EQUITY RESEARCH

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NA Gold & Silver Equities: Stress Testing the Balance Sheets (3)

Equity value erodes below $1,100/oz. With gold having dipped below $1,100/oz and silver below $15.00/oz, we have once again run a balance sheet sensitivity analysis for the North American listed precious metal producers in our coverage universe over the H2/2015 to 2018 period. **As highlighted in previous research, the difference for the equities in the current gold price sell-off, versus prior price declines, is that the precious metals producers now have significantly greater levels of debt (Exhibit 2).**

In conclusion, the companies best positioned to operate in a $1,000/oz price environment are the royalty-streaming companies **Franco-Nevada, Royal Gold, Silver Wheaton**, and **Osisko Gold Royalties**. The gold producers that are best positioned to withstand a sub-$1,100/oz gold price are **Acacia, Alamos, Centamin, Fresnillo, Goldcorp, Goldfields, Klondex, Newmont, Randgold, SEMAFO**, and **Tahoe (Exhibit 1)**. While a number of companies have already cut or eliminated their dividends, **we believe Barrick, Centerra, Goldcorp, Goldfields, Pan American, and Yamana could reduce their dividends.**

Stress testing at lower gold prices after growth capital is frozen. Our base case is $1,100/oz gold & $14.50/oz silver with scenarios at $1,000/oz & $13.25/oz and $1,200/oz & $15.75/oz. We provide a one-page summary for 35 gold producers (Page 5) that includes: (1) annual operating forecasts, liquidity estimates and key credit ratios; and (2) a discussion of our scenario analysis for each company. We assume that the companies do not draw down on their existing short-term credit facilities, as many banks are likely reviewing the credit risk of these facilities. We model similar levels of sustaining capital and assume that new mine development capital is suspended, with the exception of development capital that is more than 50% complete, such as **Goldcorp's** Cochenour project and **Eldorado's** Olympias and Skouries projects.

Stress test highlights $1,100/oz as a critical level

- At $1,100/oz gold and $14.50/oz silver, the North American gold sector remains ex-growth. In addition to the cost-cutting measures that have occurred to date, producers will need to place their higher-cost mines in **harvest** and **accelerated closure mode** or on **care and maintenance**. We would expect to see a reduction in management and board compensation and the use of private aircraft travel curtained. And below $1,100/oz, we believe some companies could see their lines of credit reduced or withdrawn, and companies with elevated levels of debt may be forced to hedge revenues, sell streams on mining assets, and/or raise distressed equity. At $1,100/oz, companies that would need to continue making cuts to discretionary and fixed costs to improve their balance sheets include **AngloGold, Barrick Gold, Hochschild, IAMGOLD, Kinross, Pan American, Primero, Teranga,** and **Timmins**.
- At $1,000/oz gold and $13.25/oz silver, we would expect mine production to begin to contract as mines are placed on care and maintenance or moved into accelerated closure. In addition to the cost-cutting measures mentioned above, we believe a number of the gold producers would need to consider mergers to capture operating synergies or other financial benefits. At $1,000/oz, all of the gold/silver producers in our coverage universe would continue to make cuts to operating and discretionary costs and the most leveraged companies would seek alternative sources of equity.
- At $1,200/oz gold and $15.75/oz silver, we believe most of the sector can sustain their current operating mines, but mines with AISC above $1,100/oz would likely go into "harvest mode" with significant development capital spending deferred. In addition, at $1,200/oz the producers can still implement cash-saving measures, with further cuts to G&A, exploration, and sustaining capital.

Priced as of prior trading day's market close, EST (unless otherwise noted).
All values in USD unless otherwise noted.
For Required Non-U.S. Analyst and Conflicts Disclosures, see page 41.

$1,100 gold is a critical level for North American precious metals companies

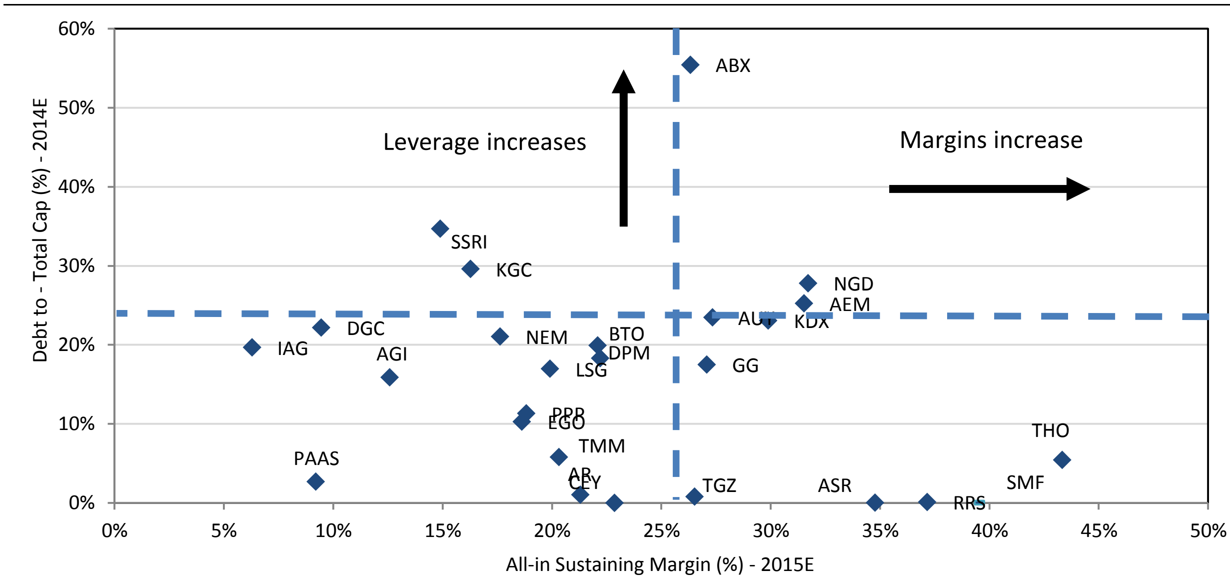
At $1,100/oz gold, most of the companies in our coverage universe are expected to continue to cut G&A, exploration, and sustaining capital spending. We could also see producers begin an ***accelerated closure*** process for their higher-cost, shorter-life mines by spending on reclamation rather than sustaining capital and mining out residual reserves over a 2- to 3-year period. Another alternative would be to place ***mines on care & maintenance****,* which would still require ongoing security/maintenance costs, although this would avoid burning cash for longer reserve life mines during a period of high sustaining capital spending associated with major waste stripping or underground development.

However, at or near $1,000/oz gold, we would expect companies to announce that their high-cost mines are being placed on accelerated closure, even mines that previously had long reserve lives given the potential for significant cash burn. We believe that most of the gold and silver producers in our coverage universe would struggle in a $1,000 gold environment if they do not defer discretionary costs, cut capital, and close cash-burning mines. The companies that currently have the highest AISC costs include **AngloGold, Centerra Gold, Detour Gold, IAMGOLD, Kinross, Newmont, Perseus, Pan American, Silver Standard, Teranga, and Timmins Gold**.

High-quality producers and royalty-streaming companies

We believe the current gold price pullback presents an opportunity to buy gold mining equities with strong balance sheets that offer an attractive risk-reward. In our view, in a sub-$1,100 gold price environment, the most resilient North American listed gold producers with solid yet flexible business plans and strong balance sheets would be **Acacia, Alamos, Centamin, Fresnillo, Goldcorp, Goldfields, Klondex, Newmont, Randgold, SEMAFO, and Tahoe** (Exhibit 1)**.** These companies have low net debt, a low capital spending to cash flow ratio, and low-cost mines. The gold companies with the most robust business models and in a sharply lower gold price environment are the royalty and streaming companies, including **Franco-Nevada, Royal Gold, Silver Wheaton, and Osisko**, which have little or no debt and minimal operating and capital exposure.

Exhibit 1: NA Precious Metal Producers leverage versus AISC margins clearly show highly levered (upper LHS) and robust financials (lower RHS)

