UK Precious Metals Equities

Asset Write-Down Season

- **Asset Devaluation** — When gold suddenly drops by $200/oz in a few days, the first market reaction is that it will be temporary and bounce back quickly. As it has now been two months since gold dropped and it still remains close to the lows it reached then, some real, hard and potentially long term impacts are hitting the industry, such as the need for asset write-downs. As time passes, we think more and more investors will begin to believe that this is now a bear market, and more and more will question why the gold industry has, once more, ploughed all its 1-in-20-year bull market cash straight back into producing more of an investment-commodity whose investment demand now appears to be in serious reverse.
- **Industrial demand to the fore** — Our sector thesis is based on the key assumption that we have passed the worst point of the credit crisis and that the global financial system and global economies are in recovery mode. This leads us to two key conclusions on the precious metals sector. The first is that the need for hard asset insurance (i.e. via gold and silver), has peaked. The second is that the demand for industrial metals, such as copper and platinum, should increase with improving economies.
- **Rally Over** — After the big $200 fall in mid-April, we argued on 29th April (Monday Mining Minutes - Was last week just a commodity bear market rally?) that "Gold could have a decent bounce from $1340/oz to the $1500/oz region" and we added "we would, once more, advise using that rally to sell gold and silver shares." We were wrong and gold has only reached $1480/oz since then and we now think that that rally has almost run its course.
- **Where to now?** — If the rally is over, where are we heading to next? We don't know, but, as a precaution, we have run EPS and cash flow sensitivities at $1300, $1200 and $1100/oz in this document to establish which companies we estimate would have the most difficulty at those levels. The answer, as always in a bear market, is to avoid the lower-quality assets and in that camp we would include ABG, POG and Nord Gold. HOCM is mid-quality but its significant spending in the boom has shifted it very close to the lower-quality end. We recommend switching out of these and into Lonmin and Petra Diamonds. Please see the table below for estimate and target price changes.

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		Rating		Target Price		Current Year Earnings Estimates	
Company	**Ticker**	**Old**	**New**	**Old**	**New**	**Old**	**New**
African Barrick	ABGL.L	3	3	£1.75	£1.24	US$0.27	US$0.27
Aquarius Platinum	AQP.L	1	1	£0.66	£0.66	US¢-2.3	US¢-2.3
Centamin Egypt	CEY.L	2	2	-	-	US¢20.8	US¢20.8
Fresnillo	FRES.L	3	3	£10.45	£10.45	US$0.93	US$0.93
Gem Diamonds	GEMD.L	1	1	£1.72	£1.72	US$0.11	US$0.11
Hochschild Mining	HOCM.L	3	3	£1.94	£1.78	US$0.17	US$0.17
Lonmin	LMI.L	1	1	£3.86	£3.86	US¢17.5	US¢17.5
NordGold	NORDNq.L	3	3	US$3.12	US$1.96	US$0.06	US$0.06
Petra Diamonds	PDL.L	1	1	£1.51	£1.51	US$0.04	US$0.04
Petropavlovsk	POG.L	3	3	£1.32	£1.16	US$0.48	US$0.48
Polymetal	POLYP.L	3	3	£5.77	£5.29	US$1.36	US$1.36
Randgold Resourc	RRS.L	3	3	£42.30	£39.26	US$4.33	US$4.33

We remain bearish on Gold and Silver

We have been bearish on UK gold and silver equities for six months and our position has not changed. We believe that we are still at the early stages of an extended bear market (in terms of time-length) and that the only positive periods in 2013 and 2014 will consist of bear market rallies.

Conversely, the platinum equity sector, albeit troubled by South African labour issues, seems to be clawing its way out of a five-year bear market. Upside will likely be slow and painstaking but we believe that good gains will be made on a one and two year view. In a similar vein, 2013 is a recovery and base-forming period for diamond shares, in our opinion, ahead of more sustained upside in the 2014 and 2015 period.

UK Precious Sector Portfolio Strategy

Our thesis on this sector is based on the key assumption the world has some time ago passed the highest risk point of the credit crisis and that the global financial system and global economies are in recovery mode. This leads us to two key conclusions on the precious metals sector. The first is that the need for hard asset insurance, such as that offered by gold and silver, has peaked. The second is that the demand for industrial metals, such as copper and platinum, should increase with improving economies.

Figure 1. Citi Precious Metal Forecasts

(US$/oz)	2013	2014	2015	Long term
Gold	1555	1435	1340	1050
Silver	28.1	25.9	23.25	16.5
Platinum	1550	1625	1750	1531
Palladium	810	950	925	680

Source: Citi Commodity Research

On the basis of the above thesis, we believe that the 'insurance component ' portion of gold (which may have been anywhere between USD 700 /oz and USD 900/ oz at the recent peak) will now be surrendered. This suggests that gold could find a base anywhere between USD 1100/oz and USD 1300/oz. At that point, we believe the metal should begin to find support from areas other than its hard asset attraction, such as the jewellery cycle improving with the economic cycle.

Platinum was not able to function as a hard-asset insurance-metal in the credit crisis because it was tied to a negatively-impacted global auto cycle. That cycle is now recovering and it is our view that its credit-crisis disadvantage relative to gold will now be turned into an advantage relative to gold (and silver) in an improving global economy.

While groups like ABG and POG have seen significant price falls in the past year, the same was the case for platinum groups like Lonmin and Aquarius in 2011 and 2012 but we are more confident of metal price upside in platinum and palladium which makes a stronger case for buying these shares after their extended price falls in the past two years. Indeed, Lonmin today is trading 87% lower than its high of the past five years and Aquarius trades 95% down from its high.

The South African labour situation remains a threat to the platinum producers but we would not put that risk any higher than the political risk of operating in the DRC, as Randgold does. Furthermore, while the strong dollar has been an added negative for all metals, the labour-intensive (and hence local-currency dependent) platinum producers derive a huge benefit from the contrasting weakening in the South African Rand.

The diamond market initially joined the hard-asset club in the credit crisis but by 2011 it had already reverted to behaving like platinum and reversed its entire credit-crisis gains even while gold was at its higher levels. As in the case of platinum, we believe that both a recovery in the fortunes of mid-net-worth consumers and a significant shortage of new diamond mines will see diamonds out-performing gold and silver in the forthcoming global economic recovery.

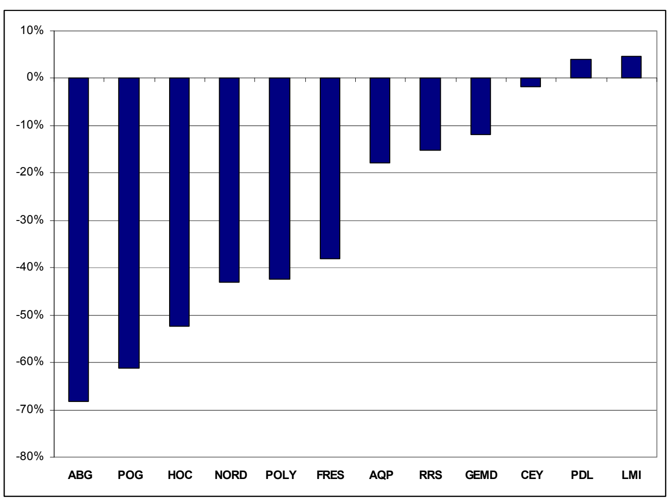
At a level of \$1600-\$1800/oz a number of the more operationally-geared gold companies (with higher cash costs and/or debt) had a certain appeal because of the upside they offered on any further advance in the gold price. The very quick fall from \$1620 to \$1320/oz suddenly called into question any groups with a high cash cost or with balance sheet debt.

We have run EPS and cash flow sensitivities at \$1300, \$1200 and \$1100/oz in this document to establish which companies we estimate would have the most difficulty at those levels. The answer, as always in a bear market, is to avoid the lower-quality assets and in that camp we would include ABG, POG and Nord Gold. HOCM is mid-quality but its adventurous spending in the boom has shifted it very close to the lower-quality end. We recommend switching out of these and into Lonmin and Petra Diamonds.

UK Gold and Silver Shares

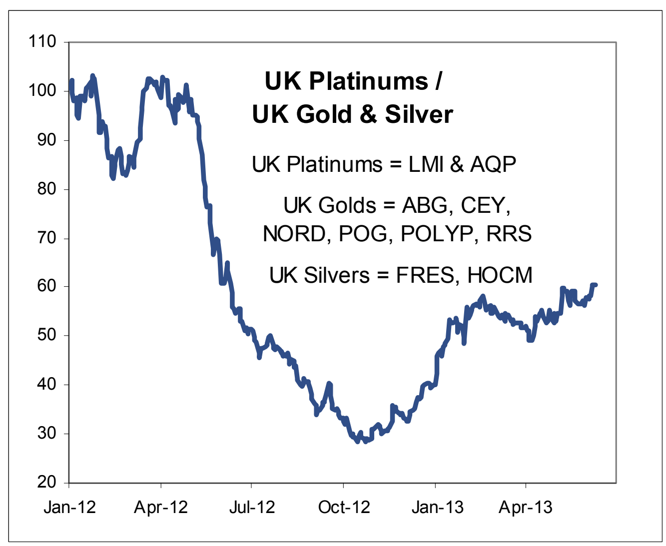
Unsurprisingly the biggest share price falls have occurred in groups with high costs (African Barrick is an example) or groups with debt (Petropavlovsk and Nord Gold). If Centamin had not been located in Egypt, we believe it would have been the best performing stock, with low and declining costs and net cash on its balance sheet.

Figure 2. Percentage change in Share Prices since 1/1/2013



Source: Datastream

Figure 3. Relative: Gold/Silver Shares vs Platinum Shares



Source: Datastream

The other type of precursor metal share which has suffered has been in the better-quality area of the market but where the market had significantly overpaid for that quality and for the seeming significant resistance to a fall in metal prices offered. This type of share has perhaps been more loved by top-down strategists and portfolio analysts all trying to squeeze into a limited high-quality space for an 'uncomplicated' exposure to these metals (in contrast to the complicated exposure of a gold and iron ore group such as Petropavlovsk.)

Fresnillo was a classic example of this and, while the gold and silver price fall should have impacted it the least, it fell sharply. We believe this fall was based on its previous over-valuation (helped by a limited free float) and on the exit of that type of portfolio investor as they switched to other performing sectors in the global equity

upturn. Hochschild, the silver producer with much higher costs and lower-quality reserves than Fresnillo, had had its valuation pulled up not by its quality, but because it was the only realistic alternative silver play to the much-overpriced Fresnillo in our view.

Figure 4. 2014E EPS (US$) Sensitivity at Various Gold Prices

	$1300	$1200	$1100
ABG	0.076	-0.029	-0.134
CEY	0.053	0.011	-0.031
FRES	0.582	0.474	0.365
HOCM	0.038	-0.021	-0.080
NORD	-0.126	-0.257	-0.385
POG	0.113	-0.076	-0.324
POLYP	0.978	0.724	0.470
RRS	2.817	1.992	1.167

Source: Citi Research

The UK gold share which has straddled all of these issues is Randgold, which has neither a high cost profile, nor debt on it balance sheet or a valuation which was as stretched as Fresnillo. Furthermore, it has a game-changing new mine (Kibali) being commissioned at the end of this year. Although the Randgold share price has been falling, it has significantly out-performed its similar-quality peer Fresnillo and it has been the one gold share about which we have been most nervous to put on a Sell-rating. This nervousness is enhanced by the fact that we have been conscious that a gold price outcome even $100 /oz better than our bearish gold view could tilt the balance between the negative of a low gold price and the positive of Kibali.

In this document we continue to rate Randgold as Sell, again, not because of a question mark over the quality of is assets or growth, but because we feel that the gold price has more downside. In contrast to the resilience of the Randgold share price, the substantial falls in the prices of the likes of POG, ABG and NORD would ordinarily be very tempting as a case for value buys. The trouble with these types of gold group is that, in the unfortunate event of gold not falling the further $150 that our commodity analysts expect but, perhaps $250 or $300, we estimate these companies would be in significant difficulty on some of their projects and perhaps on their companies as a whole. Our view is therefore to maintain discipline and not be tempted back into these groups until we are more confident that a bottom has been reached in the gold cycle.

While groups like ABG and POG have seen significant price falls in the past year, the same has been the case for platinum groups like Lonmin and Aquarius but we are more confident of platinum metal price upside than gold upside.

Figure 5. 2014E Free Cash Flow ($m) Sensitivity at Various Gold Prices

	$1300	$1200	$1100
ABG	-155	-215	-276
CEY	42	-4	-49
FRES	373	299	226
HOCM	-163	-183	-203
NORD	153	95	-203
POG	89	66	32
POLYP	402	305	208
RRS	305	225	144

Source: Citi Research

Based on our sensitivity analysis, while Randgold's 2014E EPS falls sharply from $2.81 at $1300 to $1.16 at $1100, the likes of ABG, NORD and POG all have negative EPS at $1200 already, as does HOCM at the equivalents gold and silver price falls. At $1100 (and the equivalent $18/oz silver price) only Fresnillo, Polymetal and Randgold are still delivering positive EPS. We are not suggesting that gold will fall to $1100, but we do believe that a fall to the recent low of $1320 could cause the market to begin to place probabilities in the range of 10% to 30% on the possibility of gold falling below $1200. Because of that EPS sensitivity, the market has been quite harsh on the price trends of the likes of ABG (down 75% this year), POG (down 63%) and HOCM which is down 55% year to date.

If the gold price were to trade at $1100 in H2 2013 and all the way through 2014, we estimate that by the end of 2014 POG would have the highest net debt to debt+ equity ratio at 35%. At $1800 gold, this was an acceptable debt level but even though POGs project-capex commitment has peaked, it is a problematical level which has forced the group into gold hedging activity. The most recent hedging was done at $1400/oz so POG is being increasingly forced into hedging a considerable amount of its potential upside away. This is unhelpful for gold bulls as the group's upside sensitivity to gold prices is watered down both by its iron ore exposure and by the need to hedge a portion of its gold sales. It is a group which looks troubled at lower gold prices and uninteresting at higher god prices in our view.

Figure 6. 2014E Net Debt / Net Debt + Equity (negative = net cash) Sensitivity at Various Gold Prices

	$1300	$1200	$1100
ABG	-5%	-2%	0%
CEY	-25%	-20%	-15%
FRES	-34%	-30%	-26%
HOCM	18%	20%	22%
NORD	22%	24%	26%
POG	32%	33%	35%
POLYP	3%	8%	13%
RRS	-14%	-10%	-6%

Source: Citi Research

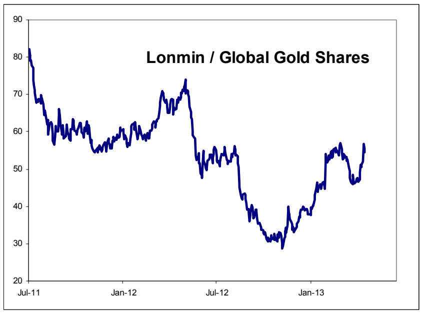
The significant net cash positions of ABG and RRS get whittled away quickly at $1100 in our sensitivity analysis, ABG because of high cash cost and RRS because of capex commitments at Kibali.

While the forecast 22% debt ratio at HOCM and 26% at Nord would not be troubling in an industrial company or in a diversified miner, the market is typically very wary of gold groups with that level of debt when the gold price is likely not in a bull market. Indeed, if we have seen the peak of the gold cycle, the age old complaint will be leveled against gold companies that in the once-in-20-year gold mega-bull-markets that come along, gold companies simply plough the mountains of cash back into producing more gold.

UK Platinum Shares

There has been a very sharp under-performance of gold and silver equities during 2013. We have been bears on these two sector since 4Q 2012 (Monday Mining Minutes - Switch from Precious to Industrial) and remain so. Conversely, we are bulls on platinum equities strikes (South African Platinum Sector - Pricing in the Perfect Storm- Time to Buy) and we believe that the key 2013 sub-sector story in UK Miners is to switch from gold and silver equities and into platinum equities.

Figure 7. Lonmin/Global Gold Shares



Source: Datastream

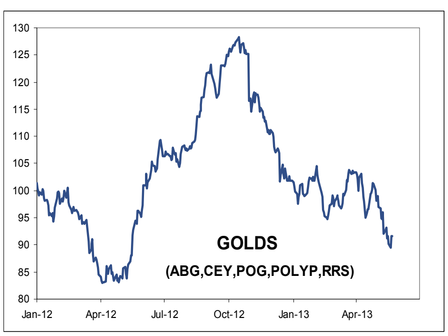
We expect the platinum shares to be an area of interesting action in 2013 and 2014 as three key factors vie to determine their direction, as follows :

1. Global Auto Sector Trends – It is only fairly recently that optimism about the global economy began to rise so we should not yet expect huge optimism on the auto sector, especially in the developed markets. However, the auto surveys carried out by our global auto team show that we have likely passed the point of extreme pessimism about the outlook.

2. The Trend in the South African Rand – The month of May saw the ZAR weakening from 8.90 rands to one US dollar to 10.28 rands to the dollar, its biggest one-month weakening since September 2011 and before that October 2008. This is very helpful for SA platinum equities.

3. South African Trade Union trends – Set against the above positive factors is the ongoing uneasiness about the current competition between the previously-dominant National Union of Mineworkers (NUM) and the recent union-of-choice, the AMCU. Local SA investors seem unruffled by this but it has un-nerved offshore investors.

Figure 8. UK Gold Miners vs UK Mining Peers

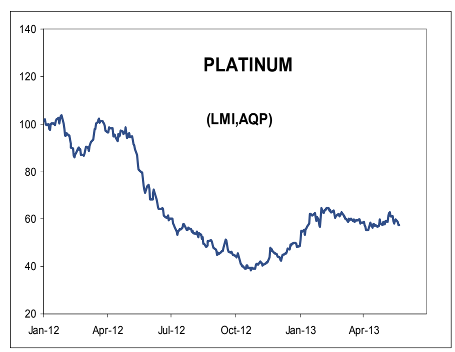


Source: Datastream

Figure 9. UK Silver Miners vs UK Mining Peers

Source: Datastream

Figure 10. UK Platinum Miners vs UK Mining Peers



Source: Datastream

In 2013 the strong US dollar has been hurting all metals, as they are all dollar-sensitive. However, the market tends to overlook the fact that a strong dollar results in weaker domestic currencies in the mining nations, like South Africa.

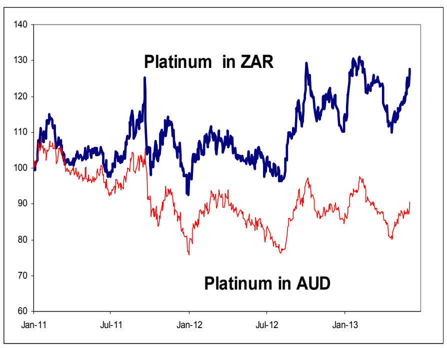
To illustrate this effect, we show below (Figure 12) the domestic price received for Palladium and Platinum in SA rands and contrast that with the gold price being received by USA gold producers in US$. They are markedly different trends and we are not convinced that the market has fully appreciated this yet.

Ordinarily when we have had such strongly diverging trends, there is the attraction of buying the weak sub-sectors on the assumption of mean-reversion within the sub-sector space. We would caution against this, particularly in the gold and silver

equities. The gold and silver prices fell sharply only very recently and if gold continues to trade below $1400/oz, we expect ongoing EPS downgrades in the market.

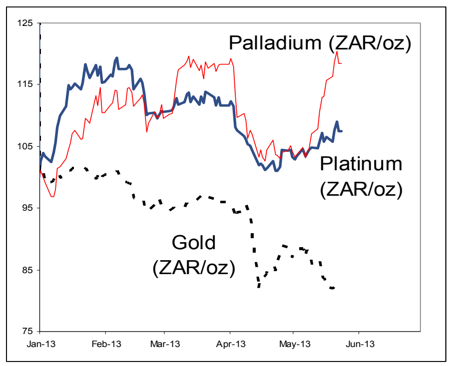
Even the Citi commodity team, which has been on the bearish end of gold forecasters, is still forecasting a $1555/oz for 2013, which now seems a long way off from the recent spot price in the $1360-$1420 range. Our advice after each sharp fall in gold has been to sell into the subsequent rallies (Monday Mining Minutes; 22 February 2013) and that remains our advice. Conversely, while we believe that 2013 will remain a tough year for platinum equities (because of the turf war between South African trade unions), we expect ongoing improvements in the global auto sector in 2014 and 2015 and we expect a coinciding outperformance of platinum equities over gold equities.

Figure 11. The contrast between ZAR and AUD



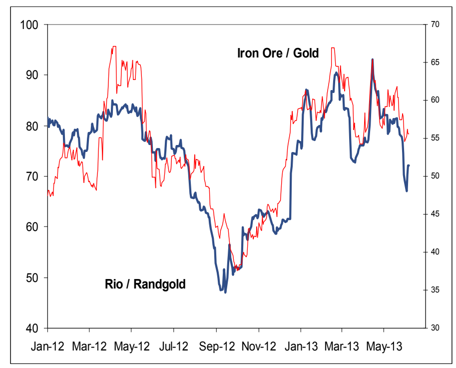
Source: Datastream

Figure 12. Contrast : SA PGMs vs. USA Golds



Source: Datastream

Figure 13. Equities are driven by metals



Source: Datastream

As SA platinum companies entered 2013, they continued to face low PGM prices and depressed margins. In addition, tough 2013 wage negotiations still lie ahead that may again result in strikes, especially judging by recent union rhetoric.

However, even though we maintain that PGM prices and margins will likely disappoint market expectations, the recent fall in valuations has made investing in these equities more compelling.

Figure 14. Weathering low prices: Estimated profitability and solvency ratios at spot platinum and R/$ exchange*

	AMS			IMP			NHM			RBP			LON			AQP		
	CY13	CY14	CY15	CY13	CY14	CY15	CY13	CY14	CY15	CY13	CY14	CY15	CY13	CY14	CY15	CY13	CY14	CY15
HEPS (SAc)	39	334	218	657	565	506	116	216	179	119	80	47	182	-8	-75	-10	-21	-49
FCF (Rm)	-1722	-1128	-1621	-651	-34	-532	-984	249	345	-1408	-2412	-3138	-1720	-556	-1710	-123	-86	-79
PE	772	90	138	15	18	20	27	14	17	44	66	113	21	-444	-50	-62	-30	-13
Net debt / Equity	26%	29%	33%	14%	10%	3%	5%	5%	9%	5%	21%	42%	-7%	-5%	0%	51%	39%	43%
Net debt / EBITDA	2.82	2.68	3.14	0.72	0.69	0.28	0.73	0.49	1.03	0.89	3.81	7.96	-0.76	-1.22	0.01	5.62	4.09	6.65

Source: Citi Research estimates

* Spot platinum price $1,491/ounce, USDZAR 9.18

Even though Lonmin's earnings and FCF are vulnerable to low PGM prices and strikes, the recent recapitalisation of its balance sheet positions it well to weather any impact these may present in our view.

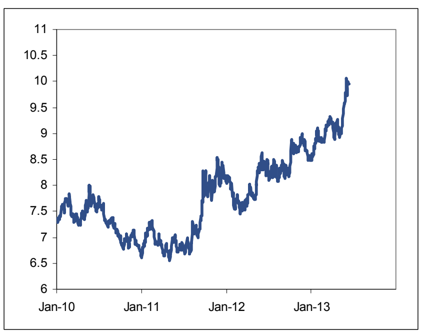
Aquarius remains at risk, both from a cash flow and balance sheet point of view, if PGM prices fall, or if they are impacted by extended strikes. As we do not believe that platinum prices will fall, we maintain our Buy on Aquarius but prefer Lonmin because of its stronger balance sheet.

Figure 15. Weathering strikes: Estimated profitability and solvency ratios at 5% lower production and 5% higher costs (relative to CitiE)

	AMS			IMP			NHM			RBP			LON			AQP		
	CY13	CY14	CY15	CY13	CY14	CY15	CY13	CY14	CY15	CY13	CY14	CY15	CY13	CY14	CY15	CY13	CY14	CY15
HEPS (SAc)	43	825	1384	441	658	643	124	283	296	122	119	157	152	120	164	-7	9	36
FCF (Rm)	-1711	162	1443	-1990	527	267	-955	500	788	-1417	-2311	-2845	-2100	-342	-805	-178	602	495
PE	699	36	22	22	15	15	25	11	10	43	44	34	25	31	22	-97	68	18
Net debt / Equity	26%	27%	26%	17%	11%	3%	5%	3%	4%	5%	20%	38%	-6%	-5%	-2%	48%	25%	17%
Net debt / EBITDA	2.81	1.86	1.38	1.04	0.69	0.20	0.68	0.21	0.34	0.91	3.17	4.97	-0.72	-0.65	-0.26	5.18	2.26	1.15

Source: Citi Research estimates

Figure 16. SA Rands per one US$



Source: Datastream

Lonmin's share price was very negatively impacted by the violent labour strikes in 2012 which resulted in fatalities and lost production. The share price also suffered significantly from the need to have a rights issue. State safety officers caused significant safety stoppages in 2012. The group also lost its CEO in 2012 through health reasons.

The union situation has improved (but is still delicate), the safety stoppages have declined, the balance sheet has been strengthened by the rights issue and Lonmin has a new CEO. A significant positive has been the weakening of the rand (see chart alongside), especially as rand strength through 2009-2011 was a key culprit in decimating the Lonmin share price at that time. The group has therefore emerged stronger in 2013 after a difficult 2012 year.

However, the auto market and PGM prices are still very subdued and 2013 is likely to be as challenging for Lonmin as it will be for its platinum peers in our view. Investors who believe that there will be an ongoing improvement in the global auto sector through 2014 should focus on the fact that the Lonmin share price is still 87% below its 2007/2008-high, when the global auto sector was still booming.

We do not expect anything like that robust 2007 auto sector within the next five years but, then again, we also do not expect Lonmin to recover the 87% which it lost. It is important to recognize how much of the global auto difficulties and local trade union difficulties have already been factored into Lonmin's price. We still see potential difficulties in 2013 but have a much higher confidence in 2014 delivering ongoing global auto sector improvements.

Company-Impact of Current metal Prices

We have run downside-sensitivities on each share at levels of $1300/oz gold (and an accompanying silver level of $21.00), at $1200/oz gold (and $19.5/oz silver) and $1100/oz gold (and $18.00 silver). The results for each of the companies are in the tables below. In those tables the gold price is depicted in $/oz, EPS is in US$/share and the debt ratio is stated as a percentage. All other data is in US$ millions.

African Barrick

ABG consists of a deep mine (Bulyanhulu at 1km deep), a fairly new mine that has already peaked in terms of production and grade and has very high costs (Buzwagi), and a decent but unexciting mine at North Mara. Its greenfield-hope, the Nyanzaga project, is unlikely to be sanctioned by the board at current gold prices. These are assets that would each face difficulties at $1100/oz gold.

The parent ABX appeared to be keen to sell ABG to China Gold but the deal fell through and this has likely left the market with the feeling that ABG is an unwanted asset with respect to its parent. It is therefore questionable in our view whether the parent will be committed to growing the asset at current low gold prices and we expect a very unexciting future production profile to emerge from the major review which ABG is currently undertaking.

Figure 17. ABG : Data at $1300 Gold Price

	2014E	2015E
Gold Price	1300	1300
EBITDA	208.5	224.9
EBIT	44.3	80.0
EPS	0.076	0.119
FCF	-154.7	-36.5
Net Debt	-133.4	-84.4
Net Debt / Net Debt + Equity	-5%	-3%

Source: Citi Research

Figure 18. ABG : Data at $1200 Gold Price

	2014E	2015E
Gold Price	1200	1200
EBITDA	148.0	159.7
EBIT	-16.2	14.8
EPS	-0.029	0.003
FCF	-215.3	-103.5
Net Debt	-63.3	39.1
Net Debt / Net Debt + Equity	-2%	1%

Source: Citi Research

Figure 19. ABG : Data at $1100 Gold Price

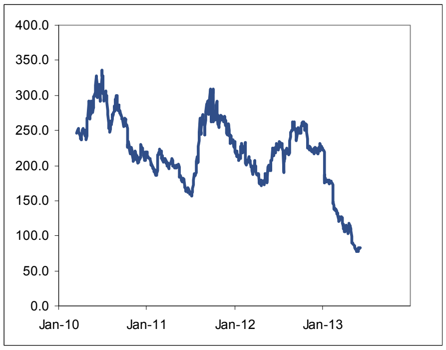
	2014E	2015E
Gold Price	1100	1100
EBITDA	87.5	94.4
EBIT	-76.7	-50.4
EPS	-0.134	-0.113
FCF	-275.9	-170.4
Net Debt	6.8	162.6
Net Debt / Net Debt + Equity	0%	6%

Source: Citi Research

Price sensitivity is illustrated above with the fall in 2014E EBITDA from $208.5 at $1300 to $87.5m at $1100 while FCF moves from -154.7m to -$275.9m. However, there is no net debt at end-2014 if gold averages $1300 from now on marginal net debt of $6.8m at $1100. While ABG's assets can therefore be classified in the same quality group as, for example, POG, its balance sheet structure is far superior to that of POG.

