5	na	na	-3.5	-13.9
Payout ratio (%)	13.4	11.4	nm	28.3	29.3	34.1
EBITDA Margin (%)	52.7	58.0	50.6	47.5	45.8	43.3
EBIT Margin (%)	41.9	48.1	38.7	34.4	32.4	29.9
ROE (%)	19.2	21.1	-2.9	12.3	10.9	8.7
Net debt/equity (%)	13.1	41.6	48.4	51.1	51.6	45.2
Net interest cover (x)	43.1	37.0	34.0	10.7	8.3	4.9

### DuPont Analysis

EBIT margin (%)	41.9	48.1	38.7	34.4	32.4	29.9
x Asset turnover (x)	0.4	0.3	0.3	0.3	0.3	0.3
x Financial cost ratio (x)	1.0	1.0	1.0	0.9	0.9	0.8
x Tax and other effects (x)	0.7	0.7	-0.1	0.7	0.7	0.7
= ROA (post tax) (%)	10.8	10.9	-1.4	5.7	5.2	4.3
x Financial leverage (x)	1.8	1.9	2.1	2.1	2.1	2.0
= ROE (%)	19.2	21.1	-2.9	12.3	10.9	8.7
annual growth (%)	na	10.2	na	na	-11.9	-20.0
x NTA/share (avg) (x)	17.1	21.2	22.6	22.9	25.1	27.0
= Reported EPS	3.28	4.48	-0.66	2.82	2.73	2.35
annual growth (%)	na	36.5	na	na	-3.5	-13.9

Source: Company data, Deutsche Bank estimates





## Goldcorp

Figure 124: Goldcorp operational summary

Operational assumptions	2010A	2011A	2012A	2013E	2014E	2015E	2016E
<b>DB commodity prices</b>							
DB Gold (\$/oz)	1,226	1,570	1,671	1,533	1,500	1,450	1,488
DB Silver (\$/oz)	20.19	35.22	31.27	26.71	26.79	26.36	26.02
DB Copper (\$/lb)	3.43	4.00	3.61	3.57	3.40	3.26	3.29
<b>Volumes (000 oz)</b>							
Red Lake	701	623	508	508	493	440	400
Cochenour	-	-	-	-	-	89	238
Porcupine	266	273	263	272	280	280	280
Musselwhite	257	242	242	247	255	250	250
Eleonore	-	-	-	-	38	488	600
<b>Canada</b>	<b>1,224</b>	<b>1,138</b>	<b>1,013</b>	<b>1,027</b>	<b>1,065</b>	<b>1,547</b>	<b>1,768</b>
Marigold (66.7%)	91	104	96	105	98	98	98
Wharf	71	65	71	54	48	40	40
<b>United States</b>	<b>163</b>	<b>169</b>	<b>167</b>	<b>159</b>	<b>146</b>	<b>138</b>	<b>138</b>
Los Filos	304	335	339	341	360	360	360
Peñasquito (gold)	82	233	400	363	425	425	425
Camino Rojo (gold)	-	-	-	-	-	-	28
<b>Mexico</b>	<b>585</b>	<b>669</b>	<b>821</b>	<b>778</b>	<b>845</b>	<b>835</b>	<b>853</b>
Marlin (gold)	296	381	209	193	200	240	200
Pueblo Viejo (40%)	-	-	-	378	433	433	433
Alumbra (gold) (37.5%)	147	134	131	114	125	120	80
Cerro Negro (gold)	-	-	-	-	427	525	525
<b>Central and South America</b>	<b>443</b>	<b>515</b>	<b>340</b>	<b>686</b>	<b>1,184</b>	<b>1,318</b>	<b>1,238</b>
<b>Gold (000 oz)</b>	<b>2,414</b>	<b>2,491</b>	<b>2,341</b>	<b>2,649</b>	<b>3,240</b>	<b>3,837</b>	<b>3,996</b>
<b>Silver (000 oz)</b>	<b>15,338</b>	<b>26,641</b>	<b>31,217</b>	<b>28,463</b>	<b>36,381</b>	<b>37,994</b>	<b>36,812</b>
<b>Copper (000 lbs)</b>	<b>111,100</b>	<b>94,500</b>	<b>106,100</b>	<b>82,500</b>	<b>100,000</b>	<b>96,000</b>	<b>64,000</b>
<b>Calculated net cash cost (\$/oz)</b>	<b>274</b>	<b>223</b>	<b>301</b>	<b>550</b>	<b>499</b>	<b>526</b>	<b>586</b>
Red Lake	297	359	495	531	600	700	725
Cochenour	-	-	-	-	-	733	725
Porcupine	595	656	772	807	860	925	957
Musselwhite	625	725	760	809	825	900	932
Eleonore	-	-	-	-	600	477	466
<b>Canada</b>	<b>430</b>	<b>508</b>	<b>630</b>	<b>671</b>	<b>722</b>	<b>705</b>	<b>703</b>
Marigold (66.7%)	679	785	776	869	900	950	983
Wharf	645	643	669	847	925	1,000	1,035
<b>United States</b>	<b>664</b>	<b>730</b>	<b>730</b>	<b>861</b>	<b>908</b>	<b>965</b>	<b>998</b>
Los Filos	423	463	551	597	650	700	735
Peñasquito	(863)	(847)	(457)	342	(11)	28	153
<b>Mexico</b>	<b>210</b>	<b>15</b>	<b>74</b>	<b>508</b>	<b>339</b>	<b>379</b>	<b>438</b>
Marlin	(19)	(343)	(74)	369	479	205	537
Pueblo Viejo (40%)	-	-	-	419	350	378	408
Alumbra (37.5%)	(619)	(187)	(774)	50	158	560	1,115
Cerro Negro	-	-	-	-	377	378	408
<b>Central and South America</b>	<b>(218)</b>	<b>(303)</b>	<b>(344)</b>	<b>343</b>	<b>225</b>	<b>213</b>	<b>302</b>
<b>Operating cash cost (\$/oz)</b>	<b>607</b>	<b>818</b>	<b>995</b>	<b>1,038</b>	<b>1,005</b>	<b>980</b>	<b>988</b>
Byproduct credit (\$/oz)	329	595	694	487	506	454	402
<b>Net cash cost (\$/oz)</b>	<b>278</b>	<b>223</b>	<b>300</b>	<b>551</b>	<b>499</b>	<b>526</b>	<b>586</b>
<b>Net cash margin (\$/oz)</b>	<b>950</b>	<b>1,313</b>	<b>1,305</b>	<b>980</b>	<b>1,001</b>	<b>924</b>	<b>902</b>

Source: Company data and Deutsche Bank

DB anticipates gold prices to trade at ~\$1,500/oz in near term

Cochenour and Eleonore to add ~800k oz by 2016

Acquired Cerro Negro to add 525k oz of gold by 2015

Op. cash cost to increase in 2013 on higher stripping costs at Peñasquito; but improve thereafter on new projects



Model updated: 10 May 2013

### Running the numbers

#### North America

#### Canada

#### Metals & Mining

### Goldcorp

Reuters: GG.N Bloomberg: GG US

### Hold

Price (31 May 13) USD 29.11

Target Price USD 28.00

52 Week range USD 25.82 - 46.93

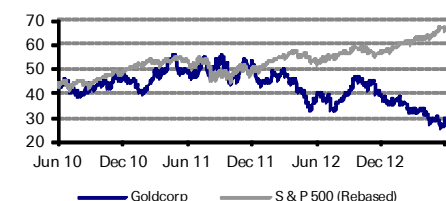
Market Cap (m) EURm 18,181

USDm 23,628

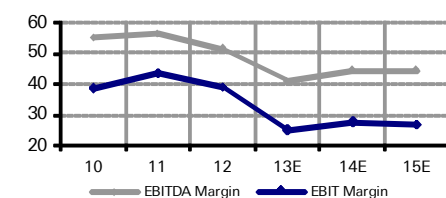
### Company Profile

Goldcorp is a gold mining company based in Vancouver, Canada. In 2012, Goldcorp produced 2.4m oz of gold, 30m oz of silver and 112m lbs of copper. Reserves at year-end 2012 stood at 67m oz of gold, 1.2bn oz of silver and 5.8bn lbs of copper. Goldcorp has operations and projects in Canada, the US, Mexico, the Dominican Republic, Guatemala, Chile and Argentina. The company's main listing is on the NYSE under the symbol GG.N. Goldcorp is also listed on the Toronto Stock Exchange, trading under the symbol G.TO.

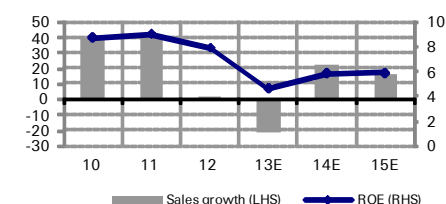
### Price Performance



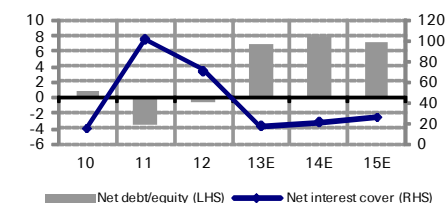
### Margin Trends



### Growth & Profitability



### Solvency



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Fiscal year end 31-Dec

### Financial Summary

	2010	2011	2012	2013E	2014E	2015E
DB EPS (USD)	2.09	2.21	1.86	1.25	1.69	1.80
Reported EPS (USD)	2.10	2.31	2.13	1.29	1.69	1.80
DPS (USD)	0.21	0.38	0.54	0.60	0.60	0.60
BVPS (USD)	27.46	26.44	28.02	28.69	29.80	31.01

### Valuation Metrics

Price/Sales (x)	8.1	7.3	6.1	5.5	4.5	3.9
P/E (DB) (x)	20.1	21.9	22.2	23.4	17.2	16.1
P/E (Reported) (x)	20.0	21.0	19.4	22.6	17.2	16.1
P/BV (x)	1.7	1.7	1.3	1.0	1.0	0.9
FCF yield (%)	1.4	1.3	nm	nm	nm	1.4
Dividend yield (%)	0.5	0.8	1.3	2.1	2.1	2.1
EV/Sales	8.0	7.1	6.1	5.9	4.9	4.2
EV/EBITDA	14.5	12.6	11.9	14.5	11.0	9.4
EV/EBIT	20.7	16.4	15.7	23.6	17.6	15.5

### Income Statement (USDm)

Sales	3,800	5,362	5,435	4,272	5,263	6,132
EBITDA	2,090	3,030	2,798	1,753	2,339	2,729
EBIT	1,467	2,336	2,123	1,073	1,454	1,645
Pre-tax profit	1,720	2,567	2,252	1,335	1,798	1,928
Net income	1,567	1,881	1,749	1,071	1,396	1,469

### Cash Flow (USDm)

Cash flow from operations	1,657	2,170	2,174	1,569	1,832	2,183
Net Capex	-1,217	-1,677	-2,608	-2,800	-1,968	-1,859
Free cash flow	439	493	-434	-1,231	-137	323
Equity raised/(bought back)	96	459	35	0	0	0
Dividends paid	-154	-330	-438	-487	-487	-487
Net inc/(dec) in borrowings	-99	-23	-30	1,420	-363	-63
Other investing/financing cash flows	-612	357	237	-1,488	412	346
Net cash flow	-330	956	-630	-1,787	-575	120
Change in working capital	-89	-174	-121	80	-105	-87

### Balance Sheet (USDm)

Cash and cash equivalents	556	1,502	918	623	48	168
Property, plant & equipment	25,316	24,209	26,367	28,719	29,802	30,578
Goodwill	762	1,737	1,737	1,737	1,737	1,737
Other assets	2,175	1,926	2,190	2,046	2,349	2,599
Total assets	28,809	29,374	31,212	33,125	33,936	35,082
Debt	747	737	783	2,275	1,980	1,980
Other liabilities	7,655	7,152	7,500	7,354	7,552	7,715
Total liabilities	8,402	7,889	8,283	9,629	9,532	9,695
Total shareholders' equity	20,407	21,485	22,929	23,496	24,405	25,387
Net debt	191	-765	-135	1,652	1,932	1,812