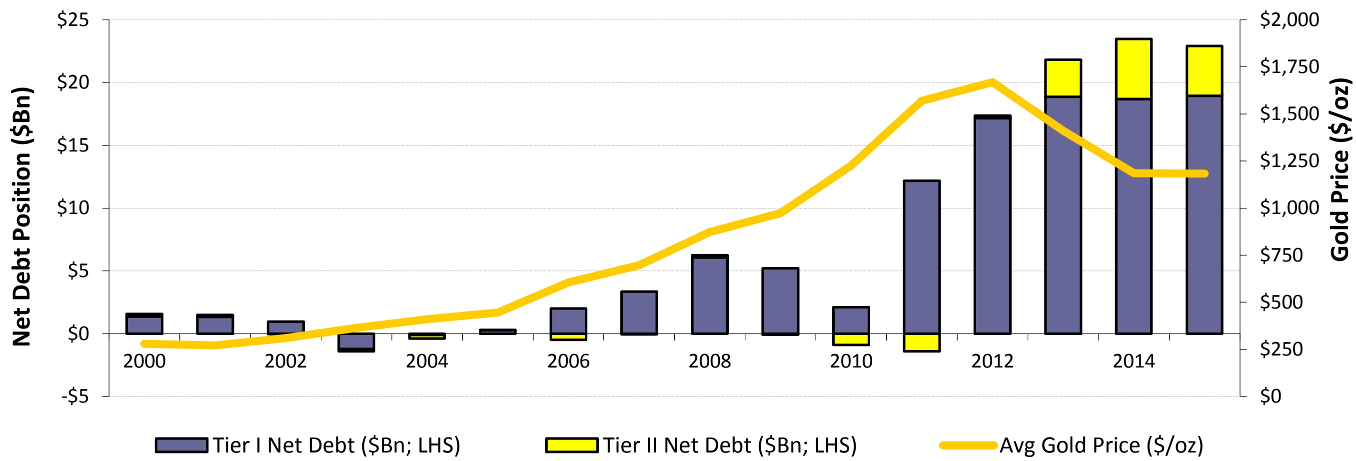


Source: Company reports, RBC Capital Markets estimates

North America gold producers are carrying significantly greater levels of debt

With gold currently trading at $1,110 per ounce, and risk to the downside, we have run a series of gold price scenarios to assess the gold where companies begin to burn cash, even after the significant cost-cutting measures that have been implemented over the last 30 months. The most significant change within the gold sector over the last four years has been the levels of debt that North American gold producers have added to their balance sheets (Exhibit 2). **The Tier I producers hold an estimated $19 billion in debt, or 61% of their combined market capitalization of $31 billion, and the Tier II producers hold $4.0 billion in debt, 26% their combined market capitalization of $15.3 billion.** This debt was used to fund mine expansion, new mine production, and acquisitions as gold broke through $1,000 and rose to over $1,900 per ounce. **Investors are focused on gold miners de-leveraging as well as how the operating model can be changed at lower gold prices to preserve equity value and ultimately create shareholder value.**

Exhibit 2: North American gold Industry net debt



Source: Bloomberg, Company reports, RBC Capital Markets estimates

Lower gold prices and elevated debt are a risky combination

With a strong US dollar and gold breaching key technical levels, the risks are to the downside. To help investors identify investment opportunities and avoid longer-term balance sheet risk, we have run flat gold price scenarios at: (1) a base case of $1,100/oz gold and $14.50/oz silver; (2) a scenario at $1,000/oz and $13.25/oz; and (3) a scenario at $1,200/oz and $15.75/oz. We provide a one-page summary for 35 companies at flat currency assumptions, with annual operating-liquidity estimates, key credit ratios, and a discussion of the key operating and financial assumptions that we made.

We have used the following as a basis for our scenario analysis:

- We assume that the companies do not draw down on their existing short-term credit facilities, as many banks are likely now reviewing the credit risk of the gold miners.
- We assume similar levels of sustaining capital expenditures to present day levels where applicable;

- We assume that any new mine development capital is suspended, with the exception of development capital that is more than 50% complete, or a short development time line, such as **Goldcorp's** Cochenour development project, **Newmont's** Merian and Long Canyon development projects, and **Eldorado's** Olympias and Skouries development projects.
- Dividends are maintained at their current reduced levels; however, we flag which companies may need to cut their dividend (Exhibits 3 to 37).
- Maturing debt is not rolled over, even though most companies currently have the ability to do so, to show the impact on the cash position if the company decides to de-lever as most investors wish.

Alternatives for producers as gold prices decline

With the potential for gold prices to remain at these levels or decline over a 12- to 24-month period, we see the need for companies to consider the following alternatives to improve AISC margins and cash positions:

1. Continue to cut G&A, exploration expenses, and sustaining capital spending. Cuts to sustaining capital can result in higher operating costs, and postponing waste stripping and underground development may result in a reserve write-down and significant future capital commitments to bring back into reserves. Cutting exploration expenses has had a negative impact on mine reserves and we have already seen North American producer mine lives decline.
2. Mine plan optimization, such as increasing the cut-off grade, to improve the gold grade processed and lowering the costs per ounce. "High grading" would occur if the reserve lives were reduced significantly and reserves written down.
3. Placing mines on "care & maintenance" requires ongoing mine and plant security and monitoring activity that may involve expenses of 10% to 15% of the existing operating costs, with no associated revenue. Mine closure would require the start of all government mandated reclamation work, which could be funded by an accelerated closure plan.
4. Place mines in "harvesting and accelerated closure" in which only currently accessible reserves are mined, with capital savings as sustaining and development capital are deferred indefinitely. This generally results in reserves being sterilized and written down.
5. Corporate items, such board and management compensation, company aircraft and charters.
6. When times are tough, contract miners offer more attractive work schedules and cost structures and may be a viable alternative to self-mining.
7. Earn-in joint ventures may offer companies access to capital. Streaming companies can also provide new capital for an operating mine with attractive margins or a major development project, which traditionally would have been provided by another mining company or through bank financing.
8. Strategic partnerships can be created whereby a sovereign wealth or private equity firms can make sizable equity investments as part of a restructuring or turnaround situation, similar to CIC's investment in Teck Corp in July 2009.
9. While many companies have already cut or eliminated dividends, this remains an option for **Goldcorp, Barrick, Centerra, Goldfields, Pan American, and Yamana**.

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Exhibit 3: AngloGold Ashanti metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	4,432	4,000	4,118	4,081	4,036
All-in Sustaining Costs - AISC ($/oz)	$1,026	$997	$1,029	$1,022	$1,028
Operating Cash Flow	$1,220	$988	$767	$795	$780
Project Capex	($299)	($215)	($239)	($127)	($22)
Sustaining Capex	($779)	($715)	($767)	($767)	($767)
Total Capex	($1,078)	($930)	($1,005)	($894)	($789)
Operating Free Cash Flow	**$142**	**$58**	**($238)**	**($99)**	**($9)**
Debt Repayments	($761)	$0	($1,250)	$0	$0
Borrowings	$611	$0	$0	$0	$0
Net Borrowings:	($150)	$0	($1,250)	$0	$0
Free Cash Flow to Equity	**($8)**	**$58**	**($1,488)**	**($99)**	**($9)**
Dividends	$0	$0	$0	$0	$0
Other	($136)	$577	($193)	($147)	($152)
Net Cash Flow	**($144)**	**$634**	**($1,682)**	**($246)**	**($161)**
Cash Balance	**$468**	**$1,102**	**($580)**	**($826)**	**($987)**
Long Term Debt	$3,498	$3,498	$2,248	$2,248	$2,248
Shareholders' Equity	$2,871	$2,633	$2,532	$2,495	$2,398
Total EBITDA	$1,665	$931	$758	$784	$755
Debt to Total Capital	55%	57%	47%	47%	48%
LTD-to-EBITDA	2.1x	3.8x	3.0x	2.9x	3.0x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$468	$1,344	($39)	$14	$173
$1,100/oz	$468	$1,102	($580)	($826)	($987)
$1,000/oz	$468	$843	($1,239)	($1,912)	($2,503)

Source: Company reports, RBC Capital Markets estimates

- ANG has no major development projects outside of Kibali and should benefit from tailwinds from the Brazilian Real, Rand and A$. We assume in this analysis that the company does not restart commercial production at Obuasi.
- The company should be FCF positive for 2015 at US$1,100, largely reflecting the CC&V disposal, before becoming FCF negative in 2016. Under the US$1,000/oz scenario, ANG would also be FCF positive in 2015 and FCF negative from that point forward. We believe that the company would need to look at seeking additional funding and/or closing higher-cost production, including much of its South African production, if lower prices were to persist, assuming that the Rand didn't also weaken further. We believe that the company could test its 3.5x net debt:EBITDA covenant at US$1,000/oz but also that it should remain within its covenants at US$1,100/oz, assuming that it exercised the short-term covenant extension facility in 2016 allowing a temporary increase to 4.5x.
- We assume that the company pays no dividends.

Exhibit 4: Barrick Gold metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,266	$1,153	$1,100	$1,100	$1,100
Copper Price ($/lb)	$3.09	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	6,254	6,116	5,783	5,733	5,553
All-in Sustaining Costs - AISC ($/oz)	$917	$915	$873	$858	$848
Operating Cash Flow	$2,296	$2,268	$1,893	$1,745	$1,638
Project Capex	($593)	($240)	($413)	($463)	($520)
Sustaining Capex	($1,932)	($1,769)	($1,368)	($1,300)	($1,206)
Total Capex	($2,525)	($2,009)	($1,781)	($1,763)	($1,726)
Operating Free Cash Flow	**($229)**	**$259**	**$112**	**($18)**	**($88)**
Debt Repayments	($188)	($2,850)	$0	$0	$0
Borrowings	$141	$2	$0	$0	$0
Net Borrowings:	($47)	($2,848)	$0	$0	$0
Free Cash Flow to Equity	**($276)**	**($2,589)**	**$112**	**($18)**	**($88)**
Dividends	($232)	($233)	($233)	($233)	($233)
Other & Asset Sales	$710	$2,833	$0	$0	$0
Net Cash Flow	**$202**	**$11**	**($121)**	**($251)**	**($321)**
Cash Balance	**$2,699**	**$2,712**	**$2,591**	**$2,341**	**$2,020**
Long Term Debt	$13,081	$10,237	$10,237	$10,237	$10,237
Shareholders' Equity & Minority Interest	$12,862	$13,005	$12,928	$12,719	$12,459
Total EBITDA	$3,962	$3,687	$2,583	$2,347	$2,174
Debt to Total Capital	50%	44%	44%	45%	45%
LTD-to-EBITDA	3.3x	2.8x	4.0x	4.4x	4.7x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$2,699	$2,949	$3,222	$3,285	$3,268
$1,100/oz	$2,699	$2,712	$2,591	$2,341	$2,020
$1,000/oz	$2,699	$2,475	$1,961	$1,396	$770

Source: Company reports, RBC Capital Markets estimates

- We believe that Barrick can maintain a positive cash balance down to $1,000/oz gold over the next three years after the divestments of Cowal ($550MM), Porgera ($298MM for 50%), and Zaldivar (est. $2B), and the expected $2.85B debt repayment this year.
- In a $1,100/oz gold price environment, we estimate sustaining capital to average $1.4B at its 14 gold mines and two copper mines over the next three years. Over the next three years, we forecast total new project investments at Goldrush and Cortez Hills of $300MM, as well as $250MM in maintenance spending at Pascua Lama and $300MM expansion spending at Turquoise Ridge.
- Further liquidity could be generated from the potential sales of equity stakes of Acacia Mining (~$1Bn) and the Jabil Sayid copper mine ($200MM).
- While the asset sales are expected to have a near-term positive impact on the LTD-to-EBITDA ratio, the loss of the EBITDA from the asset sales is not forecast to improve this ratio at $1,100 gold and $2.51 copper price assumptions.
- We believe there is room for Barrick to reduce its dividend further.