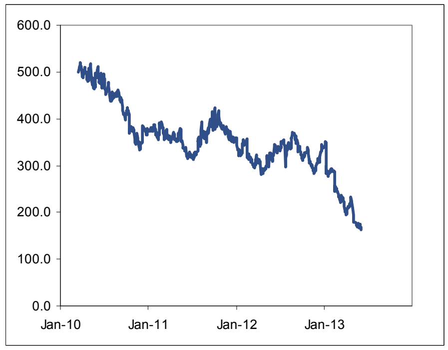
ABG is undertaking the review of its assets in the light of the current gold price, the challenges of power availability in Tanzania and the social challenges around North Mara. We expect ABG to announce that it will not proceed with the Nyanzaga project at current gold prices based on the likely low returns at recent gold prices and we also expect ABG to question the viability of Buzwagi at current gold prices. Some of the capex plans at Bulyanhulu may also be culled. As North Mara has had social difficulties purchasing the ground required for pit expansion, the group had considered an underground option instead. At the recent low gold prices, we question whether that underground option is viable.

Figure 20. ABG vs. UK Mining Sector



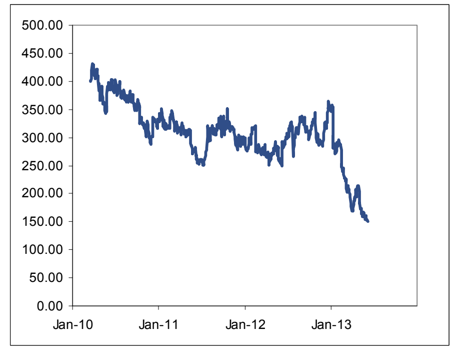
Source: Datastream

Figure 21. ABG vs. UK Precious Equities



Source: Datastream

Figure 22. ABG vs. Global Gold Equities



Source: Datastream

At our gold price forecasts, we have a negative NPV for Buzwagi, although we concede that this assumes ongoing high diesel use in the face of energy challenges within Tanzania. If those energy challenges persist, we think ABG will have to give serious consideration to shutting Buzwagi. While this would be positive for our group NPV, the fact that the company proposed Buzwagi as a major success for the group at its IPO in 2010, could lead to disappointment if it is shut or takes a huge write-down. In any event, we should expect substantial write-downs from ABG.

Figure 23. Citi Metal Price Forecasts

(US$/oz)	2013	2014	2015	Long term
Gold	1555	1435	1340	1050
Silver	28.1	25.9	23.25	16.5
Platinum	1550	1625	1750	1531
Palladium	810	950	925	680

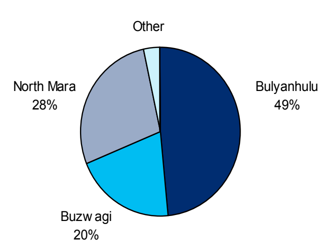
Source: Citi Commodity Research

At the time of the IPO Nyanzaga was to be the future but that project does not seem viable even at current gold prices let alone at $1100/oz. We estimate North Mara, without is usual social problems, would be OK at $1100 but the challenges with buying the surrounding property from the locals in order to avoid the underground option mean very low returns on capital.

Bulyanhlu has had some sharp cost increases because of a one off paste fill problem but this mine, operating below the depth of its 1km shaft is likely to face above-average cost increases as it goes deeper and has to haul material up to the shaft bottom.

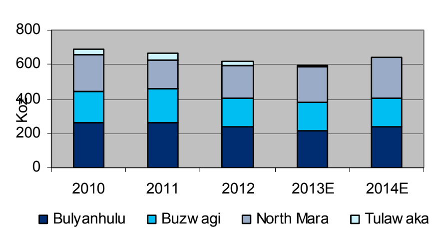
In short, at $1100, we calculate ABG is not only ex-growth, but is likely a shrinking producer. It's big plus is that it still has a cash pile such that, if remedial action is substantial, that shrunken group could offer better returns to shareholders than in its current form. We look forward to the operational review that ABG is undergoing and trust that it will indeed cut to the bone if needed. We set our target price of £1.24 by applying a 1.1x P/NPV ratio to our NPV estimate of £1.13 (derived using a discount rate of 10%).

Figure 24. ABG EBITDA Split



Source: Company

Figure 25. ABG Gold Production



Source: Company Historic; Citi Forecasts

Centamin

CEY has good reserves (15.5Moz resources/10.1Moz reserves), a strong production growth profile (doubling from 2011-2014), and uses uncomplicated technology, as opposed to technical risks such as pressure oxidisation at the Russian gold producers. Its cost profile and its balance sheet profile make it one of the more desirable gold groups at lower gold prices. However, it carries the highest political/business risk amongst the precious metals groups which we cover.

CEY's future plans include an open pit mine life of 30 years at average grade of 1.09g/t. The CEY plan expects annual group production of 502k oz in the year 2015, up from 202k oz in 2011. We consider CEY's long-term plan to be positive but the share price will likely remain strongly influenced by Egyptian politics.

Figure 26. CEY: Data at $1300 Gold Price

	2014E	2015E
Gold Price	1300	1300
EBITDA	228.6	217.2
EBIT	52.8	127.3
EPS	5.317	12.304
FCF	41.7	152.4
Net Debt	-241.2	-380.2
Net Debt / Net Debt + Equity	-0.25	-0.43

Source: Citi Research

Figure 27. CEY : Data at $1200 Gold Price

	2014E	2015E
Gold Price	1200	1200
EBITDA	190.1	179.3
EBIT	7.2	109.2
EPS	1.105	10.576
FCF	-3.7	135.1
Net Debt	-191.8	-315.4
Net Debt / Net Debt + Equity	-0.20	-0.35

Source: Citi Research

Figure 28. CEY : Data at $1100 Gold Price

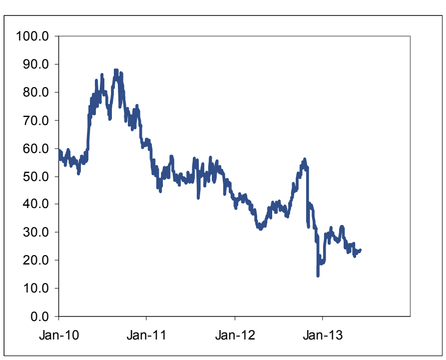
	2014E	2015E
Gold Price	1100	1100
EBITDA	151.6	141.3
EBIT	-38.4	71.2
EPS	-3.108	7.027
FCF	-49.2	97.9
Net Debt	-142.4	-232.7
Net Debt / Net Debt + Equity	-0.15	-0.26

Source: Citi Research

Price sensitivity is illustrated with the fall in 2014E EBITDA from $228.6m at $1300 to $151.6 m at $1100 and FCF falls from a positive $41.7m to a negative $49.2m. However, there should be net cash of $241.2m at end-2014 if gold averages $1300 from now on and there should still be net cash of $142.4m at $1100/oz, illustrating the desirability of the suite of assets at lower gold prices. If only the politics were better.

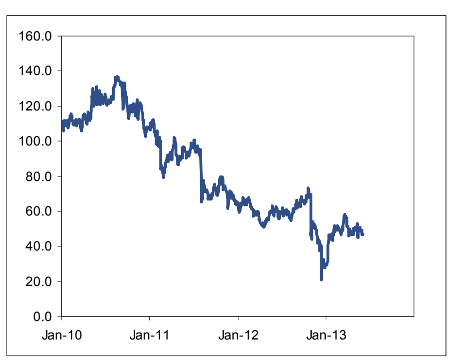
We do not believe that CEY would have to take much remedial action at $1100, aside from cutting back its ambitions in East Africa. The Stage 4 (plant expansion to 10Mtpa) is giving CEY a production lift in 2014. The market has a high level of faith in the mine and its expansion programme and recognises that higher production levels should deliver lower costs per ounce. However, CEY is likely to lose its oil subsidy over time, which we estimate will add $150/oz of costs. This is factored into our model. We have always been positive on the CEY mining assets and our only concern has been the political risk.

Figure 29. CEY vs. UK Mining Sector



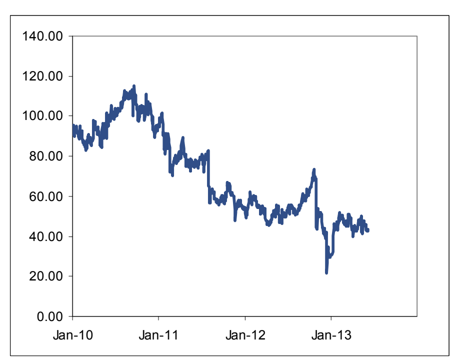
Source: Datastream

Figure 30. CEY vs. UK Precious Equities



Source: Datastream

Figure 31. CEY vs. Global Gold Equities



Source: Datastream

CEY has a Neutral rating. We have not assigned a target price because of the political risk and therefore no valuation methodology is applicable

Nord Gold

Nord has a portfolio of eight producing mines and two development projects located in Russia, Kazakhstan, Guinea and Burkina Faso. Nord had total cash costs for 2012 of US$836 per ounce vs. FY 11 at US$688 per ounce. This increase was primarily due lower production levels (FY 12 717k oz vs FY 11 755k oz) resulting in increased fixed cost per ounce, lower recovery levels together with inflation and the increased usage of spare parts and other consumables on certain mines. The 2012 year therefore delivered unhelpful cost trends at a time when the gold price was falling and continues to fall and the combination of Nord's high-cost assets and the debt on its balance sheet is unhelpful at lower gold prices. Its spread of assets across Russia and African countries is also unhelpful and leaves much room for error at the operations.

Figure 32. NORD : Data at $1300 Gold Price

	2014E	2015E
Gold Price	1300	1300
EBITDA	317.5	387.8
EBIT	22.5	92.8
EPS	-0.126	0.016
FCF	93.7	153.3
Net Debt	457.8	293.2
Net Debt / Net Debt + Equity	0.22	0.15

Source: Citi Research

Figure 33. NORD : Data at $1200 Gold Price

	2014E	2015E
Gold Price	1200	1200
EBITDA	233.9	288.2
EBIT	-61.1	-6.8
EPS	-0.257	-0.147
FCF	64.4	94.5
Net Debt	488.4	370.7
Net Debt / Net Debt + Equity	0.24	0.19

Source: Citi Research

Figure 34. NORD : Data at $1100 Gold Price

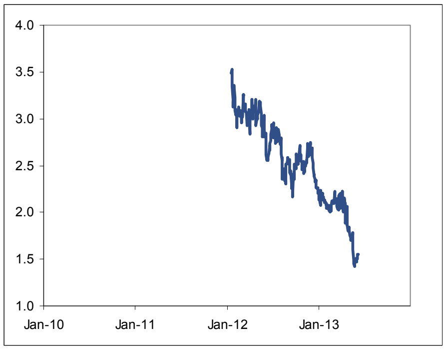
	2014E	2015E
Gold Price	1100	1100
EBITDA	151.7	189.2
EBIT	-143.3	-105.8
EPS	-0.385	-0.308
FCF	35.6	36.3
Net Debt	518.5	447.4
Net Debt / Net Debt + Equity	0.26	0.24

Source: Citi Research

Price sensitivity is illustrated above with the fall in 2014E EBITDA from $317.5 at $1300 to $151.7 m at $1100 and FCF falls from $93.7m to $35.6m. This trend is helped by the fact that Nord has just completed its key capex commitments to bring on two new mines. Unfortunately, that has left the group with net debt which could end up being $457.8m at end-2014 if gold averages $1300 from now on and $518.5m if gold averages $1100/oz. Net debt could therefore be 3.4x EBITDA at end-2014 if gold averages $1100/oz.

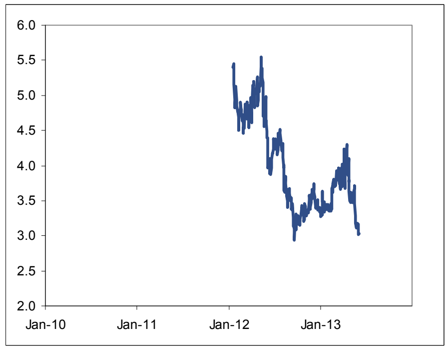
Nord recently announced the start-up of the Bissa mine in Burkina Faso and expects to produce up to 100 koz of gold at the mine in 2013. Planned capacity of the open pit mine is 4mt of ore per annum, producing up to 200 koz of gold annually. The first ore at the Gross mine is expected to be treated towards the end of 2013 and hence Nord has a good growth profile in the 2013-2015 period.

Figure 35. Nord vs. UK Mining Sector



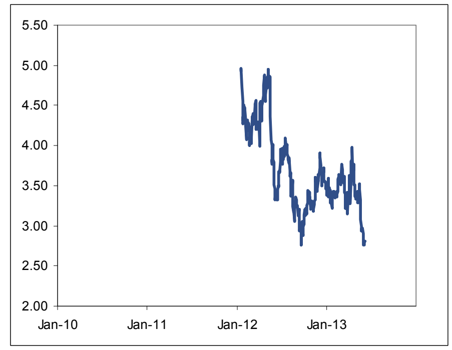
Source: Datastream

Figure 36. Nord vs. UK Precious Equities



Source: Datastream

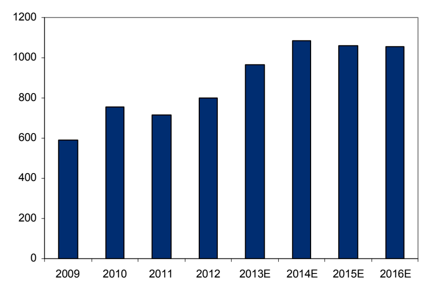
Figure 37. Nord vs. Global Gold Equities



Source: Datastream

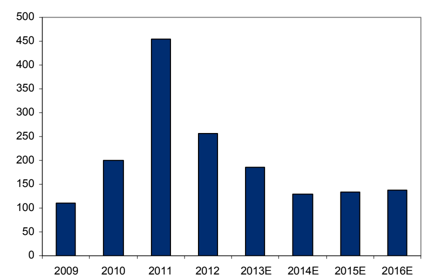
Nord is in the advantageous position of bringing on Gross and Bissa now but bringing those on into a $1800 bull market is a very different matter to bringing them on at $1100. Cash has been spent and debt has built up and it is likely that the ex-shareholders of High River Gold and Crew Gold, which sold the African assets to Nord, are now much happier than the Nord shareholders.

Figure 38. Production (k oz)



Source: Company Historic; Citi Forecasts

Figure 39. Capex ($m)



Source: Company Historic; Citi Forecasts

The combination of Russian and African assets may have had some appeal at $1800 gold but at $1100 gold the market may well feel that Nord is too geographically cumbersome to produce focused success. The higher cost assets such as Lefa ($1200/oz cash costs) could come under scrutiny and any new potential projects currently the subject of pre-feasibility studies are likely to be put on the back burner. Right now we have a group that is too geographically stretched and it is listed in the wrong location to attract wide investor interest. Our NPV for Nordgold is $1.79, to which we apply a 1.1x P/NPV target multiple. Our NPV is based on a 10% weighted average cost of capital. On this basis our target price is $1.96

Petropavlovsk

The key assets are all in Russia and the gold assets consist of Pioneer (320 k oz); Malomir (12k), Albyn (ramping up to50k, then 190k), Pokrovskiy (70k) and alluvial mining (80k). POG also owns 65% of listed iron ore producer (IRC). This is a complex set of assets to cope with at $1100/oz, and POG could have done well without the complication of owning the iron ore assets at a time like this.

Figure 40. POG : Data at $1300 Gold Price

	2014E	2015E
Gold Price	1300	1300
EBITDA	283.1	293.5
EBIT	44.9	50.6
EPS	0.113	0.313
FCF	88.9	135.0
Net Debt	828.5	700.7
Net Debt / Net Debt + Equity	0.32	0.29

Source: Citi Research

Figure 41. POG : Data at $1200 Gold Price

	2014E	2015E
Gold Price	1200	1200
EBITDA	228.5	220.6
EBIT	-9.6	-22.4
EPS	-0.076	0.052
FCF	65.8	88.5
Net Debt	848.4	762.3
Net Debt / Net Debt + Equity	0.33	0.32

Source: Citi Research

Figure 42. POG : Data at $1100 Gold Price

	2014E	2015E
Gold Price	1100	1100
EBITDA	156.5	147.6
EBIT	-81.7	-95.3
EPS	-0.324	-0.210
FCF	31.8	41.6
Net Debt	876.9	832.9
Net Debt / Net Debt + Equity	0.35	0.36

Source: Citi Research

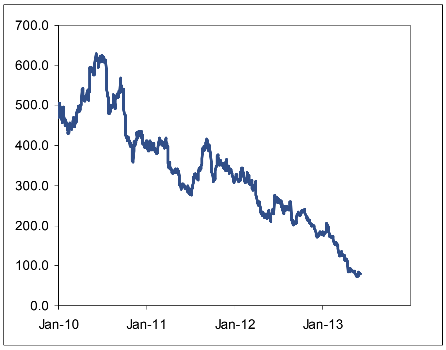
Price sensitivity is illustrated with the fall in 2014E EBITDA from $283.1m at $1300 to $156.5m at $1100 and FCF falls from $88.9m to $31.8 m, helped by the recent deferral of POX capex. However, net debt could be $828.5 at end-2014 if gold averages $1300 from now on and could be $876.9m at $1100/oz. That would put the net debt to EBITDA ratio at the onerous level of 5.6x at end-2014. Our forecasts take into account the hedging which has been done.

Investment in POG is suited to a gold price above $1700/oz, in our view, which is where the price was just six months ago. The six months since then have changed POG's outlook dramatically and it is now a group which will likely have to have significant asset write-downs if gold were to fall another $200/oz. Given that gold recently fell $200/oz in just two days, the market has quickly ratcheted up its probability of POG being at significant financial risk by 2014. Added to that, it faces the extra technical risk of the POX process.

POG is in the position of being one of the very few gold groups not carrying net cash as it passed the gold cycle-peak, a feature which does not lend itself to investor enthusiasm during a gold price downturn. The iron ore assets are now in associate rather than subsidiary form, but they continue to detract from the core business of this gold group, making it neither fish nor fowl.

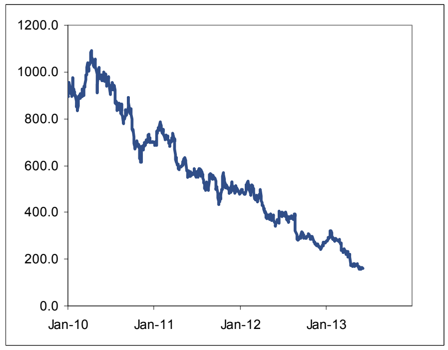
Because of balance sheet pressure, POG sold forward a total of 399k oz of gold over a period of 14 months ending in March 2014 at an average price of US$1,663 per ounce, representing 47% of POG's forecast production for the period. The group recently moved this program forward with the sale of a further 96k oz for the April-June 2014 period, equivalent to 55% of the groups expected production. This is useful but not life-saving for a group which still (unusually for the gold sector) has significant net debt as well as a 2015 convertible bond to deal with. It is also increasingly locking in lower gold prices, a turn-off for any investors who may be looking for gold to bounce back up.

Figure 43. POG vs. UK Mining Sector



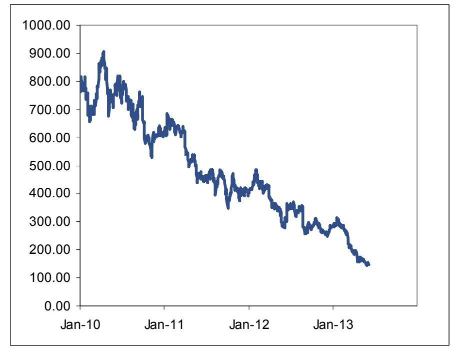
Source: Datastream

Figure 44. POG vs. UK Precious Equities



Source: Datastream

Figure 45. POG vs. Global Gold Equities

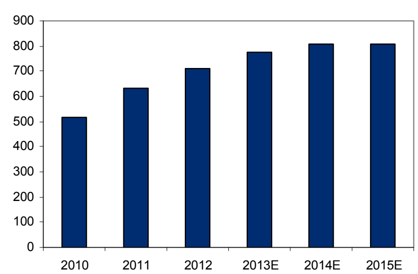


Source: Datastream

During 2011 there was significant uncertainty around management guidance but confidence had been restored by mid-2012. Unfortunately, we believe the sharp drop in the gold price has now negated that problem and investors are very concerned about the debt and the impact of the 2015 convertible bond on the perception of the per-share value on a fully diluted basis.

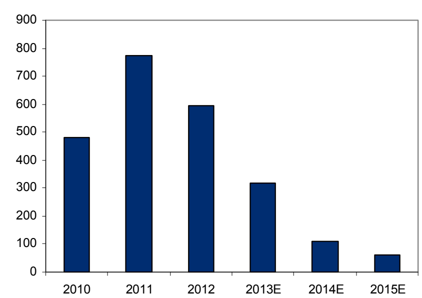
It is probable that POG will successfully operate its new POX facilities but it is also probable that the market will not believe this until it actually happens, such has been the (unfair, we believe) lack of trust in the management. Balance sheet pressure has forced POG to defer investment in POX (helped by further discoveries of oxide ore, but those may not be too profitable at current prices) and so the market will have to wait longer for POG to prove that it can operate the process successfully.

Figure 46. Production Koz



Source: Company Historic; Citi Forecasts

Figure 47. Capex ($m)



Source: Company Historic; Citi Forecasts

If gold were to fall below $1200, POG would have to take further measures beyond the hedging it has done and the capex-deferral it has done. The alluvials assets are very high cost but have served to prop up the promised and guided production levels. They would not be viable below $1200 and this suggests that POG could have to return to revising production guidance downwards. Write-downs are highly likely in our view.

We set our target price of £1.16 by applying a 1.1x P/NPV multiple to POG's gold assets (NPV of £0.42 per share; derived using a discount rate of 10%), while we use the market capitalisation of the IRC subsidiary to value the stake which POG holds (currently $0.70 per POG share).

Polymetal

POLYP is a precious metals producer in Russia and Kazakhstan and had FY11 gold equivalent ('GE') production of 810 Koz of gold (55% gold, 41% silver, 4% copper). The group has 5 operations in Russia and 1 operation in Kazakhstan, including 3 processing hubs. The group has GE reserves (JORC) of 14.3 Moz at 4.2 g/t GE plus 13.8 Moz of GE resources at 3.9 g/t . The board structure is seen as a positive, with ex-Anglogold CEO Bobby Godsell on the board. This dissipates concern about the common weaknesses of Russian corporate governance.

Figure 48. POLYP : Data at $1300 Gold Price

	2014E	2015E
Gold Price	1300	1300
EBITDA	689.1	679.5
EBIT	502.5	481.8
EPS	0.978	0.959
FCF	402.4	396.0
Net Debt	79.6	-290.4
Net Debt / Net Debt + Equity	3%	-10%

Source: Citi Research

Figure 49. POLYP : Data at $1200 Gold Price

	2014E	2015E
Gold Price	1200	1200
EBITDA	565.6	555.5
EBIT	379.1	357.8
EPS	0.724	0.698
FCF	305.1	296.0
Net Debt	219.2	-50.7
Net Debt / Net Debt + Equity	0.08	-0.02

Source: Citi Research

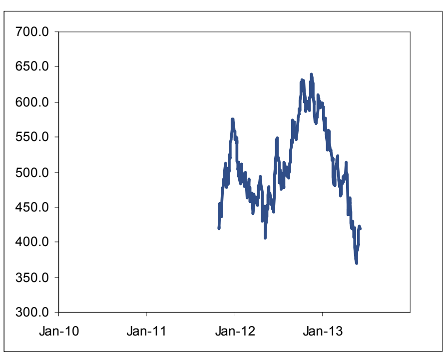
Figure 50. POLYP : Data at $1100 Gold Price

	2014E	2015E
Gold Price	1100	1100
EBITDA	442.2	431.5
EBIT	255.6	233.8
EPS	0.470	0.436
FCF	207.8	196.0
Net Debt	358.9	188.9
Net Debt / Net Debt + Equity	0.13	0.07

Source: Citi Research

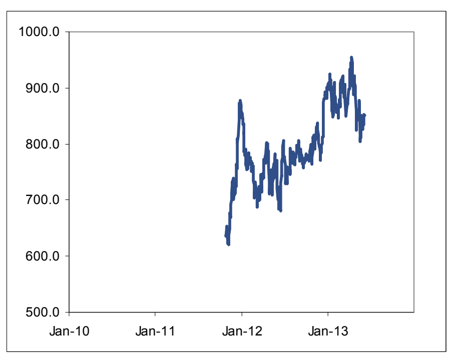
Price sensitivity is illustrated with the fall in 2014E EBITDA from $689m at $1300 to $442m at $1100 and FCF falls from $402m to $208m. However, net debt is low at $79.6m in 2014 if gold averages $1300 from now on and rises to a non-problematical $358.9m at $1100/oz, less than the forecast EBITDA for that year. This makes POLYP one of the better-placed groups in the event of further falls in the gold price in our view.

Figure 51. POLYP vs. UK Mining Sector



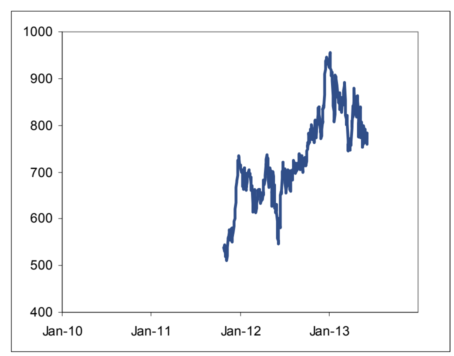
Source: Datastream

Figure 52. POLYP vs. UK Precious Equities



Source: Datastream

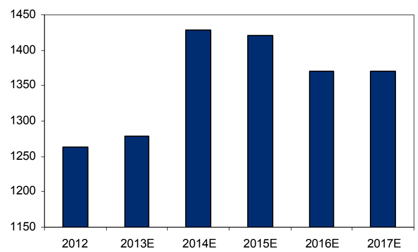
Figure 53. POLYP vs. Global Gold Equities



Source: Datastream

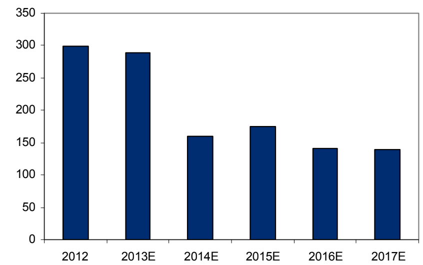
As with POG, pressure-oxidisation (POX) is a big part of POLYP's future. Design daily concentrate throughput at Amursk POX was achieved in late November 2012. However, due to the presence of unexpectedly high chlorine concentrations in process water and certain design weaknesses the plant had to be shut down in late December and currently operates at 60% of design throughput and 9-14 percentage points below design recovery (80-85%). POLYP is implementing a series of corrective measures and expects that recovery will slowly improve over Q2 and Q3 while full throughput will be reached in Q4. Such uncertainties are less important at $1800 gold than at $1100 gold.

Figure 54. POLYP GE production (k oz)



Source: Company Historic; Citi Forecasts

Figure 55. POLYP Capex ($m)



Source: Company Historic; Citi Forecasts

We use a 10% discount rate for the two other Russian gold groups that we cover and so we apply the same discount rate to POLYP. We also use a 1.1x P/NPV ratio to derive our target price, as we do for the two other Russian gold groups which we cover. Our TP of £5.29 for POLYP is therefore based on 1.1x our £4.81 NPV calculation.

We rate POLYP Sell. We believe it is a well-managed group but its assets are spread over many mines, unlike its more compact peer, Randgold Resources. We are not enamoured of this multiple-mine structure or of the mine-life within the group. In 2013 about 40% of POLYP revenue could be sourced from silver and, unfortunately, we have been even more bearish on silver than on gold

Randgold

Key assets are Loulo (Mali, 250k oz), Gounkoto (Mali, 365k oz, effectively part of the Loulo complex), Tongon (Ivory Coast , 270k oz), Morila (Mali, 75k oz, short life) and Kibali (DRC, 45% owned, will be 178k oz attributable). Kibali should have very low operating costs and the timing of its ramp-up, coinciding with a sliding gold price, is helpful to the average cost profile of the group.

With Kibali coming onstream in 4Q 2013, RRS production should grow to 1.2m oz p.a. by the middle of the decade, even though Morila should have run out of life by then. We view Kibali as a very good mine (owned 45% by RRS and 45% by Anglogold) and think it is likely to be the core to the future of the group.