### Key Company Metrics

Sales growth (%)	39.5	41.1	1.4	-21.4	23.2	16.5
DB EPS growth (%)	545.2	6.0	-16.2	-32.8	35.6	6.7
Payout ratio (%)	9.9	16.1	25.0	45.5	34.9	33.1
EBITDA Margin (%)	55.0	56.5	51.5	41.0	44.4	44.5
EBIT Margin (%)	38.6	43.6	39.1	25.1	27.6	26.8
ROE (%)	8.8	9.1	8.0	4.7	5.9	6.0
Net debt/equity (%)	0.9	-3.6	-0.6	7.0	7.9	7.1
Net interest cover (x)	14.9	101.6	70.8	17.5	21.4	26.2

### DuPont Analysis

EBIT margin (%)	38.6	43.6	39.1	25.1	27.6	26.8
x Asset turnover (x)	0.2	0.2	0.2	0.1	0.2	0.2
x Financial cost ratio (x)	0.9	1.0	1.0	0.9	1.0	1.0
x Tax and other effects (x)	1.1	0.8	0.8	1.1	1.0	0.9
= ROA (post tax) (%)	6.3	6.5	5.8	3.3	4.2	4.3
x Financial leverage (x)	1.4	1.4	1.4	1.4	1.4	1.4
= ROE (%)	8.8	9.1	8.0	4.7	5.9	6.0
annual growth (%)	457.0	3.3	-12.3	-41.4	26.3	1.2
x NTA/share (avg) (x)	23.9	25.4	26.8	27.6	28.7	30.3
= Reported EPS	2.10	2.31	2.13	1.29	1.69	1.80
annual growth (%)	541.7	10.0	-7.8	-39.6	31.4	6.7

Source: Company data, Deutsche Bank estimates



## Kinross Gold

Figure 125: Kinross Gold operational summary

Operational assumptions	2010A	2011A	2012A	2013E	2014E	2015E	2016E
<b>DB commodity prices</b>							
DB Gold (\$/oz)	1,226	1,570	1,671	1,533	1,500	1,450	1,488
DB Silver (\$/oz)	20.19	35.22	31.27	26.71	26.79	26.36	26.02
DB Copper (\$/lb)	3.43	4.00	3.61	3.57	3.40	3.26	3.29
<b>Volumes (000 oz)</b>							
Fort Knox	349	288	333	438	380	320	320
Round Mountain (50%)	185	185	191	159	160	140	120
Kettle River	196	178	157	130	100	40	-
<b>North America</b>	<b>730</b>	<b>651</b>	<b>681</b>	<b>727</b>	<b>640</b>	<b>500</b>	<b>440</b>
Kupol (gold equivalent) (100%)	741	642	578	522	675	675	675
<b>Asia</b>	<b>741</b>	<b>642</b>	<b>578</b>	<b>522</b>	<b>675</b>	<b>675</b>	<b>675</b>
Paracatu	488	450	471	527	580	580	580
<b>Brazil</b>	<b>565</b>	<b>513</b>	<b>489</b>	<b>527</b>	<b>580</b>	<b>580</b>	<b>580</b>
La Coipa (gold equivalent)	204	191	175	87	-	-	100
Maricunga	155	231	237	220	260	260	260
Lobo Marte	-	-	-	-	-	-	-
<b>Chile</b>	<b>359</b>	<b>422</b>	<b>413</b>	<b>307</b>	<b>260</b>	<b>260</b>	<b>360</b>
<b>South America</b>	<b>924</b>	<b>935</b>	<b>901</b>	<b>834</b>	<b>840</b>	<b>840</b>	<b>940</b>
Chirano (100%)	85	263	299	294	340	350	350
Tasiast	57	197	180	218	240	280	570
<b>Africa</b>	<b>142</b>	<b>460</b>	<b>478</b>	<b>513</b>	<b>580</b>	<b>630</b>	<b>920</b>
<b>Gold equivalent (000 oz) (100%)</b>	<b>2,537</b>	<b>2,701</b>	<b>2,654</b>	<b>2,595</b>	<b>2,735</b>	<b>2,645</b>	<b>2,975</b>
<b>Gold equivalent (000 oz) (90%)</b>	<b>2,343</b>	<b>2,611</b>	<b>2,608</b>	<b>2,566</b>	<b>2,701</b>	<b>2,610</b>	<b>2,940</b>
Silver to gold conversion factor	62	45	54	58	56	55	57
<b>Cash costs</b>							
<b>Unit cash cost GEO (\$/oz)</b>	<b>509</b>	<b>597</b>	<b>707</b>	<b>756</b>	<b>746</b>	<b>816</b>	<b>811</b>
Fort Knox	550	692	663	600	675	840	869
Round Mountain (50%)	658	697	718	820	900	1,050	1,087
Kettle River	329	420	481	590	725	1,000	0
<b>North America</b>	<b>518</b>	<b>619</b>	<b>636</b>	<b>646</b>	<b>739</b>	<b>912</b>	<b>929</b>
Kupol (100%)	319	379	472	570	475	500	525
<b>Asia</b>	<b>319</b>	<b>379</b>	<b>472</b>	<b>570</b>	<b>475</b>	<b>500</b>	<b>525</b>
Paracatu	535	720	881	832	865	925	971
<b>Brazil</b>	<b>529</b>	<b>729</b>	<b>879</b>	<b>832</b>	<b>865</b>	<b>925</b>	<b>971</b>
La Coipa	648	762	966	892	0	0	800
Maricunga	746	457	779	1,010	900	1,000	1,050
Lobo Marte	0	0	0	0	0	0	0
<b>Chile</b>	<b>690</b>	<b>595</b>	<b>858</b>	<b>977</b>	<b>900</b>	<b>1,000</b>	<b>981</b>
<b>South America</b>	<b>591</b>	<b>668</b>	<b>869</b>	<b>885</b>	<b>876</b>	<b>948</b>	<b>975</b>
Chirano	605	721	721	764	800	825	891
Tasiast	790	675	889	1,065	1,000	1,000	746
<b>Africa</b>	<b>679</b>	<b>701</b>	<b>784</b>	<b>893</b>	<b>883</b>	<b>903</b>	<b>801</b>
<b>Cash costs GEO (\$/oz) (100%)*</b>	<b>458</b>	<b>471</b>	<b>561</b>	<b>580</b>	<b>559</b>	<b>601</b>	<b>564</b>
<b>Cash costs GEO (\$/oz) (90%)*</b>	<b>509</b>	<b>597</b>	<b>707</b>	<b>756</b>	<b>746</b>	<b>816</b>	<b>811</b>
<b>Operating cash cost (\$/oz)</b>	<b>534</b>	<b>652</b>	<b>763</b>	<b>795</b>	<b>777</b>	<b>851</b>	<b>852</b>
Byproduct credit (\$/oz)	94	162	129	78	61	62	73
<b>Net cash cost (\$/oz)</b>	<b>440</b>	<b>490</b>	<b>634</b>	<b>717</b>	<b>716</b>	<b>789</b>	<b>779</b>
<b>Net cash margin GEO (\$/oz)</b>	<b>678</b>	<b>909</b>	<b>935</b>	<b>775</b>	<b>754</b>	<b>634</b>	<b>676</b>
<b>Net cash margin (\$/oz)</b>	<b>747</b>	<b>1,016</b>	<b>1,008</b>	<b>814</b>	<b>784</b>	<b>661</b>	<b>709</b>

Source: Company data and Deutsche Bank

DB anticipates gold prices to trade at ~\$1,500/oz in near term

Shipment of first ore from Dvoinoye expected in 2H13

Acquired mines in West Africa to add ~300k oz in 2016

Net cash costs to decline in 2014 on ramp-up of new projects partly offset by lower by-product credits



Model updated: 10 May 2013

### Running the numbers

#### North America

#### Canada

#### Metals & Mining

### Kinross Gold

Reuters: KGC.N Bloomberg: KGC US

### Hold

Price (31 May 13) USD 6.41

Target Price USD 6.00

52 Week range USD 5.00 - 11.08

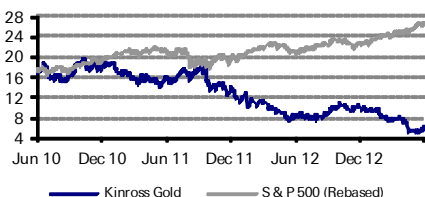
Market Cap (m) EURm 5,626

USDm 7,311

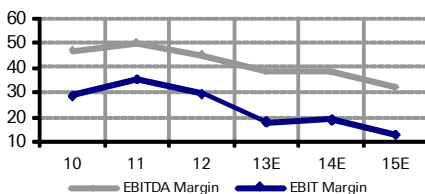
### Company Profile

Kinross Gold Corp, based in Toronto, Canada, is one of the world's largest gold companies and produced ~2.6m oz of gold equivalent in 2012. Attributable reserves stood at ~60m oz of gold, 68m oz of silver and 1.4bn lbs of copper. Kinross's operations are divided into 4 regional units: North America (27% of 2012 output), South America (34%), Russia (22%) and West Africa (17%). The company's main listing is on the NYSE under the symbol KGC.N. It is also listed on the Toronto Stock Exchange, trading under the symbol K.TO.

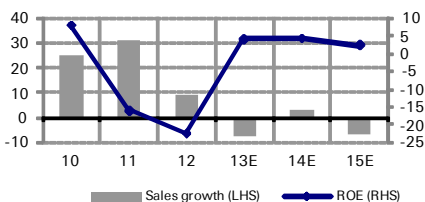
### Price Performance



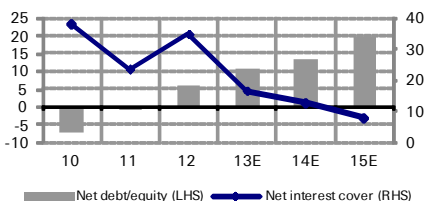
### Margin Trends



### Growth & Profitability



### Solvency



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Fiscal year end 31-Dec

### Financial Summary

	2010	2011	2012	2013E	2014E	2015E
DB EPS (USD)	0.93	-1.83	-2.20	0.37	0.39	0.23
Reported EPS (USD)	0.68	-1.83	-2.20	0.37	0.39	0.23
DPS (USD)	0.10	0.11	0.16	0.16	0.16	0.16
BVPS (USD)	11.81	10.91	8.65	8.87	9.12	9.20

### Valuation Metrics

Price/Sales (x)	6.7	4.5	2.5	1.8	1.8	1.9
P/E (DB) (x)	19.0	nm	nm	17.3	16.4	28.1
P/E (Reported) (x)	26.2	nm	nm	17.3	16.4	28.1
P/BV (x)	1.6	1.0	1.1	0.7	0.7	0.7
FCF yield (%)	1.9	nm	nm	nm	nm	nm
Dividend yield (%)	0.5	0.7	1.7	2.5	2.5	2.5
EV/Sales	6.2	4.3	2.5	2.0	2.0	2.3
EV/EBITDA	13.2	8.6	5.6	5.2	5.2	7.3
EV/EBIT	21.6	12.2	8.6	11.1	10.5	18.2

### Income Statement (USDm)

Sales	3,010	3,943	4,311	3,972	4,103	3,835
EBITDA	1,414	1,973	1,962	1,528	1,581	1,235
EBIT	867	1,395	1,281	718	788	494
Pre-tax profit	1,156	1,435	-2,292	665	726	431
Net income	772	-2,074	-2,505	425	449	262

### Cash Flow (USDm)

Cash flow from operations	946	1,321	1,499	1,367	1,288	1,136
Net Capex	-564	-1,652	-1,925	-1,600	-1,359	-1,628
Free cash flow	382	-330	-426	-233	-71	-491
Equity raised/(bought back)	20	29	2	0	0	0
Dividends paid	-71	-125	-182	-183	-182	-182
Net inc/(dec) in borrowings	-23	-59	-37	-43	-62	-63
Other investing/financing cash flows	715	-345	-82	-70	16	14
Net cash flow	1,023	-831	-725	-529	-300	-722
Change in working capital	-193	-141	-202	67	-31	57