Exhibit 5: Gold Fields metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	2,219	1,943	2,040	1,970	1,970
All-in Sustaining Costs - AISC ($/oz)	$1,016	$1,002	$926	$920	$920
Operating Cash Flow	$849	$700	$627	$633	$592
Project Capex	($39)	$0	$0	$0	$0
Sustaining Capex	($570)	($592)	($521)	($506)	($506)
Total Capex	($609)	($592)	($521)	($506)	($506)
Operating Free Cash Flow	**$240**	**$108**	**$107**	**$127**	**$86**
Debt Repayments	($592)	$0	$0	$0	$0
Borrowings	$466	$0	$0	$0	$0
Net Borrowings:	($126)	$0	$0	$0	$0
Free Cash Flow to Equity	**$114**	**$108**	**$107**	**$127**	**$86**
Dividends	($40)	$0	$0	$0	$0
Other	$78	$0	$0	$0	$0
Net Cash Flow	**$152**	**$108**	**$107**	**$127**	**$86**
Cash Balance	**$458**	**$566**	**$673**	**$800**	**$886**
Long Term Debt	$1,766	$1,766	$1,766	$1,766	$1,766
Shareholders' Equity	$3,663	$3,606	$3,604	$3,601	$3,606
Total EBITDA	$1,091	$808	$859	$843	$843
Debt to Total Capital	33%	33%	33%	33%	33%
LTD-to-EBITDA	1.6x	2.2x	2.1x	2.1x	2.1x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$458	$662	$910	$1,177	$1,403
$1,100/oz	$458	$566	$673	$800	$886
$1,000/oz	$458	$470	$436	$423	$370

Source: Company reports, RBC Capital Markets estimates

- We assume that Gold Fields places South Deep on care and maintenance under a weaker gold price scenario unless very significant improvements in production and costs can be realized over the short term.
- If Gold Fields were to place South Deep on care and maintenance, the company would be FCF positive in 2015 and 2016 at US$1,100/oz. Assuming that South Deep is placed on care and maintenance, we believe that the company should remain within its key 2.5x net debt:EBITDA covenant.
- We believe that at US$1,100/oz and at US$1,000/oz, the company would be likely to suspend the dividend.

Exhibit 6: Goldcorp metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price ($/oz)	$19.09	$15.52	$14.50	$14.50	$14.50
Gold Production (Koz)	2,873	3,373	3,508	3,619	3,590
All-in Sustaining Costs - AISC ($/oz)	$943	$921	$876	$813	$817
Operating Cash Flow	$1,242	$1,371	$1,404	$1,577	$1,505
Project Capex	($1,234)	($412)	($450)	($450)	($150)
Sustaining Capex	($716)	($848)	($825)	($763)	($706)
Total Capex	($1,951)	($1,259)	($1,275)	($1,213)	($856)
Operating Free Cash Flow	**($709)**	**$112**	**$129**	**$364**	**$649**
Debt Repayments	($154)	($3)	$0	$0	$0
Borrowings	$1,223	$300	$0	$0	$0
Net Borrowings /(repayments):	$1,069	$297	$0	$0	$0
Free Cash Flow to Equity	**$360**	**$409**	**$129**	**$364**	**$649**
Dividends	($488)	($491)	($492)	($492)	($492)
Other	($62)	$808	$0	$0	$0
Net Free Cash Flow	**($190)**	**$726**	**($363)**	**($128)**	**$157**
Cash Balance	**$535**	**$1,263**	**$900**	**$772**	**$929**
Long Term Debt	$3,592	$3,790	$3,640	$3,640	$3,640
Shareholders' Equity	$16,960	$16,931	$17,122	$17,095	$17,039
Total EBITDA	$1,069	$1,377	$1,420	$1,635	$1,591
Debt to Total Capital	17%	18%	18%	18%	18%
LTD-to-EBITDA	3.4x	2.8x	2.6x	2.2x	2.3x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold/Silver Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$535	$1,428	$1,342	$1,478	$1,898
$1,100/oz	**$535**	**$1,263**	**$900**	**$772**	**$929**
$1,000/oz	$535	$1,095	$443	$185	$182

Source: Company reports, RBC Capital Markets estimates

- With one of the lowest AISC costs of the large cap producers, we estimate that Goldcorp can maintain a positive cash position at $1,000/oz gold over the next three years. We assume $1B in new mine capital at Penasquito for the CEP and tailings leach projects, and ~$800MM in average annual sustaining capital. We assume that projects such as Camino Rojo, Musselwhite shaft, Eleonore plant expansion, and the Porcupine-Borden optimization are on hold at $1,100 gold.
- With the recent THO divestment of C$1B (US$808MM), we believe the market's concern about the balance sheet has declined. However, at $1,100 gold we would expect the dividend to be reduced.
- At debt to total capital of ~18%, GG's level of debt is the lowest among all of the large cap producers.
- We believe that any acquisition with >$1B cash component would require the company to draw down on the current $1.86B available in the credit facility and likely cut the dividend.

Exhibit 7: Kinross metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,266	$1,153	$1,100	$1,100	$1,100
Gold Production (Koz)	2,710	2,530	2,488	2,449	2,213
All-in Sustaining Costs - AISC ($/oz)	$965	$1,039	$1,048	$1,037	$1,037
Operating Cash Flow	$858	$789	$618	$583	$451
Project Capex	($257)	($143)	($38)	($36)	($33)
Sustaining Capex	($408)	($489)	($446)	($480)	($369)
Total Capex	($665)	($632)	($484)	($516)	($402)
Operating Free Cash Flow	**$193**	**$157**	**$134**	**$67**	**$48**
Debt Repayments	($980)	($80)	($270)	$0	($500)
Borrowings	$913	$20	$0	$0	$0
Net Borrowings:	($67)	($60)	($270)	$0	($500)
Free Cash Flow to Equity	**$126**	**$97**	**($136)**	**$67**	**($452)**
Dividends	$0	$0	$0	$0	$0
Other	$99	($44)	$0	$0	$0
Net Cash Flow	**$224**	**$53**	**($136)**	**$67**	**($452)**
Cash Balance	**$984**	**$1,037**	**$901**	**$968**	**$516**
Long Term Debt	$2,058	$2,052	$1,782	$1,782	$1,282
Shareholders' Equity & Minority Interest	$4,791	$4,706	$4,643	$4,680	$4,684
Debt to Total Capital	30%	30%	28%	28%	21%
LTD-to-EBITDA	1.9x	2.7x	3.1x	3.2x	2.7x

Source: Company reports, RBC Capital Markets estimates

- We assume that Kinross stops all spending on its 100%-owned $1.6B Tasiast brownfields development project in Mauritania; as a result, it could maintain a positive cash balance down to $1,100 gold over the next three years, and it could also pay down an estimated $830 million in debt due over that time. At $1,000/oz gold, we forecast the $500 million term loan to be rolled in order to remain a positive cash balance.
- Given that we expect Kinross's production profile to decline in 2018 without the Tasiast brownfields expansion, and in the current $1,100/oz price environment, we could see the company invest $500–750 million of its cash to acquire a producing or near-producing asset without impacting its near-term financial liquidity.