Figure 56. RRS : Data at $1300 Gold Price

	2014E	2015E
Gold Price	1300	1300
EBITDA	593.2	642.3
EBIT	378.5	392.4
EPS	2.817	2.774
FCF	134.6	305.2
Net Debt	-398.4	-678.1
Net Debt / Net Debt + Equity	-14%	-24%

Source: Citi Research

Figure 57. RRS : Data at $1200 Gold Price

	2014E	2015E
Gold Price	1200	1200
EBITDA	484.7	522.1
EBIT	270.0	274.5
EPS	1.992	1.918
FCF	59.3	224.5
Net Debt	-288.5	-494.9
Net Debt / Net Debt + Equity	-10%	-18%

Source: Citi Research

Figure 58. RRS : Data at $1100 Gold Price

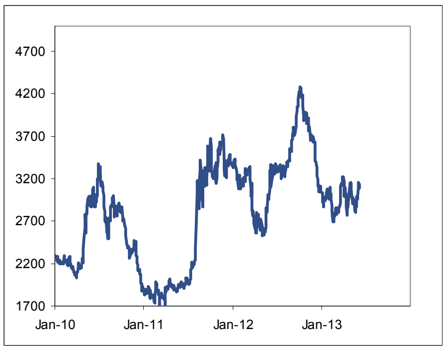
	2014E	2015E
Gold Price	1100	1100
EBITDA	376.3	401.8
EBIT	161.6	156.7
EPS	1.167	1.062
FCF	-16.1	143.9
Net Debt	-178.6	-311.7
Net Debt / Net Debt + Equity	-6%	-11%

Source: Citi Research

Price sensitivity is illustrated with the fall in 2014E EBITDA from $593m at $1300 to $376m at $1100 and FCF falls from $134.6m to a negative $16.1m. However, RRS is still in net cash at end 2014 if gold averages $1300 from now on and that remains the case at $1100/oz. The group therefore has a strong balance sheet to cope with any gold-price-induced adversity.

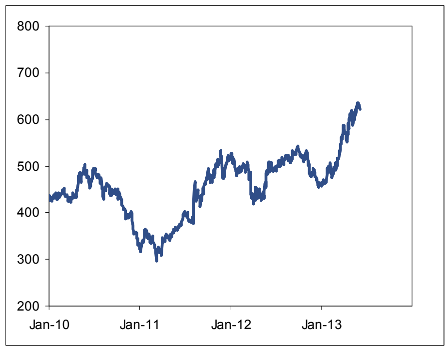
RRS is already making adjustments to its expenditure in the light of the lower gold price. Future action is likely to include finally ruling out developing Massawa at current gold prices. Some of the mining of satellite deposits and dumps will also likely be reconsidered but RRS has a good balance sheet and the Kibali start-up should reduce average group costs. Severe remedial action, such as that needed at ABG for example, is unlikely to be needed. However, we should expect some modest write-downs.

Figure 59. RRS vs. UK Mining Sector



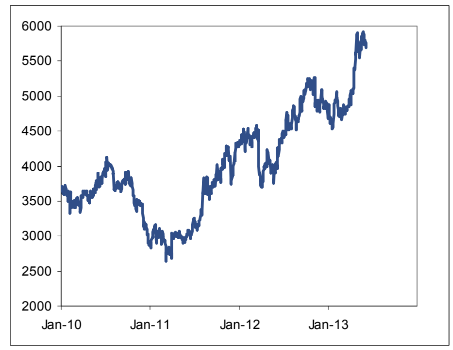
Source: Datastream

Figure 60. RRS vs. UK Precious Equities



Source: Datastream

Figure 61. RRS vs. Global Gold Equities

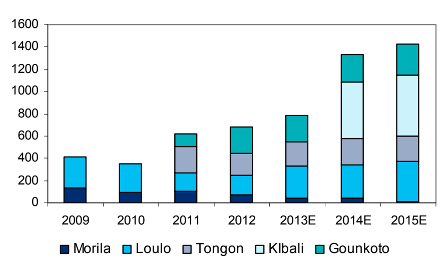


Source: Datastream

Mali's previous leader was ousted by a military junta recently and the junta is still in power. RRS had similar challenges in the Ivory Coast but the Ivory Coast represented 18% of our NPV at the time whereas Mali represents over 40% of our NPV at present. We do not consider the threat of destabilisation in Mali to have disappeared altogether. While we consider the DRC to be a low-level risk for the next three years, groups such as Randgold and Anglogold which are jointly sinking $1.6bn into the Kibali mine in the DRC have needed to assume that the low level risk will still exist in years four to twenty. We are not entirely convinced that that will be the case.

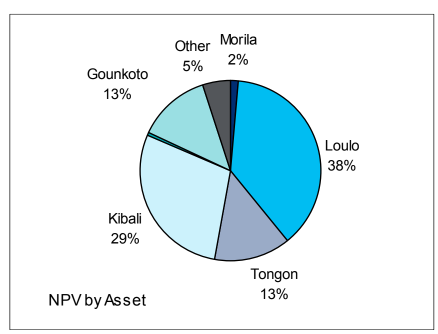
The market is torn between the high quality assets and good management on the one hand and examples of unsettled politics in Ivory Coast and Mali in the past two years. DRC remains a high-risk political geography.

Figure 62. Gold Prod Koz



Source: Company reports, Citi Research

Figure 63. NPV by Asset



Source: Citi Research

We derive our target price of £39.26 by applying a 1.3x P/NPV ratio to our NPV estimate of £30.20 (derived using a discount rate of 10%). We consider this premium to be adequate in the light of the fact that the market is currently pricing the likes of RIO (RIO.L; £27.23; 1) at an NPV discount of greater than 30%.

Fresnillo

Key assets are the Fresnillo and Saucito silver mines in Mexico and Cienega, Heradura, Soledad and Noche Buena gold mines in Mexico. These are all good-quality mines and should stand FRES in good stead on any fall in metal prices.

Figure 64. FRES : Data at $1300 Gold Price

	2014E	2015E
Gold Price	1300	1300
EBITDA	978.6	1092.6
EBIT	699.8	808.4
EPS	0.582	0.686
FCF	373.1	549.1
Net Debt	-633.1	-998.9
Net Debt / Net Debt + Equity	-0.34	-0.56

Source: Citi Research

Figure 65. FRES : Data at $1200 Gold Price

	2014E	2015E
Gold Price	1200	1200
EBITDA	855.0	959.6
EBIT	576.2	675.4
EPS	0.474	0.567
FCF	299.5	465.7
Net Debt	-558.3	-873.4
Net Debt / Net Debt + Equity	-0.30	-0.50

Source: Citi Research

Figure 66. FRES: Data at $1100 Gold Price

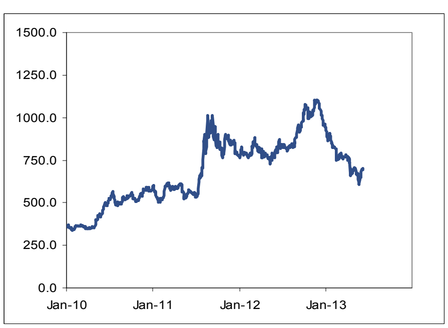
	2014E	2015E
Gold Price	1100	1100
EBITDA	731.4	826.6
EBIT	452.6	542.4
EPS	0.365	0.448
FCF	225.9	382.3
Net Debt	-483.5	-748.0
Net Debt / Net Debt + Equity	-0.26	-0.43

Source: Citi Research

Price sensitivity is illustrated above with the fall in 2014E EBITDA from $978.6m at $1300 gold (and $21 silver) to $731.4m at $1100 (and $18) and FCF falls from $373.1m to $225.9m, still a very healthy cash flow. FRES is still in net cash at end 2014 if gold averages $1300 from now on and that remains the case at $1100. With quality assets and a quality balance sheet, FRES should be the 'go-to' stock in the space but, unfortunately, the market has more-than-adequately priced those credentials into the FRES share price, in our opinion.

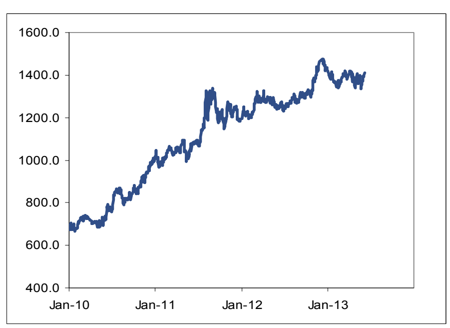
FRES has a long-term objective of producing 65m oz p.a. silver and 400k oz p.a. gold by 2018. Expanded capacity at the Cienega gold mine and the start-up of the Greenfields Saucito mine in 2011 drove growth in 2012. First production at the Noche Buena gold mine took place in March 2012. At lower metal prices, greenfield exploration and some maintenance capex maybe reduced in 2014 (2013 capex of $750m is unchanged). However, with its strong balance sheet, there may be useful M&A opportunities coming forward as lower prices distress the sector; FRES would look for low cost, producing assets, in LatAm. Input costs continue to rise but may see some alleviation in 2014; FX remains a key factor for costs.

Figure 67. FRES vs. UK Mining Sector



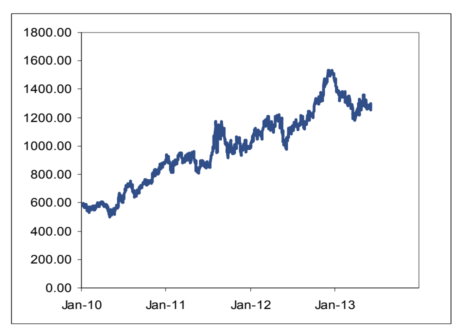
Source: Datastream

Figure 68. FRES vs. UK Precious Equities



Source: Datastream

Figure 69. FRES vs. Global Gold Equities



Source: Datastream

FRES has been experiencing declining production at the flagship Fresnillo mine in 2011/2012 due to declining grades but the start-up of Saucito has compensated for this. The market will want to see the pace of decline at the Fresnillo mine stabilising and not accelerating. At the recent site visit FRES noted that grades at the Fresnillo mine have stabilized (@ ~305g/t), but should fall to reserve levels by ~2018 (280g/t).

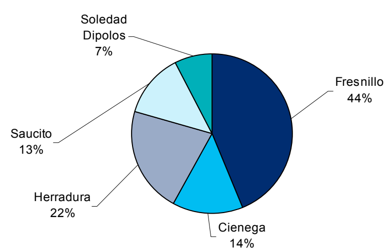
FRES has the lowest-cost expansion forthcoming in terms of phase 2 at Saucito which is an extremely low cost producer. Our only concern with FRES in the past has been the very high valuation level attached to the group by the market. Should the entire sector experience share price falls if gold fell below $1200 ($19.5 silver), FRES would likely be our preferred exposure to any significant rally or new uptrend in gold from that level as it offers growth-upside while still being financially comfortable at levels like $1100 ($ 18 silver), a very different situation to that of the likes of ABG or POG.

FRES is progressing on the Saucito II expansion (+10moz Ag), with underground development and advance planning for concentrator construction. All the major equipment for Herradura dynamic leaching (+50koz Au) installed and soon to begin testing. A lot of work in 2012/13 developing Herradura and the district (increasing resources and planning Mega Centauro and Centauro Deep).

FRES is viewed as the highest quality UK listed precious metal stock by many clients but the market is very conscious of the fact that these qualities, and its very limited free float, have also put it on the highest valuation-rating in the sector. The market is split between those who believe the quality is worth paying for and those who are ore tempted by lesser-quality stocks trading at big valuation discounts to FRES.

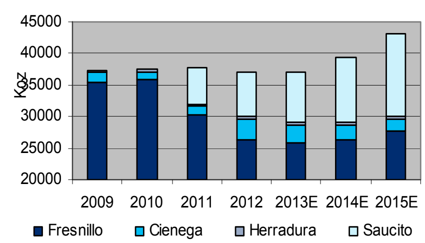
As FRES only has a 26% free float, there is a tendency for the valuation to get inflated during a silver bull market as buyers compete for limited liquidity. We recognise that FRES is a top quality silver and gold producer. FRES looks to be the UK precious metal producer with the most potential in a 10-30 year time frame because of the quality and nature of its reserves. However, all of these positives seem to have been priced into the FRES share price.

Figure 70. Asset EBITDA 2013E



Source: Company Reports, Citi Research

Figure 71. Silver Production



Source: Company reports, Citi Research

We recently reduced our P/NPV from 1.5x to 1.4x to reflect the deep NPV discounts in the sector (e.g. RIO at 34% discount to NPV) and set our new TP at £10.45. We have maintained for some time that FRES is best-in-class among UK precious metals miners, but our bearish view on silver and our concerns about its limited free float causing excessively high valuations means we rate FRES as Sell

Hochschild

HOCM currently operates four underground mines, three located in southern Peru and one in southern Argentina. All of the underground operations are epithermal vein mines and the principal mining method used is cut and fill. In 2012, HOCM produced 13.6m attributable ounces of silver and 111.8k attributable ounces of gold, a total of 20.3m attributable silver equivalent ounces. HOCM has a production target of 20.0m attributable silver equivalent ounces for 2013.

Figure 72. HOCM : Data at $21Ag / $1300 Au

	2014E	2015E
Gold Price	1300	1300
EBITDA	218.9	308.3
EBIT	89.7	164.3
EPS	0.038	0.176
FCF	-163.0	-8.6
Net Debt	258.1	291.7
Net Debt / Net Debt + Equity	0.18	0.19

Source: Citi Research

Figure 73. HOCM : Data at $19.5 Ag / $ 1200 Au

	2014E	2015E
Gold Price	1200	1200
EBITDA	174.2	252.4
EBIT	44.9	108.4
EPS	-0.021	0.099
FCF	-182.8	-34.9
Net Debt	286.4	346.3
Net Debt / Net Debt + Equity	0.20	0.23

Source: Citi Research

Figure 74. HOCM : Data at $18 Ag / $1100 Au

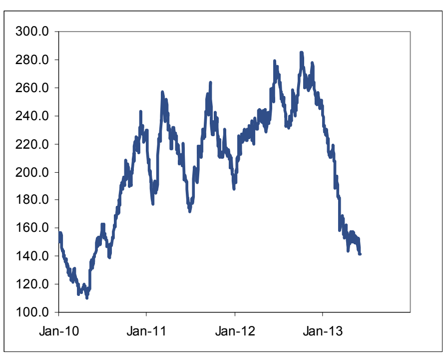
	2014E	2015E
Gold Price	1100	1100
EBITDA	129.4	196.6
EBIT	0.2	52.5
EPS	-0.080	0.021
FCF	-202.7	-61.1
Net Debt	314.7	400.8
Net Debt / Net Debt + Equity	0.22	0.26

Source: Citi Research

HOCM has a much higher cost profile than peer FRES, and this is illustrated above in it price sensitivity. 2014E EBITDA falls from $218.9m at $1300 to $129.4m at $1100, a 41% fall in comparison to the 25% fall at FRES. FCF moves from -$163m to -$202.7m. However, net debt is not high at $258m in 2014 if gold averages $1300 from now on and rises to a manageable $314.7 (debt ratio 22%) at $18/oz silver. Net debt to EBITDA is a manageable 2.44x at that pessimistic metal price scenario.

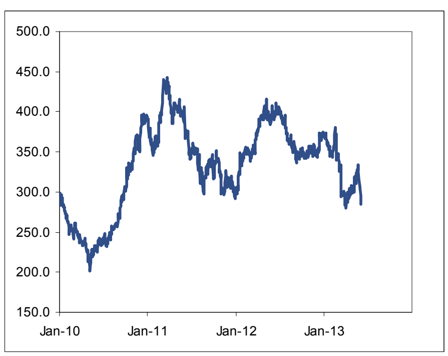
HOCM's flat production in 2013 is occurring at a time of a persistent fall in the silver price, an unhelpful combination at a time when costs have been rising sharply. In 2014, the Inmaculada project comes on stream to boost production, but it is our view that the metal price will be even lower by then. As Inmaculada is partly replacement-tonnage for ageing mines, its impact on HOCM will be restrained at low metal prices.

Figure 75. HOCM vs. UK Mining Sector



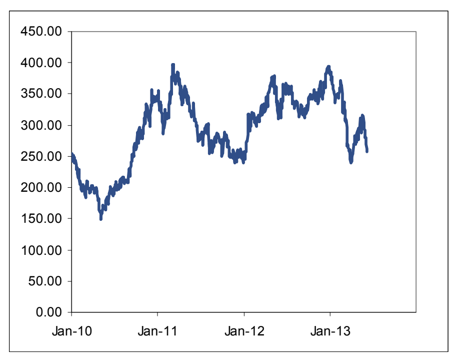
Source: Datastream

Figure 76. HOCM vs. UK Precious Equities



Source: Datastream

Figure 77. HOCM vs. Global Gold Equities



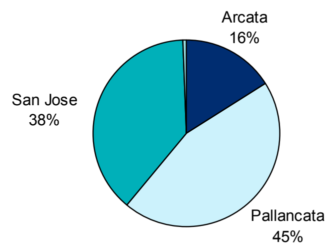
Source: Datastream

Remedial action at HOCM under low gold prices is likely to focus on cutting back on what has been a very high exploration budget, certainly not repeating the purchase of listed gold equities which HOCM has done in the past, or a repeat of the purchase of Andina's Volcan project which is unlikely to proceed at lower metal prices in our view. The market gave HOCM a lot of credit for buying into gold assets

like GRC during the bull market but the share price reversal of GRC has called into question the entire game plan of HOCM in the bull market which was to use the cash flow from silver prices above $30 to simply plough back into more investments and aggressive exploration.

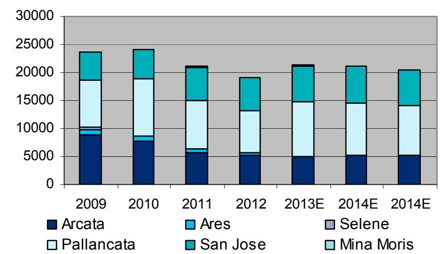
Investors are caught between the caution of knowing that production will be flat or declining in 2013 and costs could rise quite substantially, while, on the other hand, the start-up of Inmaculada in 2014 should reverse the decline. However, the currently low silver price should focus minds on the nearer-term issues of declining

Figure 78. EBITDA 2013E



Source: Citi Research

Figure 79. Silver Production Koz



Source: Company reports, Citi Research

We set our target price of £1.78 by applying a 1.10x P/NPV ratio to our NPV estimate of £1.62 (derived using a discount rate of 10%). We believe that HOCM does not warrant the higher P/NPV rating of its key silver peer (which operates primarily in Mexico), because of the higher political risk in Peru. However, we use a 1.5x P/NPV rating for key silver Fresnillo to reflect the asset-quality and low political risk of that group and hence we use a 1.2x P/NPV ratio for HOCM.

Platinum Equities

The recent fall in platinum equity valuations has made investing in these equities more compelling. All but one (RBP) of the equities in the SA platinum sector now trade well below what we estimate as intrinsic value. This means that we now rate five out of the six stocks under our coverage as Buys. In contrast, all of our rated UK gold and silver equities are rated as Sell. This is the big 2013 switch for us and we note in the chart below how the trend is developing between these two sub-sectors.

Lonmin

Lonmin production rose from 757k oz in 2002 to 903k oz in 2003 and remained above 900k oz until the 951k oz it produced in 2006. At that point, the difficulties with mechanised mining began to impact Lonmin and 2007 production fell below 800k oz then 2008 production fell below 700k oz. New management stabilised production and had been targeting 950k oz p.a. by 2015, but has recently cut capex and reduced that target to 850k oz.

Lonmin had a difficult 2012, which included the police-shooting of a number of illegal strikers and the need to strengthen the balance sheet via a rights issue. Despite that, Lonmin has performed very well operationally but the group still faces the industry-wide challenges of a weak global auto market and the threat of future labour disruption.

Lonmin is likely to have a very promising 2014 and 2015 as the global auto market recovers. In the interim, there is still a challenging 2013 to deal with. Rand weakness is likely to help Lonmin in 2013 and carry it through to better PGM markets in 2014. The market gives management substantial credit for sustained improvement in operational efficiency in the past two years but recognises that this is being outweighed by industry-specific problems in South Africa, as well as by the comatose global auto industry

Our target price for Lonmin is £3.86. We value Lonmin based on a sum-of-the-parts discounted cash flow (DCF) analysis. Our model uses a nominal WACC of 9% and discounts forecast cash flows over the life of the group's individual assets. We apply a 1.05 P/NPV multiple to our £3.68 NPV, a slight premium to the 1.0x that we use for South African listed platinum producers, because of its primary London listing

We rate Lonmin a Buy due to both its very good recovery from the difficult mining and smelting conditions of two years ago and on a belief that PGM prices are set to rise in the next few years. Offsetting this somewhat is a nagging concern about the South African labour situation, and recent strike events do not reduce that worry.

The table below shows the sensitivity of Lonmin's profitability and solvency ratios to changes in the platinum price and R/$ exchange rate.

Figure 80. LON estimated profitability and solvency ratio sensitivities to the platinum price and R/$ exchange rate (CY13-15)

HEPS (SAc)

	CY13 Platinum price (USD/oz)					CY14 Platinum price (USD/oz)					CY15 Platinum price (USD/oz)				
R/$	1100	1300	Spot*	1700	1900	1100	1300	Spot*	1700	1900	1100	1300	Spot*	1700	1900
8.50	-48	23	91	165	236	-452	-279	-115	66	239	-523	-349	-183	-1	173
9.00	11	86	158	237	312	-394	-211	-37	155	337	-464	-279	-104	89	273
Spot*	33	109	182	262	339	-373	-187	-8	187	373	-442	-255	-75	121	309
9.50	70	150	225	308	387	-336	-143	42	243	436	-405	-210	-25	178	373
10.00	129	213	292	380	463	-278	-75	120	332	535	-346	-141	54	268	473

PE ratio

	CY13 Platinum price (USD/oz)					CY14 Platinum price (USD/oz)					CY15 Platinum price (USD/oz)				
R/$	1100	1300	Spot*	1700	1900	1100	1300	Spot*	1700	1900	1100	1300	Spot*	1700	1900
8.50	-78.4	160.6	41.1	22.6	15.8	-8.3	-13.4	-32.7	56.7	15.7	-7.2	-10.7	-20.5	-3677.9	21.6
9.00	331.6	43.3	23.6	15.8	12.0	-9.5	-17.7	-102.4	24.2	11.1	-8.1	-13.4	-36.1	42.2	13.7
Spot*	115.1	34.3	20.5	14.3	11.0	-10.0	-20.0	-443.9	20.1	10.0	-8.5	-14.7	-49.7	30.9	12.1
9.50	53.2	25.0	16.6	12.1	9.7	-11.1	-26.2	90.1	15.4	8.6	-9.2	-17.8	-151.4	21.0	10.0
10.00	28.9	17.6	12.8	9.9	8.1	-13.5	-50.2	31.3	11.3	7.0	-10.8	-26.5	68.9	14.0	7.9

FCF (Rm)

	CY13 Platinum price (USD/oz)					CY14 Platinum price (USD/oz)					CY15 Platinum price (USD/oz)				
R/$	1100	1300	Spot*	1700	1900	1100	1300	Spot*	1700	1900	1100	1300	Spot*	1700	1900
8.50	-2309	-2193	-2077	-1947	-1817	-2596	-1800	-1039	-206	592	-4028	-3093	-2200	-1223	-288
9.00	-2060	-1937	-1815	-1677	-1539	-2333	-1490	-684	198	1043	-3775	-2785	-1840	-805	185
Spot*	-1970	-1845	-1720	-1579	-1439	-2238	-1378	-556	343	1205	-3684	-2674	-1710	-654	356
9.50	-1810	-1681	-1552	-1406	-1261	-2070	-1180	-330	602	1493	-3522	-2477	-1479	-387	659
10.00	-1561	-1424	-1289	-1135	-983	-1807	-870	25	1005	1943	-3268	-2169	-1118	32	1132

Net debt / EBITDA

	CY13 Platinum price (USD/oz)					CY14 Platinum price (USD/oz)					CY15 Platinum price (USD/oz)				
R/$	1100	1300	Spot*	1700	1900	1100	1300	Spot*	1700	1900	1100	1300	Spot*	1700	1900
8.50	-2.80	-1.18	-0.81	-0.62	-0.52	-0.47	-0.30	-1.67	-0.78	-0.70	-1.48	-1.81	-5.53	-0.20	-0.69
9.00	-1.62	-1.01	-0.77	-0.62	-0.54	-0.25	0.96	-1.26	-0.86	-0.77	-1.47	-2.02	0.82	-0.68	-0.87
Spot*	-1.47	-0.97	-0.76	-0.62	-0.54	-0.14	3.38	-1.22	-0.88	-0.78	-1.46	-2.19	0.01	-0.77	-0.91
9.50	-1.29	-0.92	-0.74	-0.62	-0.55	0.14	-5.51	-1.19	-0.90	-0.81	-1.45	-3.01	-0.56	-0.89	-0.97
10.00	-1.14	-0.88	-0.73	-0.63	-0.56	1.03	-2.22	-1.16	-0.93	-0.83	-1.41	0.29	-0.90	-1.00	-1.04

Net debt / Equity

	CY13 Platinum price (USD/oz)					CY14 Platinum price (USD/oz)					CY15 Platinum price (USD/oz)				
R/$	1100	1300	Spot*	1700	1900	1100	1300	Spot*	1700	1900	1100	1300	Spot*	1700	1900
8.50	-5%	-5%	-6%	-6%	-6%	5%	1%	-2%	-5%	-8%	22%	13%	6%	-1%	-6%
9.00	-6%	-7%	-7%	-7%	-7%	2%	-2%	-5%	-8%	-10%	16%	8%	1%	-5%	-10%
Spot*	-7%	-7%	-7%	-8%	-8%	1%	-2%	-5%	-8%	-11%	14%	6%	0%	-6%	-11%
9.50	-7%	-8%	-8%	-8%	-8%	-1%	-4%	-7%	-10%	-12%	11%	4%	-2%	-8%	-13%
10.00	-8%	-9%	-9%	-9%	-9%	-3%	-6%	-9%	-11%	-14%	7%	0%	-5%	-11%	-15%

Source: Citi Research estimates

*Spot prices: Platinum $1,491/ounce, USDZAR 9.18

Aquarius

The $1.078bn valuation of Mimosa (100%) by the government of Zimbabwe as part of a transaction to buy a 51% stake for $550m was a major ‘plus’ for AQP compared with the market’s concern prior to that about a possible under-valuation. However, the matter of ‘trust’ in relation to the longer-term relationship with the new 51% owner may still be considered to be a risk in the eyes of some investors. It could be a rocky road but we believe that Mimosa, a low-cost producer, will continue to be a benefit to AQP for many years.

AQP recently reported production of 81.4 k oz for Mar-Q 2013. In dollar terms, overall group unit costs decreased 4% quarter-on-quarter to $922 per PGM ounce and 21% compared to Mar-Q 12. We expect AQP to produce 181k ounces (Pt attributable) in FY13 and 159k ounces in FY14. We expect unit costs to average R8,150/ounce (PGM) in FY13 and R8,279/ounce in FY14.

The table below shows the sensitivity of AQP’s profitability and solvency ratios to changes in the platinum price and R/$ exchange rate.