### Balance Sheet (USDm)

Cash and cash equivalents	1,467	1,766	2,041	1,028	729	6
Property, plant & equipment	6,912	8,959	8,979	9,781	10,348	11,235
Goodwill	5,980	3,420	1,137	1,137	1,137	1,137
Other assets	2,039	2,363	2,726	2,647	2,699	2,604
Total assets	16,397	16,509	14,882	14,593	14,912	14,982
Debt	503	1,633	2,633	2,149	2,149	2,149
Other liabilities	2,295	2,405	2,324	2,238	2,258	2,220
Total liabilities	2,798	4,038	4,957	4,387	4,407	4,369
Total shareholders' equity	13,599	12,471	9,926	10,207	10,504	10,612
Net debt	-964	-133	592	1,121	1,420	2,143

### Key Company Metrics

Sales growth (%)	24.8	31.0	9.3	-7.9	3.3	-6.5
DB EPS growth (%)	108.6	na	-20.4	na	5.6	-41.7
Payout ratio (%)	14.2	nm	nm	43.0	40.7	69.7
EBITDA Margin (%)	47.0	50.0	45.5	38.5	38.5	32.2
EBIT Margin (%)	28.8	35.4	29.7	18.1	19.2	12.9
ROE (%)	8.1	-16.1	-22.5	4.3	4.4	2.5
Net debt/equity (%)	-7.1	-1.1	6.0	11.0	13.5	20.2
Net interest cover (x)	38.0	23.6	34.8	16.6	12.7	7.9

### DuPont Analysis

EBIT margin (%)	28.8	35.4	29.7	18.1	19.2	12.9
x Asset turnover (x)	0.2	0.2	0.3	0.3	0.3	0.3
x Financial cost ratio (x)	1.0	1.0	1.0	0.9	0.9	0.9
x Tax and other effects (x)	0.9	-1.6	-2.0	0.6	0.6	0.6
= ROA (post tax) (%)	6.3	-12.6	-16.0	2.9	3.0	1.8
x Financial leverage (x)	1.3	1.3	1.4	1.5	1.4	1.4
= ROE (%)	8.1	-16.1	-22.5	4.3	4.4	2.5
annual growth (%)	35.9	na	-40.1	na	2.7	-42.7
x NTA/share (avg) (x)	8.3	11.4	9.8	8.7	8.9	9.1
= Reported EPS	0.68	-1.83	-2.20	0.37	0.39	0.23
annual growth (%)	52.4	na	-20.5	na	5.6	-41.7

Source: Company data, Deutsche Bank estimates



## Newmont Mining

Figure 126: Newmont Mining operational summary

Operational assumptions	2010A	2011A	2012A	2013E	2014E	2015E	2016E
<b>DB commodity prices</b>							
DB Gold (\$/oz)	1,226	1,570	1,671	1,533	1,500	1,450	1,488
DB Copper (\$/lb)	3.43	4.00	3.61	3.57	3.40	3.26	3.29
<b>Volumes</b>							
<b>North America</b>	<b>1,910</b>	<b>1,934</b>	<b>1,931</b>	<b>2,012</b>	<b>2,045</b>	<b>2,115</b>	<b>2,115</b>
Nevada-gold	1,736	1,724	1,719	1,762	1,770	1,840	1,840
Nevada - copper	-	-	-	-	-	-	-
La Herradura (44%)	174	210	212	250	275	275	275
<b>South America 100%</b>	<b>1,468</b>	<b>1,271</b>	<b>1,325</b>	<b>1,008</b>	<b>896</b>	<b>779</b>	<b>819</b>
<b>South America</b>	<b>753</b>	<b>652</b>	<b>680</b>	<b>518</b>	<b>460</b>	<b>400</b>	<b>534</b>
Yanacocha (100%)	1,468	1,271	1,325	1,008	896	779	584
Yanacocha - (51.35%)	753	652	680	518	460	400	300
<b>Asia Pacific (100%)</b>	<b>2,434</b>	<b>2,057</b>	<b>1,683</b>	<b>1,748</b>	<b>1,740</b>	<b>1,900</b>	<b>1,900</b>
<b>Asia Pacific</b>	<b>2,086</b>	<b>1,880</b>	<b>1,648</b>	<b>1,715</b>	<b>1,649</b>	<b>1,721</b>	<b>1,708</b>
Jundee	335	333	322	316	200	200	200
Tanami	251	221	180	210	225	250	250
Kalgoorlie	374	376	341	329	340	340	340
Waihi	107	95	62	90	60	60	60
Boddington- gold	677	688	711	744	750	750	750
Boddington- copper	52	61	66	76	78	78	78
Batu Hijau - gold (100%)	690	344	67	59	165	300	300
Batu Hijau - gold (27.6%)	342	167	32	26	74	121	108
Batu Hijau - copper (100%)	518	298	163	178	235	300	300
Batu Hijau - copper (27.6%)	257	145	79	80	105	121	108
<b>Africa</b>	<b>546</b>	<b>552</b>	<b>527</b>	<b>592</b>	<b>955</b>	<b>1,000</b>	<b>1,175</b>
Ahafo	546	552	527	532	600	600	775
Akyem	-	-	-	60	355	400	400
<b>Gold (000 oz) 100%</b>	<b>6,358</b>	<b>5,814</b>	<b>5,466</b>	<b>5,362</b>	<b>5,636</b>	<b>5,794</b>	<b>6,009</b>
<b>Gold (000 oz)</b>	<b>5,295</b>	<b>5,018</b>	<b>4,787</b>	<b>4,839</b>	<b>5,109</b>	<b>5,236</b>	<b>5,533</b>
<b>Copper (m lbs) 100%</b>	<b>570</b>	<b>359</b>	<b>229</b>	<b>254</b>	<b>313</b>	<b>378</b>	<b>378</b>
<b>Copper (m lbs)</b>	<b>309</b>	<b>206</b>	<b>145</b>	<b>156</b>	<b>182</b>	<b>199</b>	<b>186</b>
<b>Cash costs</b>							
<b>Calculated unit cash cost (\$/oz)</b>	<b>489</b>	<b>591</b>	<b>672</b>	<b>736</b>	<b>768</b>	<b>822</b>	<b>816</b>
<b>North America</b>	<b>562</b>	<b>600</b>	<b>640</b>	<b>672</b>	<b>650</b>	<b>692</b>	<b>718</b>
<b>South America</b>	<b>435</b>	<b>562</b>	<b>515</b>	<b>618</b>	<b>700</b>	<b>800</b>	<b>840</b>
<b>Asia Pacific</b>	<b>475</b>	<b>644</b>	<b>862</b>	<b>948</b>	<b>1,033</b>	<b>1,071</b>	<b>1,125</b>
<b>Africa</b>	<b>453</b>	<b>480</b>	<b>602</b>	<b>564</b>	<b>604</b>	<b>640</b>	<b>631</b>
<b>Others</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Operating cash cost (\$/oz)</b>	<b>490</b>	<b>591</b>	<b>679</b>	<b>737</b>	<b>768</b>	<b>822</b>	<b>816</b>
Byproduct credit (\$/oz)	236	141	54	56	56	66	59
<b>Net cash cost (\$/oz)</b>	<b>254</b>	<b>450</b>	<b>625</b>	<b>680</b>	<b>713</b>	<b>756</b>	<b>757</b>
<b>Net cash margin (\$/oz)</b>	<b>969</b>	<b>1,112</b>	<b>1,035</b>	<b>852</b>	<b>787</b>	<b>694</b>	<b>730</b>

Source: Company data and Deutsche Bank

DB anticipates gold prices to trade at ~\$1,500/oz in near term

Volumes to increase in near term through commissioning of Akyem and Batu Hijau phase 6

Net cash costs to increase due to decline in output at Yanacocha, lower grades at mature mines and inflation



Model updated: 10 May 2013

### Running the numbers

North America

United States

Metals & Mining

### Newmont Mining

Reuters: NEM.N

Bloomberg: NEM US

### Sell

Price (31 May 13) USD 34.28

Target Price USD 24.00

52 Week range USD 30.63 - 57.20

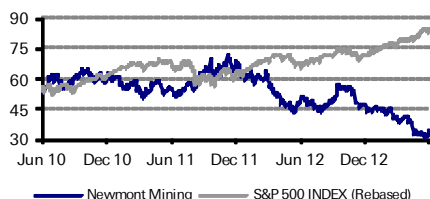
Market Cap (m) USDm 17,106

EURm 13,163

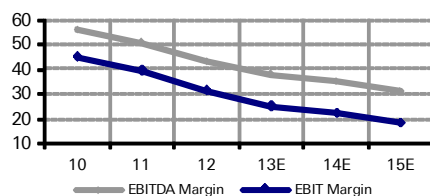
### Company Profile

Newmont Mining Corporation is the world's second-largest gold company. In 2012, it sold 5.0m oz of gold and 143m lbs of copper on an attributable basis. Wholly-owned reserves stood at 99m oz of gold and 9.5bn lbs of copper. With operations in the US, Canada, Mexico, Peru, Australia, New Zealand, Indonesia, Suriname and Ghana; North America represented 39% of 2012 attributable gold production, Asia Pacific (34%), South America (15%) and Africa (11%). Newmont is listed on the NYSE under the symbol NEM.N.

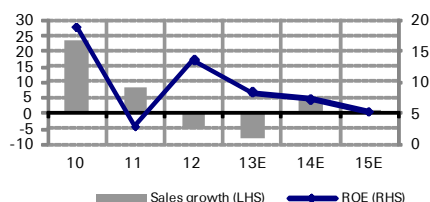
### Price Performance



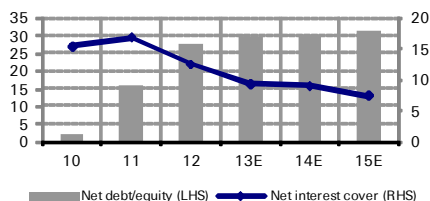
### Margin Trends



### Growth & Profitability



### Solvency



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Fiscal year end 31-Dec

### Financial Summary

	2010	2011	2012	2013E	2014E	2015E
DB EPS (USD)	4.55	0.70	3.62	2.38	2.18	1.64
Reported EPS (USD)	4.56	0.73	3.62	2.38	2.18	1.64
DPS (USD)	0.50	1.00	1.40	1.33	1.20	1.05
BVPS (USD)	27.12	26.11	27.80	29.06	30.51	31.59

### Valuation Metrics

Price/Sales (x)	2.9	2.8	2.6	1.9	1.8	1.8
P/E (DB) (x)	12.3	84.2	14.2	14.4	15.7	20.9
P/E (Reported) (x)	12.3	80.6	14.2	14.4	15.7	20.9
P/BV (x)	2.3	2.3	1.7	1.2	1.1	1.1
FCF yield (%)	10.3	6.4	nm	1.5	1.2	0.7
Dividend yield (%)	0.9	1.7	2.7	3.9	3.5	3.1
EV/Sales	3.0	3.2	3.2	2.7	2.6	2.7
EV/EBITDA	5.4	6.3	7.5	7.1	7.5	8.5
EV/EBIT	6.6	8.0	10.2	10.7	11.7	14.5

### Income Statement (USDm)

Sales	9,540	10,358	9,868	9,091	9,504	9,635
EBITDA	5,348	5,282	4,265	3,458	3,362	3,027
EBIT	4,338	4,126	3,137	2,289	2,151	1,781
Pre-tax profit	3,971	1,821	3,063	2,069	1,913	1,543
Net income	2,277	366	1,809	1,187	1,087	818

### Cash Flow (USDm)

Cash flow from operations	4,257	4,697	3,170	2,655	2,749	2,585
Net Capex	-1,402	-2,830	-3,210	-2,400	-2,547	-2,464
Free cash flow	2,855	1,867	-40	255	202	121
Equity raised/(bought back)	27	0	0	0	0	0
Dividends paid	-246	-494	-694	-660	-599	-524
Net inc/(dec) in borrowings	-279	-244	-249	-243	-238	-239
Other investing/financing cash flows	-1,148	-3,297	-1,201	33	233	246
Net cash flow	1,209	-2,168	-2,184	-615	-401	-396
Change in working capital	-264	128	-226	-148	-20	36