Exhibit 8: Newmont metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	4,844	4,799	5,182	5,295	5,170
All-in Sustaining Costs - AISC ($/oz)	$1,006	$1,016	$1,018	$1,004	$1,021
Operating Cash Flow	$1,451	$2,025	$1,641	$1,934	$1,161
Project Capex	($482)	($718)	($449)	($238)	($77)
Sustaining Capex	($748)	($907)	($832)	($851)	($782)
Total Capex	($1,229)	($1,624)	($1,281)	($1,089)	($859)
Operating Free Cash Flow	**$222**	**$401**	**$361**	**$845**	**$302**
Debt Repayments	($686)	($780)	($221)	($196)	$0
Borrowings	$601	$0	$0	$0	$0
Net Borrowings/(repayments):	($85)	($780)	($221)	($196)	$0
Free Cash Flow to Equity	**$137**	**($379)**	**$140**	**$649**	**$302**
Dividends	($114)	($50)	($50)	($50)	($50)
Net Asset Acquisition/Sales	$633	($670)	$0	$0	$0
Equity Issuance	$0	$682	$0	$0	$0
Other	$210	$44	$27	$27	$27
Net Free Cash Flow	**$233**	**($373)**	**$117**	**$626**	**$279**
Cash Balance	**$2,403**	**$2,010**	**$2,127**	**$2,753**	**$3,032**
Long Term Debt	$6,646	$5,877	$5,656	$5,460	$5,460
Shareholders' Equity & Minority Interest	$13,089	$14,449	$14,792	$15,326	$15,252
Total EBITDA	$1,965	$2,514	$2,108	$2,495	$1,391
Debt to Total Capital	29%	25%	24%	22%	22%
LTD-to-EBITDA	3.4x	2.3x	2.7x	2.2x	3.9x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$2,403	$2,183	$2,669	$3,686	$4,345
$1,100/oz	$2,403	$2,010	$2,127	$2,753	$3,032
$1,000/oz	$2,403	$1,838	$1,585	$1,822	$1,719

Source: Company reports, RBC Capital Markets estimates

- Newmont is expected to benefit from significant Cu-Au cash flows from Batu Hijau from 2015 to 2017, before returning to a low-grade, waste stripping phase. As such, we forecast that the company can generate enough cash at $1,100 gold to fund development at Merian, Long Canyon, Turquoise Ridge, and CC&V, which we have included in our analysis. However, we note that the expected debt repayments of $1.4B in 2019 would put significant strain on the balance sheet at these price levels.
- The company has good operating discipline, and should gold decline below $1,100/oz, we would expect the closure of some of its higher-cost assets, potentially some of the higher-cost Nevada open pits and some of the Yanacocha operations.

Exhibit 9: Acacia metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	642	719	797	857	798
All-in Sustaining Costs - AISC ($/oz)	$732	$714	$610	$624	$643
Operating Cash Flow	$290	$226	$273	$280	$276
Project Capex	($60)	($40)	($3)	($3)	($10)
Sustaining Capex	($187)	($188)	($187)	($177)	($137)
Total Capex	($247)	($228)	($190)	($180)	($147)
Operating Free Cash Flow	**$43**	**($2)**	**$83**	**$100**	**$129**
Debt Repayments	$0	($22)	($26)	($28)	($32)
Borrowings	$0	$0	$0	$0	$0
Net Borrowings:	$0	($22)	($26)	($28)	($32)
Free Cash Flow to Equity	**$43**	**($24)**	**$57**	**$72**	**$97**
Dividends	($14)	($12)	($25)	($19)	($14)
Other	($15)	$0	$0	$5	$0
Net Cash Flow	**$14**	**($36)**	**$32**	**$58**	**$84**
Cash Balance	**$294**	**$258**	**$290**	**$349**	**$432**
Long Term Debt	$128	$106	$80	$52	$20
Shareholders' Equity	$1,997	$2,046	$2,144	$2,227	$2,282
Total EBITDA	$252	$245	$336	$303	$265
Debt to Total Capital	6%	5%	4%	2%	1%
LTD-to-EBITDA	0.5x	0.4x	0.2x	0.2x	0.1x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014A**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$294	$291	$390	$518	$669
$1,100/oz	$294	$258	$290	$349	$432
$1,000/oz	$294	$225	$192	$179	$196

Source: Company reports, RBC Capital Markets estimates

- Acacia has no development projects outside of its existing operations. Given the importance of the ramp-up at Bulyanhulu and the development of the underground mine at North Mara, we assume that these continue to be funded.
- At US$1,100, we expect Acacia to finish 2015 with cash of US$258 million, falling to US$225 million at US$1,000/oz. For 2016, the YE cash should be US$290 million at US1,100/oz, falling to US$192 million at US$1,000/oz. The company would be FCF negative for 2015 at US$1,100, before returning to FCF positive in 2016. Under the US$1,000/oz scenario, Acacia would be FCF negative in both years.
- We assume the payment of a US$12 million dividend for 2015 at US$1,100/oz, declining to US$3 million at US$1,000/oz. The company should be able to maintain a dividend based on the current policy at US$1,000/oz.

Exhibit 10: Agnico Eagle metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price Assumption	$1,263	$1,153	$1,100	$1,100	$1,100
Gold Production (Koz)	1,428	1,619	1,601	1,540	1,504
All-in Sustaining Costs - AISC ($/oz)	$954	$836	$788	$773	$757
Operating Cash Flow	$681	$629	$659	$674	$646
Project Capex	($136)	($130)	($190)	($175)	($150)
Sustaining Capex	($323)	($306)	($241)	($227)	($219)
Total Capex	($459)	($436)	($431)	($402)	($369)
Operating Free Cash Flow	**$222**	**$193**	**$228**	**$272**	**$276**
Debt Repayments	($710)	($113)	($8)	($119)	$0
Borrowings	$1,010	$0	$0	$0	$0
Net Borrowings:	$300	($113)	($8)	($119)	$0
Free Cash Flow to Equity	**$521**	**$81**	**$220**	**$153**	**$276**
Dividends	($54)	($67)	($69)	($69)	($69)
Other	($460)	$15	$0	$0	$0
Net Free Cash Flow	**$7**	**$29**	**$151**	**$84**	**$207**
Cash Balance	**$178**	**$206**	**$357**	**$441**	**$648**
Long Term Debt	$1,375	$1,322	$1,314	$1,195	$1,195
Shareholders' Equity & Minority Interest	$4,068	$4,039	$4,018	$4,020	$4,028
Total EBITDA	$733	$737	$727	$736	$737
Debt to Total Capital	25%	25%	25%	23%	23%
LTD-to-EBITDA	1.9x	1.8x	1.8x	1.6x	1.6x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$178	$278	$571	$786	$1,108
$1,100/oz	$178	$206	$357	$441	$648
$1,000/oz	$178	$130	$133	$74	$153

Source: Company reports, RBC Capital Markets estimates

- The company is expected to see some pressure on its balance sheet at $1,000/oz gold, and we expect that cost-saving measures are being taken after the recent price correction. We assume that the Amaruq-Meadowbank project proceeds with $450 million in spending over three years.
- As management recently highlighted, the focus in the current gold price environment will be capital allocation, and we assume that the company will slow but not stop capital spending at all of its mines at $1,100/oz gold, and slow both exploration and pre-feasibility expenditures. The $119 million in debt due in 2017 will likely get rolled as well, but we do not expect the dividend to be cut further.
- Our forecast of increased operating cash flow in 2016 is largely a result of improved grades at LaRonde as well as overall improvements at the Mexican operations—successful operating execution is a key factor for Agnico's liquidity. The company is also benefiting from weaker currencies at its mines in Canada, Finland, and Mexico.

Exhibit 11: Alamos Gold metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,266	$1,152	$1,100	$1,100	$1,100
Gold Production (Koz)	224	324	454	486	510
All-in Sustaining Costs - AISC ($/oz)	$1,167	$1,047	$917	$888	$865
Operating Cash Flow ($M) - Levered	$55	$72	$138	$155	$168
Ongoing Capex ($M)	($69)	($80)	($80)	($82)	($80)
Growth Capex ($M) - Existing Mines	($97)	($63)	($60)	($40)	($30)
Growth Capex ($M) - New Mines	($18)	($10)	($7)	($7)	-
Total Capex ($M)	($184)	($153)	($147)	($129)	($110)
Operating Free Cash Flow	**($128)**	**($80)**	**($9)**	**$27**	**$58**
Debt Repayments ($M)	($254)	($7)	($7)	($7)	($1)
Total Borrowings ($M)	$310	-	-	-	-
Net Borrowings ($M)	$56	($7)	($7)	($7)	($1)
Free Cash Flow to Equity	**($73)**	**($87)**	**($16)**	**$20**	**$56**
Dividends ($M)	($14)	($20)	($15)	($15)	($15)
Other ($M)	$31	$343	$1	-	-
Net Cash Flow ($M)	**($56)**	**$236**	**($30)**	**$5**	**$41**
Cash - Ending Balance ($M)	**$89**	**$325**	**$294**	**$299**	**$340**
Total Debt	$314	$330	$323	$317	$316
Shareholders' Equity	$1,631	$1,652	$1,588	$1,527	$1,471
Total EBITDA	$80	$103	$161	$183	$198
Debt to Total Capital	16%	17%	17%	17%	18%
Total Debt-to-EBITDA	3.9x	3.2x	2.0x	1.7x	1.6x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold/Silver Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$89	$344	$351	$396	$479
$1,100/oz Au & $14.50/oz Ag	$89	$325	$294	$299	$340
$1,000/oz Au & $13.25/oz Ag	$89	$304	$231	$193	$189

Note: Although Alamos is the name of the merged company, AuRico was technically the acquirer. As a result, all operational and financial data prior to Q3/15 is for AuRico only.
Source: Company reports, RBC Capital Markets estimates

- Following the recent merger between Alamos and AuRico, we expect the combined entity to remain well positioned to withstand lower gold prices in an ex-growth environment given solid and improving sustaining cash flow from its existing operations as well as a relatively strong balance sheet ($315M of long debt due 2020).
- Even at $1,000/oz and paying a semi-annual dividend of $0.03/sh, Alamos's cash balance is expected to remain around $200 million, while funding ongoing development work at Young-Davidson (both upper and lower mines).
- If the company were to pursue the development of Kirazli and Agi Dagi as currently envisioned (not Esperanza), it would likely be able to do so at a price of $1,200/oz without putting its dividend at risk, although at prices below $1,200/oz, the dividend would likely have to be reduced or the projects could be staggered over a longer period.
- If Alamos were to pursue only the development of Esperanza (not Kirazli and Agi Dagi), it could do so without cutting its dividend even at $1,000/oz while maintaining nearly $100 million in cash on hand.
- With critical mass gained following the recent merger, we expect that Alamos could be an active M&A participant should lower prices spur consolidation, either acquiring production from a company struggling with elevated debt or merging with another mid-tier company and generating immediate synergies through corporate overhead redundancies.