Figure 81. AQP estimated profitability and solvency ratio sensitivities to the platinum price and R/$ exchange rate (CY13-15)

		CY13					CY14					CY15				
		Platinum price (USD/oz)					Platinum price (USD/oz)					Platinum price (USD/oz)				
	R/$	1100	1300	Spot*	1700	1900	1100	1300	Spot*	1700	1900	1100	1300	Spot*	1700	1900
HEPS (SAc)	8.50	-101	-66	-32	6	41	-152	-103	-55	-4	45	-209	-149	-92	-30	30
HEPS (SAc)	9.00	-90	-52	-16	24	61	-133	-80	-30	24	77	-184	-121	-61	5	68
HEPS (SAc)	Spot*	-85	-47	-10	30	68	-126	-72	-21	34	88	-175	-111	-49	18	82
HEPS (SAc)	9.50	-78	-38	0	41	81	-113	-58	-5	52	108	-160	-93	-29	40	107
HEPS (SAc)	10.00	-66	-24	16	59	101	-94	-36	20	81	139	-135	-65	2	76	146
PE ratio	8.50	-6.2	-9.6	-19.9	112.5	15.3	-4.1	-6.1	-11.4	-162.9	13.8	-3.0	-4.2	-6.8	-21.0	21.3
PE ratio	9.00	-7.0	-12.1	-39.7	26.8	10.3	-4.8	-7.8	-20.8	26.0	8.2	-3.4	-5.2	-10.4	121.1	9.2
PE ratio	Spot*	-7.4	-13.4	-61.8	21.0	9.2	-5.0	-8.7	-29.5	18.3	7.2	-3.6	-5.7	-12.7	35.2	7.7
PE ratio	9.50	-8.1	-16.5	-4878.3	15.2	7.8	-5.6	-10.9	-119.7	12.0	5.9	-3.9	-6.8	-21.5	15.6	5.9
PE ratio	10.00	-9.5	-25.8	40.4	10.6	6.2	-6.7	-17.7	31.8	7.8	4.5	-4.7	-9.7	268.9	8.3	4.3
FCF (Rm)	8.50	-653	-445	-247	-30	178	-592	-259	-173	-3	259	-1023	-677	-347	15	361
FCF (Rm)	9.00	-586	-366	-156	74	294	-445	-220	-109	152	429	-866	-500	-150	233	600
FCF (Rm)	Spot*	-562	-337	-123	111	336	-392	-202	-86	189	490	-810	-436	-79	312	686
FCF (Rm)	9.50	-519	-287	-65	178	410	-297	-172	-45	326	599	-709	-322	47	451	838
FCF (Rm)	10.00	-452	-208	26	281	526	-150	-125	125	469	769	-552	-145	244	670	1077
Net debt / EBITDA	8.50	-12.38	-666.70	10.25	4.05	2.18	-8.24	-25.76	11.19	2.74	0.88	-5.98	-9.12	-99.04	3.85	0.50
Net debt / EBITDA	9.00	-21.87	23.07	6.39	3.02	1.71	-12.61	39.32	5.03	1.60	0.42	-7.48	-18.37	10.05	1.51	-0.16
Net debt / EBITDA	Spot*	-30.11	16.81	5.62	2.76	1.58	-15.79	19.74	4.09	1.34	0.30	-8.29	-31.86	6.65	1.07	-0.32
Net debt / EBITDA	9.50	-89.80	11.34	4.62	2.39	1.38	-29.59	10.14	2.98	0.97	0.12	-10.47	67.89	3.81	0.53	-0.54
Net debt / EBITDA	10.00	43.50	7.51	3.60	1.96	1.14	64.45	5.47	1.96	0.58	-0.09	-19.52	9.63	1.88	-0.01	-0.78
Net debt / Equity	8.50	99%	76%	59%	44%	32%	147%	88%	54%	30%	13%	399%	151%	73%	30%	6%
Net debt / Equity	9.00	89%	69%	53%	39%	28%	116%	70%	42%	21%	7%	236%	103%	49%	17%	-2%
Net debt / Equity	Spot*	86%	66%	51%	37%	27%	108%	65%	39%	19%	5%	203%	91%	43%	13%	-5%
Net debt / Equity	9.50	82%	62%	48%	35%	25%	95%	57%	33%	15%	2%	160%	74%	33%	7%	-9%
Net debt / Equity	10.00	75%	57%	44%	32%	22%	79%	47%	26%	10%	-2%	117%	54%	22%	0%	-14%

Source: Citi Research estimates

*Spot prices: Platinum $1,491/ounce, USDZAR 9.18

Our £0.66 target price is based on our NPV valuation. Our base case NPV for the stock of £0.66 is derived from a DCF model that assumes a discount rate for the UK listing of 9% (in line with that which we use for its closest UK peer). We set our target price at 1.0x NPV, in line with its SA platinum peers. Risks are focused on PGM prices and the rand

Diamond Equities

The diamond market initially joined the hard-asset club in the credit crisis but by 2011 it had already reverted to behaving like platinum and reversed its entire credit-crisis gains even while gold was at its higher levels. As in the case of platinum, we believe that both a recovery in the fortunes of mid-net-worth consumers and a significant shortage of new diamond mines will see diamonds out-performing gold and silver in the forthcoming global economic recovery.

Petra Diamonds

Petra's operating assets are primarily to be found in South Africa, with one mine in Tanzania. South African labour unions demonstrated their ability to cause significant production losses in 2012 and this remains a threat for Petra and for the SA mining industry. Political risk is also higher than in the mature economies.

Petra has eight producing mines; seven mines are in South Africa and one is in Tanzania. Petra is also active in exploration in diamond-rich Botswana. The group has diamond resources of more than 300 million carats (Mct).

Petra has grown by primarily buying non-core South African assets from De Beers as that mining giant continues to focus on new and much larger projects globally. This has left Petra as a top-quality mid-cap group with good production growth in the years ahead and opportunities to apply efficiencies which may not have been worthwhile for De Beers to pursue. Petra produced 2.2M ct in 2012 (up 98% on FY 11) and is guiding to 5Mct p.a. by 2019.

Petra produced 2.2M ct in 2012 (up 98% on FY 11) and is guiding to 5Mct p.a. by 2019. EBITDA of $90.3m and NPAT of $39.2m was generated in FY to June 2012 on the back of Revenue of $316.9m. Petra generated cash from operations of $81.9m in 2012 and, as a growing company, applied $135.5m in capex during 2012. The group had a $47m cash holding at the end of FY12 and had debt of $69.2m out of total debt facilities available to it of $136m and, since the end of FY 12, the group has been granted further debt facilities of $50m.

In FY 12, 50% of Petra's diamond production (as measured in carats) came from the Finsch mine which it purchased from De Beers in FY 12. The Cullinan mine, purchased from De Beers in 2008, produced 39% of Petra's diamonds in FY 12, illustrating the dominance of these two former De Beers mines in the Petra portfolio.

As with all of our other UK precious metals stocks, we use Petra's long term (25-year) NPV as the key driver of our valuation. We set our PDL target price of £1.51 by applying a 1.0x P/NPV on Petra's £1.51 NPV Valuation. This compares to the average 1.3x P/NPV that we use on our UK Gold Shares. We prefer to align Petra with our diversified mining groups where we use typically use1.0x P/NPV. Diamond groups have historically not commanded the senior valuation ratings attributed to gold groups.

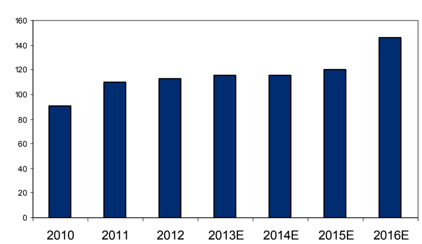
Gem Diamonds

GEMD recently sold its Ellendale mine, leaving it with only the Letseng mine as its production base. We estimate the NPV of the new Ghaghoo mine (the company's key project to replace the Ellendale contribution, but only starting late 2014) at only $31m vs. the Letseng NPV of $397m (attributable). GEMD will therefore remain very focused on its one key mine.

The expansion at Letseng (Project Kholo) recently got board approval with expectations of new capacity coming online by July 2014. The new Ghaghoo mine will eventually replace the short-life Ellendale mine but we do not consider Ghaghoo to be a top-quality mine. As a result of weaker diamond prices, GEMD scaled back the capex earmarked for Project Kholo and for the development of Phase 1 at the Ghaghoo mine. Work is already underway to replace four crushing units in both of Letšeng's existing processing plants with crushers designed for project Kholo, with the aim of reducing diamond damage and thus minimising the loss of revenues. These crushers should be installed by June 2013.

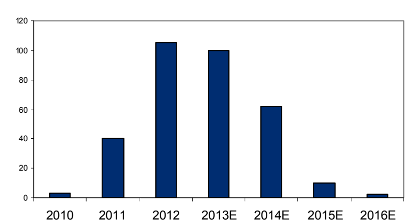
The procurement and installation of the new secondary crushers for Plants 1 and 2 for Project Kholo is underway and on target for installation by the end of Q2 2013. It is expected that these crushers will contribute significantly to reducing diamond damage and hence improving revenue. At Ghaghoo, development of the access decline entered weathered basalt country rock during Q1.

Figure 82. Letseng Production (k carats)



Source: Company reports, Citi Research

Figure 83. Letseng Project Capex ($m)



Source: Company reports, Citi Research

GEMD is now a significantly re-focused group and this should stand the group in good stead, especially as a more conservative attitude is being taken with respect to expansions and new mines, as has been the recent trend amongst the diversified groups. GEMD should be able to emerge a far stronger, leaner and more focused company in 2013.

Our £1.72 target price is based on a 1.0x P/NPV ratio applied to our NPV of £1.72, derived by using a 10% discount rate. The 1.0x P/NPV is in line with the 1.0x P/NPV ratio that we use for diamond peer, Petra Diamonds.

The diamond market took its price-fall medicine some time ago with the result that prices are now stabilizing while the prices of gold and silver have plummeted recently. The demand/supply balance in diamonds looks promising for the 2014-2016 period but we do not expect prices to improve much in 2013. We rate GEMD as Buy.

Company Focus

- Estimate Change
- Target Price Change

Sell	**3**
Price (12 Jun 13)	£1.29
Target price	£1.24
from £1.75	
Expected share price return	-4.0%
Expected dividend yield	0.0%
Expected total return	**-4.0%**
Market Cap	£530M
	US$829M

Price Performance
(RIC: ABGL.L, BB: ABG LN)

African Barrick Gold Plc (ABGL.L)

Big Challenges at Lower Gold Prices

- **Operations Review** — ABG is undertaking the review of its assets in the light of the current gold price, the challenges of power availability in Tanzania and the social challenges around north Mara. We expect ABG to announce that it will not proceed with the Nyanzaga project at current gold prices and we also expect ABG to question the viability of Buzwagi at current gold prices. Some of the capex plans at Bulyanhulu may also be culled. As North Mara has had social difficulties purchasing the ground required for pit expansion, the group had considered an underground option instead. At the recent low gold prices, we question whether that underground option is viable.

- **Problematical Buzwagi** — At our gold price forecasts, we have a negative NPV for Buzwagi, although we concede that this assumes ongoing high diesel use in the face of energy challenges within Tanzania. If those energy challenges persist, ABG will have to give serious consideration to shutting Buzwagi in our view. While this would be positive for our group NPV, the fact that the company proposed Buzwagi as a major success for the group at its IPO in 2010, could lead to disappointment if it is shut or takes a huge write-down.

- **Ex-Growth** — In short, at $1100, we estimate ABG is not only ex-growth, but is likely a shrinking producer. It's big plus is that it still has a cash pile such that, if remedial action is substantial, that shrunken group could offer better returns to shareholders than in its current form. We look forward to the operational review that ABG is undergoing and trust that it will indeed cut significantly if needed.

- **Sensitivity** — Price sensitivity is illustrated with the fall in 2014E EBITDA from $208.5m at $1300 to $87.5m at $1100 while FCF moves from -$154.7m to -$275.9m. However, there is no net debt at end-2014 if gold averages $1300 from now on marginal net debt of $6.8m at $1100. While ABG's assets can therefore be classified in the same quality group as, for example, POG, its balance sheet structure is far superior to that of POG.

- **Valuation** — We prefer to use longer-term P/NPV ratios to value this subsector and set our target price of £1.24 by applying a 1.1x P/NPV ratio to our NPV estimate of £1.13 (derived using a discount rate of 10%). The gold shares which we previously rated at 1.2x P/NPV are now rated as 1.1x P/NPV because of the big P/NPV discounts on shares like RIO, now trading at a 0.66x P/NPV. After applying this valuation to ABG and also re-assessing likely sustaining capex spend in future, our new TP is £1.24, down from £1.75. We continue to rate ABG as Sell. We also make some minor estimate changes.

African Barrick Gold Plc (USD)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales ($M)	1,218.0	1,087.5	968.1	968.4	978.8
Profit Before Tax ($M)	399.7	143.4	154.9	120.0	98.9
Diluted EPS ($)	0.67	0.20	0.27	0.22	0.17
Diluted EPS (Old) ($)	0.67	0.20	0.27	0.22	0.17
PE (x)	3.0	9.9	7.4	9.3	12.0
EV/EBITDA (x)	0.8	1.6	2.1	2.5	3.2
DPS ($)	0.16	0.16	0.08	0.07	0.03
Net Div Yield (%)	8.0	8.1	3.8	3.2	1.7

Company Focus

Buy	1
Price (12 Jun 13)	£0.41
Target price	£0.66
Expected share price return	62.0%
Expected dividend yield	0.0%
Expected total return	**62.0%**
Market Cap	£198M
	US$310M

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

Aquarius Platinum Ltd (AQP.L)

Turnaround Story

- **Mimosa** — The $1.078bn valuation of Mimosa (100%) by the government of Zimbabwe as part of a transaction to buy a 51% stake for $550m was a major 'plus' for AQP compared with the market's concern prior to that about a possible under-valuation. However, the matter of 'trust' in relation to the longer-term relationship with the new 51% owner may still be considered to be a risk in the eyes of some investors. It could be a rocky road but we believe that Mimosa, a low-cost producer, will continue to be a benefit to AQP for many years.
- **Good cost trends** — AQP recently reported production of 81.4 k oz for Mar-Q 2013. In dollar terms, overall group unit costs decreased 4% quarter-on-quarter to $922 per PGM ounce and 21% compared to Mar-Q 12. We expect AQP to produce 181k ounces (Pt attributable) in FY13 and 159k ounces in FY14. We expect unit costs to average R8,150/ounce (PGM) in FY13 and R8,279/ounce in FY14.
- **Valuation** — Our £0.66 target price is based on our NPV valuation. Our base case NPV for the stock of £0.66 is derived from a DCF model that assumes a discount rate for the UK listing of 9% (in line with that which we use for its closest UK peer). We set our target price at 1.0x NPV, in line with its SA platinum peers. Risks are focused on PGM prices and the rand.

Aquarius Platinum Ltd (USD)

Year to 30 Jun	2011A	2012A	2013E	2014E	2015E
Sales ($M)	667.6	477.5	359.0	340.5	474.0
Net Income ($M)	97.1	-61.0	-10.9	7.2	21.1
Diluted EPS (¢)	21.0	-13.1	-2.3	1.5	4.5
Diluted EPS (Old) (¢)	21.0	-13.1	-2.3	1.5	4.5
PE (x)	3.1	-4.9	-27.7	41.9	14.3
EV/EBITDA (x)	1.3	115.6	12.1	10.1	6.5
DPS (¢)	4.0	0.0	0.0	0.0	0.0
Net Div Yield (%)	6.2	0.0	0.0	0.0	0.0

Company Focus

Neutral	**2**
Price (12 Jun 13)	£0.37
Target price	-
Expected share price return	-
Expected dividend yield	-
Expected total return	**-**
Market Cap	£407M US$636M

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

Centamin Egypt Limited (CEY.L)

Great Assets, Tough Politics

- **Well-Positioned** — CEY is one of the better-positioned groups at $1100/oz as it is low cost and has good growth. We do not believe that CEY would have to take much remedial action at $1100, aside from cutting back its ambitions in East Africa. Unfortunately, CEY's problem is not the gold price, but the uncertain political and business environment in Egypt. We have always been positive on the CEY mining assets and our only concern has been the political risk.
- **Expansion** — The Stage 4 (plant expansion to 10Mtpa) is giving CEY a production lift in 2014.The market has a high level of faith in the mine and its expansion programme and recognises that higher production levels should deliver lower costs per ounce. However, CEY is likely to lose its oil subsidy over time, which we estimate will add $150/oz of costs.
- **Sensitivity** — Price sensitivity is illustrated with the fall in 2014E EBITDA from $228.6m at $1300 to $151.6m at $1100 and FCF falls from a positive $41.7m to a negative $49.2m. However, there should be net cash of $241.2m at end-2014 if gold averages $1300 from now on and there is still net cash of $142.4m at $1100/oz, illustrating the desirability of the suite of assets at lower gold prices. If only the politics were better.
- **Valuation** — This company has a Neutral rating. We have not assigned a target price and therefore no valuation methodology is applicable.

Centamin Egypt Limited (USD)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales ($M)	340.5	426.4	512.3	568.8	524.2
Net Income ($M)	183.5	231.2	227.2	129.6	107.5
Diluted EPS (¢)	16.7	21.2	20.8	11.9	9.9
Diluted EPS (Old) (¢)	16.7	21.2	20.8	11.9	9.9
PE (x)	3.5	2.7	2.8	4.9	5.9
EV/EBITDA (x)	2.1	2.0	1.7	1.2	1.0
DPS (¢)	0.0	0.0	0.0	0.0	0.0
Net Div Yield (%)	0.0	0.0	0.0	0.0	0.0

Company Focus

Sell	3
Price (12 Jun 13)	£10.84
Target price	£10.45
Expected share price return	-3.6%
Expected dividend yield	1.7%
Expected total return	**-2.0%**
Market Cap	£7,990M
	US$12,503M

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

Fresnillo Plc (FRES.L)

Best-Quality, but a Stretched-Valuation

- **Good Quality** — Key assets are the Fresnillo and Saucito silver mines in Mexico and Cienega, Heradura, Soledad and Noche Buena gold mines in Mexico. FRES has the lowest-cost expansion forthcoming in terms of phase 2 at Saucito which is an extremely low cost producer. These are all good-quality mines and will stand FRES in good stead on any fall in metal prices.

- **Opportunities at lower prices** — At lower metal prices, greenfield exploration and some maintenance capex maybe reduced in 2014 (2013 capex of $750m is unchanged). However, with its strong balance sheet, there may be useful M&A opportunities coming forward as lower prices distress the sector; FRES would look for low cost, producing assets, in LatAm.

- **Sensitivity** — Price sensitivity is illustrated with the fall in 2014E EBITDA from $978.6m at $1300 gold (and $21 silver) to $731.4m at $1100 (and $18) and FCF falls from $373.1m to $225.9m, still a very healthy cash flow. FRES is still in net cash at end 2014 if gold averages $1300 from now on and that remains the case at $1100. With quality assets and a quality balance sheet, FRES should be the 'go-to' stock in the space but, unfortunately, the market has more-than-adequately priced those credentials into the FRES share price, in our opinion.

- **Valuation** — We recently reduced our P/NPV from 1.5x to 1.4x to reflect the deep NPV discounts in the sector (e.g. RIO at 34% discount to NPV) and set our new TP at £10.45.

- **Recommendation** — Our only concern with FRES in the past has been the very high valuation level attached to the group by the market. Should the entire sector experience significant share price falls in the event of gold fell below $1200 ($19.5 silver), FRES would likely be our preferred exposure to any significant rally or new uptrend in gold from that level as it offers growth-upside while still being financially comfortable at levels like $1100 ($ 18 silver). However, we have maintained for some time that its limited free float has caused excessively high valuations and we continue to rate FRES as Sell.

Fresnillo Plc (USD)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales ($M)	2,120.2	2,157.4	2,101.1	2,036.0	1,997.0
Net Income ($M)	901.4	652.9	668.0	597.9	578.9
Diluted EPS ($)	1.26	0.91	0.93	0.83	0.81
Diluted EPS (Old) ($)	1.26	0.91	0.93	0.83	0.81
PE (x)	13.5	18.6	18.2	20.3	21.0
EV/EBITDA (x)	7.6	9.0	8.9	9.3	9.4
DPS ($)	1.03	0.61	0.70	0.34	0.32
Net Div Yield (%)	6.1	3.6	4.1	2.0	1.9

Company Focus

Gem Diamonds (GEMD.L)

Shrinking to One Mine is no Bad Thing

Buy	1
Price (12 Jun 13)	£1.23
Target price	£1.72
Expected share price return	39.6%
Expected dividend yield	0.0%
Expected total return	**39.6%**
Market Cap	£170M
	US$266M

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

- **Focus on Letseng** — GEMD recently sold its Ellendale mine, leaving it with only the Letseng mine as its production base. We estimate the NPV of the new Ghaghoo mine (the company's key project to replace the Ellendale contribution, but only starting late 2014) at only $31m vs. the Letseng NPV of $397m (attributable). GEMD will therefore remain very focused on its one key mine.
- **Expansion** — The expansion at Letseng (Project Kholo) recently got board approval with expectations of new capacity coming online by July 2014. The new Ghaghoo mine will eventually replace the short-life Ellendale mine but we do not consider Ghaghoo to be a top-quality mine.
- **Valuation** — Our £1.72 target price is based on a 1.0x P/NPV ratio applied to our NPV of £1.72, derived by using a 10% discount rate. The 1.0x P/NPV is in line with the 1.0x P/NPV ratio that we use for diamond peer, Petra Diamonds.
- **Recommendation** — GEMD has shrunk from the intended multi-country mining operation set out at the time of its IPO. However, shrinking down to a mine like Letseng which produces some of the highest quality diamonds in the world is no bad thing. Furthermore, GEMD has been ahead of the game as we estimate that many gold producers (e.g. ABG) still have this shrinking process ahead of them. GEMD's new compact size could also have made it bite-size for predators although that may only come along once the uptrend in diamond prices is assured.

Gem Diamonds (USD)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales ($M)	395.0	202.1	225.6	260.9	278.1
Profit Before Tax ($M)	159.7	50.7	44.0	70.6	76.9
Diluted EPS ($)	0.52	0.12	0.11	0.20	0.22
Diluted EPS (Old) ($)	0.52	0.12	0.11	0.20	0.22
PE (x)	3.7	15.7	17.1	9.6	8.7
EV/EBITDA (x)	1.2	3.9	5.3	4.2	4.0
DPS ($)	0.00	0.00	0.00	0.00	0.00
Net Div Yield (%)	0.0	0.0	0.0	0.0	0.0

Company Focus

Hochschild Mining Plc (HOCM.L)

Too Aggressive in the Bull Market

- Target Price Change

Sell	3
Price (12 Jun 13)	£2.23
Target price	£1.78
from £1.94	
Expected share price return	-20.1%
Expected dividend yield	1.8%
Expected total return	**-18.3%**
Market Cap	£753M
	US$1,179M

Price Performance
(RIC: HOCM.L, BB: HOC LN)

- **Flat Production in near term** — HOCM's flat production in 2013 is occurring at a time of a persistent fall in the silver price, an unhelpful combination at a time when costs have been rising sharply. In 2014, the Inmaculada project comes on stream to boost production, but it is our view that the metal price will be even lower by then. As Inmaculada is partly replacement-tonnage for ageing mines, its impact on HOCM will be restrained at low metal prices.

- **Remedial Action** — Remedial action at HOCM under low silver and gold prices is likely to focus on cutting back on what has been a very high exploration budget, and certainly not repeating the purchase of listed gold equities which HOCM has done in the past, or a repeat of the purchase of Andina's Volcan project which is unlikely to proceed at lower metal prices in our view. The market gave HOCM a lot of credit for buying into gold assets like GRC during the bull market but the share price reversal of GRC has called into question the entire game plan of HOCM in the bull market which was to use the cash flow from silver prices above $30 to simply plough back into more investments and aggressive exploration.

- **Sensitivity** — HOCM has a much higher cost profile than peer FRES, and this is illustrated in it price sensitivity. 2014E EBITDA falls from $218.9m at $1300 (and $21 silver) to $129.4m at $1100 (and $181 silver), a 41% fall in comparison to the 25% fall at FRES. FCF moves from -$163m to -$202.7m. However, net debt is not high at $258m in 2014 if gold averages $1300 from now on and rises to a manageable $314.7m (debt ratio 22%) at $18/oz silver. Net debt to EBITDA is a manageable 2.44x at that pessimistic metal price scenario.

- **Valuation** — We set our target price of £1.78 by applying a 1.10x P/NPV ratio to our NPV estimate of £1.62 (derived using a discount rate of 10%). We believe that HOCM does not warrant the higher P/NPV rating of its key silver peer Fresnillo (which operates primarily in Mexico) at 1.4x, because of the higher political risk in Peru. The gold and silver shares which we previously rated at 1.2x P/NPV are now rated as 1.1x P/NPV because of the big P/NPV discounts on shares like RIO, now trading at a 0.66x P/NPV. After applying this valuation to HOCM and also re-assessing likely sustaining capex spend in future, our new TP is £1.78, down from £1.94. We continue to rate HOCM as Sell.

Hochschild Mining Plc (USD)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales ($M)	985.8	817.7	776.9	795.2	915.0
Profit Before Tax ($M)	416.4	214.9	197.6	224.0	268.0
Diluted EPS ($)	0.48	0.19	0.17	0.22	0.32
Diluted EPS (Old) ($)	0.48	0.19	0.17	0.22	0.32
PE (x)	7.3	18.0	21.1	15.6	10.8
EV/EBITDA (x)	1.8	3.0	4.0	4.3	3.9
DPS ($)	0.06	0.06	0.03	0.04	0.06
Net Div Yield (%)	1.7	1.6	0.9	1.2	1.7

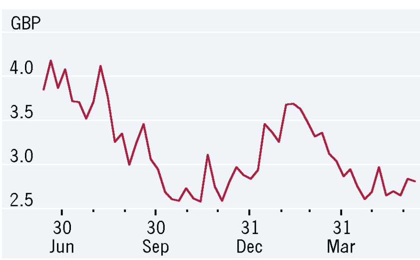
Company Focus

Lonmin PLC (LMI.L)

Slowly-Turning Tanker

Buy	**1**
Price (12 Jun 13)	£2.80
Target price	£3.86
Expected share price return	38.0%
Expected dividend yield	0.0%
Expected total return	**38.0%**
Market Cap	£1,591M
	US$2,489M

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



- **Good 2014 & 2015 in Prospect** — Lonmin is likely to have a very promising 2014 and 2015 as the global auto market recovers. In the interim, there is still a challenging 2013 to deal with. We believe Rand weakness is likely to help Lonmin in 2013 and carry it through to better PGM markets in 2014. The market gives management substantial credit for sustained improvement in operational efficiency in the past two years but recognises that this is being outweighed by industry-specific problems in South Africa, as well as by the weak global auto industry

- **Valuation** — Our target price for Lonmin is £3.86. We value Lonmin based on a sum-of-the-parts discounted cash flow (DCF) analysis. Our model uses a nominal WACC of 9% and discounts forecast cash flows over the life of the group's individual assets. We apply a 1.05x P/NPV multiple to our £3.68 NPV, a slight premium to the 1.0x used on the S.a.-listed platinums.

- **Recommendation** — We rate Lonmin a Buy due to both its very good recovery from the difficult mining and smelting conditions of two years ago and on a belief that PGM prices are set to rise in the next few years. Offsetting this somewhat is a nagging concern about the South African labour situation, and recent strike events do not reduce that worry.

Lonmin PLC (USD)

Year to 30 Sep	2011A	2012A	2013E	2014E	2015E
Sales ($M)	1,975.2	1,613.3	1,560.0	1,791.6	1,955.5
Profit Before Tax ($M)	296.8	59.5	152.4	174.3	221.3
Diluted EPS (¢)	103.1	5.6	17.5	19.4	24.0
Diluted EPS (Old) (¢)	103.1	5.6	17.5	19.4	24.0
PE (x)	4.3	78.0	25.0	22.5	18.3
EV/EBITDA (x)	4.2	10.5	6.4	5.2	4.6
DPS (¢)	26.1	2.1	0.0	0.0	4.9
Net Div Yield (%)	6.0	0.5	0.0	0.0	1.1

Company Focus

- Estimate Change
- Target Price Change

Sell	3
Price (12 Jun 13)	US$2.20
Target price	US$1.96
from US$3.12	
Expected share price return	-10.9%
Expected dividend yield	8.6%
Expected total return	**-2.3%**
Market Cap	US$832M

Price Performance
(RIC: NORDNq.L, BB: NORD LI)

Nordgold (NORDNq.L)

Troubles at $1100 Gold

- **New Start-Ups** — Nord recently announced the start-up of the Bissa mine in Burkina Faso and expects to produce up to 100 koz of gold at the mine in 2013. Planned capacity of the open pit mine is 4mt of ore per annum, producing up to 200 koz of gold annually. The first ore at the Gross mine is expected to be treated towards the end of 2013 and hence Nord has a good growth profile in the 2013-2015 period.

- **Stretched Geographically** — The combination of Russian and African assets may have had some appeal at $1800 gold but at $1100 gold the market may well feel that Nord is too geographically cumbersome to produce focused success. Right now we have a group that is too geographically stretched and it is listed in the wrong location to attract wide investor interest.

- **Remedial Action** — The higher cost assets such as Lefa ($1200/oz cash costs) will come under scrutiny and any new potential projects currently the subject of pre-feasibility studies are likely to be put on the back burner. Expect significant write-downs.

- **Sensitivity** — Price sensitivity is illustrated with the fall in 2014E EBITDA from $317.5m at $1300 to $151.7m at $1100 and FCF falls from $93.7m to $35.6m. This trend is helped by the fact that Nord has just completed its key capex commitments to bring on two new mines. Unfortunately, that has left the group with net debt which could end up being $457.8m at end-2014 if gold averages $1300 from now on and $518.5m if gold averages $1100/oz. Net debt could therefore be 3.4x EBITDA at end-2014 if gold averages $1100/oz.