### Balance Sheet (USDm)

Cash and cash equivalents	4,056	1,760	1,561	1,037	636	240
Property, plant & equipment	12,907	15,881	18,010	19,157	20,492	21,711
Goodwill	188	188	188	188	188	188
Other assets	8,512	9,645	9,891	9,932	9,964	9,907
Total assets	25,663	27,474	29,650	30,315	31,281	32,047
Debt	4,441	4,313	6,298	6,389	6,389	6,389
Other liabilities	5,506	7,390	6,404	6,010	6,021	6,000
Total liabilities	9,947	11,703	12,702	12,399	12,410	12,389
Total shareholders' equity	15,716	15,771	16,948	17,916	18,871	19,657
Net debt	385	2,553	4,737	5,352	5,753	6,149

### Key Company Metrics

Sales growth (%)	23.6	8.6	-4.7	-7.9	4.5	1.4
DB EPS growth (%)	71.7	-84.6	417.3	-34.3	-8.4	-24.7
Payout ratio (%)	10.8	134.9	38.3	55.7	55.1	64.0
EBITDA Margin (%)	56.1	51.0	43.2	38.0	35.4	31.4
EBIT Margin (%)	45.5	39.8	31.8	25.2	22.6	18.5
ROE (%)	18.9	2.8	13.6	8.4	7.3	5.3
Net debt/equity (%)	2.4	16.2	28.0	29.9	30.5	31.3
Net interest cover (x)	15.5	16.9	12.6	9.4	9.1	7.5

### DuPont Analysis

EBIT margin (%)	45.5	39.8	31.8	25.2	22.6	18.5
x Asset turnover (x)	0.4	0.4	0.3	0.3	0.3	0.3
x Financial cost ratio (x)	0.9	0.9	0.9	0.9	0.9	0.9
x Tax and other effects (x)	0.6	0.1	0.6	0.6	0.6	0.5
= ROA (post tax) (%)	9.5	1.4	6.3	4.0	3.5	2.6
x Financial leverage (x)	2.0	2.0	2.1	2.1	2.1	2.0
= ROE (%)	18.9	2.8	13.6	8.4	7.3	5.3
annual growth (%)	30.0	-85.3	386.3	-38.1	-12.9	-27.8
x NTA/share (avg) (x)	24.1	26.2	26.7	28.3	29.8	31.0
= Reported EPS	4.56	0.73	3.62	2.38	2.18	1.64
annual growth (%)	71.2	-84.0	395.3	-34.4	-8.4	-24.7

Source: Company data, Deutsche Bank estimates



# Appendix

## NA Gold all-in sustaining cost data

Figure 127: NA Gold – all-in sustaining cost data (2011-2014E)

	Production	C1 Cash Cost	Royalty	D&A	Sust. Capex	Dev. Capex	Total Capex	Corp. Overheads	Exploration	All-in cash costs
	(Koz)	(\$/oz)	(\$/oz)	(\$/oz)	(\$/oz)	(\$/oz)	(\$/oz)	(\$/oz)	(\$/oz)	(\$/oz)
<b>Barrick</b>										
2011	7,550	418	41	141	215	51	266	59	18	751
2012	7,292	538	45	177	269	57	326	71	21	944
2013E	7,187	593	41	215	281	48	328	73	15	1,003
2014E	7,602	613	40	215	263	74	312	64	14	994
<b>Goldcorp</b>										
2011	2,490	223	-	276	343	-	343	92	24	683
2012	2,341	301	-	283	437	-	437	112	23	873
2013E	2,649	550	-	257	423	-	423	77	26	1,076
2014E	3,240	499	-	273	400	-	400	59	18	976
<b>Kinross Gold</b>										
2011	2,380	531	-	234	248	373	621	100	27	906
2012	2,435	624	-	276	290	448	738	90	85	1,088
2013E	2,469	717	-	312	227	354	582	110	75	1,129
2014E	2,628	716	-	290	235	262	497	107	67	1,125
<b>Newmont Mining</b>										
2011	5,821	413	38	180	279	34	313	73	124	927
2012	5,466	591	40	193	308	70	379	82	129	1,150
2013E	5,360	645	37	215	270	79	350	93	112	1,157
2014E	5,636	676	36	215	270	80	350	84	86	1,153
<b>NA Gold</b>										
2011	18,241	405	29	184	257	81	338	73	54	818
2012	17,534	535	31	210	306	108	414	82	64	1,019
2013E	17,665	619	28	235	291	93	384	85	55	1,078
2014E	19,105	626	27	235	284	89	364	75	43	1,056

Source: Company data and Deutsche Bank estimates

Note: DBe all-in cash costs are calculated using bottom-up approach (mine by mine basis) and hence does not necessarily match with the reported figures.

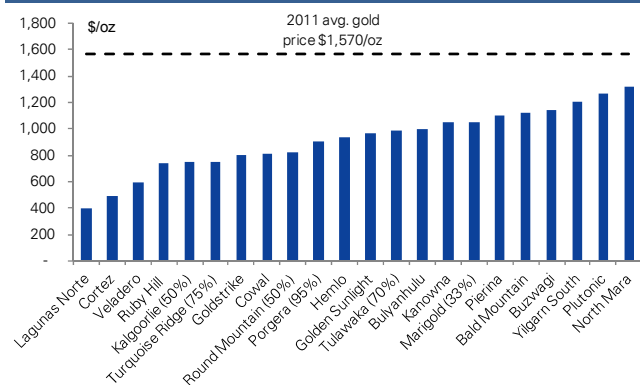
### 2011 (actual)

In 2011, weighted average all-in cash costs for stocks under coverage was \$818/oz compared to an average gold price of \$1,570/oz, implying \$752/oz cash margin. Figures below show the individual mine cost profile for each of our stocks under coverage.



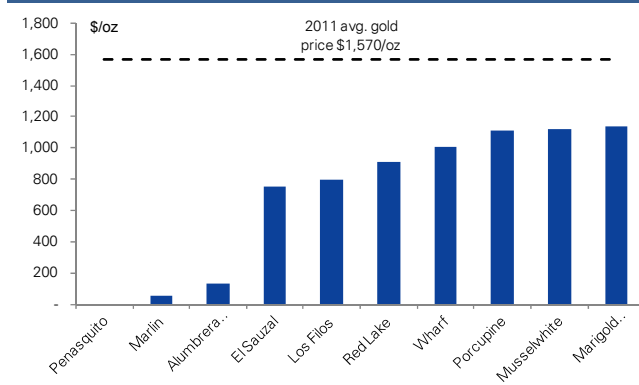


Figure 128: 2011 Barrick – AISC of \$751/oz



Source: Company data and Deutsche Bank estimates

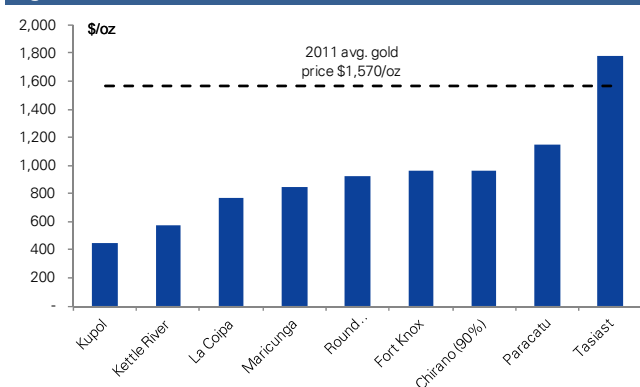
Figure 129: 2011 Goldcorp – AISC of \$683/oz



Source: Company data and Deutsche Bank estimates

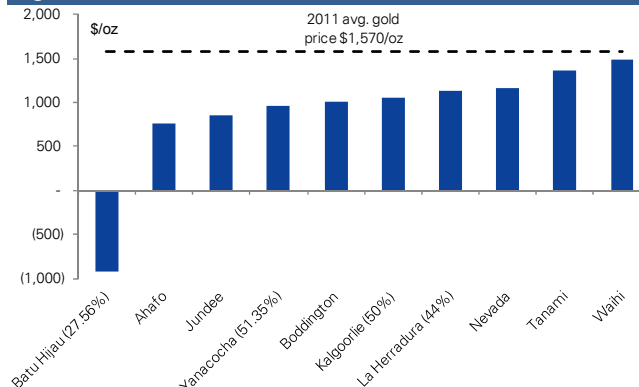
Large scale operations (such as Lagunas Norte, Cortez) and mines with significant by-product production (Penasquito, Marlin, Alumbra, Batu Hijau) were among the lowest cost producing mines in our coverage universe. Notably, Tasiast was the only mine with all-in cash costs higher than the average price of gold primarily due to heavy capital spend to build basic mine infrastructure (sustaining capex at \$953/oz).

Figure 130: 2011 Kinross – AISC of \$906/oz



Source: Company data and Deutsche Bank estimates

Figure 131: 2011 Newmont – AISC of \$927/oz



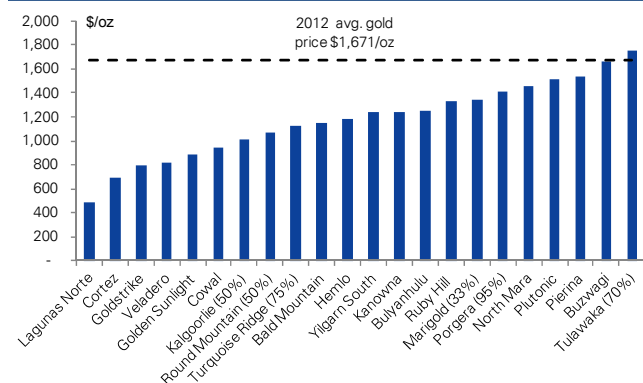
Source: Company data and Deutsche Bank estimates

## 2012 (actual)

In 2012, weighted average all-in cash cost increased 24% YoY to \$1,019/oz. This compares to a 6% increase in average gold price to \$1,671/oz, resulting in margin declining by \$100/oz to \$652/oz.

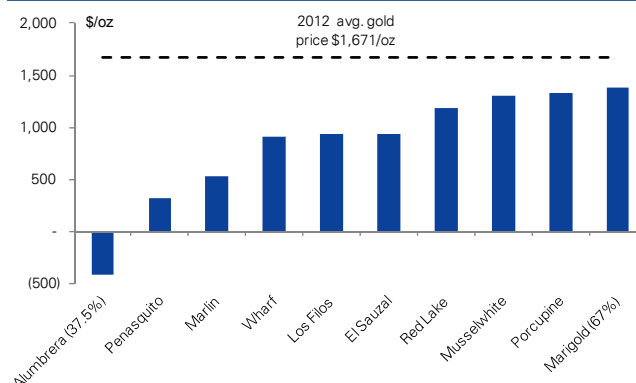


Figure 132: 2012 Barrick – AISC of \$944/oz



Source: Company data and Deutsche Bank estimates

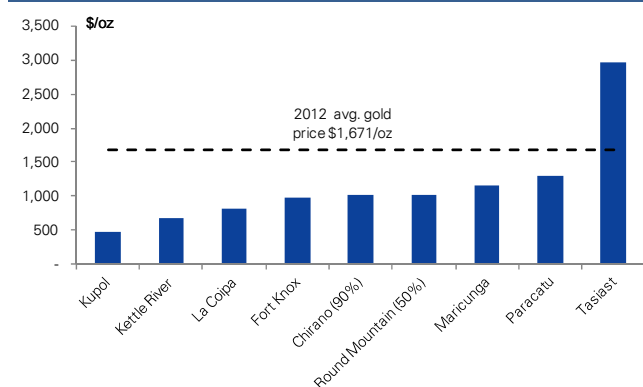
Figure 133: 2012 Goldcorp – AISC of \$873/oz



Source: Company data and Deutsche Bank estimates

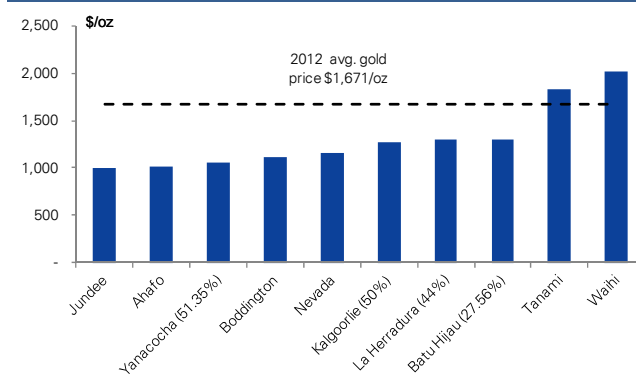
Barrick's Tulawaka (nearing end of life), Newmont's Tanami (lower ore availability) and Waihi (mine sequencing) and Kinross' Tasiast (higher sustaining capex of \$1,892/oz and grade variability issues) had estimated all-in cash costs which were higher than the average gold price for the period.