Exhibit 12: B2Gold metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price ($/oz)	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price ($/lb)	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	384	521	572	572	554
All-in Sustaining Costs - AISC ($/oz)	$1,101	$966	$894	$894	$934
Operating Cash Flow	$114	$154	$161	$191	$175
Project Capex	($205)	($150)	$0	$0	$0
Sustaining Capex	($80)	($85)	($70)	($70)	($65)
Total Capex	($285)	($235)	($70)	($70)	($65)
Operating Free Cash Flow	**($171)**	**($81)**	**$91**	**$121**	**$110**
Debt Repayments	($22)	($17)	($17)	($116)	$0
Borrowings	$93	$0	$0	$0	$0
Net Borrowings:	$71	($17)	($17)	($116)	$0
Free Cash Flow to Equity	**($100)**	**($98)**	**$74**	**$5**	**$110**
Dividends	$0	$0	$0	$0	$0
Other	($20)	$0	$0	$0	$0
Net Cash Flow	**($120)**	**($98)**	**$74**	**$5**	**$110**
Cash Balance	**$133**	**$35**	**$109**	**$113**	**$223**
Long Term Debt	$379	$362	$345	$229	$229
Shareholders' Equity	$1,525	$1,558	$1,580	$1,607	$1,599
Total EBITDA	$152	$187	$194	$194	$163
Debt to Total Capital	20%	19%	18%	12%	13%
LTD-to-EBITDA	2.5x	1.9x	1.8x	1.2x	1.4x

	Cash Balance Sensitivity Analysis (US$MM)				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$133	$55	$173	$224	$379
$1,100/oz Au & $14.50/oz Ag	$133	$35	$109	$113	$223
$1,000/oz Au & $13.25/oz Ag	$133	$15	$44	$3	$67

Source: Company reports, RBC Capital Markets estimates

- **Able to generate cash flow at lower gold prices:** At lower gold prices, we expect BTO to still generate steady cash flow, with about one-third of total production (ex Fekola) coming from the low-cost Otjikoto mine, which has now been successfully commissioned. At $1,100/oz gold, we model life of mine AISC of $743/oz at Otjikoto and $920/oz on a consolidated basis out to 2020E.
- We expect debt to be serviceable via operating cash flows and model a $116MM repayment in 2017; however, at $1,000 gold we would expect BTO to roll the 2017 debt.
- **Expect Fekola development to continue at $1,100:** The Fekola project, with an initial capex estimate of US$492MM, is currently expected to be fully financed via the recently increased line of credit of $350MM and cash from operations. We expect that at $1,100/oz, project development would continue; however, B2 could decide to slow down capital or put the project on hold should gold prices decline further.
- Note: The numbers exclude the development of Fekola.

Exhibit 13: Centamin metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price	$19.09	$15.75	$15.75	$15.75	$15.75
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	357	377	441	471	499
All-in Sustaining Costs - AISC ($/oz)	$967	$947	$955	$924	$927
Operating Cash Flow	$112	$153	$147	$131	$127
Project Capex	($28)	$0	$0	$0	$0
Sustaining Capex	($60)	($93)	($100)	($111)	($99)
Total Capex	($89)	($93)	($100)	($111)	($99)
Operating Free Cash Flow	**$23**	**$60**	**$47**	**$21**	**$28**
Debt Repayments	$0	$0	$0	$0	$0
Borrowings	$0	$0	$0	$0	$0
Net Borrowings:	$0	$0	$0	$0	$0
Free Cash Flow to Equity	**$23**	**$60**	**$47**	**$21**	**$28**
Dividends	($10)	($32)	($18)	($15)	($9)
Other	$8	$0	$0	$0	$0
Net Cash Flow	**$21**	**$27**	**$29**	**$6**	**$19**
Cash Balance	**$126**	**$153**	**$182**	**$187**	**$206**
Long Term Debt	$0	$0	$0	$0	$0
Shareholders' Equity	$1,333	$1,379	$1,424	$1,466	$1,488
Total EBITDA	$168	$157	$149	$178	$163
Debt to Total Capital	0%	0%	0%	0%	0%
LTD-to-EBITDA	0.0x	0.0x	0.0x	0.0x	0.0x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014E**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$126	$174	$239	$261	$302
$1,100/oz	$126	$153	$182	$187	$206
$1,000/oz	$126	$132	$125	$113	$111

Source: Company reports, RBC Capital Markets estimates

- Centamin passed the point of peak capex at Sukari in 2013 at US$283 million and we expect capex of US$70–110 million per year going forward. Whilst the company has some early-stage projects, we have made no assumption about these being developed.
- Centamin has a robust cash balance, finishing Q1 with cash of US$163 million and no debt. The company should remain FCF positive in 2015 at both US$1,000/oz and US$1,100/oz; however, it would be FCF negative at US$1,000/oz in 2016.
- We believe that Centamin should be in a position to maintain a dividend at US$1,100/oz. It would be FCF negative if the dividend were maintained at US$1,000/oz; however, the strength of the balance sheet should allow it to maintain a dividend if management chose to.

Exhibit 14: Centerra metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	621	532	570	521	599
All-in Sustaining Costs - AISC ($/oz)	$852	$1,244	$1,288	$1,320	$1,201
Operating Cash Flow	$376	$298	$174	$167	($85)
Project Capex	($52)	$0	$0	$0	$0
Sustaining Capex	($243)	($280)	($238)	($269)	($161)
Total Capex	($295)	($280)	($238)	($269)	($161)
Operating Free Cash Flow	**$81**	**$19**	**($65)**	**($102)**	**($246)**
Debt Repayments	$0	$0	$0	$0	$0
Borrowings	$0	$0	$0	$0	$0
Net Borrowings:	$0	$0	$0	$0	$0
Free Cash Flow to Equity	**$81**	**$19**	**($65)**	**($102)**	**($246)**
Dividends	($31)	$0	$0	$0	$0
Other	($92)	($161)	$0	$0	$0
Net Cash Flow	**($43)**	**($142)**	**($65)**	**($102)**	**($246)**
Cash Balance	**$301**	**$158**	**$94**	**($9)**	**($255)**
Long Term Debt	$76	$0	$0	$0	$0
Shareholders' Equity	$1,399	$1,412	$1,306	$1,177	$910
Total EBITDA	$249	$254	$134	$135	($34)
Debt to Total Capital	5%	0%	0%	0%	0%
LTD-to-EBITDA	0.3x	0.0x	0.0x	0.0x	0.0x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$301	$167	$150	$93	($117)
$1,100/oz	$301	$158	$94	($9)	($255)
$1,000/oz	$301	$149	$37	($110)	($392)

Source: Company reports, RBC Capital Markets estimates

- Centerra would be FCF negative under all three scenarios from 2015 to 2018.
- Under a weaker gold price scenario, we have assumed that the company ends the development of the Gatsuurt, Oksut, and Hard Rock. We have assumed that it continues to fund the pre-stripping and development work at Kumtor, although it would need additional funding at US$1,100/oz in 2017. At current prices, we believe that CG may need to review the Kumtor mine plan, potentially moving to a harvest strategy with less stripping even if this shortens the mine life.
- Although Centerra has a relatively strong balance sheet, we believe that it would need to suspend the dividend in 2016 at US$1,100/oz and in 2015 at US$1,000/oz.