- **Valuation** — Our NPV for Nordgold is $1.79, to which we apply a 1.1x P/NPV target multiple. Our NPV is based on an 10% weighted average cost of capital. On this basis our target price is $1.96.The gold shares which we previously rated at 1.2x P/NPV are now rated as 1.1x P/NPV because of the big P/NPV discounts on shares like RIO, now trading at a 0.66x P/NPV. After applying this valuation to NORD and also re-assessing likely sustaining capex spend in future, our new TP is US$1.96, down from US$3.12. We continue to rate NORD as Sell. We also make some minor estimate changes.

Nordgold (USD)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales ($M)	1,182.1	1,197.3	1,245.5	1,384.4	1,452.8
Net Income ($M)	168.9	19.5	19.9	21.1	34.5
Diluted EPS ($)	0.47	0.05	0.06	0.06	0.10
Diluted EPS (Old) ($)	0.47	0.05	0.06	0.06	0.10
PE (x)	4.7	40.7	39.9	37.6	23.0
EV/EBITDA (x)	2.1	3.2	3.4	3.3	3.0
DPS ($)	0.00	0.00	0.01	0.01	0.02
Net Div Yield (%)	0.0	0.0	0.6	0.7	1.1

Company Focus

Petra Diamonds (PDL.L)

Building a New Business

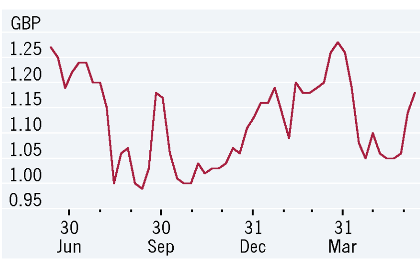
- **Good Mid-Cap Group** — Petra has grown by primarily buying non-core South African assets from De Beers as that mining giant continues to focus on new and much larger projects globally. This has left Petra as a top-quality mid-cap group with good production growth in the years ahead and opportunities to apply efficiencies which may not have been worthwhile for De Beers to pursue. Petra produced 2.2M ct in 2012 (up 98% on FY 11) and is guiding to 5Mct p.a. by 2019.

- **Financials** — Petra had a $47m cash holding at the end of FY12 and had debt of $69.2m out of total debt facilities available to it of $136m and, since the end of FY 12, the group has been granted further debt facilities of $50m.

- **Valuation** — We use Petra's long term (25-year) NPV as the key driver of our valuation. We set our PDL target price of £1.51 by applying a 1.0x P/NPV on Petra's £1.51 NPV Valuation. This compares to the average 1.3x P/NPV that we use on our UK Gold Shares. We prefer to align Petra with our diversified mining groups where we use typically use 1.0x P/NPV. Diamond groups have historically not commanded the senior valuation ratings attributed to gold groups.

Buy	**1**
Price (12 Jun 13)	£1.19
Target price	£1.51
Expected share price return	27.2%
Expected dividend yield	0.0%
Expected total return	**27.2%**
Market Cap	£605M
	US$947M

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



Petra Diamonds (USD)

Year to 30 Jun	2011A	2012A	2013E	2014E	2015E
Sales ($M)	223.3	325.8	356.5	502.5	563.8
Net Income ($M)	53.2	-2.4	20.0	101.6	127.5
Diluted EPS ($)	0.12	0.00	0.04	0.20	0.25
Diluted EPS (Old) ($)	0.12	0.00	0.04	0.20	0.25
PE (x)	15.1	-401.8	48.0	9.4	7.5
EV/EBITDA (x)	14.7	12.6	10.4	5.0	4.1
DPS ($)	0.00	0.00	0.00	0.00	0.00
Net Div Yield (%)	0.0	0.0	0.0	0.0	0.0

Company Focus

- **Target Price Change**
- **Estimate Change**

Sell	**3**
Price (12 Jun 13)	£1.34
Target price	£1.16
from £1.32	
Expected share price return	-13.4%
Expected dividend yield	0.0%
Expected total return	**-13.4%**
Market Cap	£250M
	US$391M

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

Petropavlovsk PLC (POG.L)

Debt & Convert are big issues at $1100

- **Designed for $1700+** — Investment in POG is suited to a gold price above $1700/oz, in our view, which is where the price was just six months ago. The six months since then have changed POG's outlook dramatically and it is now a group which could experience serious financial issues in our view if gold were to fall another $200/ oz. Given that gold recently fell $200/oz in just two days, the market has quickly ratcheted up its probability of POG being at significant financial risk by 2014. Added to that, it faces the extra technical risk of the POX process.

- **Not Ready for $1100** — POG is in the position of being one of the very few gold groups not carrying net cash as it passed the gold cycle-peak, a feature which does not lend itself to investor enthusiasm during a gold price downturn. The iron ore assets are now in associate rather than subsidiary form, but they continue to detract from the core business of this gold group, making it neither fish nor fowl.

- **Sensitivity** — Price sensitivity is illustrated with the fall in 2014E EBITDA from $283.1m at $1300 to $156.5m at $1100 and FCF falls from $88.9m to $31.8 m, helped by the recent deferral of POX capex. However, net debt could be $828.5m at end-2014 if gold averages $1300 from now on and could be $876.9m at $1100/oz. That would put the net debt to EBITDA ratio at the onerous level of 5.6x at end-2014. Our forecasts take into account the hedging which has been done.

- **Valuation** — We set our target price of £1.16 by applying a 1.1x P/NPV multiple to POG's gold assets (NPV of £0.42 per share; derived using a discount rate of 10%), while we use the market capitalisation of the IRC subsidiary to value the stake which POG holds (currently $0.70 per POG share). The gold shares which we previously rated at 1.2x P/NPV are now rated as 1.1x P/NPV because of the big P/NPV discounts on shares like RIO, now trading at a 0.66x P/NPV. After applying this valuation to POG and also re-assessing likely sustaining capex spend in future, our new TP is £1.16, down from £1.32. We continue to rate POG as Sell. We also make some minor estimate changes.

Petropavlovsk PLC (USD)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales ($M)	1,261.5	1,374.7	1,214.1	1,087.1	1,027.8
Profit Before Tax ($M)	356.9	140.7	127.2	107.7	94.3
Diluted EPS ($)	1.23	0.53	0.48	0.45	0.43
Diluted EPS (Old) ($)	1.23	0.53	0.48	0.45	0.45
PE (x)	1.7	4.0	4.4	4.7	4.9
EV/EBITDA (x)	2.2	3.5	4.0	4.0	4.1
DPS ($)	0.19	0.19	0.19	0.09	0.04
Net Div Yield (%)	9.1	9.1	9.1	4.3	1.9

Company Focus

■ Target Price Change

Sell	**3**
Price (12 Jun 13)	£6.22
Target price	£5.29
from £5.77	
Expected share price return	-15.0%
Expected dividend yield	4.8%
Expected total return	**-10.1%**
Market Cap	£2,423M
	US$3,791M

Price Performance
(RIC: POLYP.L, BB: POLY LN)

Polymetal (POLYP.L)

Decent Quality Group

- **POX Challenges** — As with POG, pressure-oxidisation (POX) is a big part of POLYP's future. Design daily concentrate throughput at Amursk POX was achieved in late November 2012. However, due to the presence of unexpectedly high chlorine concentrations in process water and certain design weaknesses the plant had to be shut down in late December and currently operates at 60% of design throughput and 9-14 percentage points below design recovery (80-85%). POLYP is implementing a series of corrective measures and expects that recovery will slowly improve over Q2 and Q3 while full throughput will be reached in Q4. Such uncertainties are less important at $1800 gold than at $1100 gold.

- **Sensitivity** — Price sensitivity is illustrated with the fall in 2014E EBITDA from $689m at $1300 to $442m at $1100 and FCF falls from $402m to $208m. However, net debt is low at $79.6m in 2014 if gold averages $1300 from now on and rises to a non-problematical $358.9m at $1100/oz, less than the forecast EBITDA for that year. This makes POLYP one of the better-placed groups in the event of further falls in the gold prices in our view.

- **Valuation** — We use a 10% discount rate for the two other Russian gold groups that we cover and so we apply the same discount rate to POLYP. We also use a 1.1x P/NPV ratio to derive our target price, as we do for the two other Russian gold groups which we cover. Our TP of £5.29 for POLYP is therefore based on 1.1x our £4.81 NPV calculation. The gold shares which we previously rated at 1.2x P/NPV are now rated as 1.1x P/NPV because of the big P/NPV discounts on shares like RIO, now trading at a 0.66x P/NPV. After applying this valuation to POLYP and also re-assessing likely sustaining capex spend in future, our new TP is £5.29, down from £5.77.

- **Recommendation** — We rate POLYP Sell. We believe it is a well-managed group but its assets are spread over many mines, unlike its more compact peer, Randgold Resources. We are not enamoured of this multiple-mine structure or of the mine-life within the group. In 2013 about 40% of POLYP revenue could be sourced from silver and, unfortunately, we have been even more bearish on silver than on gold

Polymetal (USD)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales ($M)	1,326.4	1,854.0	1,979.8	2,038.9	1,890.5
Net Income ($M)	289.9	406.6	553.3	560.3	444.4
Diluted EPS ($)	0.74	1.00	1.36	1.37	1.09
Diluted EPS (Old) ($)	0.74	1.00	1.36	1.37	1.09
PE (x)	13.2	9.8	7.2	7.1	8.9
EV/EBITDA (x)	7.4	4.8	4.5	4.1	4.3
DPS ($)	0.20	0.31	0.22	0.22	0.17
Net Div Yield (%)	2.1	3.2	2.2	2.3	1.8

Company Focus

■ Target Price Change

Sell	3
Price (12 Jun 13)	£49.04
Target price	£39.26
from £42.30	
Expected share price return	-19.9%
Expected dividend yield	0.4%
Expected total return	**-19.6%**
Market Cap	£4,521M
	US$7,075M

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

Randgold Resources Ltd (RRS.L)

Good Group; Subject to the Gold Price

- **Kibali, the Game Changer** — With Kibali coming on stream in 4Q 2013, RRS production should grow to 1.2m oz p.a. by the middle of the decade, even though Morila should have run out of life by then. We view Kibali as a very good mine and think it is likely to be the core to the future of the group.

- **Remedial Action** — RRS is already making adjustments to its expenditure in the light of the lower gold price. Future action is likely to include finally ruling out developing Massawa at current gold prices. Some of the mining of satellite deposits and dumps will also likely be reconsidered but RRS has a good balance sheet and the Kibali start-up is going to reduce average group costs. Severe remedial action, such as that needed at ABG for example, is unlikely to be needed.

- **Sensitivity** — Price sensitivity is illustrated with the fall in 2014E EBITDA from $593m at $1300 to $376m at $1100 and FCF falls from $134.6m to a negative $16.1m. However, RRS is still in net cash at end 2014 if gold averages $1300 from now on and that remains the case at $1100/oz. The group therefore has a strong balance sheet to cope with any gold-price-induced adversity.

- **Valuation** — We derive our target price of £39.26 by applying a 1.3x P/NPV ratio to our NPV estimate of £30.20 (derived using a discount rate of 10%). We consider this premium to be adequate in the light of the fact that the market is currently pricing the likes of RIO at an NPV discount of greater than 30%. We previously rated RRS at 1.4x P/NPV but we now rate it at 1.3x P/NPV because of the big P/NPV discounts on shares like RIO, now trading at a 0.66x P/NPV. After applying this valuation to RRS and also re-assessing likely sustaining capex spend in future, our new TP is £39.26, down from £42.30.

- **Recommendation** — We continue to rate RRS as Sell. RRS is at a pivotal stage of its evolution with the top-quality Kibali mine soon to come on steam in the DRC. Unfortunately, there is a price for everything and we do not believe that RRS warrants currently being at double the expected PE of the larger diversified mining groups through 2013-2016. This is especially questionable in a gold bear market.

Randgold Resources Ltd (USD)

Year to 31 Dec	2011A	2012A	2013E	2014E	2015E
Sales ($M)	1,128.3	1,311.0	1,409.1	1,653.7	1,710.5
Net Income ($M)	375.9	429.3	399.3	358.5	287.1
Diluted EPS ($)	4.07	4.65	4.33	3.88	3.11
Diluted EPS (Old) ($)	4.07	4.65	4.33	3.88	3.11
PE (x)	18.8	16.5	17.7	19.8	24.7
EV/EBITDA (x)	11.9	9.9	10.3	9.3	9.5
DPS ($)	0.40	0.50	0.44	0.40	0.32
Net Div Yield (%)	0.5	0.7	0.6	0.5	0.4

Appendix : Commodity Outlook

In this section we offer brief comments on the outlook for gold, platinum, silver and diamonds. For more detailed commentary please follow the links to the following notes : Precious Metals Perspective - The Dichotomy Continues; From Commodities Supercycle to Unicycles - From Commodities Supercycle to Unicycles.

Gold

Given ongoing concerns over the outlook for Europe, one might have thought European investors would have been rushing for gold as a safe haven, but that has not been the case. Similarly, the announcement on Thursday 5th April of the Bank of Japan's $1.4 trn asset buying plan to try and end Japan's long period of deflation by doubling money supply and targeting 2% inflation over the next 2 years should notionally have sent gold price soaring, but, instead, gold has been falling since then. While the gold market appears to be largely unmoved by Europe and Japan, the reality is that it is events in the US and their related dollar//inflation impact which remain pivotal for gold.

Figure 84. Gold Supply / Demand balance

tonnes	**2011**	**2012**	**2013f**	**2014f**	**2015f**	**2016f**	**2017f**
Mine Production	2,819	2,843	2,894	2,941	2,810	2,850	2,800
Net Central Bank Sales	0	0	0	0	0	0	0
Scrap Supply	1,661	1,626	1,655	1,454	1,199	1,100	1,075
Net Producer Hedging	6	0	0	1	180	200	210
Total Supply	**4,486**	**4,469**	**4,549**	**4,396**	**4,189**	**4,150**	**4,085**
Jewellery	1,973	1,908	1,898	1,915	2,202	2,300	2,350
Electronics	320	303	296	297	306	315	324
Dentistry	44	40	40	36	36	35	35
Other Industrial	89	86	94	96	99	102	105
Other Fabricaton	333	314	330	300	223	212	200
Total non-Jewellery	786	743	760	729	664	664	664
Total Fabrication	**2,759**	**2,651**	**2,658**	**2,644**	**2,866**	**2,964**	**3,014**
Official Sector Purchases	456	535	550	400	280	261	230
Physical Bar Investment	1,202	973	1,096	1,005	986	855	740
Net Producer De Hedging	0	20	4	0	0	0	0
Implied other Investment	**69**	**290**	**241**	**347**	**57**	**70**	**101**
Consisting of:							
ETFs (flows)	171	275	-300	-100	-70	-50	-50
Coins, medals, other	-102	15	541	447	127	120	151
Total Demand	**4,486**	**4,469**	**4,549**	**4,396**	**4,189**	**4,150**	**4,085**
(US$/oz)	1,570	1,679	1,555	1,435	1,340	1,300	1,200

Source: Thomson Reuters GFMS, Citi Research

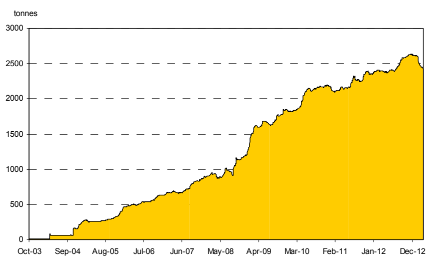
We are of the view that gold prices will struggle to maintain current levels in the second half of the year, as there appears to be little in the way of short or medium term risk, with inflation concerns being pushed further and further forward into the future, while low interest rates and growing liquidity have tended to favour other asset classes such as equities over gold. Additionally, the prospect of US rates backing up—the 10Y Treasury perhaps 60-70 basis points from current levels to around 2.50% during the back-half of this year according to our rates team—also serves as a headwind for the yellow metal.

Investors have continued to leave the gold space this year, as other assets classes grow in attraction, while inflation fears are further and further postponed. Indeed, net long managed money positions on Comex have fallen sharply since the beginning of this year, a clear vote of no confidence in gold.

Gold has not been helped by the mixed messages emanating from various members of the FOMC with regards to timing of an ending of QE operations. Indeed, hints of an earlier than expected end of asset purchases has removed focus from the potential longer term inflationary impact of easing.

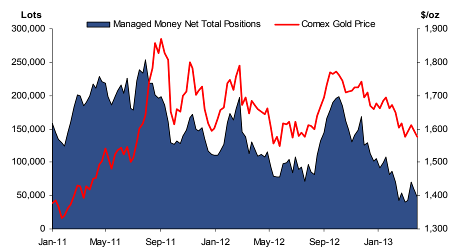
ETF uptake provides a key to wider investor sentiment towards the gold space, with physical gold holdings in exchange traded funds down by close to 200 tonnes in the year to date. The daily outflow rate appears to have slowed in April, possibly due to renewed Eurozone concerns and US debt negotiations. However, to some extent the reduction in ETF gold holdings are self-reinforcing, in that visible outflows remove confidence in investing in an ETF in the first place.

Figure 85. Outflow from ETFs at 200 tonnes and rising



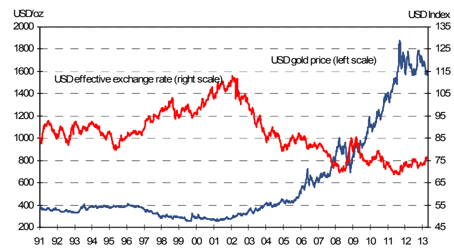
Source: Bloomberg; Citi Research

Figure 86. Manager net long positions half over the first 3 months of the year



Source: Bloomberg; Citi Research

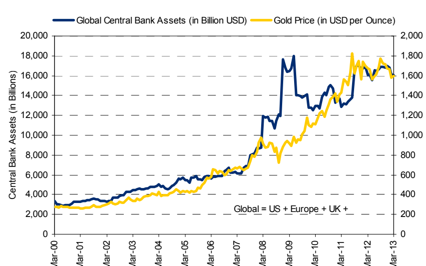
Figure 87. Dollar recovery weighs on gold



Source: Datastream; Citi Research

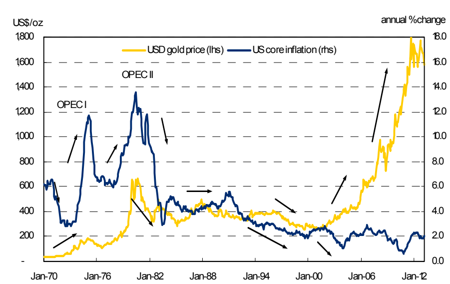
We see a number of analysts allotting the rise in gold prices over the last decade, and principally since 2008, to the expansion of central bank balance sheets i.e. QE. There is clearly some degree of linkage, but the question is: what is the transmission mechanism between expanding Central Bank balance sheets on the one hand, and rising gold prices on the other?

Figure 88. Central Bank Balance Sheet expansion appears to correlate well with gold



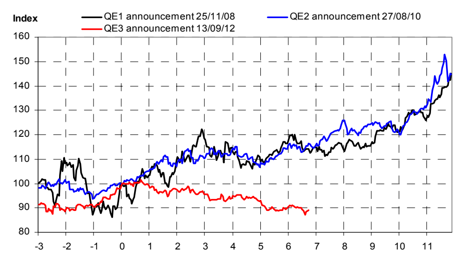
Source: Bloomberg; Citi Research

Figure 89. No-apparent connection between US core inflation and gold



Source: Bloomberg; Citi Research

Figure 90. Inflationary concerns of each round of QE have clearly diminished

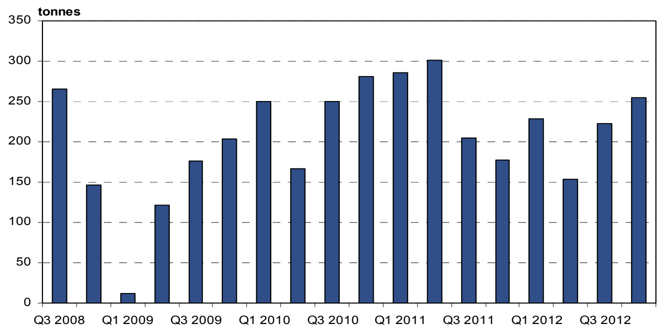


Source: Bloomberg; Citi Research

The answer of course is the fear of inflation. During the first 5 years of the last decade, inflation concerns were stoked by the level of global economic growth and running into global capacity constraints. In the last five years, inflation concerns have been driven by the extent of the expansion of Central Banks' balance sheet through QE.

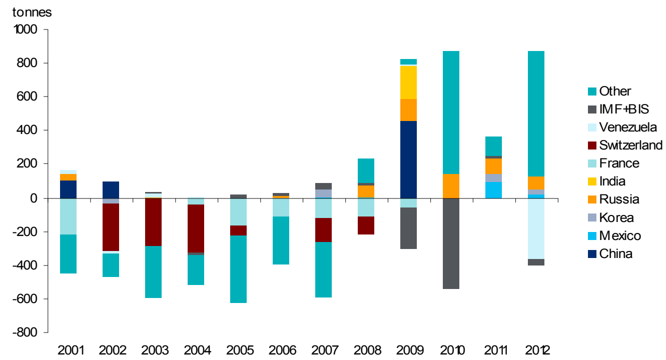
However, inflation has not occurred. Indeed, in the US, core CPI has generally been on a downward trend over the last decade. The very fact that inflationary pressure is almost non-existent appears to at last be informing professional investors' decision making processes with regards to gold investment. Indeed, as fears of inflation driven by global QE recede, for the time being, so will the gold price.

Figure 91. India Gold imports pick up ahead of import duty hike – expect levels to slow in 2013



Source: World Gold Council, Citi Research

Figure 92. Central Banks continuing to buy physical gold in 2013



Source: World Gold Council, Citi Research

Indian gold demand was in the doldrums through 2012, struggling under the impact of weak Rupee and a temporary import duty rate hike in H1. However, towards the end of the year import demand began to rally ahead of an expected hike in import duties, which in fact took effect on January 21st. The key driver for the Indian market remains the USD/Rupee exchange, which has not rallied sufficiently to prompt significant uptick in end user jewellery demand.

In contrast Chinese demand remains robust, and we expect positive growth through 2013. Indeed we have moderately revised up our total jewellery sector fabrication for gold from 1,775 tonnes to 1,898 tonnes on the back of strong Chinese and other Asian (ex. India) demand.

The official sector remains a net purchaser of gold, with most recent data for January-February showing 20 tonnes of holding addition by Korea, 12.2 tonnes by Russia, and 10.2 tonnes by Turkey. What is notable about central bank gold purchases is that buying is more price sensitive and opportunistic in nature than in the past. Indeed, central banks have provided a floor during dips in gold prices, and are still not a price driving factor.

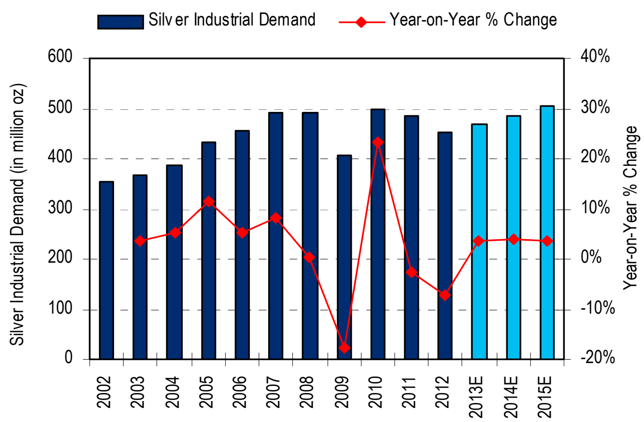
Silver

Silver has the property of being both a widely used industrial metal, on the one hand, and a store of value on the other, due to it being considered a “poor man’s gold”. As a result of these conflicting drivers, the silver market has experienced rising and highly volatile silver prices in recent years, as it schizophrenically switches from being a gold proxy and an industrial metal. Indeed, the annual average silver price increased from $7.31/oz in 2005 to $31.12/oz in 2012, nearly breaching the $50/oz mark in April 2011. Silver also outperformed gold during most of 2012. However, since the end of January this year, silver prices have followed a virtually unbroken downward trend, falling from $32.26/oz to a 3-year low of $21.57 recently.

We believe that rising levels of price inelastic mine production combined with a mixed fabrication demand picture will cap any silver price rallies. Indeed, unlike gold, market fundamentals remain an important driver for silver. A key issue on the industrial demand side has been a significant pull back in silver demand from the Photovoltaic (PV) solar energy sector since 2011. Prior to 2011, the PV sector had been one of the main drivers behind the acceleration in silver industrial demand .

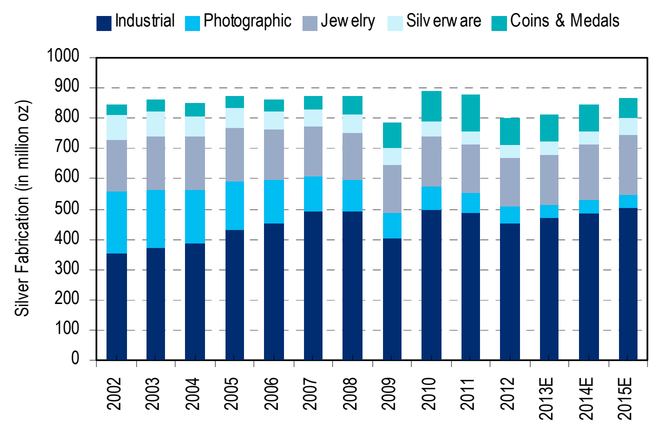
Over the last decade, silver industrial demand has enjoyed a robust performance, increasing from 355.3 million ounces in 2002 to 451.7 million ounces in 2012. This period included a peak of 500 million ounces in 2010. This strong performance has offset decreased silver demand from other areas, such as photographic applications and silverware. As a result, industrial demand's share of global silver fabrication has increased from 42.1% in 2002 to 56.1% in 2012. One of the main catalysts behind this has been the rapid growth of silver demand from the expanding PV solar energy industry.

Figure 93. Silver Industrial Demand is Expected to Show Moderate Growth From 2013 Onwards



Source: Thomson Reuters GFMS, Citi Research

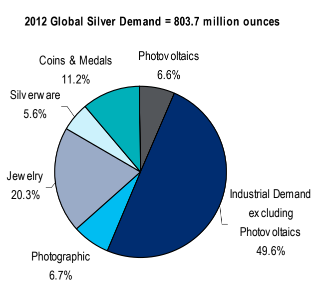
Figure 94. Industrial Demand's Share of Global Silver Fabrication Has Increased Over The Last Decade



Source: Thomson Reuters GFMS, Citi Research

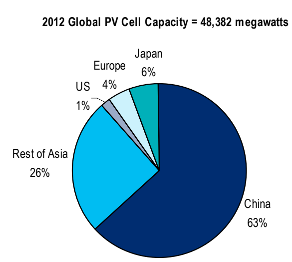
Indeed, the PV industry's share of global industrial silver demand was only 1% in 2004, but it rose to 14% of global industrial demand in 2011, the year in which PV silver demand reached its peak to date.

Figure 95. Silver Demand



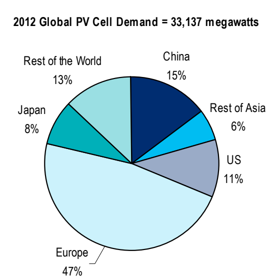
Source: Thomson Reuters GFMS, Citi Research

Figure 96. China Dominates Global PV Cell Capacity



Source: Bloomberg New Energy FinanceCiti Research

Figure 97. Europe is the Leading Player in terms of PV Cell Demand



Source: Bloomberg New Energy FinanceCiti Research

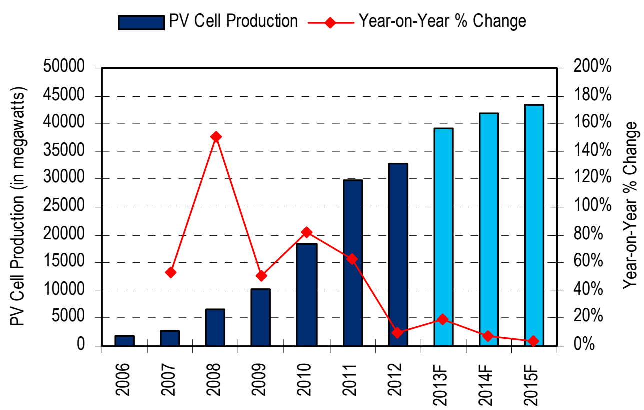
In 2012, the PV industry's share of global industrial silver demand was 11.8%, according to Thomson Reuters GFMS. In addition, the PV industry's share of global silver fabrication has increased from 0.5% in 2004 to 6.6% in 2012

While silver demand growth over the last decade from the PV industry has been dramatic, the prospects going forward look less positive. Global photovoltaic cell production growth is projected to slow sharply over the next three years, according analysts Bloomberg New Energy Finance. Bloomberg expects solar PV cell production

growth of 19.5% in 2013, slowing to 7.3% in 2014 and 3.7% in 2015. This compares with a compound annual growth rate for PV cell production of 63% between 2006 and 2012. Indeed, Citi forecast that PV industry silver paste demand will actually contract by 1.5% in 2013, with the contraction accelerating to 13% in 2014 and 25% in 2015.