Figure 134: 2012 Kinross – AISC of \$1,088/oz



Source: Company data and Deutsche Bank estimates

Figure 135: 2012 Newmont – AISC of \$1,150/oz



Source: Company data and Deutsche Bank estimates

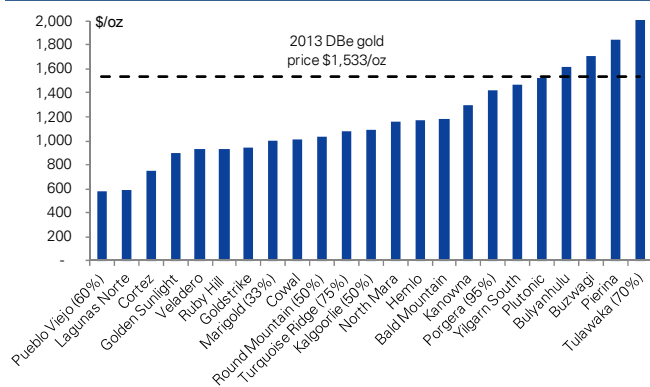
Note: For Kinross we have assumed that ~40% of capex spent at the operating mines were sustaining in nature.

### 2013 (forecast)

The weighted average all-in cash cost is estimated to increase 6% YoY to \$1,078/oz in 2013, primarily due to lower production (lower grades/mine sequencing at existing mines) and inflationary pressures. At a \$1,500/oz gold price, the implied margin is expected to decline \$230/oz to \$422/oz.

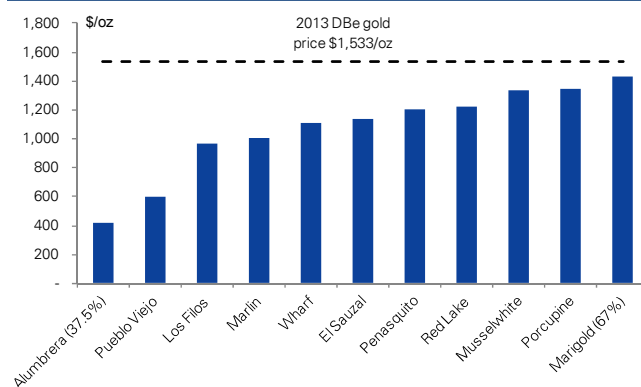


Figure 136: 2013E Barrick – AISC of \$1,003/oz



Source: Company data and Deutsche Bank estimates

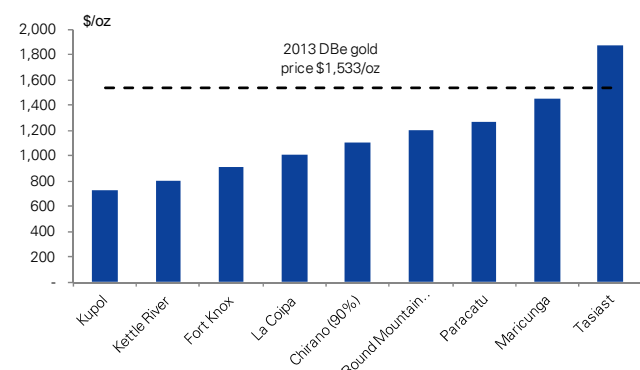
Figure 137: 2013E Goldcorp – AISC of \$1,076/oz



Source: Company data and Deutsche Bank estimates

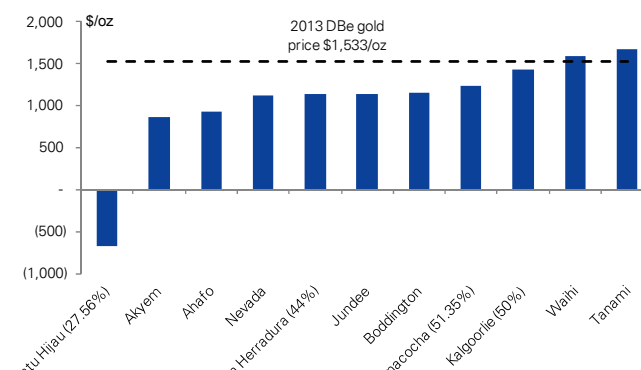
Sector production is expected to increase just 1% (~100k oz) despite the anticipated contribution from projects such as Pueblo Viejo (~945k oz, 100% basis) and Dvoinoye (~25k oz). Newmont's Batu Hijau is forecasted to be the most profitable mine (by-product basis) on higher copper production relative to gold from stockpiled ore. On the other end of the spectrum is Barrick's Tulawaka mine which is on track for closure in 1H13. Kinross' Tasiast mine is expected to show marked improvement (-37% YoY) as sustaining capex spending ease.

Figure 138: 2013E Kinross – AISC of \$1,129/oz



Source: Company data and Deutsche Bank estimates

Figure 139: 2013E Newmont – AISC of \$1,157/oz



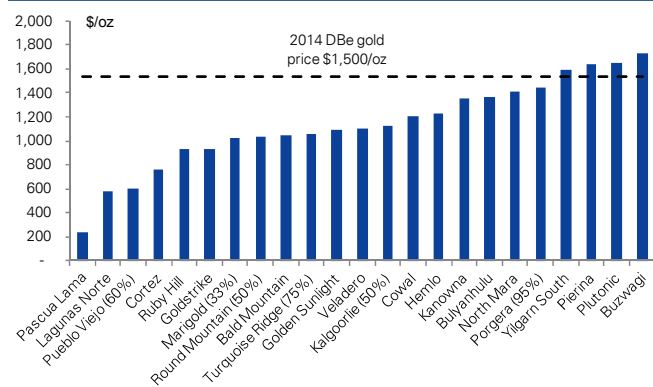
Source: Company data and Deutsche Bank estimates

## 2014 (forecast)

In 2014, the weighted average all-in cash cost is estimated to decline 2% YoY to \$1,056/oz, largely driven by commissioning/ramp of various projects and recovery of grades at old operating mines, resulting in a net addition of ~1.5 million oz across the sector.

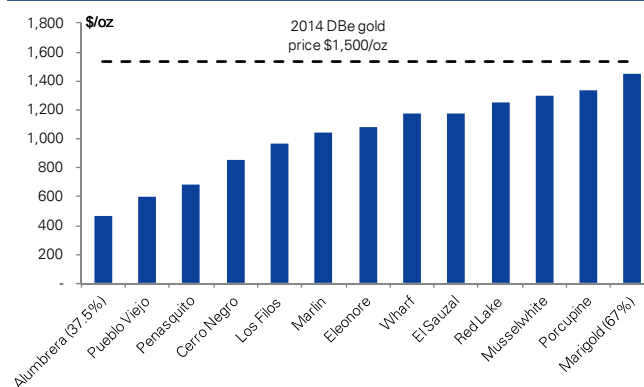


Figure 140: 2014E Barrick – AISC of \$994/oz



Source: Company data and Deutsche Bank estimates

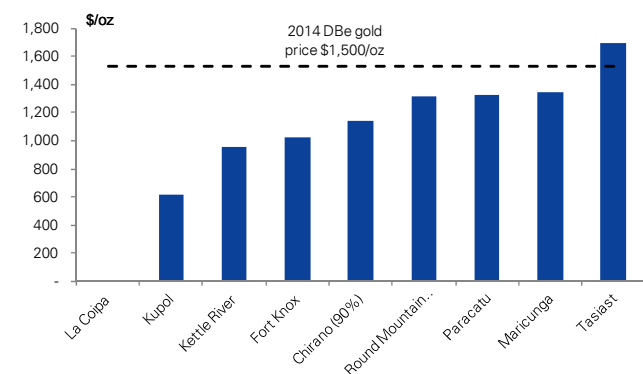
Figure 141: 2014E Goldcorp – AISC of \$976/oz



Source: Company data and Deutsche Bank estimates

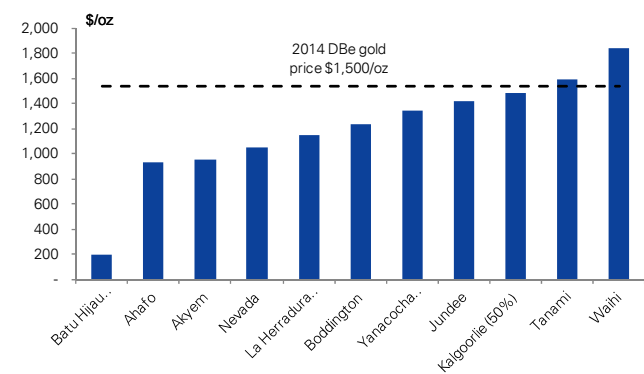
The major projects that lead to incremental volumes include – Pueblo Viejo (~140k oz, Dominican Republic), Pascua Lama (~250k oz, Chile-Argentina), Cerro Negro (~425k oz, Argentina), Éléonore (38k oz, Canada), Dvoinoye (~150k oz, Russia) and Akyem (~300k oz, Ghana). Also, better cost control and implementation of cost cutting measures through 2013 (as guided by NA Gold management teams) should also result in benefits flowing through into 2014.