Exhibit 15: Detour Gold metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,266	$1,153	$1,100	$1,100	$1,100
Gold Production (Koz)	457	491	529	566	597
All-in Sustaining Costs - AISC ($/oz)	$1,289	$1,096	$942	$878	$852
Operating Cash Flow - Levered	$95	$133	$164	$205	$252
Ongoing Capex	($132)	($125)	($106)	($104)	($106)
Growth Capex - Existing Mines	-	-	-	($25)	($50)
Growth Capex - New Mines	$0	-	-	-	-
Total Capex	($132)	($125)	($106)	($129)	($156)
Operating Free Cash Flow	**($37)**	**$8**	**$58**	**$75**	**$96**
Debt Repayments	($40)	($124)	-	($500)	-
Total Borrowings	-	-	-	-	-
Net Borrowings	($40)	($124)	-	($500)	-
Free Cash Flow to Equity	**($77)**	**($116)**	**$58**	**($425)**	**$96**
Dividends	-	-	-	-	-
Equity issued including exercise of ITM options/wa	$155	$123	-	-	-
Other	($24)	($11)	($0)	$0	($0)
Net Cash Flow	**$54**	**($4)**	**$58**	**($425)**	**$96**
Cash - Ending Balance	**$135**	**$129**	**$186**	**($238)**	**($143)**
Total Debt	$526	$500	$500	-	-
Shareholders' Equity	$1,848	$1,798	$1,769	$1,767	$1,797
Total EBITDA	$112	$154	$184	$224	$248
Debt to Total Capital	22%	22%	22%	0%	0%
Total Debt-to-EBITDA	n.m.	3.3x	2.7x	0.0x	0.0x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$135	$151	$261	($107)	$49
$1,100/oz Au & $14.50/oz Ag	$135	$129	$186	($238)	($143)
$1,000/oz Au & $13.25/oz Ag	$135	$106	$112	($370)	($334)

Source: Company reports, RBC Capital Markets estimates

- With significant operational improvement delivered over the past several months and the benefit of a weaker Canadian dollar and lower fuel prices, Detour is less susceptible to declining metal prices now than it has been over the last 12–24 months.
- While processed grades are expected to remain below reserve grades for the next couple of years and capital intensity is likely to remain elevated, we expect Detour to be able to generate positive operating free cash flow (prior to debt repayments) down to $1,000/oz gold.
- At our current operational assumptions, we estimate that Detour would be able to maintain sufficient liquidity through 2016 at prices below $1,000/oz gold but would need to repay $500 million of convertible debt due in November 2017.
- Given positive, albeit minimal, operating free cash flow at $1,000/oz, we expect that Detour would likely be able to restructure its long-term debt when a $500M convertible facility comes due in late 2017, either by issuing longer-term debt or extending the term of its convertible debt with existing holders in exchange for a lower conversion price.
- We also expect that Detour could become a takeover target for a larger producer looking to gain access to a long-life asset, located in a mining-friendly jurisdiction, with a sizeable reserve base and regional exploration potential.

Exhibit 16: Eldorado Gold metrics at $1,100/oz gold and $14.50/oz silver

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,268	$1,156	$1,100	$1,100	$1,100
Gold Production (Koz)	743	641	729	847	899
All-in Sustaining Costs - AISC ($/oz)	$798	$990	$812	$707	$681
Operating Cash Flow - Levered (100% Basis)	$340	$181	$306	$486	$527
Ongoing Capex	($109)	($160)	($129)	($174)	($171)
Growth Capex - Existing Mines	($12)	($10)	($80)	($144)	($89)
Growth Capex - New Mines	($263)	($390)	($270)	-	-
Total Capex	($384)	($560)	($479)	($317)	($260)
Operating Free Cash Flow	**($44)**	**($379)**	**($173)**	**$169**	**$268**
Debt Repayments	($33)	($24)	-	-	-
Total Borrowings	$33	$8	-	-	-
Net Borrowings	$0	($16)	-	-	-
Free Cash Flow to Equity	**($44)**	**($395)**	**($173)**	**$169**	**$268**
Dividends	($13)	($6)	-	-	-
Dividends to minority partners - net capital calls	($12)	($1)	($9)	($12)	($11)
Other	($21)	($37)	-	($0)	-
Net Cash Flow	**($91)**	**($439)**	**($182)**	**$157**	**$257**
Cash - Ending Balance	**$502**	**$108**	**($74)**	**$83**	**$340**
Total Debt	$604	$600	$600	$600	$600
Shareholders' Equity	$5,876	$5,827	$5,867	$6,027	$6,210
Total EBITDA	$455	$256	$354	$540	$583
Debt to Total Capital	10%	10%	10%	10%	10%
Total Debt-to-EBITDA	1.3x	2.3x	1.7x	1.1x	1.0x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$502	$133	$14	$250	$592
$1,100/oz Au & $14.50/oz Ag	$502	$108	($74)	$83	$340
$1,000/oz Au & $13.25/oz Ag	$502	$82	($166)	($91)	$79

Source: Company reports, RBC Capital Markets estimates

- While Eldorado may need modest additional capital to complete the development of Skouries, Olympias Phase II & III, and Eastern Dragon as currently planned at gold prices below $1,200/oz, we believe the company is likely to continue its strategy of prioritizing growth opportunities based on projected returns to ensure that cash outflows are better aligned with cash inflows.
- In addition, the company's balance sheet could be further strengthened if the proposed divestment (either full sale or partial listing) of its China-based assets is completed.
- Overall, Eldorado is reasonably well positioned to withstand lower metal prices given low-cost operations, capital flexibility, and ability to access additional capital.

Exhibit 17: IAMGOLD metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,266	$1,153	$1,100	$1,100	$1,100
Gold Production (Koz)	844	810	796	774	752
All-in Sustaining Costs - AISC ($/oz)	$1,090	$1,139	$1,088	$1,044	$982
Operating Cash Flow - Levered	$273	$111	$84	$135	$202
Ongoing Capex	($152)	($170)	($151)	($139)	($132)
Growth Capex - Existing Mines	($96)	($65)	($38)	($30)	($23)
Growth Capex - New Mines	($104)	($8)	-	-	-
Total Capex	($352)	($243)	($189)	($169)	($154)
Operating Free Cash Flow	**($80)**	**($132)**	**($105)**	**($34)**	**$48**
Debt Repayments	-	($12)	($280)	($10)	($8)
Total Borrowings	-	-	-	-	-
Net Borrowings	-	($12)	($280)	($10)	($8)
Free Cash Flow to Equity	**($80)**	**($144)**	**($385)**	**($44)**	**$39**
Dividends	($4)	-	-	-	-
Other	$41	$566	-	-	-
Net Cash Flow	**($43)**	**$422**	**($385)**	**($44)**	**$39**
Cash - Ending Balance	**$300**	**$728**	**$343**	**$299**	**$338**
Long Term Debt	$642	$672	$393	$383	$375
Shareholders' Equity	$2,664	$2,548	$2,376	$2,243	$2,171
Total EBITDA	$372	$178	$150	$187	$231
Debt to Total Capital	19%	21%	14%	15%	15%
LTD-to-EBITDA	1.7x	3.8x	2.6x	2.1x	1.6x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$312	$776	$458	$485	$593
$1,100/oz Au & $14.50/oz Ag	$300	$728	$343	$299	$338
$1,000/oz Au & $13.25/oz Ag	$289	$681	$230	$119	$90

Note: Cash balance includes bullion at implied gold price
Source: Company reports, RBC Capital Markets estimates

- Assuming that cash proceeds from the recent $500 million sale of Niobec and $62.5 million Diavik Royalty sale are not spent on an acquisition, Iamgold's balance sheet should allow it to withstand lower gold prices (assumes that potential unspent proceeds are used to repurchase bonds in Q2/16 as per the company's bond indenture).
- While the company is unlikely to generate meaningful free cash flow at $1,100/oz gold, it would be expected to maintain sufficient liquidity through 2018, down to $1,000/oz.
- Although the company's balance sheet is in a stronger position following the sales of Niobec and Diavik Royalty, we caution investors that Iamgold is seeking to make an acquisition that could change not only its balance sheet strength but also its free cash flow potential.

Exhibit 18: New Gold metrics at $1,100/oz gold and $14.50/oz silver

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price ($/oz)	$19.08	$15.52	$14.50	$14.50	$14.50
Copper Price ($/lb)	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	380	412	361	399	528
All-in Sustaining Costs - AISC ($/oz)	$776	$856	$594	$655	$747
Operating Cash Flow - Levered	$258	$194	$228	$197	$237
Ongoing Capex	($130)	($122)	($82)	($82)	($108)
Growth Capex - Existing Mines	($55)	($20)	($10)	($25)	($72)
Growth Capex - New Mines (less El Morro)	($86)	($307)	($281)	($214)	-
Total Capex	($271)	($449)	($373)	($321)	($180)
Operating Free Cash Flow	**($13)**	**($255)**	**($145)**	**($124)**	**$57**
Debt Repayments	-	-	-	-	-
Total Borrowings	-	-	-	-	-
Net Borrowings	-	-	-	-	-
Free Cash Flow to Equity	**($13)**	**($255)**	**($145)**	**($124)**	**$57**
Dividends	-	-	-	-	-
Other	($28)	$102	$84	-	-
Net Cash Flow	**($41)**	**($153)**	**($61)**	**($124)**	**$57**
Cash - Ending Balance	**$371**	**$214**	**$153**	**$30**	**$87**
Total Debt (less El Morro)	$800	$800	$800	$800	$800
Shareholders' Equity	$2,271	$2,296	$2,434	$2,430	$2,413
Total EBITDA	$270	$234	$258	$241	$284
Debt to Total Capital	26%	26%	25%	25%	25%
Debt-to-EBITDA	3.0x	3.4x	3.1x	3.3x	2.8x

	Estimated Year-End Cash Balance After Financing				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$371	$243	$212	$122	$227
$1,100/oz Au & $14.50/oz Ag	$371	$214	$153	$30	$87
$1,000/oz Au & $13.25/oz Ag	$371	$185	$92	($69)	($63)

Source: Company reports, RBC Capital Markets estimates

- Following the recent streaming agreement with Royal Gold, we expect New Gold to continue advancing Rainy River even in a weaker commodity price environment.
- While additional funding could be required at gold prices below $1,100/oz, we do not expect that New Gold would put its balance sheet at risk in order to build the project, and as such, we expect that it would most likely look to defer or slow play development in order to ensure that sufficient capital were on hand at all times.
- Recall that in late 2008, the company placed its flagship New Afton mine on care-and-maintenance mid-build in order to protect the balance sheet and already extended the development schedule of Rainy River to 30 months from 24 months.
- While we expect the company to continue advancing Rainy River, should the project be put on hold, New Gold would be well positioned to withstand lower gold and silver prices, with the company able to generate solid operating free cash flow even below $1,000/oz.