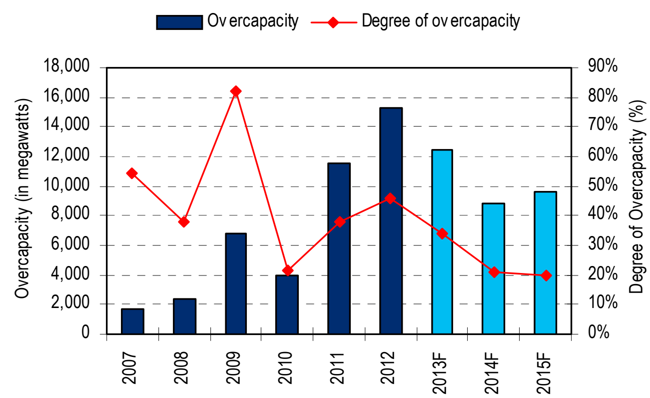
One reason for this expected decrease in cell production growth is that the PV industry is now suffering from significant overcapacity, resulting from significant over investment in the sector during the last decade. The Citi Research Global Alternative Energy Team believe that overcapacity in the PV sector (which is equal to annual PV Capacity minus annual PV Demand) was 15,245 megawatts in 2012. This overcapacity is mainly due to the particularly explosive growth of the PV industry in China, stimulated by the country's Building-Integrated Photovoltaics (BIPV) subsidy and "Golden Sun" programs. These programs were launched in 2009 and aimed to provide upfront subsidies for qualifying BIPV systems and PV projects.

Figure 98. Slower Growth in PV Cell Production is Expected



Source: Bloomberg New Energy Finance, Citi Research

Figure 99. Intense Investment Has Resulted in the PV Industry Suffering from Significant Overcapacity

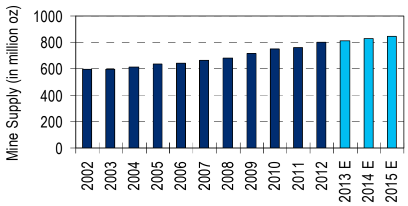


Source: Bloomberg New Energy Finance, Citi Research forecasts

Although overcapacity is expected to decrease over the forecast period, this is likely to be achieved principally through consolidation and closure of uneconomic capacity and industry exits. Evidence of this is already being exhibited with the plight of Chinese solar panel producer Suntech Power. Suntech was the world's largest manufacturer of solar panels in 2010 and 2011, according to Bloomberg New Energy Finance. However, the company's main manufacturing unit in China was forced into bankruptcy in late March after defaulting on a $541 million bond repayment.

Increasing and volatile silver prices have resulted in PV cell producers striving to reduce or eliminate the silver content of their cells, in order to limit costs. This is being achieved through increased thrifting and substitution of silver in the manufacturing process. Consequently, Citi forecasts silver industrial demand to increase by modest rates of 3.5% in 2013, 3.9% in 2014 and 3.7% in 2015, significantly lower than the growth rates seen earlier in the decade.

Figure 100. Silver Mine Supply Expectations



Source: Thomson Reuters GFMS, Citi Research

On the supply side, rising production of silver as a by-product of gold is likely to be the main driver of growth in mine supply over the forecast period. According to analysts Thomson Reuters GFMS, gold mining's share of global silver mine supply is expected to increase from 13% in 2012 to 20% in 2015. This increase is likely to come from Barrick Gold's Pueblo Viejo project in the Dominican Republic, Frisco's Concheno project in Mexico and Allied Nevada Gold Corp's Hycroft mine in the United States. Barrick Gold's Pascua-Lama mine project on the border of Chile and Argentina was due to start operations in the second half of 2014, with an expected production of 20 million ounces of silver for the year. However, Chilean courts have thrown the start-up date into doubt by ordering a temporary suspension to construction on the Chilean side of the project, due to indigenous communities' fears that it was causing damage to their water supply.

In addition to by-product output growth from the gold mining sector, by-product production growth from copper and lead/zinc mining will also add to supply. Indeed, mine life depletion issues in the lead-zinc industry continue to be pushed further forward into the future, which should result in this industry still making significant contributions to total silver mine production. In contrast to by-product production, primary silver production is expected to decline. Although the start-up of the Tahoe Resources' Escobal project is currently on-schedule and the Hecla Mining's Lucky Friday mine has resumed production, declining ore grades at older mining complexes such as the Fresnillo mine in Mexico, will drag on primary production. Despite this, total mine supply is expected to grow by 8 m oz to 802.5 m oz in 2013, rising to 828.5 m oz in 2014 and 2015, as increasingly, volumes of by product production come to market. This growth will be further supplemented by higher volumes of producer hedging from by-product silver producers.

Platinum Group Metals

The PGMs have been the most positive price performers in the metals space so far in 2013, driven by both price positive supply and demand issues. Given that ~90% of platinum is mined in South Africa, a weaker rand vs. dollar presents some degree of margin relief for South African platinum miners, removing some pressure for production cuts. However, we expect the dollar platinum price to weaken when the rand depreciates relative to the dollar, and vice versa. Looking further forward, the introduction of Euro VI commercial vehicle emissions regulations (to be phased in by January 2014) will support platinum demand growth in Europe. The Euro VI measures require significant additional cuts in diesel particulate and NOx emissions, which require and additional platinum based catalyst.

For palladium, we recently upgraded our 2013-14 dollar palladium price expectations 4.5% and 2.7% respectively on a growing deficit outlook. Indeed, we forecast a 336k ounce deficit in 2013, rising to 639k ounces and 946k ounces in 2014 and 2015 respectively. This is mainly due to our view of a continued medium-term growth in auto production in gasoline based markets like the US and China. The sheer size of these markets (40% of global vehicle production) implies significant uplift in demand for palladium. The positive effect positive US/Chinese/emerging market auto growth may be somewhat offset by lower jewellery demand and a pick-up in auto catalyst recycling. We estimate that auto catalyst recycling will increase 13% to 2.1m ounces in 2013.

Figure 101. Platinum Market Data

000 ounces	2011	2012	2013E	2014E	2015E	2016E	2017E
Mine production:							
South Africa	5,195	4,485	4,569	4,827	4,992	5,094	5,210
Russia	835	790	798	767	752	737	737
North America	350	340	381	376	371	366	366
Rest of World	100	120	120	120	120	120	120
Total Mine Supply	6,480	5,735	5,868	6,090	6,235	6,317	6,432
Autocatalyst recycling	1,225	1,179	1,335	1,426	1,513	1,602	1,684
Total Supply	7,705	6,914	7,203	7,516	7,748	7,919	8,116
% chg.	7.8%	-10.3%	4.2%	4.3%	3.1%	-0.1%	4.9%
Gross Autocatalyst demand	3,105	3,227	3,160	3,263	3,305	3,337	3,442
Net Jewellery demand	1,660	1,717	1,818	1,887	1,969	2,029	2,086
Industrial demand	2,050	1,948	2,045	2,118	2,191	2,265	2,342
Investment	460	210	274	202	202	202	202
Total Demand	7,275	7,101	7,297	7,471	7,666	7,873	8,072
% chg.	2.6%	-2.4%	2.8%	2.4%	2.6%	2.7%	2.5%
Surplus / (Deficit)	430	-187	-94	46	82	46	45
- US$/oz	1,722	1,552	1,550	1,625	1,750	1,800	1,705

Source: Johnson Mathey historic, Citi Forecasts

Palladium is also expected to continue to get a lift from expectations of a dwindling of Russian government stockpile sales. Analysts GFMS suggest that 2013 will be the last year of Russia stockpile sales, while Johnson Matthey suggests that Russian government sales were as little as 250,000 oz in 2012, with levels expected to fall further in 2013. We remain somewhat cautious on predictions of the end of these stockpile sales, as such predictions have been made annually since 2010, only for material to continue to appear in the market.

Despite the mine supply losses and production cuts, the platinum market remains well supplied. Total above-ground stock for platinum have increased by 4.8m ounces since 2007 to 9.6m ounces in 2012, which represents 1.6 years of mine supply, compared with 0.75 years in 2007. The increased availability of above-ground stock holdings may weigh on platinum’s upside, as these will likely be drawn down when platinum rises.

The rise in above-ground stock has been fuelled by: 1) the introduction of ETFs in 2007, 2) fabricator stock holdings accumulated in a surplus and low price environment, and 3) a continued increase in other investment holdings. Citi estimates that holdings by fabricators, traders and physical investors now amount to well over 1.5m oz, largely accumulated during the past four years' surpluses. In addition to primary metal, secondary supply, which accounts for roughly 18% of total supply, is likely to pick up in 2013 after being held back in 2012 due to soft platinum prices particularly through the middle of the year. This is likely to be released now prices have settled in a higher trading range. Indeed, we forecast a 13% increase in scrap supply in 2013.

Another factor that will likely cap the upside for platinum is price elastic demand for platinum from the Chinese jewellery market. Chinese platinum jewellery demand now accounts for 25-30% of total platinum, compared with 13% of total demand in 2007. Chinese jewellery demand is highly elastic and we calculate that a 10% increase in platinum prices could lead to an 18% decrease in Chinese platinum jewellery demand. Although growth in Chinese GDP/capita should make this market more inelastic over time, we believe that this is unlikely to occur in the next five years.

The severe contraction that European light vehicle production has undergone since Q1 2012 has clearly hampered platinum demand. This has to some extent counteracted the 2012 South African strike-related production loses. For 2013, signs of recovery in European auto production are not expected to be seen until Q4 at the earliest, with continued contractions likely to limit the impact of the outcome of negotiations over Angloplats announced mine capacity closures. As a result, we forecast a balanced market from 2014-17; even without assuming a return of recently mothballed production. Hence, we remain cautiously positive on platinum.

Figure 102. Palladium Market Data

000 ounces	2011	2012	2013E	2014E	2015E	2016E	2017E
Mine production:							
South Africa	2,825	2,523	2,625	2,733	2,822	2,870	2,920
Russia	2,705	3,350	3,400	3,400	3,400	3,400	3,400
North America	900	890	870	980	1,050	1,050	1,050
Rest of World	155	180	180	180	180	180	180
Total Mine Supply	6,585	6,943	7,075	7,293	7,452	7,500	7,550
Russian stock sales	775	750	750	750	750	750	750
Autocatalyst recycling	1,655	1,844	2,086	2,225	2,357	2,492	2,616
Total Supply	9,015	8,787	9,162	9,519	9,809	9,992	10,166
% chg.	4.0%	-2.5%	4.3%	3.9%	3.0%	1.9%	1.7%
Gross Autocatalyst demand	6,030	6,783	7,070	7,671	8,187	8,686	9,123
Net Jewellery demand	295	211	214	237	265	337	346
Industrial demand	2,000	1,900	1,995	2,067	2,137	2,210	2,285
Investment	-565	185	219	183	165	165	165
Total Demand	7,760	9,080	9,497	10,158	10,754	11,397	11,918
% chg.	-15.4	17.01%	4.6%	7.0%	5.9%	6.0%	4.6%
Surplus / (Deficit)	1,255	-292	-336	-639	-946	-1,405	-1,753
- US$/oz	734	645	810	950	925	900	760

Source: Johnson Mathey historic, Citi Forecasts

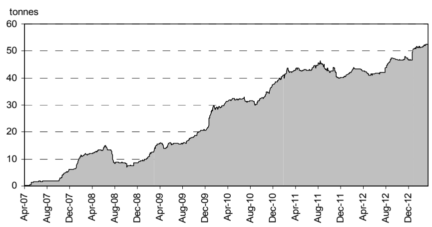
In contrast to platinum, palladium outperformed consensus expectations during the last quarter of 2012 and has largely continued to do so in 2013. It has benefitted not only from South African strike-related production loses, estimated at 300,000 oz, but more importantly a far more positive demand environment, with a minimal exposure to price-sensitive jewellery markets (approximately 2% of demand net of scrap), and highly positive gasoline auto sector exposure.

The auto market picture is significantly more positive for palladium than platinum, driving our bullish price outlook for the former. Indeed, more gasoline focused North American, Chinese, and other emerging market auto markets have continued to see good growth, driving palladium demand. Globally, gasoline vehicles account for around 80% of total vehicle production, giving palladium a significant market share in the global autocatalyst market. Chinese auto production growth was somewhat sluggish during 2011 and the first half of 2012 as slower economic growth and in particular sluggish property markets impacted negatively on passenger vehicle demand. However, Q4 2012 showed a strong pick-up in LV production, and this strong growth trend is expected by Citi auto sector analysts to continue into 2013, helped by the introduction of Euro 5 equivalent emissions standard in Beijing and other cities, effectively increasing palladium catalyst loadings.

We expect Auto production in other emerging markets including India, Thailand, South Korea, Malaysia, Brazil, and Mexico will also be key to the positive palladium demand story. Collectively, emerging market auto sector demand for palladium accounted for 1.5 million oz of palladium consumption in 2012, and we expect that this will rise to 1.6 million oz in 2013, on back of Citi auto sector analyst projections

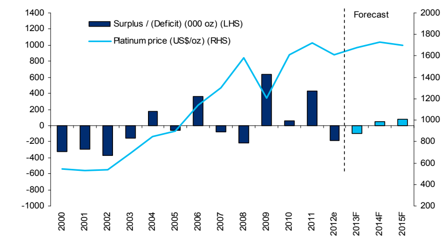
of a combined 6% increase in total vehicle production. In these regions, autocatalyst recycling accounts for roughly 8-9% of palladium consumption, hence the positive demand story is very much primary metal focused. Indeed, we expect improving auto production to help drive palladium use in autocatalyst production to 1.49 m oz, compared to 1.35 m oz in 2013, an 11% increase.

Figure 103. Platinum ETF holdings – Lift from South African strike beginning to ebb



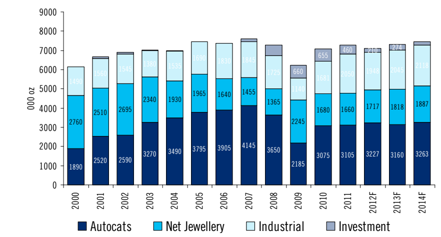
Source: Bloomberg, Citi Research

Figure 104. Citi Platinum Surplus (deficit) forecasts



Source: Johnson Matthey, Citi Research

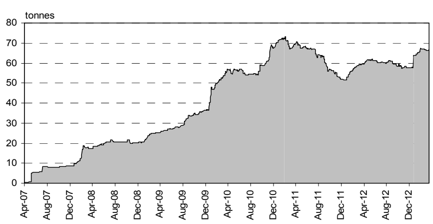
Figure 105. Citi Platinum demand by application forecasts



Source: Johnson Matthey, Citi Research

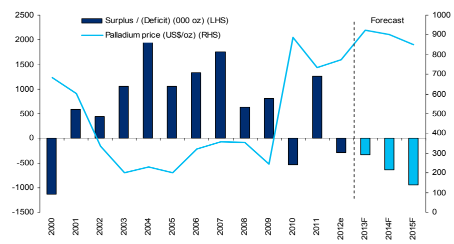
The inventory story for palladium also looks more positive than for platinum. Above-ground stock holdings for palladium have decreased by 7.5m oz between 2007 and 12.2m ounces in 2011, with a further 860,000 oz fall in 2012, which suggests that volumes net of ETF holdings stood at 8.5 million oz at the end of last year.

Figure 106. Palladium ETF holdings – On the decline since May



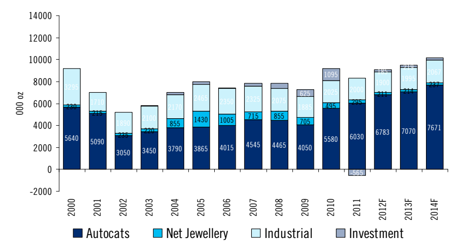
Source: Citi Research

Figure 107. Citi Palladium Surplus (deficit) forecasts



Source: Johnson Matthey, Citi Research

Figure 108. Citi Palladium demand by application forecasts



Source: Johnson Matthey, Citi Research

The biggest potential threat to our bullish thesis for PGMs, at least in the short term, is the potential for reversal in investor sentiment. Since the middle of 2012, net non-commercial length in palladium on NYMEX surge 510%. Over the same period, net platinum length has jumped by 71%, though levels are significantly off the highs seen in February, prompted by Anglo's mine review.

For palladium, we may have already seen the wash out of less firm hands with the pull-back in prices from 2013 ytd highs of $784/oz on April 2nd down to $707/oz on April 10th. Indeed, around 35% of net long palladium positions reported by the CFTC on April 4th were put in place at prices about $700/oz. However, we expect any short-term dips below $700/oz to represent positive buying opportunities given the underlying bullish palladium S/D story.

For platinum, the 32% shake out of net length since mid-February suggests that the risk of a significant sell in the event of a new macro trigger/crisis is much less acute than at the beginning of the year

Diamonds

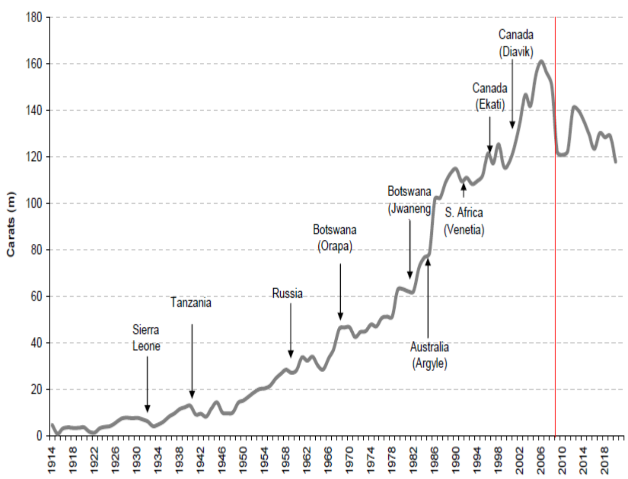
The feature that sets diamonds apart from gold, silver and platinum (where one ounce of that material is exactly the same as the next ounce, in terms of content and value) there are more than 12,000 different categories of diamonds. It takes a trained eye and years of experience to determine each rough stone's value based on its cut, colour, clarity, and carat size and each mine within our coverage universe produces a different quality and type of diamond.

Furthermore, during the rush into hard assets in the midst of the credit crisis, it was the investment-quality diamonds performing the best rather than those being bought by middle-income consumers as gifts. The high-net-worth end of all luxury goods continued to do well in the credit crisis, but middle-income consumers were being squeezed by the credit crisis.

Current global diamond demand is being led by the emerging consumer middle class in developing economies – particularly China and India. De Beers believes that China and India could account for half of global demand by 2025 (up from 12% in 2008).

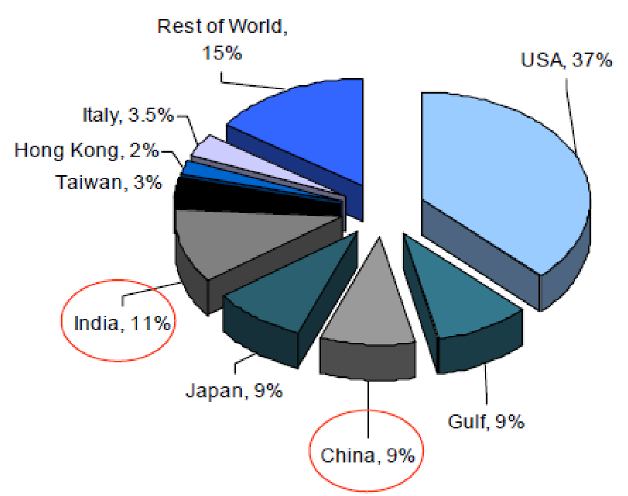
Chinese consumers have increasingly been adopting western culture with respect to the tradition of buying a diamond engagement ring at the time of an engagement but there is still plenty of upside until the ratio reaches western levels. This suggests that the 2014-2017 market will be carried along more by those middle-income ‘standard purchases’ rather than the ’hard asset’ buying carried out by high net worth individuals during the credit crisis. This middle-income area of demand, is, in our opinion, more reliable and sustainable.

Figure 109. World Production Growth (De Beers Forecast)



Source: De Beers

Figure 110. De Beers’ Estimate of 2016 Diamond Demand



Source: De Beers

The fastest growing new consumer markets for diamonds are China and India, with China recently overtaking Japan as the world’s second largest market for diamonds. These markets are predicted to continue their rapid expansion, accounting for more than 50% of incremental growth over the next five years. De Beers expects the Far East (classified as China, Hong Kong, Taiwan, India and the Gulf) to eventually account for approximately 40% of global demand by 2015.

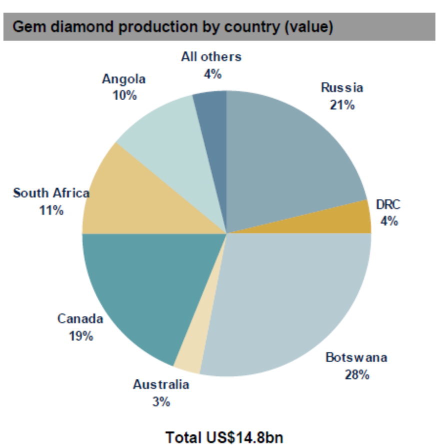
In addition, significant growth markets such as China and India have a reach along the diamond pipeline that the US does not, thereby enhancing their influence on the trade. India, in particular, has an unmatched depth in diamond manufacturers and dealers with an estimated 6,000 cutting factories in operation employing over 500,000 workers. China is likewise developing as a highly competitive manufacturing centre and the Chinese government has put fiscal incentives in place to assist its expansion.

Diamond prices gave up their entire credit-crisis price gains in 2011 when investors fell out of love with investment-grade diamonds and focused more intensely on gold and silver. This means that the diamond market began to search for its 'base foundation' demand in terms of jewellery far quicker than gold and silver did, as their sustained high prices above $1700/oz and $30/oz respectively were a deterrent to middle-income buyers.

While there is this positive on the demand side of an ongoing cultural boost from China and an eventual recovery of demand in the mature economies, the bigger boost for diamond prices could come from the restricted mine supply expected from late-2014 onwards. There is currently declining output from ageing mines and peak global production was reached in 2006. There have been few discoveries of major new deposits during the past two decades. Consequently, a structural supply demand gap is expected to emerge mid-decade, with rough diamond production likely unable to keep pace with new demand

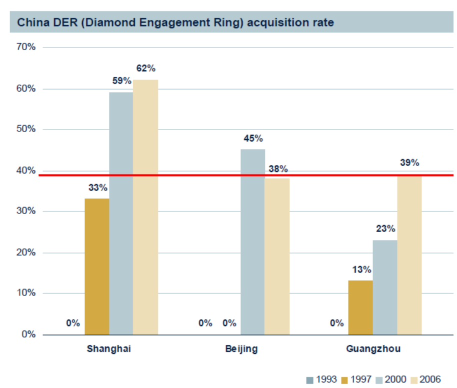
The majority of the world's major diamond mines have been in operation for decades and are now in decline as they cannot maintain previous high levels of output. In some cases, open pit operations are having to move underground, which naturally limits the volumes which can be extracted from the orebody. Whilst certain new mines are coming on stream in the next few years, de Beers believes that the new production will not be of sufficient size to make up for this shortfall.

Figure 111. Global Production by Value



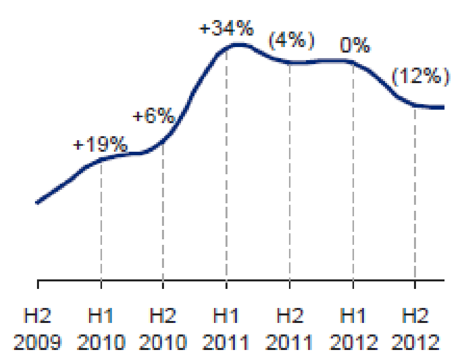
Source: De Beers

Figure 112. Trend in Diamond Engagement Ring Acquisition in China



Source: De Beers

Figure 113. De Beers' Estimate of 2016 Diamond Demand



Source: De Beers

The rough diamond market is dominated by the four major producers – De Beers, Alrosa, Rio Tinto and BHP Billiton – which accounted for approximately 85% of the global diamond market by value in 2010, with De Beers leading at just under 50% by value. Two of the four have expressed more of an interest in withdrawing from

the diamond market, primarily due to lack of success in finding new deposits, than pursuing their interests aggressively.

Citi therefore believes that the supply and demand fundamentals of the diamond industry suggest that there will be a shortfall in diamond supply in future years that should lead to a sustained upward trend in diamond prices. Global diamond reserves are falling and globally there have been no major discoveries this decade. Constrained supply looks set to continue for the foreseeable future and well into the next decade. Supply is particularly constrained for large, high-value stones.

Other companies mentioned: Anglo American Platinum Ltd (AMSJ.J; R308.41; 1); Impala Platinum (IMPJ.J; R97.85; 1); Northam Platinum (NHMJ.J; R35.87; 1); Royal Bafokeng Platinum (RBPJ.J; R49.15; 2)

African Barrick Gold Plc

Company description

African Barrick Resources operates four gold mines in Tanzania, namely Bulyanhulu, Buzwagi, North Mara and Tulawaka. Buzwagi, an open-pit mine, is the newest mine, having started up in 2009. The company is 75% owned by Barrick Gold following the IPO in March 2010.

Investment strategy

We rate African Barrick as Sell. The group has been struggling with containing costs on a number of fronts, primarily as a result of inadequate state provision of power in Tanzania.

Valuation

We prefer to use longer-term P/NPV ratios to value this subsector and set our target price of £1.24 by applying a 1.1x P/NPV ratio to our NPV estimate of £1.13 (derived using a discount rate of 10%).

Risks

Key risks that could cause volatility in the share price are the gold price, which has a volatile trading history, and African political risk. While Tanzania has a stable democracy, its location alongside some unstable democracies does offer some risk.

ABG has good labour relationships but there have been examples of labour disruption in the past before ABG took steps to improve relationships. There is always a risk that labour difficulties could resume. There has also been a security risk at ABG's North Mara mine.

A recent key risk is that the approach by Chinese interests does not result in an attractive bid

We consider the ABG technology to be standard for the mining industry but all mining carries risk. ABG has extremely high safety standards but mines present a constant risk of fatalities and accidents cannot be ruled out.

If the impact of these risk factors is more or less positive than we currently anticipate, then the share price could deviate significantly from our target price.

Aquarius Platinum Ltd

Company description

Aquarius Platinum has interests in five operations. Operations and projects are located on both the Bushveld Complex in South Africa and the Great Dyke in Zimbabwe. The primary operation is at Kroondal, one of the lowest-cost and most efficient PGM producers in the world. In Zimbabwe, AQP holds a 25% interest in the Mimosa Mine, and is due more than $250m for the other 25% of the Mimosa mine which it owned until recently and has sold to the Zimbabwe government. Mimosa is arguably the lowest-cost primary PGM mine in the world. Mimosa has a mine life in excess of 30 years. AQP recently put its Marikana and Everest mines on care and maintenance.

Investment strategy

We rate AQP Buy. AQP has put two high-cost mines on care and maintenance, and in so doing has lowered its operating cost, especially as one of its two mines, Mimosa, is a very low-cost operation. In the process, capex has been contained as well and the balance sheet is therefore more robust. In the long term, we think Aquarius should benefit from a structurally supportive outlook for PGM prices.

Valuation

Our £0.66 target price is based on our NPV valuation, given the current uncertainty over the macro outlook and likelihood of depressed earnings near term. Our base-case NPV for the stock of £0.66 is derived from a DCF model that assumes a discount rate for the UK listing of 9% (in line with that which we use for its closest UK peer). We set our target price at 1.0x NPV, in line with its SA platinum peers.

Risks

Aquarius faces risks given that group earnings are all generated from a single commodity and mining is limited to one African region.

Key risks to Aquarius failing to achieve our projected earnings, cash flows and target price relate to the following:

Rand strength. A stronger-than-expected rand would continue to depress rand-denominated cash flows.

Cost pressures. Cost pressures continue to be a feature in the industry.

Geopolitical exposure. Mining is limited to one region, Southern Africa. Aquarius has considerable investment at Mimosa in Zimbabwe. Any further deterioration in the political situation there and/or inability to expand the production assets could be a problem for the company.

However, if the impact of these risk factors is less negative than we currently anticipate, then the share price could exceed our target price.

Centamin Egypt Limited

Company description

The principal asset of Centamin (CEY) is the Sukari gold project, located in eastern Egypt. The first gold bar was produced on 26 June 2009. CEY is began its life as a standard open pit, carbon in leach gold producer and recently added underground production to the open pit operations, thus targeting higher grades earlier than would be the case with only the open pit. CEY is currently subject to significant political uncertainty within Egypt.