Figure 142: 2014E Kinross – AISC of \$1,125/oz



Source: Company data and Deutsche Bank estimates

Figure 143: 2014E Newmont – AISC of \$1,153/oz



Source: Company data and Deutsche Bank estimates



## Metals and mining sector valuation and performance

Figure 144: DB Americas Metals & Mining valuation matrix

Company	Ticker	Price	Rating	Price	Mkt cap (US\$m)	EV/EBITDA (x)			P/E (x)			P/BV Div yield		ROE	FCF Yld	ND/Eq.
		5/31/2013		Target		2012E	2013E	2014E	2012E	2013E	2014E	(x)	(%)	(%)	(%)	(%)
Alcoa	AA.N	8.50	Hold	9	9,795	8.9	6.2	5.7	nm	12.8	10.4	0.6	1.3	4.5	(3.0)	45
Cliffs Natural Resources	CLF.N	18.04	Hold	25	3,076	5.7	5.8	4.7	nm	8.6	7.4	0.4	4.3	5.6	7.8	40
Freeport-McMoRan	FCX.N	31.05	Buy	40	31,003	4.8	5.2	4.3	9.7	8.0	7.9	1.1	4.0	15.6	1.6	64
Southern Copper	SCCO.N	31.15	Hold	42	26,340	8.2	7.8	7.8	13.6	13.1	13.4	4.4	3.1	37.3	2.5	34
Teck Resources	TCK.N	26.69	Hold	30	15,406	4.8	5.9	4.8	19.3	14.9	11.1	0.8	3.4	5.6	(0.5)	28
Thompson Creek	TC.N	3.52	Buy	4.5	773	nm	14.7	4.9	nm	nm	nm	0.6	-	0.6	(42.3)	42
Vale	VALE.N	14.40	Buy	22	74,209	5.3	5.2	5.7	13.4	8.1	9.5	0.9	4.6	11.7	(0.7)	37
Industrial Metals					160,603	5.8	5.8	5.7	12.2	9.8	9.9	1.5	3.9	15.5	0.1	42
Barrick Gold Corporation	ABX.N	21.12	Hold	22.5	21,141	4.8	5.8	5.9	nm	7.5	7.7	0.8	3.8	11.0	(3.5)	51
Goldcorp	GG.N	29.11	Hold	28	23,628	8.4	14.5	11.0	13.5	22.1	16.9	1.0	2.1	4.6	(5.2)	7
Kinross Gold Corporation	KGC.N	6.41	Hold	6	7,311	3.8	5.2	5.2	nm	17.2	16.3	0.7	2.5	4.2	(3.2)	11
Newmont Mining	NEM.N	34.28	Sell	24	17,106	5.5	7.1	7.5	9.4	14.4	15.7	1.0	3.9	6.8	1.5	30
Precious Metals					69,186	6.1	9.0	7.9	6.9	15.2	13.8	0.9	3.1	7.1	(2.8)	27
AK Steel	AKS.N	3.47	Hold	4	471	9.0	6.1	4.7	nm	nm	13.6	nm	-	31.8	(6.2)	nm
Allegheny Technologies	ATI.N	27.57	Buy	39	2,939	8.1	9.1	6.3	18.5	22.1	11.5	1.1	2.8	5.1	(0.0)	48
ArcelorMittal	MT.N	12.66	Hold	16	22,155	6.3	6.6	5.1	nm	nm	10.6	0.4	1.3	0.4	11.5	34
Nucor	NUE.N	44.51	Hold	45	14,185	9.7	10.2	7.2	26.7	25.8	14.7	1.8	3.3	6.9	2.9	34
Steel Dynamics	STLD.OQ	15.34	Buy	18	3,375	8.2	7.4	5.4	20.6	14.7	9.1	1.3	3.0	9.4	3.7	71
US Steel	X.N	17.69	Buy	23	2,554	5.6	9.8	5.6	nm	nm	20.8	0.8	1.1	(8.9)	8.5	102
Steel					45,678	7.6	8.1	5.9	11.0	10.5	12.4	1.0	2.1	3.2	7.2	41
Alliance Resource LP	ARLP.OQ	72.28	Buy	70	2,669	5.8	5.4	5.3	11.6	12.1	11.6	3.5	6.3	30.1	10.8	102
Alpha Natural Resources	ANR.N	6.68	Hold	9	1,475	5.2	10.0	6.5	nm	nm	nm	0.3	-	(9.4)	(3.1)	60
Arch Coal	ACI.N	5.16	Buy	7	1,094	8.1	12.2	7.1	nm	nm	nm	0.4	2.3	(10.3)	1.5	170
Consol Energy	CNX.N	34.68	Buy	40	7,918	9.7	9.7	7.8	20.3	46.0	16.0	2.0	1.1	4.3	1.1	80
James River	JRCC.OQ	2.59	Hold	2	90	9.3	nm	22.4	nm	nm	nm	1.4	-	nm	nm	759
Peabody Energy	BTU.N	19.67	Buy	26	5,250	6.3	8.8	6.5	nm	83.4	13.5	1.1	1.7	1.3	3.4	114
Walter	WLT.N	17.06	Hold	22	1,068	8.1	11.5	6.9	nm	nm	60.7	1.2	2.9	(12.6)	3.2	267
Coal					19,564	7.7	9.1	7.0	9.8	42.6	15.0	1.7	2.0	4.2	2.9	109
DB Americas Metals & Mining					295,030	6.3	7.1	6.3	10.6	13.3	11.6	1.3	3.3	10.8	0.7	42

Source: Bloomberg Finance LP and Deutsche Bank

Figure 145: Global gold miner valuation matrix

Company	Ticker	Price	Rating	Price	Mkt cap (US\$m)	EV/EBITDA (x)			P/E (x)			P/BV Div yield (%)	ROE (%)	FCF Yld (%)	ND/Eq. (%)	
		5/31/2013		Target		2012E	2013E	2014E	2012E	2013E	2014E					
AngloGold Ashanti Ltd	ANGJ.J	182.05	Buy	200	7,004	4.5	5.0	3.6	8.5	13.6	8.1	1.2	1.7	9.2	(8.9)	64
Barrick Gold	ABX.N	21.12	Hold	22.5	21,141	4.8	5.8	5.9	nm	7.5	7.7	0.8	3.8	11.0	(3.5)	51
Gold Fields	GFIJ.J	61.44	Hold	60	4,468	4.0	5.5	4.9	7.9	43.2	24.5	1.0	3.4	2.2	2.6	29
Goldcorp	GG.N	29.11	Hold	28	23,628	8.4	14.5	11.0	13.5	22.1	16.9	1.0	2.1	4.6	(5.2)	7
Harmony Gold Mining Ltd	HARJ.J	41.79	Buy	55	1,792	4.6	5.9	7.8	7.0	21.0	69.9	0.5	2.4	2.5	(3.0)	(0)
Kinross Gold	KGC.N	6.41	Hold	6	7,311	3.8	5.2	5.2	nm	17.2	16.3	0.7	2.5	4.2	(3.2)	11
Newcrest Mining Ltd	NCM.AX	14.51	Hold	19	10,634	6.3	10.8	7.7	9.9	20.9	14.9	0.7	2.3	3.5	(12.2)	25
Newmont Mining	NEM.N	34.28	Sell	24	17,106	5.5	7.1	7.5	9.4	14.4	15.7	1.0	3.9	6.8	1.5	30
Polymetal	POLYP.L	6.91	Buy	9	4,028	5.6	7.0	6.5	10.0	11.9	10.1	1.9	8.2	15.9	5.4	49
Polyus Gold	PGIL.L	2.06	Buy	2	9,479	6.2	10.0	10.0	10.2	16.8	18.6	1.9	1.5	12.0	(8.7)	7
Zijin Group	2899.HK	2.16	Sell	2	6,068	4.5	5.7	6.6	7.1	10.4	12.3	1.0	5.9	10.2	6.7	30
Weighted average					112,660	5.8	8.6	7.6	7.7	16.6	15.0	1.0	3.1	7.5	(3.5)	28
Barrick Gold vs average						-17%	-32%	-23%	nm	-55%	-48%	-23%	21%	47%	-2%	84%
Goldcorp vs average						44%	69%	45%	74%	33%	13%	-2%	-34%	-38%	47%	-75%
Kinross Gold vs average						-35%	-39%	-31%	nm	4%	8%	-30%	-20%	-44%	-10%	-60%
Newmont Mining vs average						-6%	-17%	-1%	21%	-13%	5%	-7%	24%	-9%	-142%	8%

Source: Bloomberg Finance LP and Deutsche Bank



Figure 146: DB Americas Metals & Mining price performance

Company	Ticker	Price 5/31/2013	52W High	52W Low	Price Target	Upside/ Downside	Absolute Performance					Relative Performance				
							1W	1M	3M	12M	YTD	1W	1M	3M	12M	YTD
Alcoa	AAN	8.50	9.84	7.96	9	6	0	0	1	2	(2)	1	2	14	15	20
Cliffs Natural Resources	CLF.N	18.04	51.73	17.32	25	39	(11)	(6)	(29)	(61)	(53)	(11)	(4)	(15)	(49)	(31)
Freeport-McMoRan	FCX.N	31.05	42.06	28.00	40	29	2	2	(1)	(1)	(8)	2	4	12	12	13
Southern Copper	SCCO.N	31.15	41.96	28.51	42	35	(1)	(5)	(17)	9	(18)	(1)	(4)	(4)	22	4
Teck Resources	TCK.N	26.69	38.36	24.52	30	12	(2)	0	(12)	(10)	(27)	(2)	2	1	3	(5)
Thompson Creek	TC.N	3.52	4.48	2.30	4.5	28	(0)	22	7	2	(15)	(0)	23	20	15	7
Vale	VALE.N	14.40	21.49	14.40	22	53	(7)	(13)	(22)	(20)	(31)	(7)	(11)	(9)	(8)	(9)
<b>Industrial Metals</b>							<b>38</b>	<b>(3)</b>	<b>(6)</b>	<b>(15)</b>	<b>(10)</b>	<b>(23)</b>	<b>(3)</b>	<b>(5)</b>	<b>(2)</b>	<b>2</b>
Barrick Gold Corporation	ABX.N	21.12	42.86	17.59	22.5	7	10	8	(28)	(50)	(40)	10	10	(15)	(37)	(18)
Goldcorp	GG.N	29.11	46.93	25.82	28	(4)	8	1	(10)	(26)	(21)	9	3	3	(14)	1
Kinross Gold Corporation	KGC.N	6.41	11.08	5.00	6	(6)	11	20	(16)	(25)	(34)	11	21	(3)	(13)	(12)
Newmont Mining	NEM.N	34.28	57.20	30.63	24	(30)	7	5	(13)	(32)	(26)	7	6	(0)	(20)	(4)
<b>Precious Metals</b>							<b>(7)</b>	<b>9</b>	<b>6</b>	<b>(17)</b>	<b>(35)</b>	<b>(29)</b>	<b>9</b>	<b>8</b>	<b>(4)</b>	<b>(22)</b>
AK Steel	AKS.N	3.47	6.44	2.82	4	8	1	5	(4)	(42)	(25)	1	7	9	(29)	(3)
Allegheny Technologies	ATI.N	27.57	36.75	25.61	39	41	(2)	5	(9)	(9)	(9)	(2)	7	4	3	13
ArcelorMittal	MT.N	12.66	17.95	11.36	16	26	(1)	3	(13)	(6)	(28)	(1)	4	0	6	(6)
Nucor	NUE.N	44.51	48.23	35.67	45	1	(2)	3	0	24	3	(1)	4	13	37	25
Steel Dynamics	STLD.OQ	15.34	16.09	10.41	18	17	(0)	4	3	47	12	0	6	16	60	34
US Steel	X.N	17.69	25.89	16.18	23	30	(4)	4	(13)	(8)	(26)	(4)	5	0	4	(4)
<b>Steel</b>							<b>19</b>	<b>(2)</b>	<b>3</b>	<b>(7)</b>	<b>7</b>	<b>(14)</b>	<b>(1)</b>	<b>4</b>	<b>6</b>	<b>19</b>
Alliance Resource LP	ARLP.OQ	72.28	77.49	53.06	70	(3)	(5)	(2)	15	28	24	(5)	(1)	28	40	46
Alpha Natural Resources	ANR.N	6.68	10.60	5.53	9	35	(5)	(6)	(13)	(36)	(31)	(5)	(5)	0	(24)	(10)
Arch Coal	ACI.N	5.16	8.66	4.55	7	26	(3)	6	5	(17)	(30)	(3)	8	18	(5)	(8)
Consol Energy	CNX.N	34.68	36.60	26.80	40	15	(2)	(1)	13	23	8	(2)	1	26	36	30
James River	JRCC.OQ	2.59	5.43	1.49	2	(23)	(17)	35	4	7	(19)	(16)	36	18	19	3
Peabody Energy	BTU.N	19.67	29.28	18.88	26	32	(4)	(3)	(4)	(14)	(26)	(4)	(2)	9	(2)	(4)
Walter	WLT.N	17.06	48.15	16.47	22	29	(8)	0	(43)	(64)	(52)	(8)	2	(30)	(52)	(31)
<b>Coal</b>							<b>20</b>	<b>(4)</b>	<b>(1)</b>	<b>3</b>	<b>2</b>	<b>(7)</b>	<b>(3)</b>	<b>0</b>	<b>16</b>	<b>15</b>
<b>DB Americas Metals &amp; Mining</b>							<b>(0)</b>	<b>(2)</b>	<b>(13)</b>	<b>(12)</b>	<b>(22)</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>(0)</b>	<b>0</b>
<b>S&amp;P 500 Index</b>	<b>SPSA</b>	<b>1,631</b>	<b>1,669</b>	<b>1,278</b>			<b>(1)</b>	<b>2</b>	<b>7</b>	<b>28</b>	<b>14</b>					

Note: averages are market cap weighted; Source: Bloomberg Finance LP and Deutsche Bank