Exhibit 19: Polymetal metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Equiv. Production (Koz)	1,429	1,387	1,319	1,317	1,195
AISC ($/AuEq oz)	$859	$790	$824	$828	$858
Operating Cash Flow	$515	$331	$361	$318	$302
Project Capex	($249)	$0	$0	$0	$0
Sustaining Capex	($249)	($190)	($199)	($200)	($135)
Total Capex	($499)	($190)	($199)	($200)	($135)
Operating Free Cash Flow	**$16**	**$141**	**$161**	**$118**	**$167**
Debt Repayments	($252)	($236)	($56)	($404)	$0
Borrowings	$454	$236	$56	$404	$0
Net Borrowings:	$202	$0	$0	$0	$0
Free Cash Flow to Equity	**$217**	**$141**	**$161**	**$118**	**$167**
Dividends	($65)	($23)	($20)	($19)	($6)
Other	($25)	($0)	$0	$0	($0)
Net Cash Flow	**$127**	**$119**	**$141**	**$99**	**$161**
Cash Balance	**$157**	**$276**	**$417**	**$515**	**$676**
Long Term Debt	$814	$814	$814	$814	$814
Shareholders' Equity	$869	$943	$1,070	$1,184	$1,257
Total EBITDA	$685	$437	$413	$407	$344
Debt to Total Capital	48%	46%	43%	41%	39%
LTD-to-EBITDA	1.2x	1.9x	2.0x	2.0x	2.4x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$157	$331	$531	$688	$902
$1,100/oz	$157	$276	$417	$515	$676
$1,000/oz	$157	$218	$295	$330	$420

Source: Company reports, RBC Capital Markets estimates

- We have assumed that Polymetal does not progress with the development of the Kyzyl project in Kazakhstan or the Svetloye project in Russia under the weaker gold price scenarios.
- Whilst Polymetal has relatively high gearing, it also has relatively low operating costs that have been driven lower by the weakness of the Rouble. There is some refinancing risks to the debt with US$306 million maturing in 2016 and US$459 million in 2018. We expect Polymetal to remain FCF positive at both US$1,100/oz and US$1,000/oz. The company could test its debt covenants at US$1,000/oz but should remain within its covenants at US$1,100.
- Polymetal should be able to maintain a dividend under a US$1,100/oz scenario; however, we would expect the dividend to be suspended at US$1,000/oz.

Exhibit 20: Randgold at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	$910	$1,147	$1,212	$1,293	$1,316
All-in Sustaining Costs - AISC ($/oz)	$816	$780	$740	$730	$733
Operating Cash Flow	$318	$381	$354	$364	$347
Project Capex	($161)	($328)	($117)	($65)	($32)
Sustaining Capex	($70)	($70)	($70)	($70)	($70)
Total Capex	($231)	($398)	($187)	($135)	($102)
Operating Free Cash Flow	**$87**	**($18)**	**$167**	**$229**	**$245**
Debt Repayments	($50)	$0	$0	$0	$0
Borrowings	$50	$0	$0	$0	$0
Net Borrowings:	$0	$0	$0	$0	$0
Free Cash Flow to Equity	**$87**	**($18)**	**$167**	**$229**	**$245**
Dividends	($43)	($58)	($61)	($64)	($67)
Other	$1	$0	$0	$0	$0
Net Cash Flow	**$45**	**($76)**	**$106**	**$165**	**$179**
Cash Balance	**$83**	**$7**	**$113**	**$278**	**$456**
Long Term Debt	$3	$3	$3	$3	$3
Shareholders' Equity	$3,098	$3,190	$3,256	$3,337	$3,426
Total EBITDA	$467	$256	$266	$299	$320
Debt to Total Capital	0%	0%	0%	0%	0%
LTD-to-EBITDA	0.0x	0.0x	0.0x	-0.1x	-0.1x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$83	$55	$242	$497	$767
$1,100/oz	$83	$7	$113	$278	$456
$1,000/oz	$83	($42)	($18)	$57	$144

Source: Company reports, RBC Capital Markets estimates

- We assume that Randgold completes the development of Kibali in the DRC but develops no new projects, such as Massawa in Senegal. The company should see a significant pullback in capital expenditure, from US$400 million in 2015E to US$188 million in 2016E. Randgold finished Q1 with US$141 million of cash and no drawn debt.
- Randgold should be FCF negative in 2015 under all of the scenarios tested due to the capex at Kibali. The company should be FCF positive under all three scenarios in future years.
- We believe that Randgold should be able to maintain a dividend under all scenarios and we would expect payment to continue in 2015, supported by the strength of the balance sheet.

Exhibit 21: Yamana metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,267	$1,152	$1,100	$1,100	$1,100
Silver Price ($/oz)	$18.98	$15.53	$14.50	$14.50	$14.50
Copper Price ($/lb)	$3.12	$2.85	$2.51	$2.51	$2.51
Gold Production (Koz)	1,179	1,297	1,359	1,410	1,455
All-in Sustaining Costs - AISC ($/oz) - RBC	$942	$894	$811	$804	$786
Operating Cash Flow - Levered	$476	$417	$517	$555	$624
Ongoing Capex	($304)	($264)	($239)	($251)	($253)
Growth Capex - Existing Mines	($212)	($127)	($153)	($108)	($83)
Growth Capex - New Mines	($119)	($47)	($45)	($15)	-
Total Capex	($634)	($438)	($436)	($373)	($335)
Operating Free Cash Flow	**($158)**	**($21)**	**$81**	**$181**	**$289**
Debt Repayments	($520)	($287)	($99)	($57)	($110)
Total Borrowings	$1,294	$51	-	-	-
Net Borrowings	$774	($236)	($99)	($57)	($110)
Free Cash Flow to Equity	**$616**	**($257)**	**($19)**	**$124**	**$179**
Dividends	($143)	($55)	($57)	($57)	($57)
Other	($757)	$133	($0)	-	-
Net Cash Flow	**($284)**	**($180)**	**($75)**	**$68**	**$122**
Cash - Ending Balance	**$191**	**$8**	**($67)**	**$1**	**$123**
Total Debt	$2,060	$1,848	$1,749	$1,692	$1,582
Shareholders' Equity & Minority Interests	$6,733	$6,626	$6,499	$6,413	$6,381
Total EBITDA	$647	$581	$636	$675	$715
Debt to Total Capital	23%	22%	21%	21%	20%
Total Debt-to-EBITDA	3.2x	3.2x	2.7x	2.5x	2.2x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$191	$70	$119	$314	$559
$1,100/oz Au & $14.50/oz Ag	$191	$8	($67)	$1	$123
$1,000/oz Au & $13.25/oz Ag	$191	($55)	($257)	($317)	($332)

Source: Company reports, RBC Capital Markets estimates

- Assuming that development of Cerro Moro does not move forward, Yamana would be expected to maintain a solid balance sheet at a gold price of $1,200/oz.
- At $1,100/oz, the company would likely need to eliminate its dividend ($57 million annually).
- The company’s balance sheet could be strengthened if the proposed initial public offering of its Brio Gold subsidiary is completed.
- Given that Yamana is expected to generate improving operating free cash flow over the coming years under an ex-growth scenario, we believe the company would be in a position to refinance its debt if necessary.
- Although Cerro Moro is expected to generate strong returns, we believe the company’s main focus should be on reducing the level of debt taken on following the acquisition of Canadian Malartic.
- Based on current debt outstanding, Yamana’s annual interest payments are forecast at $90 million annually.

Exhibit 22: Alacer metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (U$MM)					
Gold Price ($/oz)	$1,270	$1,151	$1,100	$1,100	$1,100
Gold Production (Koz)	182	152	133	141	196
All-in Sustaining Costs - AISC ($/oz)	$708	$788	$799	$802	$759
Operating Cash Flow ($M) - Levered (100% Basis)	$148	$103	$61	$65	$87
Ongoing Capex ($M)	($18)	($34)	($9)	($10)	($19)
Growth Capex ($M) - Existing Mines	$0	$0	$0	$0	$0
Growth Capex ($M) - New Mines	($31)	($104)	($275)	($251)	($57)
Total Capex ($M) - 100% Basis	($49)	($137)	($284)	($261)	($77)
Operating Free Cash Flow	**$98**	**($34)**	**($223)**	**($196)**	**$11**
Debt Repayments ($M)	-	-	-	-	-
Total Borrowings ($M)	-	-	-	-	-
Net Borrowings ($M)	-	-	-	-	-
Free Cash Flow to Equity	**$98**	**($34)**	**($223)**	**($196)**	**$11**
Dividends ($M)	($6)	-	-	-	-
Dividends to minority partners ($M) - net capital calls	($22)	$0	$13	$45	$24
Other ($M)	($13)	($12)	($0)	-	-
Net Cash Flow ($M)	**$57**	**($47)**	**($210)**	**($151)**	**$35**
Cash - Ending Balance ($M)	**$347**	**$300**	**$90**	**($61)**	**($27)**
Long Term Debt	-	-	-	-	-
Shareholders' Equity & Minority Interests	$171	$167	$183	$204	$258
Total EBITDA	$149	$102	$58	$62	$85
Debt to Total Capital	0%	0%	0%	0%	0%
LTD-to-EBITDA	0.0x	0.0x	0.0x	0.0x	0.0x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$347	$308	$111	($27)	$28
$1,100/oz Au & $14.50/oz Ag	$347	$300	$90	($61)	($27)
$1,000/oz Au & $13.25/oz Ag	$347	$292	$69	($96)	($82)

Source: Company reports, RBC Capital Markets estimates

- Assuming that the company continues to move ahead with the Copler Sulphide project, we estimate that it would require an additional ~$75-–100 million in cash to complete the project at $1,200/oz, while at $1,000/oz gold, development would likely require an additional $150 million.
- We note that the company recently put in place a $250 million senior secured credit facility to cover any potential capital shortfall during development/ramp-up, although, for this analysis, we assumed that companies do not draw on existing credit facilities given that many banks are likely reviewing the credit risk of the gold miners.
- In an ex-growth scenario, Alacer is well positioned to withstand lower gold prices given solid operating free cash flow from the Oxide operation and a strong balance sheet (no debt), which we estimate would allow Alacer’s cash position to remain above $300 million even at $1,000/oz.
- We expect that Alacer could be a potential M&A player should lower prices spur industry consolidation given that its strong balance sheet could make it a takeover target for a company looking to shore up its balance or the company could look to leverage its balance sheet to acquire production from a company struggling with elevated debt at lower gold prices.