Investment strategy

We rate Centamin Neutral. Because of the extreme political uncertainty in Egypt, we do not attach a target price to CEY.

Valuation

This company has a Neutral rating. We have not assigned a target price and therefore no valuation methodology is applicable.

Risks

CEY faces risks associated with the difficult political situation in Egypt. Furthermore, all mining ventures carry risk via the acquisition, financing, exploration, development and operation of mining properties. These risk factors could materially affect the company's future operations. The following risk factors could also cause the stock price to deviate significantly from our target price.

CEY's operations are influenced by fluctuations in the world gold price. If the price of gold should drop significantly, the economic prospects of CEY's Sukari project could be significantly reduced or rendered uneconomic. The converse applies to a rising gold price.

CEY offers potential predators instant access to gold production, as opposed to gold exploration assets and there is a possibility that CEY could become a target. Also, should CEY seek to make acquisitions, this represents either upside or downside risk.

There is a risk that the expenditures that CEY makes in exploration will not result in the discovery of mineralised materials in commercial quantities. There is also a degree of uncertainty attributable to the calculation of mineralisation, which could represent an upside or downside risk to our earning forecasts. These risks could impede the share price from reaching our target price.

Fresnillo Plc

Company description

FRES was spun out of the Penoles group in May 2008. FRES houses the precious metals assets that were previously part of the Penoles group. FRES has three core operating assets (the Fresnillo, Cienega and Herradura mines, all based in Mexico) as well as owning a silver-stream style royalty from Penoles's Sabinas mine. The Soledad & Dipolos expansion project at Herradura came on stream in 1Q 2010. The next major development project is the Saucito operation, currently in ramp up.

Investment strategy

We rate Fresnillo Sell. FRES's core silver asset are the Fresnillo and Saucito mines in Mexico. Fresnillo also has four gold mines. Production in 2012 was 40.97m oz of silver (including 4m oz from a contractual arrangement with the polymetallic Penolesmines, known as the Slverstream contract) and 473k oz (attributable) gold production. We see FRES as having good growth out to 2018, but it is our view that the flat 2013 silver production will be accompanied by slipping silver and gold prices. We think the FRES valuation is rich and this has contributed to our Sell rating.

Valuation

We prefer to use longer-term P/NPV ratios to value this subsector and set our target price of £10.45 by applying a 1.4x P/NPV ratio to our NPV estimate of £7.47 (derived using a discount rate of 10%, in line with other UK precious metals peers)

We set our target P/NPV multiples with reference to absolute and relative historical average levels, taking into account our views on the current stage of the cycle and on the quality of each company's assets and management.

Risks

The main risks to our investment thesis and target price revolve around either positive or negative moves in the following key areas:

Silver and metal prices: We expect silver to hold recent levels but see only limited upside risk as global financial risk is easing and silver will have to rely on industrial and jewellery demand alone. Silver has displayed a greater degree of volatility than other precious metals over recent years. The volatility and oversupply potential could see silver prices fluctuate away from our forecasts, leading to a risk to our earnings estimates. We also expect lead and zinc prices to remain volatile over the next several years.

Currency: All of FRES's operations are in Mexico. The revenue stream is denominated in US$ and upwards of 70% of the cost base denominated in Mexican pesos, thus any significant shift in the US$:peso exchange rate could impact profitability. We estimate that a ±10% move in the US$:peso exchange rate would influence profitability by c±3%.

Cost pressures: One of the key challenges facing the mining industry is rising cost pressures. Cyclical costs are under pressure from inflationary issues driven by the upswing in the commodities cycle. If we continue to see cost escalation against the backdrop of stable commodity prices, we could see margin erosion and reduced profitability for the mining industry.

Political risk: FRES's assets are predominantly based in Mexico. Consequently, while its revenue will be driven by the global demand for silver and gold, its cost base will be influenced by local currency rates, as well as country-specific economic issues such as labour availability, wages and inflation.

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

Gem Diamonds

Company description

GEM was incorporated in July 2005 and listed in February 2007. The company has two producing mines: Letseng in Lesotho and Ellendale in Australia, both kimberlite mines. GEM is currently constructing its next mine, Ghaghoo, in Botswana.

Investment strategy

We rate GEMD as Buy. Though the Ellendale mine is expected to be closed within two years, the flagship asset, Letseng remains a good-quality and relatively longer life operation. We are positive on the diamonds market as we expect structural supply issues as the inventory overhang is now behind us which had kept diamonds prices suppressed over the last few years.

Valuation

Our £1.72 target price is based on a 1.0x P/NPV ratio applied to our NPV of £1.72, derived by using a 10% discount rate. The 1.0x P/NPV is in line with the 1.0x P/NPV ratio that we use for diamond peer, Petra Diamonds.

Risks

We highlight the following risks:

Country/political risk: GEM has operations and development projects in Lesotho and Botswana. These two countries would be considered to be lower risk than Central African countries but are not low risk in relation to mature economies. GEM operations in Australia provide a stable political and economical environment and geographical diversification but represent only a small part of the long-term value of GEM.

Project execution: GEM is contemplating a new project in Botswana where there is a risk of some time slippage in delivery and budget overruns.

Diamond prices: The diamonds produced by GEM are for the luxury goods market. We are positive on the outlook for diamond prices, particularly for large, high-value stones. Any change in consumer spending habits and/or further economic deterioration could result in lower demand and lower prices.

Currency risk: GEM reports in US$, and the revenue stream is priced in US$. However, operating costs are denominated in A$, ZAR and US$. Depreciation of the US$ against these currencies will cause the cost base to rise and could negatively impact earnings.

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

Hochschild Mining Plc

Company description

Hochschild is a precious metals miner producing silver and gold, headquartered in Lima and registered in London. The group is also a substantial gold producer.

The group has 100%-owned operating mines in Peru (Arcata & Ares) which are underground epithermal vein mines and the principal mining method used is cut and fill. The ore is processed into either silver-gold concentrate or doré. In addition, the group has three joint venture operations in Mina Morris, Pallancata and San Jose. Two new projects, Inmaculada and Crespo, are due on-stream in H2 2014.

Investment strategy

We rate Hochschild Mining as Sell. HOCM has little organic growth before 2H 2014E and its above-average rises in costs could restrict performance until the new Inmaculada starts in H2 2014.

Despite its slightly declining production profile in the near term, HOCM should have good production growth after 2014E. However, the Peruvian political landscape does still present a moderate risk.

Valuation

We prefer to use longer-term P/NPV ratios to value this subsector and set our target price of £1.78 by applying a 1.10x P/NPV ratio to our NPV estimate of £1.62 (derived using a discount rate of 10%). We believe that HOCM does not warrant the higher P/NPV rating of its key silver peer (which operates primarily in Mexico) , because of the higher political risk in Peru. However, we use a 1.5x P/NPV rating for key silver Fresnillo to reflect the asset-quality and low political risk of that group and hence we use a 1.1x P/NPV ratio for HOCM.

Risks

The main risks to our investment thesis and target price include:

Downside risk from politics: Following the recent Peruvian election, there is a higher risk of excessive taxes and more anti-business policies.

Upside risk from politics: Should the new government become more pro-business, there is upside risk to the HOCM target price.

Upside risk from a higher-than-expected silver price.

Downside risk from a lower-than-expected silver price.

Upside risk from a weaker Peruvian or Argentinian currency than expected.

Downside risk from a stronger Peruvian or Argentinian currency than expected.

Lonmin PLC

Company description

Lonmin is the world's third-largest primary producer of PGMs. Platinum production has been in the region of 720 k oz p.a. and may rise to above 800k oz p.a. in the medium term. Most of the operations are located in South Africa.

Investment strategy

We rate Lonmin Buy. We think that management is steadily gaining market confidence following a consistently improving trend in operational efficiency. The group is also recovering from a very problematic 2012 with serious labour unrest involving fatalities and we believe that labour relations have improved and will continue improving. The entire industry is facing cost challenges but the auto market requires the metal and will have to accommodate those costs in long-term PGM prices, or investment will fall short of levels required for adequate supply.

Valuation

Our target price for Lonmin is £3.86. We value Lonmin based on a sum-of-the-parts discounted cash flow (DCF) analysis. Our model uses a nominal WACC of 9% and discounts forecast cash flows over the life of the group's individual assets. We apply a 1.05 P/NPV multiple to our £3.68 NPV, a slight premium to the 1.0x that we use for South African listed platinum producers, because of its primary London listing

Risks

Our valuation of LON is exposed to macroeconomic developments affecting PGM prices and exchange rates, operational risks that might affect volumes and input costs, and political and regulatory risks that might affect costs and the company's reputation.

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

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

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

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

Nordgold

Company description

Nordgold is a gold mining company, whose initial history was formed within Russian steel group Severstal until the gold assets were spun out of the parent and a GDR was created. Nordgold has a portfolio of eight producing mine, two development projects, give advanced exploration projects and a broad portfolio of early exploration projects and licences located across West Africa in Guinea and Burkina Faso, Kazakhstan and the Russian Federation. Since 2007 the Nord assets have grown both by acquisitions and organically, increasing production from 21koz in 2007 to 754koz in 2011. The company targets over 1moz of gold produced on a fully consolidated basis by 2013.

Investment strategy

We have a Sell rating on Nordgold. Our bearish view on the gold price has negative implications for the future earnings of Nordgold.

Valuation

Our NPV for Nordgold is $1.79, to which we apply a 1.1x P/NPV target multiple. Our NPV is based on an 10% weighted average cost of capital. On this basis our target price is $1.96.

Risks

The key risks to Nordgold are a combination of stock specific and common mining sector factors, including:

Gold price exposure and potential earnings volatility

Operational risks and challenges, particularly during the expansion of an operation

Tax changes can impact profitability

Nordgold employs chemical processes that may be harmful to the environment and may be subject to compliance, clean-up and other costs which could materially affect the business, financial condition and results of the business

Fluctuations in currencies may adversely affect profitability

Nordgold operates in emerging markets which are subject to greater risks than more developed markets, including economic, political, social, legal and legislative risks.

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

Petra Diamonds

Company description

Petra has grown by primarily buying non-core South African assets from De Beers as that mining giant continues to focus on new and much larger projects globally. This has left Petra as a top-quality mid-cap group with good production growth in the years ahead and opportunities to apply efficiencies which may not have been worthwhile for De Beers to pursue. Petra produced 2.2M ct in 2012 (up 98% on FY 11) and is guiding to 5Mct p.a. by 2019. Petra has eight producing mines; seven mines are in South Africa and one is in Tanzania. Petra is also active in exploration in diamond-rich Botswana. The group has diamond resources of more than 300 million carats (Mct).

Investment strategy

We rate Petra as Buy both on the grounds of its NPV, which is our key valuation metric, but also on the basis that the global diamond market is likely to be headed towards significant shortages in the years ahead, with key stockpiles now depleted and with very few new major discoveries or mine construction plans.

Valuation

As with all of our other UK precious metals stocks, we use Petra's long term (25-year) NPV as the key driver of our valuation. We set our PDL target price of £1.51 by applying a 1.0x P/NPV on Petra's £1.51 NPV Valuation. This compares to the average 1.3x P/NPV that we use on our UK Gold Shares. We prefer to align Petra with our diversified mining groups where we use typically use1.0x P/NPV. Diamond groups have historically not commanded the senior valuation ratings attributed to gold groups.

Risks

We note the following risks to our target price and forecasts:

The key risk to Petra is the long term trend in the diamond price, and this provides both upside and downside risk. Petra faces risk from the trade union structure in South Africa and, during 2012, Petra lost some production as a result of widespread trade union activism across South Africa. Petra has a number of expansion plans in place and so the key risk there would be cost over-runs on capex or technical difficulties with those plans. Costs are very strongly linked to the South African Rand and that represents a key currency risk for Petra. Petra is also subject to South African political risk.

Petropavlovsk PLC

Company description

POG is a UK-listed gold mining company with gold and iron ore assets in Russia.

Investment strategy

We rate Petropavlovsk as Sell. Our bearish gold price view has negative implications for POG's future earnings.

Valuation

We set our target price of £1.16 by applying a 1.1x P/NPV multiple to POG's gold assets (NAV of £0.42 per share; derived using a discount rate of 10%), while we use the market capitalisation of the IRC subsidiary to value the stake which POG holds (currently $0.70 per POG share)

We set our target P/NPV multiples with reference to absolute and relative historical average levels, taking into account our views on the current stage of the cycle and on the quality of each company's assets and management.

Risks

We would highlight in particular that it is a single commodity play with the bulk of its earnings being derived from gold. Adverse movement in the gold price away from our forecasts could see a significant delta in our forecasts from actual profits, both positively and negatively. POG also faces technical risk in relation to its POX technology. Finally the company conducts the bulk of its business in Russia which has higher risk than developed countries.

If the impact of these risk factors is more or less negative than we currently anticipate, then the share price could fail to reach or exceed our target price.

Polymetal

Company description

PMTL is a precious metals producer in Russia and Kazakhstan and had FY11 gold equivalent ('GE') production of 810 Koz of gold (55% gold, 41% silver, 4% copper). The group has 5 operations in Russia and 1 operation in Kazakhstan, including 3 processing hubs. PMTL has GE reserves (JORC) of 14.3 Moz at 4.2 g/t GE plus 13.8 Moz of GE resources at 3.9 g/t GE

Investment strategy

We rate Polymetal as a Sell as our bearish view on gold and silver prices have very negative implications for the earnings outlook.

Valuation

We use a 10% discount rate for the two other Russian gold groups that we cover and so we apply the same discount rate to POLYP. We also use a 1.1x P/NPV ratio to derive our target price, as we do for the two other Russian gold groups which we cover. Our TP of £5.29 for POLYP is therefore based on 1.1x our £4.81NPV calculation .

Risks

PMTL is subject to a range of risks associated with operating in Russia and Kazakhstan. Gold/silver price volatility is a major risk for Polymetal, both downside and upside. The mining operations are affected by mining conditions and other operational risks associated with industrial or engineering activity, such as mechanical breakdowns and the use of explosive materials, especially in the severe climate of Russia. As a company that reports in USD, but incurs most of its costs in the local currency, Polymetal may be impacted by FX moves.

Randgold Resources Ltd

Company description

RRS is an African-based gold mining company listed on the LSE since 1997 and Nasdaq since 2002. RRS has three operational mines in Mali: Morila, Loulo and Gounkoto. The Tongon mine is based in Cote D'Ivoire. The Kibali project in DRC is expected to begin production in Q4 2013. Massawa in Senegal could begin production in 2014. Randgold also has a portfolio of exploration projects in West Africa.

Investment strategy

We rate Randgold Resources as Sell. We see production growth as superior to many peers, but RRS still carries more political risk than most other mid and large-cap global gold companies. Our bearish view on gold also implies reduced returns on the key new RRS project, Kibali, in the DRC. Higher returns are needed to offset the geographical risk, in our opinion.

Valuation

We derive our target price of £39.26 by applying a 1.3x P/NPV ratio to our NPV estimate of £30.20 (derived using a discount rate of 10%). We set our target P/NPV multiples with reference to absolute and relative historical average levels, taking into account our views on the current stage of the cycle and on the quality of each company's assets and management.

Risks

The key risks that could prevent the achievement of our target price are gold price, currency risk, political risk and cost base. The political risk is a function of Randgold's operation in African countries.

Gold Price: Any material deviation from our price forecasts, either from ‘stronger for longer' prices or a sharper and sooner decline, would impact on our earnings forecasts.

Currency Risk: Randgold reports in US$, and the revenue stream is priced in US$. However, operating costs are split 40:60 between the Communaute Financiere Africaine franc (CFA) and US$. The CFA is fixed against the euro, therefore, depreciation of the US$ against the euro would cause the cost base to rise and negatively impact earnings.

Notes

Notes

Appendix A-1

Analyst Certification

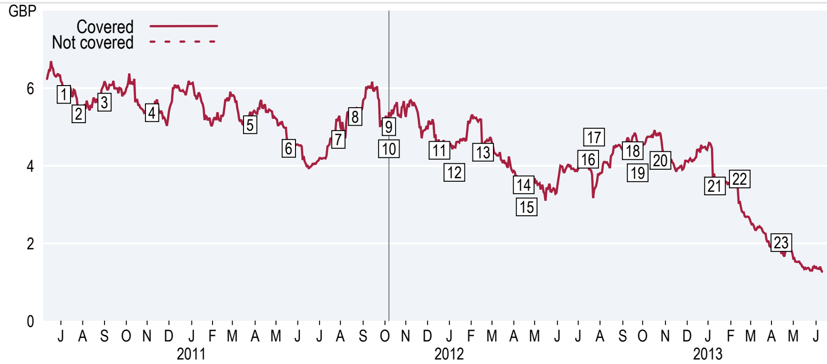
The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each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

IMPORTANT DISCLOSURES

African Barrick Gold Plc (ABGL.L)

Ratings and Target Price History
Fundamental Research

Analyst: Jon H Bergtheil



	Date	Rating	Target Price	Closing Price
1	6-Jul-10	1M	*7.40	5.84
2	27-Jul-10	1M	*6.75	5.47
3	1-Sep-10	*2M	*6.40	6.18
4	7-Nov-10	2M	*6.20	5.49
5	25-Mar-11	*1M	*6.25	5.39
6	19-May-11	1M	*6.21	4.60
7	28-Jul-11	1M	*6.57	5.23
8	21-Aug-11	1M	*7.90	5.36

	Date	Rating	Target Price	Closing Price
9	7-Oct-11	Stock rating system changed		
10	7-Oct-11	*1	7.90	5.38
11	19-Dec-11	1	*7.56	4.60
12	9-Jan-12	1	*6.55	4.48
13	17-Feb-12	*3	*4.19	4.43
14	15-Apr-12	3	*3.11	3.57
15	19-Apr-12	3	*3.21	3.55
16	16-Jul-12	3	*2.73	4.04

	Date	Rating	Target Price	Closing Price
17	24-Jul-12	3	*2.72	3.38
18	17-Sep-12	3	*4.20	4.76
19	24-Sep-12	3	*4.23	4.59
20	25-Oct-12	3	*4.39	4.82
21	10-Jan-13	3	*3.35	3.65
22	14-Feb-13	3	*2.67	3.09
23	15-Apr-13	3	*1.75	1.73

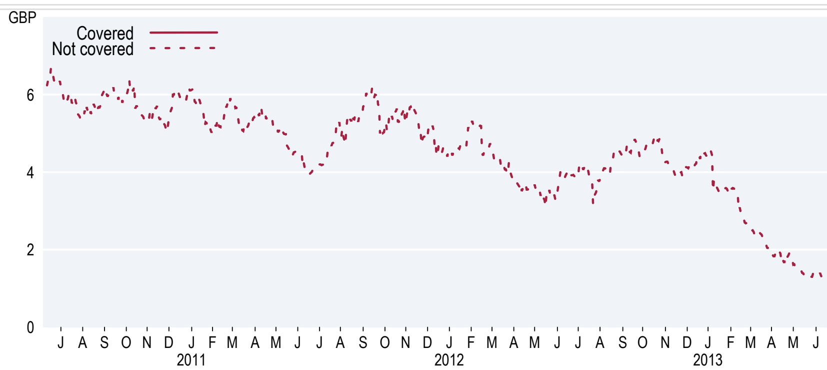
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

African Barrick Gold Plc (ABGL.L)

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

Analyst: Jon H Bergtheil



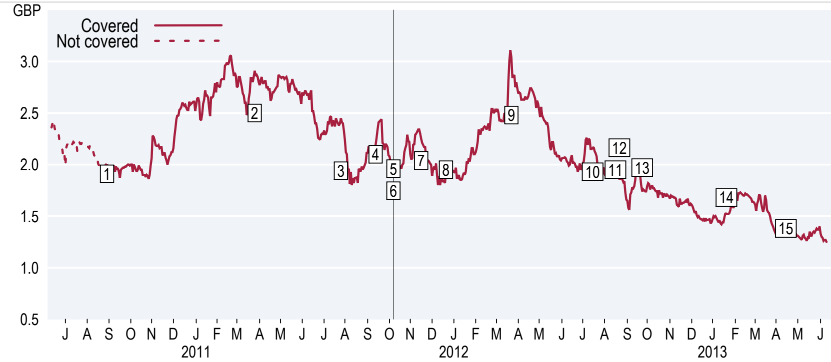
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Gem Diamonds (GEMD.L)

Ratings and Target Price History
Fundamental Research

Analyst: Jon H Bergtheil
Covered since August 31 2010



	Date	Rating	Target Price	Closing Price
1	30-Aug-10	*2M	*2.15	2.00
2	25-Mar-11	2M	*2.78	2.91
3	26-Jul-11	2M	*2.88	2.45
4	13-Sep-11	*1M	*2.78	2.19
5	7-Oct-11	Stock rating system changed		

	Date	Rating	Target Price	Closing Price
6	7-Oct-11	*1	2.78	2.02
7	16-Nov-11	1	*2.81	2.25
8	21-Dec-11	1	*2.61	1.92
9	22-Mar-12	*3	*2.83	3.04
10	16-Jul-12	3	*1.96	2.16

	Date	Rating	Target Price	Closing Price
11	16-Aug-12	3	*1.89	1.91
12	22-Aug-12	3	*1.85	1.86
13	24-Sep-12	*2	*1.99	1.74
14	21-Jan-13	*1	*1.95	1.52
15	15-Apr-13	1	*1.72	1.30

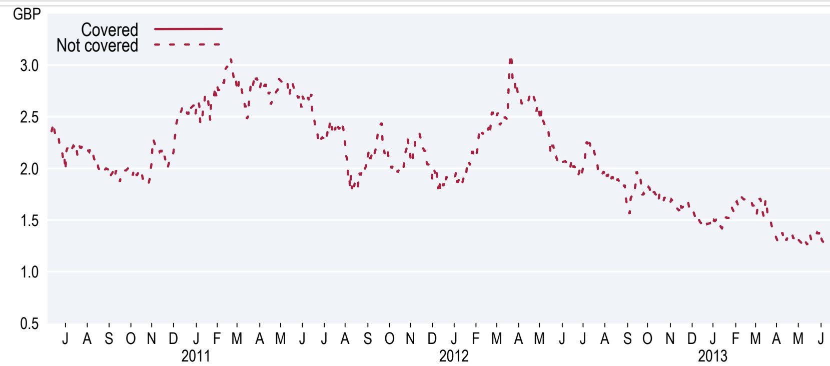
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Gem Diamonds (GEMD.L)

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

Analyst: Jon H Bergtheil
Covered since August 31 2010



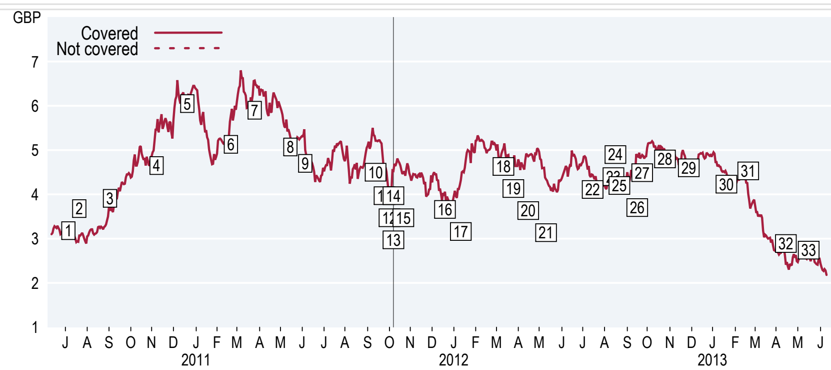
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Hochschild Mining Plc (HOCM.L)

Ratings and Target Price History
Fundamental Research

Analyst: Jon H Bergtheil



	Date	Rating	Target Price	Closing Price
1	6-Jul-10	2M	*3.40	3.08
2	21-Jul-10	2M	*3.20	3.07
3	2-Sep-10	*3M	*3.06	3.63
4	7-Nov-10	3M	*4.50	5.46
5	21-Dec-10	*2M	*6.25	6.15
6	21-Feb-11	*1M	*6.94	5.79
7	25-Mar-11	1M	*7.65	6.57
8	16-May-11	1M	*8.00	5.29
9	6-Jun-11	*2H	*6.00	5.00
10	13-Sep-11	2H	*5.91	5.21
11	26-Sep-11	2H	*5.50	4.50

	Date	Rating	Target Price	Closing Price
12	3-Oct-11	2H	*4.43	4.18
13	7-Oct-11	Stock rating system changed		
14	7-Oct-11	*2	4.43	4.53
15	21-Oct-11	2	*4.84	4.49
16	20-Dec-11	2	*4.51	4.06
17	11-Jan-12	2	*4.75	4.32
18	12-Mar-12	2	*5.13	5.04
19	26-Mar-12	2	*4.90	4.78
20	16-Apr-12	2	*4.94	4.86
21	10-May-12	*3	*4.02	4.34
22	16-Jul-12	3	*3.83	4.44

	Date	Rating	Target Price	Closing Price
23	14-Aug-12	3	*3.81	4.30
24	16-Aug-12	3	*3.78	4.27
25	22-Aug-12	3	*3.86	4.30
26	17-Sep-12	3	*4.56	4.86
27	24-Sep-12	*2	*4.98	4.89
28	25-Oct-12	2	*5.51	4.97
29	28-Nov-12	2	*5.22	4.61
30	21-Jan-13	2	*5.16	4.48
31	20-Feb-13	*3	*3.90	4.01
32	15-Apr-13	3	*2.14	2.41
33	16-May-13	3	*1.94	2.58

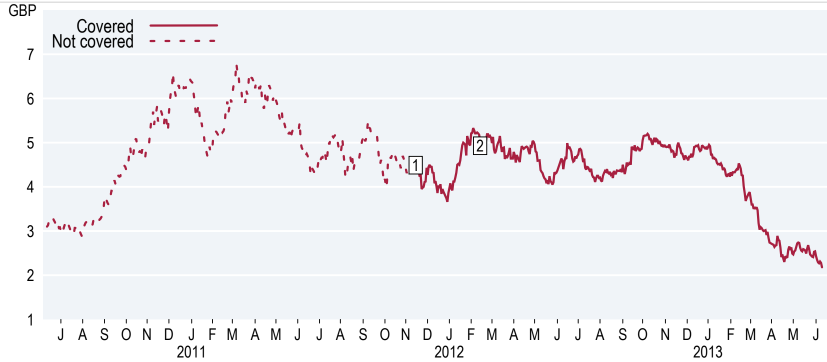
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Hochschild Mining Plc (HOCM.L)

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

Analyst: Jon H Bergtheil



	Date	Rating	Target Price	Closing Price
1	15-Nov-11	*ADD LP	-	4.38
2	14-Feb-12	*REM LP	-	5.05

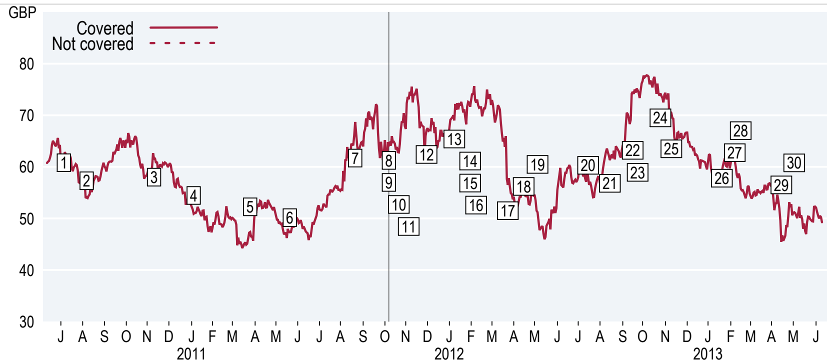
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Randgold Resources Ltd (RRS.L)

Ratings and Target Price History
Fundamental Research

Analyst: Jon H Bergtheil



	Date	Rating	Target Price	Closing Price
1	6-Jul-10	2M	*67.30	61.85
2	6-Aug-10	2M	*62.60	54.10
3	10-Nov-10	2M	*64.20	61.60
4	5-Jan-11	*1M	*62.20	50.90
5	25-Mar-11	1M	*54.88	47.36
6	20-May-11	1M	*61.35	47.55
7	22-Aug-11	1M	*86.78	68.70
8	7-Oct-11	Stock rating system changed		
9	7-Oct-11	*1	86.78	64.00
10	21-Oct-11	1	*88.46	62.80
11	4-Nov-11	1	*88.59	73.10
12	30-Nov-11	1	*83.49	67.15
13	9-Jan-12	1	*84.16	69.00
14	31-Jan-12	1	*90.90	71.65
15	31-Jan-12	1	*90.83	71.65
16	8-Feb-12	1	*88.84	72.45
17	23-Mar-12	*2	*65.27	56.50
18	16-Apr-12	2	*60.27	55.50
19	4-May-12	2	*55.00	51.20
20	16-Jul-12	*3	*49.19	58.05
21	15-Aug-12	3	*50.30	61.30
22	17-Sep-12	*2	*76.84	74.55
23	24-Sep-12	2	*80.41	74.85
24	25-Oct-12	2	*85.80	74.25
25	9-Nov-12	2	*80.00	70.45
26	21-Jan-13	2	*68.30	59.10
27	7-Feb-13	2	*66.00	61.20
28	15-Feb-13	*3	*55.40	55.80
29	15-Apr-13	3	*43.00	45.45
30	2-May-13	3	*42.30	51.20