Figure 147: Global gold miner price performance

Company	Ticker	5/31/2013	52W High	52W Low	Price Target	Upside/ Downside	Absolute Performance					Relative Performance				
							1W	1M	3M	12M	YTD	1W	1M	3M	12M	YTD
AngloGold Ashanti Ltd	ANGJ.J	182.05	319.50	155.28	200	10	15	6	(16)	(42)	(31)	8	3	2	(10)	(2)
Barrick Gold	ABX.N	21.12	42.86	17.59	22.5	7	10	8	(28)	(50)	(40)	3	5	(10)	(18)	(11)
Gold Fields	GFIJ.J	61.44	117.45	54.15	60	(2)	11	(5)	(18)	(48)	(41)	4	(8)	1	(16)	(12)
Goldcorp	GG.N	29.11	46.93	25.82	28	(4)	8	1	(10)	(26)	(21)	1	(1)	8	5	8
Harmony Gold Mining Ltd	HARJ.J	41.79	89.00	34.56	55	32	16	(3)	(26)	(52)	(44)	9	(6)	(8)	(21)	(15)
Kinross Gold	KGC.N	6.41	11.08	5.00	6	(6)	11	20	(16)	(25)	(34)	3	17	2	7	(6)
Newcrest Mining Ltd	NCM.AX	14.51	29.96	14.42	19	32	(4)	(10)	(35)	(40)	(35)	(11)	(13)	(16)	(8)	(6)
Newmont Mining	NEM.N	34.28	57.20	30.63	24	(30)	7	5	(13)	(32)	(26)	0	2	5	(0)	2
Polymetal	POLYP.L	6.91	12.19	6.17	9	33	6	(2)	(31)	(10)	(41)	(1)	(5)	(12)	na	(13)
Polyus Gold	PGILL	2.06	2.30	1.88	2	10	1	2	(6)	na	na	(6)	na	na	na	na
Zijin Group	2899.HK	2.16	3.27	2.12	2	(17)	1	(5)	(18)	(15)	(29)	(6)	(8)	0	17	(1)
<b>Weighted average</b>							<b>7</b>	<b>3</b>	<b>(19)</b>	<b>(31)</b>	<b>(28)</b>	<b>(0)</b>	<b>0</b>	<b>(1)</b>	<b>(3)</b>	<b>(2)</b>

Note: averages are market cap weighted; Source: Bloomberg Finance LP and Deutsche Bank



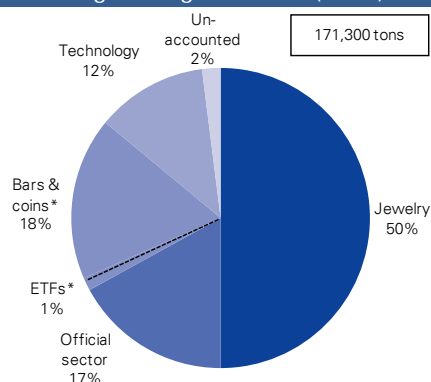
## Global gold and silver supply/demand models and end-uses

Figure 148: DB global gold supply/demand model

(tons)	2009	2010	2011	2012E	2013E	2014E	2015E
Mine production	2,575	2,739	2,836	2,848	2,900	3,010	3,050
Producer hedging	(257)	(108)	11	(20)	20	20	20
Secondary supply, scrap	1,695	1,641	1,669	1,626	1,536	1,366	1,337
<b>Total Supply</b>	<b>4,013</b>	<b>4,272</b>	<b>4,516</b>	<b>4,454</b>	<b>4,456</b>	<b>4,396</b>	<b>4,407</b>
Jewelry	1,814	2,017	1,973	1,908	2,002	2,012	2,029
Industrial & others	697	767	786	780	800	810	810
Investment demand	1,536	1,411	1,301	1,231	1,104	994	988
ETFs and similar	617	368	154	50	300	300	0
Official sector purchases	(34)	77	456	535	550	580	580
<b>Total Demand</b>	<b>4,013</b>	<b>4,272</b>	<b>4,516</b>	<b>4,454</b>	<b>4,456</b>	<b>4,396</b>	<b>4,407</b>
Gold price (\$/oz)	974	1,225	1,576	1,669	1,533	1,500	1,450

Source: GFMS, WGC and Deutsche Bank estimates

Figure 149: Above-ground gold stocks (2011)



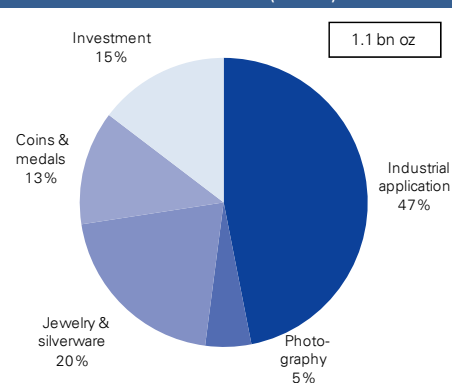
\*ETFs and Bars & coins together represent Investment category Source: GFMS, WGC and Deutsche Bank estimates

Figure 150: DB global silver supply/demand model

(m oz)	2010	2011	2012	2013E	2014E	2015E	2016E
<b>Total supply</b>	<b>1,064</b>	<b>1,051</b>	<b>1,087</b>	<b>1,129</b>	<b>1,149</b>	<b>1,163</b>	<b>1,170</b>
Mine production	755	787	820	857	872	880	881
Secondary supply/scrap	215	222	232	242	247	253	259
Government sales (net)	45	10	10	10	10	10	10
Producer hedging	50	32	25	20	20	20	20
<b>Total fabrication</b>	<b>876</b>	<b>907</b>	<b>928</b>	<b>967</b>	<b>988</b>	<b>1,012</b>	<b>1,037</b>
Industrial applications	487	497	510	530	552	574	597
Photography	72	63	56	50	45	41	37
Jewelry & silverware	219	221	223	226	228	230	232
Coins & medals	97	126	139	160	163	166	170
Implied Net Investment	189	144	159	162	161	152	133
<b>Total Demand</b>	<b>1,064</b>	<b>1,051</b>	<b>1,087</b>	<b>1,129</b>	<b>1,149</b>	<b>1,163</b>	<b>1,170</b>
Silver price (\$/oz)	20.2	35.2	31.3	26.7	26.8	26.4	26.0

Source: GFMS and Deutsche Bank estimates

Figure 151: World silver demand (2012)



Source: GFMS and Deutsche Bank estimates



## DB Commodity price forecasts

Figure 152: DB commodity price forecasts

May 31, 2013		Spot px	YTD avg	QTD avg	2007	2008	2009	2010	2011	2012	2013E	2014E	2015E	2016E	2017E	2018E	LT real#	LT nominal*
<b>Base Metals</b>																		
Aluminum	(US\$/lb)	85	88	84	120	116	76	99	109	93	92	98	102	111	121	130	113	139
Copper	(US\$/lb)	328	347	327	323	315	234	343	400	361	357	340	326	329	333	337	277	340
Lead	(US\$/lb)	99	99	92	117	96	78	98	109	94	98	103	112	112	112	112	91	112
Molybdenum	(US\$/lb)	11.11	11.32	11.15	30.36	30.50	12.76	15.66	15.76	13.39	10.99	10.40	11.78	13.14	14.49	15.85	14.00	17.20
Nickel	(US\$/lb)	664	748	694	1,691	964	664	991	1,037	797	764	726	730	799	867	935	817	1,003
Zinc	(US\$/lb)	85	89	84	148	86	75	98	99	89	93	92	107	110	113	117	98	120
Tin	(US\$/lb)	945	1,041	962	659	832	615	927	1,182	954	1,005	1,057	1,093	1,029	964	900	681	835
<b>Precious Metals</b>																		
Gold	(US\$/oz)	1,388	1,557	1,450	697	873	974	1,226	1,570	1,671	1,533	1,500	1,450	1,488	1,525	1,563	1,300	1,600
Palladium	(US\$/oz)	749	731	715	356	353	264	527	733	653	742	800	900	1,000	1,100	1,200	815	1,000
Platinum	(US\$/oz)	1,459	1,571	1,484	1,306	1,577	1,205	1,610	1,719	1,555	1,658	1,800	1,850	1,900	2,000	2,200	1,625	2,000
Silver	(US\$/oz)	22.26	27.6	24.2	13.38	15.02	14.65	20.19	35.22	31.27	26.71	26.79	26.36	26.02	25.68	25.34	20.00	25.00
Rhodium	(US\$/oz)				6,173	6,613	1,618	2,483	1,997	1,285	1,275	1,600	1,800	1,800	1,800	2,500	3,250	4,000
<b>Bulks</b>																		
Spot landed fines price in China	US\$/t CIF	112	141	132	124	167	119	147	168	124	124	114	112	109	105	102	80	98
Premium Hard Coking Coal	(US\$/t)	138	158	147	101	249	172	195	289	210	169	180	182	182	181	181	150	180
Thermal Coal - Japanese Benchmark	(US\$/t)				55	108	85	91	122	119	101	100	97	98	99	100	82	101
<b>Other Commodities</b>																		
Alumina spot	(US\$/t)	330	335	327	347	371	243	334	409	318	355	347	383	410	437	464	400	491
Cobalt	(US\$/lb)	13.02	11.91	12.26	28.16	37.33	17.32	20.17	19.27	15.00	12.00	12.00	11.00	11.00	12.00	13.00	10.00	12.72
WTI Cushing	(US\$/bbl)	92	94	93	72	100	62	79	95	95	100	103	100	105	108	110	91	112
Brent	(US\$/bbl)	100	110	103	73	97	62	80	112	112	114	113	110	110	111	113	94	115
US Natural gas	(US\$/CF)	4.03	3.73	4.10	7.18	9.05	4.05	4.26	4.07	2.86	3.75	4.25	4.50	4.75	5.00	5.25	4.50	5.50
<b>Exchange Rates</b>																		
USD/AUD	(x)	0.96	1.03	1.01	0.84	0.85	0.79	0.92	1.03	1.04	1.03	0.95	0.93	0.95	0.95	0.95	0.95	0.95
ZAR/USD	(x)	10.09	9.03	9.16	7.05	8.26	8.42	7.32	7.26	8.21	8.53	9.05	9.25	9.50	9.50	9.50	9.50	9.50
USD/EUR	(x)	1.30	1.31	1.30	1.37	1.47	1.39	1.33	1.39	1.29	1.29	1.18	1.15	1.15	1.15	1.15	1.15	1.15
BRL/USD	(x)	2.14	2.01	2.02	1.95	1.84	2.00	1.76	1.67	1.95	2.09	2.05	2.09	2.14	2.18	2.18	2.18	2.18

Note: #in 2013 Dollar, \*LT nominal is for 2019 based on assumed inflation rate of 3.5% per annum; Source: Bloomberg Finance LP, Platts and Deutsche Bank estimates





*The authors of this report wish to acknowledge the contribution made by Sathish Kasinathan, employee of Irevna, a division of CRISIL Limited; a third party provider to Deutsche Bank of offshore research support services.*



# Appendix 1

## Important Disclosures

Additional information available upon request

### Disclosure checklist

Company	Ticker	Recent price*	Disclosure
Barrick Gold	ABX.N	21.12 (USD) 31 May 13	1,14,15,17
Goldcorp	GG.N	29.11 (USD) 31 May 13	6
Kinross Gold	KGC.N	6.41 (USD) 31 May 13	NA
Newmont Mining	NEM.N	34.28 (USD) 31 May 13	1,6,8,14,15,17

\*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.

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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.
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15. This company has been a client of Deutsche Bank Securities Inc. within the past year, during which time it received non-investment banking securities-related services.

## Important Disclosures Required by Non-U.S. Regulators

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1. Within the past year, Deutsche Bank and/or its affiliate(s) has managed or co-managed a public or private offering for this company, for which it received fees.
6. Deutsche Bank and/or its affiliate(s) owns one percent or more of any class of common equity securities of this company calculated under computational methods required by US law.
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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>

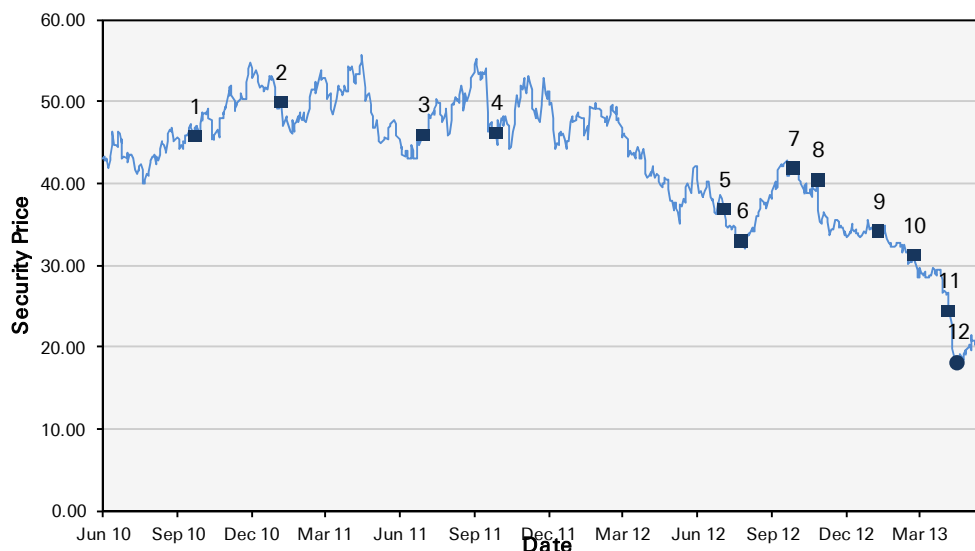
## Analyst Certification

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. Jorge Beristain



## Historical recommendations and target price: Barrick Gold (ABX.N)

(as of 5/31/2013)



### Previous Recommendations

Strong Buy  
Buy  
Market Perform  
Underperform  
Not Rated  
Suspended Rating

### Current Recommendations

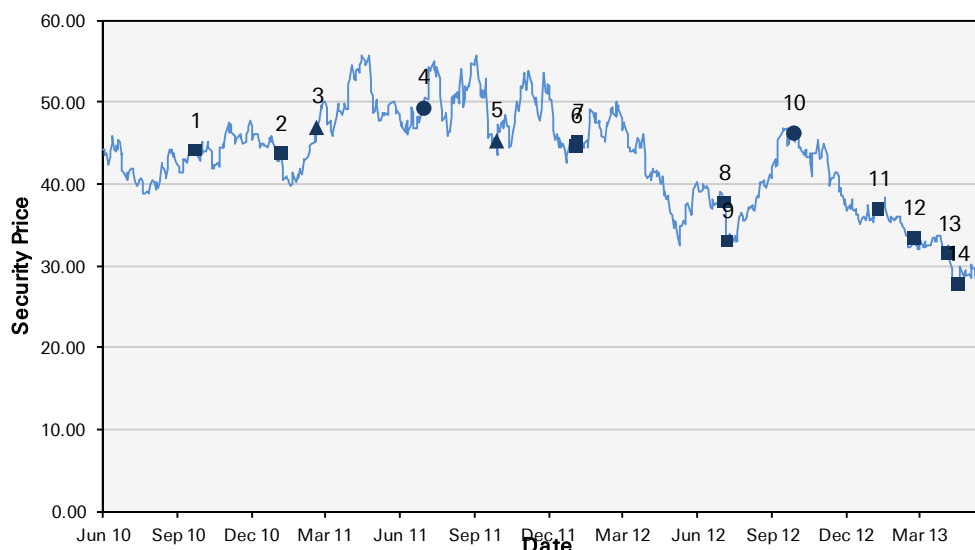
Buy  
Hold  
Sell  
Not Rated  
Suspended Rating

\*New Recommendation Structure  
as of September 9, 2002

1. 09/27/2010:	Buy, Target Price Change USD58.00	7. 10/02/2012:	Buy, Target Price Change USD59.00
2. 01/11/2011:	Buy, Target Price Change USD76.00	8. 11/01/2012:	Buy, Target Price Change USD54.00
3. 07/05/2011:	Buy, Target Price Change USD67.00	9. 01/15/2013:	Buy, Target Price Change USD50.00
4. 10/03/2011:	Buy, Target Price Change USD69.00	10. 02/27/2013:	Buy, Target Price Change USD46.00
5. 07/09/2012:	Buy, Target Price Change USD61.00	11. 04/11/2013:	Buy, Target Price Change USD40.00
6. 07/31/2012:	Buy, Target Price Change USD50.00	12. 04/22/2013:	Downgrade to Hold, Target Price Change USD22.50

## Historical recommendations and target price: Goldcorp (GG.N)

(as of 5/31/2013)



### Previous Recommendations

Strong Buy  
Buy  
Market Perform  
Underperform  
Not Rated  
Suspended Rating

### Current Recommendations

Buy  
Hold  
Sell  
Not Rated  
Suspended Rating

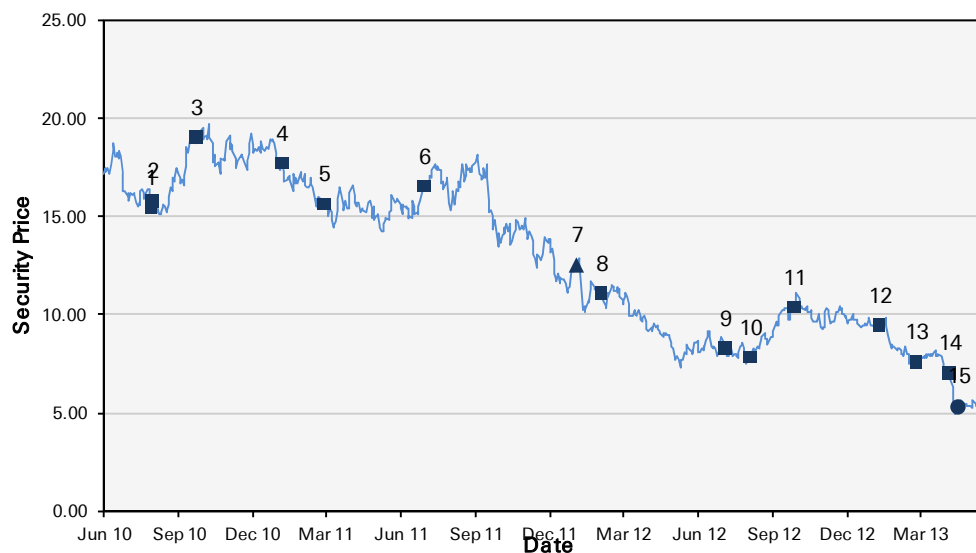
\*New Recommendation Structure  
as of September 9, 2002

1. 09/28/2010:	Hold, Target Price Change USD46.00	8. 07/09/2012:	Buy, Target Price Change USD50.00
2. 01/11/2011:	Hold, Target Price Change USD60.00	9. 07/13/2012:	Buy, Target Price Change USD45.00
3. 02/25/2011:	Upgrade to Buy, USD60.00	10. 10/02/2012:	Downgrade to Hold, Target Price Change USD48.00
4. 07/05/2011:	Downgrade to Hold, Target Price Change USD56.00	11. 01/15/2013:	Hold, Target Price Change USD36.00
5. 10/03/2011:	Upgrade to Buy, Target Price Change USD54.00	12. 02/27/2013:	Hold, Target Price Change USD35.00
6. 01/09/2012:	Buy, Target Price Change USD58.00	13. 04/11/2013:	Hold, Target Price Change USD31.00
7. 01/11/2012:	Buy, Target Price Change USD55.00	14. 04/22/2013:	Hold, Target Price Change USD28.00



## Historical recommendations and target price: Kinross Gold (KGC.N)

(as of 5/31/2013)



### Previous Recommendations

Strong Buy  
Buy  
Market Perform  
Underperform  
Not Rated  
Suspended Rating

### Current Recommendations

Buy  
Hold  
Sell  
Not Rated  
Suspended Rating

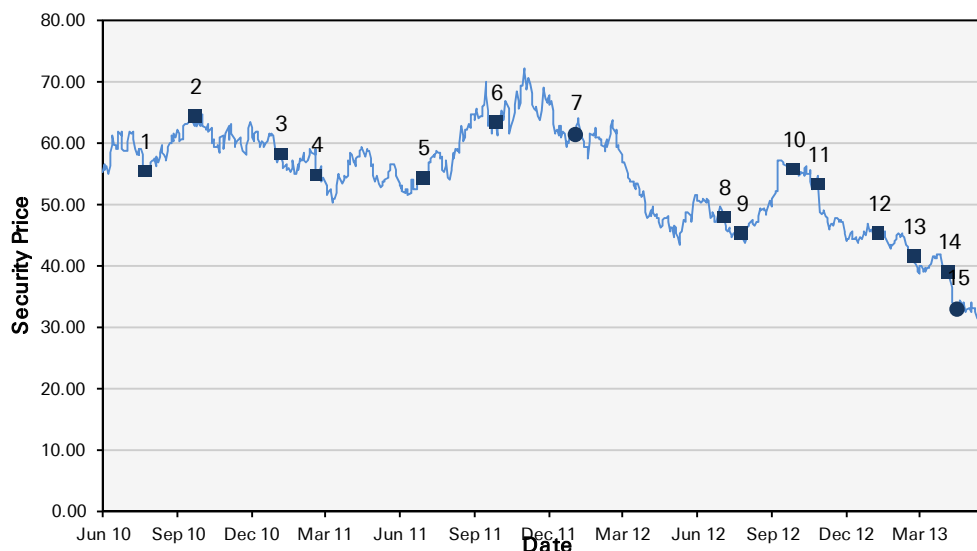
\*New Recommendation Structure  
as of September 9, 2002

1. 08/03/2010:	Hold, Target Price Change USD18.00	9. 07/09/2012:	Buy, Target Price Change USD14.50
2. 08/05/2010:	Hold, Target Price Change USD16.50	10. 08/09/2012:	Buy, Target Price Change USD13.00
3. 09/28/2010:	Hold, Target Price Change USD20.00	11. 10/02/2012:	Buy, Target Price Change USD16.00
4. 01/11/2011:	Hold, Target Price Change USD23.00	12. 01/15/2013:	Buy, Target Price Change USD12.00
5. 03/04/2011:	Hold, Target Price Change USD21.00	13. 03/01/2013:	Buy, Target Price Change USD11.00
6. 07/05/2011:	Hold, Target Price Change USD18.00	14. 04/11/2013:	Buy, Target Price Change USD9.00
7. 01/09/2012:	Upgrade to Buy, USD18.00	15. 04/22/2013:	Downgrade to Hold, Target Price Change USD6.00
8. 02/08/2012:	Buy, Target Price Change USD16.50		



## Historical recommendations and target price: Newmont Mining (NEM.N)

(as of 5/31/2013)



### 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. 07/28/2010:	Buy, Target Price Change USD70.00	9. 07/31/2012:	Hold, Target Price Change USD50.00
2. 09/28/2010:	Buy, Target Price Change USD77.00	10. 10/02/2012:	Hold, Target Price Change USD59.00
3. 01/11/2011:	Buy, Target Price Change USD93.00	11. 11/02/2012:	Hold, Target Price Change USD54.00
4. 02/24/2011:	Buy, Target Price Change USD85.00	12. 01/15/2013:	Hold, Target Price Change USD50.00
5. 07/05/2011:	Buy, Target Price Change USD75.00	13. 02/27/2013:	Hold, Target Price Change USD47.00
6. 10/03/2011:	Buy, Target Price Change USD77.00	14. 04/11/2013:	Hold, Target Price Change USD40.00
7. 01/09/2012:	Downgrade to Hold, Target Price Change USD64.00	15. 04/22/2013:	Downgrade to Sell, Target Price Change USD24.00
8. 07/09/2012:	Hold, Target Price Change USD57.00		

### Equity rating key

**Buy:** Based on a current 12- month view of total share-holder 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 share-holder 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.

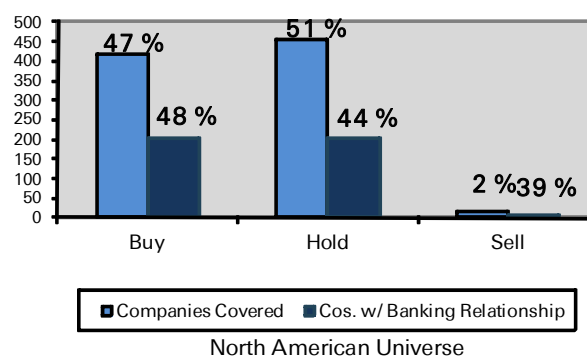
2. Ratings definitions prior to 27 January, 2007 were:

**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

### Equity rating dispersion and banking relationships





## Regulatory Disclosures

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