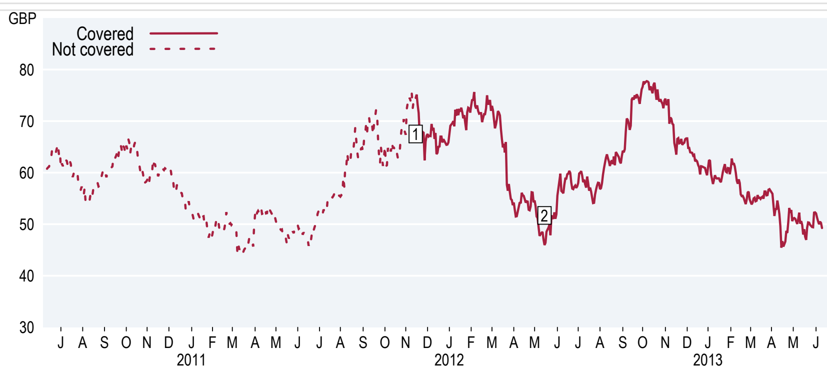
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Randgold Resources Ltd (RRS.L)

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

Analyst: Jon H Bergtheil



	Date	Rating	Target Price	Closing Price
1	15-Nov-11	*ADD MP	-	74.50
2	15-May-12	*REM MP	-	45.96

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Aquarius Platinum Ltd (AQP.L)

Ratings and Target Price History
Fundamental Research

Analyst: Jon H Bergtheil

#	Date	Rating	Target Price	Closing Price
1	6-Jul-10	1H	*4.20	3.15
2	20-Jul-10	1H	*3.80	2.55
3	12-Oct-10	1H	*4.10	3.64
4	11-Feb-11	*2H	4.10	4.16
5	1-Jun-11	2H	*3.57	3.41
6	13-Sep-11	2H	*2.61	2.19
7	29-Sep-11	2H	*2.00	1.90
8	5-Oct-11	2H	*1.89	1.73
9	7-Oct-11	Stock rating system changed		
10	7-Oct-11	*2	1.89	1.86
11	1-Feb-12	2	*1.80	1.67
12	14-Feb-12	2	*1.65	1.40
13	16-Apr-12	2	*1.51	1.30
14	1-May-12	2	*1.40	1.30
15	12-Jun-12	2	*0.80	0.64
16	16-Jul-12	2	*0.44	0.41
17	24-Jul-12	2	*0.41	0.38
18	14-Aug-12	2	*0.40	0.37
19	24-Sep-12	*1	*0.59	0.43
20	21-Jan-13	1	*0.92	0.72
21	15-Apr-13	1	*0.66	0.40

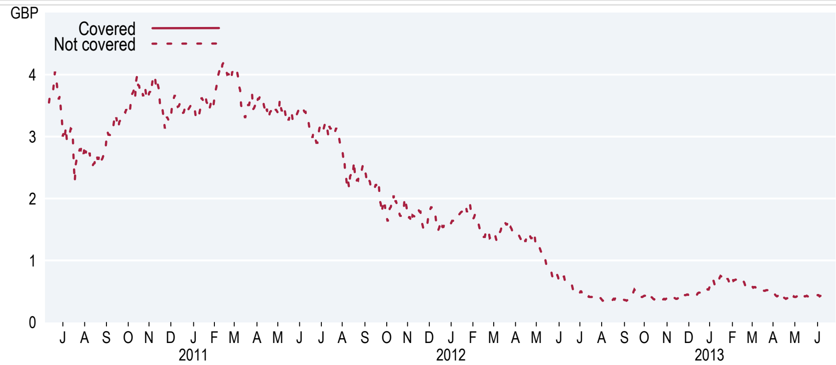
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Aquarius Platinum Ltd (AQP.L)

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

Analyst: Jon H Bergtheil



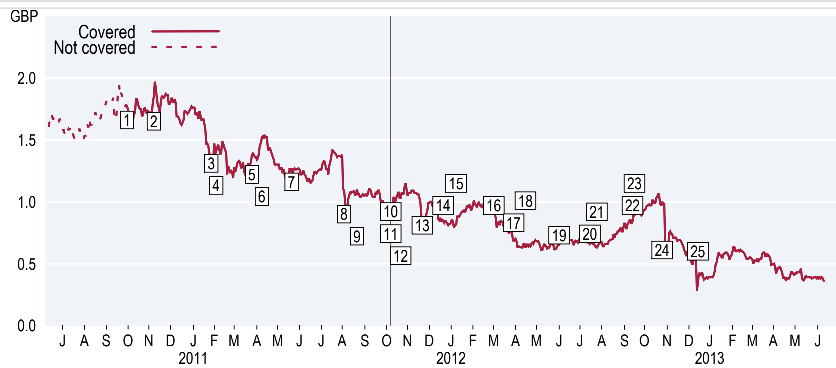
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Centamin Egypt Limited (CEY.L)

Ratings and Target Price History
Fundamental Research

Analyst: Jon H Bergtheil
Covered since October 1 2010



#	Date	Rating	Target Price	Closing Price
1	30-Sep-10	*3M	*1.50	1.77
2	7-Nov-10	3M	*1.58	1.80
3	27-Jan-11	*1M	*1.65	1.36
4	3-Feb-11	1M	*1.71	1.41
5	25-Mar-11	*1H	*1.80	1.38
6	8-Apr-11	1H	*1.77	1.52
7	20-May-11	1H	*1.66	1.27
8	3-Aug-11	1H	*1.43	1.09
9	22-Aug-11	1H	*1.72	1.10
10	7-Oct-11	Stock rating system changed		
11	7-Oct-11	*1	1.72	0.95
12	21-Oct-11	1	*1.80	1.03
13	22-Nov-11	1	*1.67	0.81
14	21-Dec-11	1	*1.23	0.84
15	9-Jan-12	1	*1.04	0.81
16	1-Mar-12	1	*1.10	0.90
17	29-Mar-12	1	*0.99	0.68
18	16-Apr-12	1	*0.87	0.63
19	1-Jun-12	1	*0.88	0.65
20	16-Jul-12	*2	*0.74	0.66
21	25-Jul-12	2	*0.72	0.63
22	13-Sep-12	*1	*1.01	0.84
23	17-Sep-12	1	*1.20	0.89
24	25-Oct-12	1	*1.36	1.00
25	14-Dec-12	*2	-	0.35

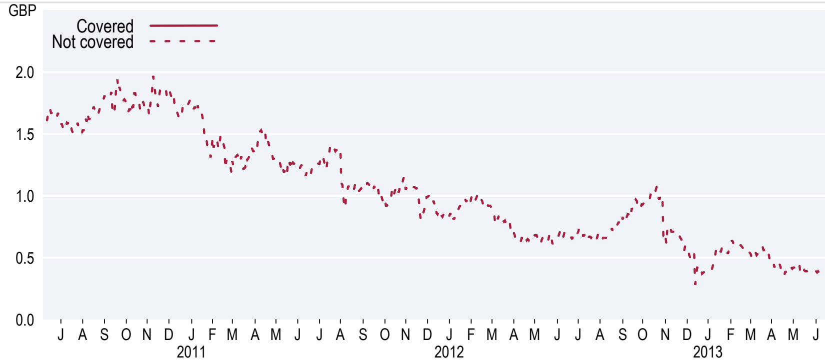
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Centamin Egypt Limited (CEY.L)

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

Analyst: Jon H Bergtheil
Covered since October 1 2010



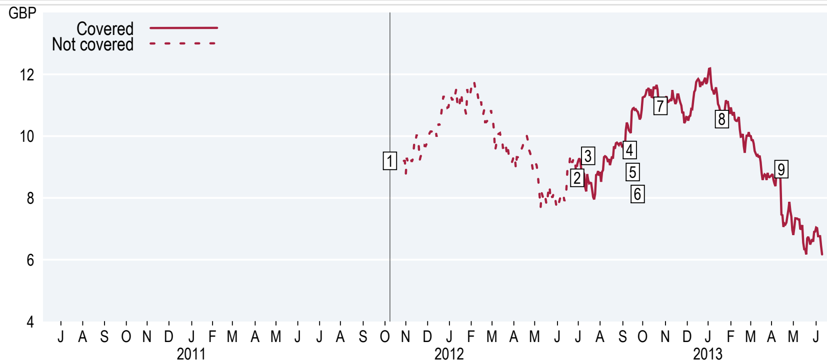
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Polymetal (POLYP.L)

Ratings and Target Price History
Fundamental Research

Analyst: Jon H Bergtheil
Covered since June 29 2012



	Date	Rating	Target Price	Closing Price
1	8-Oct-11	Stock rating system changed		
2	29-Jun-12	*2	*9.40	9.09
3	16-Jul-12	*3	*7.72	8.58
4	12-Sep-12	3	*7.90	10.15
5	17-Sep-12	3	*9.33	10.89
6	24-Sep-12	3	*9.65	10.79
7	25-Oct-12	3	*10.78	11.08
8	21-Jan-13	*2	*11.31	10.75
9	15-Apr-13	*3	*5.77	7.46

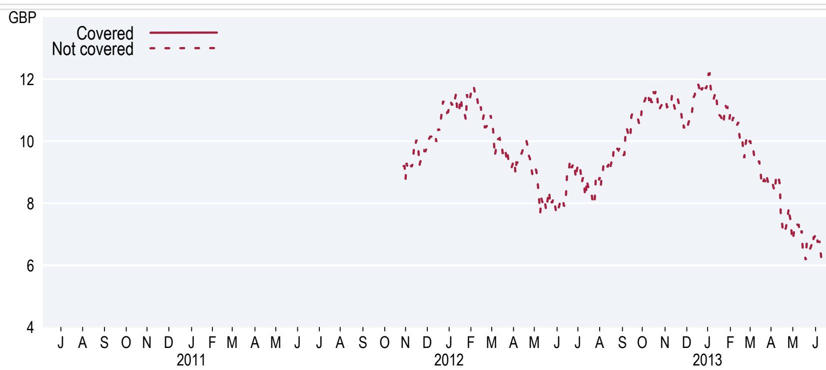
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Polymetal (POLYP.L)

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

Analyst: Jon H Bergtheil
Covered since June 29 2012



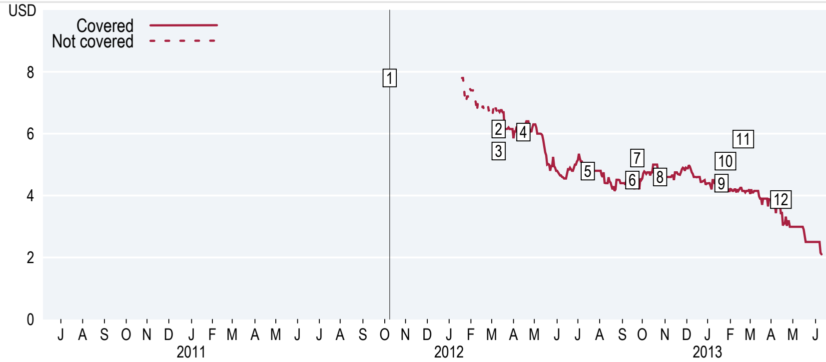
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Nordgold (NORDNq.L)

Ratings and Target Price History
Fundamental Research

Analyst: Jon H Bergtheil
Covered since March 12 2012



	Date	Rating	Target Price	Closing Price
1	8-Oct-11	Stock rating system changed		
2	12-Mar-12	*2	*7.11	6.75
3	12-Mar-12	2	*7.24	6.75
4	16-Apr-12	2	*6.27	6.25

	Date	Rating	Target Price	Closing Price
5	16-Jul-12	2	*5.30	4.80
6	17-Sep-12	*1	*6.27	4.40
7	24-Sep-12	1	*6.32	4.50
8	25-Oct-12	1	*6.77	4.75

	Date	Rating	Target Price	Closing Price
9	21-Jan-13	1	*5.25	4.25
10	25-Jan-13	*2	*4.62	4.20
11	20-Feb-13	2	*4.30	4.15
12	15-Apr-13	*3	*3.12	3.40

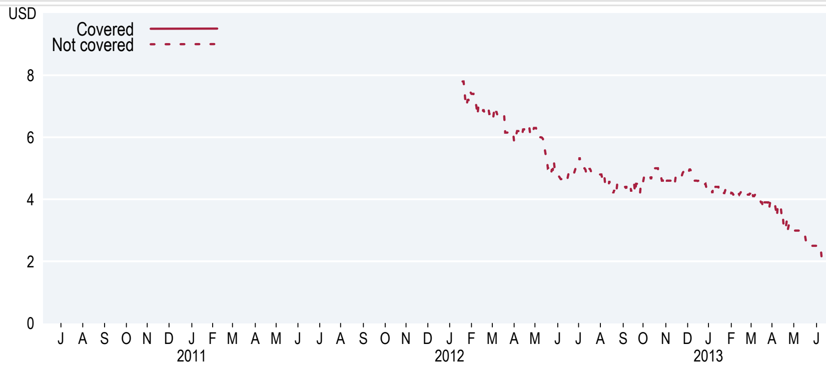
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Nordgold (NORDNq.L)

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

Analyst: Jon H Bergtheil
Covered since March 12 2012



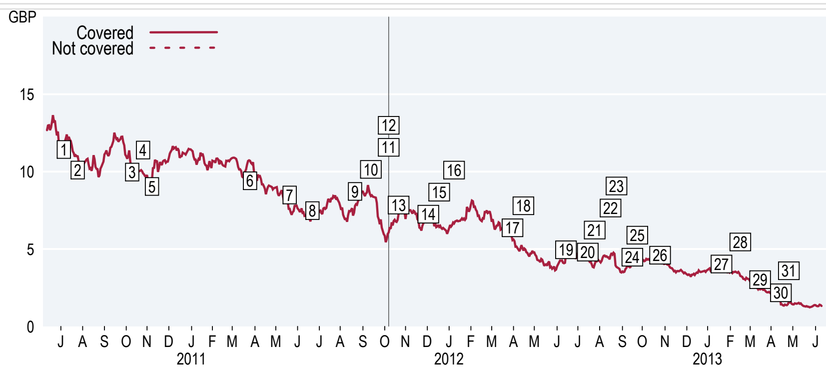
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Petropavlovsk PLC (POG.L)

Ratings and Target Price History
Fundamental Research

Analyst: Jon H Bergtheil



	Date	Rating	Target Price	Closing Price
1	6-Jul-10	1M	*14.90	11.92
2	26-Jul-10	1M	*14.10	10.99
3	11-Oct-10	1M	*13.70	10.00
4	26-Oct-10	1M	*13.50	9.89
5	7-Nov-10	1M	*12.90	9.44
6	25-Mar-11	*2M	*11.00	10.70
7	20-May-11	2M	*9.11	7.60
8	22-Jun-11	2M	*8.32	7.40
9	22-Aug-11	*1M	*9.90	7.79
10	13-Sep-11	1M	*10.47	8.42
11	7-Oct-11	Stock rating system changed		

	Date	Rating	Target Price	Closing Price
12	7-Oct-11	*1	10.47	6.07
13	21-Oct-11	1	*11.31	7.28
14	2-Dec-11	1	*10.91	7.00
15	19-Dec-11	1	*10.10	6.43
16	9-Jan-12	1	*8.34	6.65
17	30-Mar-12	1	*7.62	5.57
18	16-Apr-12	1	*6.24	4.90
19	14-Jun-12	1	*6.36	4.70
20	16-Jul-12	*2	*4.86	4.40
21	25-Jul-12	2	*4.60	4.01
22	16-Aug-12	2	*4.62	4.59

	Date	Rating	Target Price	Closing Price
23	24-Aug-12	2	*4.42	3.84
24	17-Sep-12	*1	*5.00	4.47
25	24-Sep-12	1	*5.40	4.24
26	25-Oct-12	1	*5.79	4.17
27	21-Jan-13	1	*5.01	4.02
28	15-Feb-13	*2	*3.77	3.26
29	15-Mar-13	2	*2.74	2.39
30	15-Apr-13	*3	*1.41	1.42
31	25-Apr-13	3	*1.32	1.58

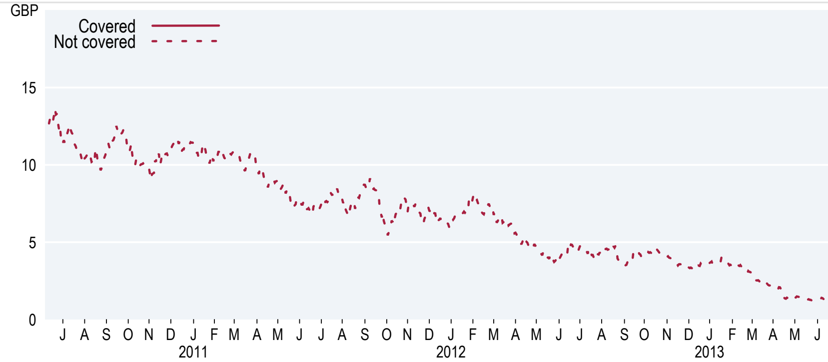
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Petropavlovsk PLC (POG.L)

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

Analyst: Jon H Bergtheil



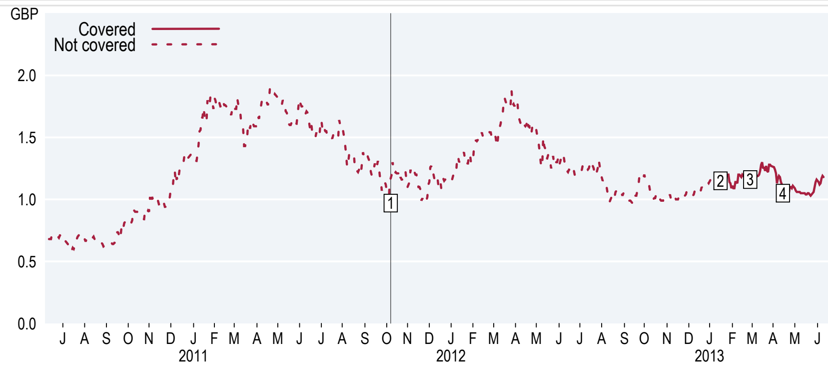
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Petra Diamonds (PDL.L)

Ratings and Target Price History
Fundamental Research

Analyst: Jon H Bergtheil
Covered since January 16 2013



	Date	Rating	Target Price	Closing Price
1	7-Oct-11	Stock rating system changed		
2	16-Jan-13	*1	*1.45	1.17
3	27-Feb-13	1	*1.43	1.20
4	15-Apr-13	1	*1.51	1.10

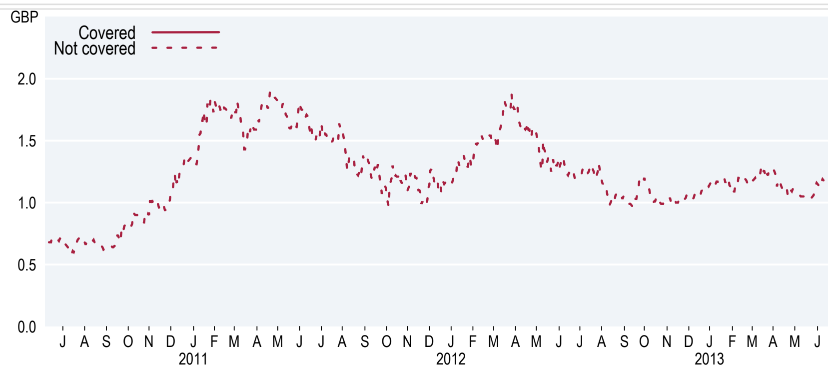
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Petra Diamonds (PDL.L)

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

Analyst: Jon H Bergtheil
Covered since January 16 2013



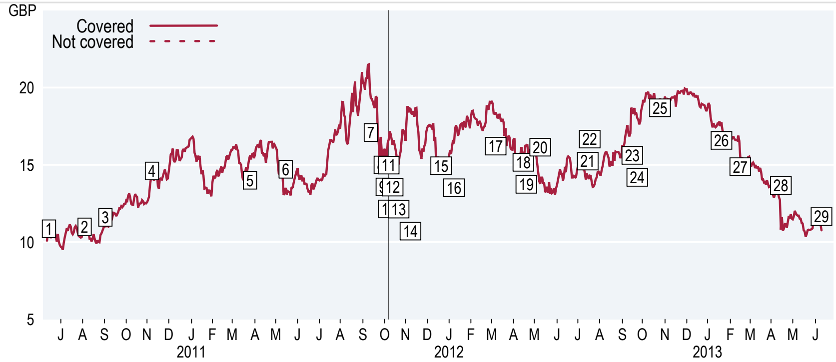
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Fresnillo Plc (FRES.L)

Ratings and Target Price History
Fundamental Research

Analyst: Jon H Bergtheil



	Date	Rating	Target Price	Closing Price
1	15-Jun-10	1M	*12.25	10.70
2	4-Aug-10	*2M	*11.90	10.98
3	2-Sep-10	2M	*11.35	10.97
4	7-Nov-10	2M	*13.75	14.13
5	25-Mar-11	2M	*15.22	15.60
6	15-May-11	2M	*15.00	13.24
7	13-Sep-11	*3M	*18.64	19.30
8	27-Sep-11	*2M	*17.15	16.81
9	29-Sep-11	2M	*16.73	15.14
10	7-Oct-11	Stock rating system changed		
11	7-Oct-11	*2	16.73	16.63
12	13-Oct-11	2	*17.30	16.29
13	21-Oct-11	2	*16.66	15.05
14	8-Nov-11	2	*18.15	18.62
15	21-Dec-11	2	*16.98	15.28
16	9-Jan-12	2	*16.68	16.38
17	7-Mar-12	2	*18.74	18.39
18	16-Apr-12	2	*17.16	15.60
19	19-Apr-12	2	*16.53	16.26
20	9-May-12	*3	*13.05	13.76
21	16-Jul-12	3	*12.98	14.23
22	18-Jul-12	3	*12.95	14.30
23	17-Sep-12	3	*17.26	18.46
24	24-Sep-12	3	*17.92	18.03
25	25-Oct-12	*2	*20.08	19.30
26	21-Jan-13	2	*19.56	17.75
27	15-Feb-13	*3	*15.20	15.50
28	15-Apr-13	3	*11.20	10.80
29	11-Jun-13	3	*10.45	10.76

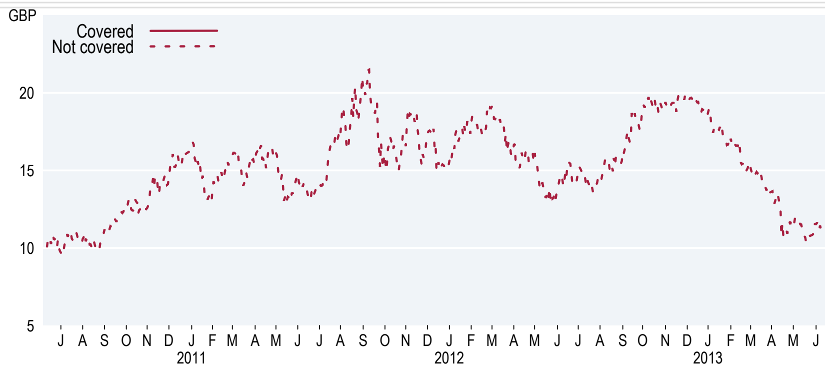
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Fresnillo Plc (FRES.L)

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

Analyst: Jon H Bergtheil



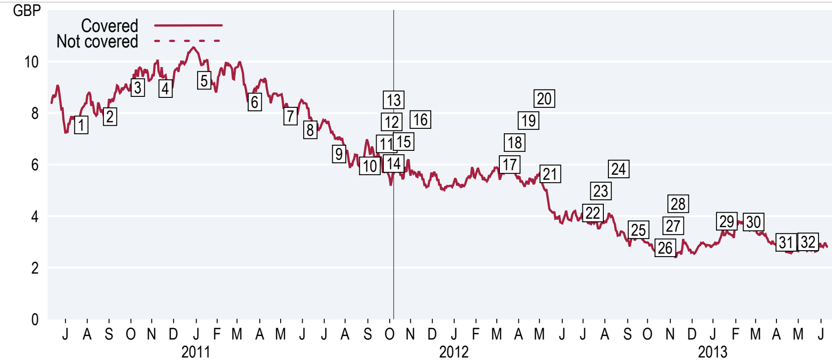
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Lonmin PLC (LMI.L)

Ratings and Target Price History
Fundamental Research

Analyst: Jon H Bergtheil



#	Date	Rating	Target Price	Closing Price
1	23-Jul-10	1M	*10.24	8.11
2	2-Sep-10	*2M	*8.94	8.39
3	12-Oct-10	2M	*9.28	9.41
4	19-Nov-10	2M	*9.57	9.47
5	13-Jan-11	2M	*10.56	10.02
6	25-Mar-11	2M	*9.87	8.98
7	16-May-11	2M	*9.04	8.07
8	13-Jun-11	2M	*8.98	7.85
9	22-Jul-11	2M	*8.16	7.08
10	5-Sep-11	2M	*7.25	6.42
11	28-Sep-11	2M	*6.58	5.84
12	5-Oct-11	2M	*6.02	5.37
13	7-Oct-11	Stock rating system changed		
14	7-Oct-11	*2	6.02	5.65
15	21-Oct-11	2	*5.68	5.49
16	15-Nov-11	2	*5.88	5.55
17	20-Mar-12	2	*5.98	5.90
18	27-Mar-12	2	*5.91	5.81
19	16-Apr-12	2	*5.85	5.23
20	8-May-12	2	*5.83	5.04
21	16-May-12	2	*5.16	4.22
22	16-Jul-12	2	*4.13	3.76
23	26-Jul-12	2	*4.04	3.69
24	21-Aug-12	2	*3.47	3.26
25	18-Sep-12	2	*3.51	3.46
26	25-Oct-12	2	*2.91	2.65
27	6-Nov-12	2	*2.81	2.62
28	13-Nov-12	2	*2.64	2.58
29	21-Jan-13	*1	*4.11	3.43
30	27-Feb-13	1	*4.25	3.45
31	15-Apr-13	1	*3.74	2.57
32	15-May-13	1	*3.86	2.68

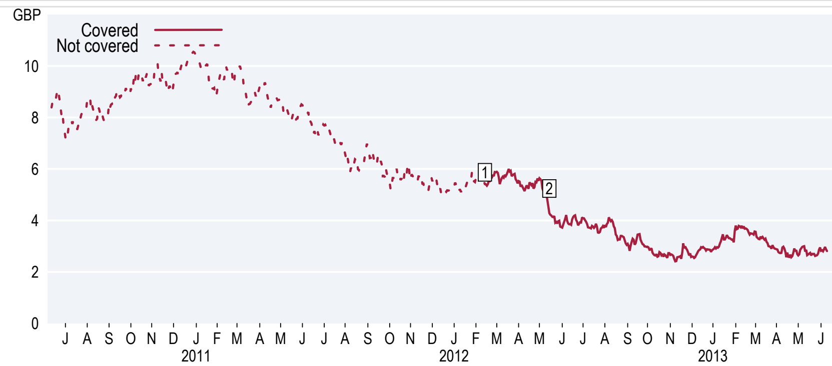
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Lonmin PLC (LMI.L)

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

Analyst: Jon H Bergtheil



#	Date	Rating	Target Price	Closing Price
1	14-Feb-12	*ADD LP	-	5.41
2	15-May-12	*REM LP	-	4.28

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Within the past 12 months, Citigroup Global Markets Inc. or its affiliates has acted as manager or co-manager of an offering of securities of Anglo American Platinum Ltd, African Barrick Gold Plc, Nordgold, Fresnillo Plc, Lonmin PLC.

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from Anglo American Platinum Ltd, African Barrick Gold Plc, Nordgold, Lonmin PLC, Rio Tinto PLC.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Anglo American Platinum Ltd, African Barrick Gold Plc, Gem Diamonds, Hochschild Mining Plc, Randgold Resources Ltd, Nordgold, Impala Platinum, Fresnillo Plc, Lonmin PLC, Rio Tinto PLC in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as investment banking client(s): Anglo American Platinum Ltd, African Barrick Gold Plc, Nordgold, Lonmin PLC, Rio Tinto PLC.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, securities-related: Anglo American Platinum Ltd, African Barrick Gold Plc, Hochschild Mining Plc, Randgold Resources Ltd, Impala Platinum, Fresnillo Plc, Lonmin PLC, Rio Tinto PLC.

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