Exhibit 23: Argonaut metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price ($/oz)	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price ($/lb)	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	$133	$138	$135	$135	$135
All-in Sustaining Costs - AISC ($/oz)	$915	$981	$957	$955	$954
Operating Cash Flow	$38	$38	$26	$28	$29
Project Capex	($38)	($35)	($10)	($5)	$0
Sustaining Capex	($17)	($21)	($11)	($11)	($11)
Total Capex	($55)	($56)	($21)	($16)	($11)
Operating Free Cash Flow	**($17)**	**($18)**	**$5**	**$12**	**$18**
Debt Repayments	($12)	$0	$0	$0	$0
Borrowings	$6	$0	$0	$0	$0
Net Borrowings:	($6)	$0	$0	$0	$0
Free Cash Flow to Equity	**($23)**	**($18)**	**$5**	**$12**	**$18**
Dividends	$0	$0	$0	$0	$0
Other	($3)	$0	$0	$0	$0
Net Cash Flow	**($26)**	**($18)**	**$5**	**$12**	**$18**
Cash Balance	**$51**	**$34**	**$39**	**$51**	**$69**
Long Term Debt	$8	$8	$8	$8	$8
Shareholders' Equity	$786	$778	$764	$749	$731
Total EBITDA	$49	$42	$27	$28	$28
Debt to Total Capital	1%	1%	1%	1%	1%
LTD-to-EBITDA	0.2x	0.2x	0.3x	0.3x	0.3x

	Cash Balance Sensitivity Analysis (US$MM)				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$51	$39	$54	$77	$105
$1,100/oz Au & $14.50/oz Ag	$51	$34	$39	$51	$69
$1,000/oz Au & $13.25/oz Ag	$51	$28	$24	$25	$32

Source: Company reports, RBC Capital Markets estimates

- **Argonaut – Growth projects could be deferred to preserve balance sheet strength.**
- **Limited cash flow generation at lower gold prices:** At $1,000/oz gold, we expect limited ability for Argonaut to generate positive free cash flow, and capital spending would need to be monitored closely at El Castillo and La Colorada. The low-grade nature of El Castillo (0.36g/t reserve grade) makes it sensitive to changes in grades, costs, and recoveries.
- **Projects could be deferred if necessary:** Argonaut ended Q2/15 with a cash balance of $44MM after paying $20MM to Silver Standard to complete the San Agustin transaction. Argonaut is proposing a relatively small, low-capital approach to San Agustin that could likely be moved forward with current liquidity. Additional debt or equity funding could be required for San Antonio if permits are received. The Magino project in Northern Ontario would require significant additional funding, and we estimate initial capex of $400MM. All of these projects are discretionary and could be deferred if necessary if low gold prices persist.
- Note: The numbers exclude the growth projects San Agustin, San Antonio, and Magino.

Exhibit 24: Dundee metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price ($/oz)	$19.00	$15.50	$14.50	$14.50	$14.50
Copper Price ($/lb)	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	145	143	149	167	166
All-in Sustaining Costs - AISC ($/oz)	$887	$1,021	$997	$922	$928
Operating Cash Flow	$98	$69	$70	$90	$91
Project Capex	($155)	($10)	$0	$0	$0
Sustaining Capex	($47)	($45)	($45)	($45)	($45)
Total Capex	($202)	($55)	($45)	($45)	($45)
Operating Free Cash Flow	**($104)**	**$14**	**$25**	**$45**	**$46**
Debt Repayments	($24)	($16)	($56)	($15)	$0
Borrowings	$87	$40	$0	$0	$0
Net Borrowings:	$63	$24	($56)	($15)	$0
Free Cash Flow to Equity	**($41)**	**$38**	**($31)**	**$30**	**$46**
Dividends	$0	$0	$0	$0	$0
Other	$28	($40)	$0	$0	$0
Net Cash Flow	**($13)**	**($2)**	**($31)**	**$30**	**$46**
Cash Balance	**$36**	**$34**	**$3**	**$33**	**$78**
Long Term Debt	$158	$182	$125	$110	$110
Shareholders' Equity	$704	$714	$737	$771	$801
Total EBITDA	$88	$68	$72	$93	$91
Debt to Total Capital	18%	20%	15%	12%	12%
LTD-to-EBITDA	1.8x	2.7x	1.7x	1.2x	1.2x

	Cash Balance Sensitivity Analysis (US$MM)				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$36	$42	$27	$74	$138
$1,100/oz Au & $14.50/oz Ag	$36	$34	$3	$33	$78
$1,000/oz Au & $13.25/oz Ag	$36	$27	($21)	($9)	$18

Source: Company reports, RBC Capital Markets estimates

- **Dundee Precious Metals – Potential for FCF after acid plant completed.**
- **Still capable of generating positive FCF at $1,100 gold price:** With the expected completion of the acid plant at Tsumeb marking the end of a capital spending program at the smelter, we expect DPM to be able to begin generating strong FCF in 2016 and repay debt, even if lower gold prices persist. The smelter is also less sensitive to metal price volatility, and if needed, the higher-cost Kapan mine in Armenia could be put on care and maintenance although the company appears committed to improving and lowering costs at the operation.
- **Krumovgrad the key development project:** We believe it makes sense to move forward with the Krumovgrad project at a gold price of +$1,100/oz, as it has robust economics due to above-average grades for an open-pit project (4g/t). However, the project could be delayed to preserve balance sheet flexibility if lower metals prices persist. Our capital estimate is $170MM for the project. DPM ended Q1/15 with $17MM in cash and $165MM on its revolving credit facility.
- Note: The numbers exclude development of the Krumovgrad project.

Exhibit 25: Klondex metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (C$MM)					
Gold Price (US$/oz)	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price (US$/oz)	$19.00	$15.50	$14.50	$14.50	$14.50
Copper Price (US$/lb)	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz AuEq)	107	123	150	172	172
All-in Sustaining Costs - AISC (US$/oz)	$466	$837	$781	$769	$769
Operating Cash Flow	$33	$65	$67	$69	$81
Project Capex	($22)	($15)	($16)	($16)	($7)
Sustaining Capex	($11)	($25)	($26)	($26)	($26)
Total Capex	($33)	($41)	($42)	($42)	($33)
Operating Free Cash Flow	**($0)**	**$24**	**$26**	**$27**	**$49**
Debt Repayments	($10)	($13)	($13)	($26)	($11)
Borrowings	$23	$0	$3	$0	$0
Net Borrowings:	$13	($13)	($10)	($26)	($11)
Free Cash Flow to Equity	**$13**	**$11**	**$15**	**$1**	**$38**
Dividends	$0	$0	$0	$0	$0
Other	$24	$0	$0	$0	$0
Net Cash Flow	**$37**	**$11**	**$15**	**$1**	**$38**
Cash Balance	**$53**	**$64**	**$80**	**$81**	**$119**
Long Term Debt	$58	$45	$35	$9	($2)
Shareholders' Equity	$193	$216	$258	$292	$331
Total EBITDA	$52	$75	$86	$94	$94
Debt to Total Capital	23%	17%	12%	3%	-1%
LTD-to-EBITDA	1.1x	0.6x	0.4x	0.1x	0.0x

	Cash Balance Sensitivity Analysis (C$MM)				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$53	$69	$96	$112	$166
$1,100/oz Au & $14.50/oz Ag	$53	$64	$80	$81	$119
$1,000/oz Au & $13.25/oz Ag	$53	$60	$63	$50	$72

Source: Company reports, RBC Capital Markets estimates

- **Klondex – High grades and modest debt provide protection from falling gold prices.**
- **Above-average grades:** With a reserve grade of 44 g/t at Fire Creek and 13 g/t at Midas, located in Nevada, and recent reserves calculated at a $1,000/oz gold price, we believe that Klondex is protected should lower gold prices persist. We estimate AISC of $790/oz out to 2020E, and the company does not benefit from non-US dollar currency weakness.
- **FCF at $1,000/oz:** We estimate that Klondex can generate positive FCF at $1,000/oz gold, and in a worst-case scenario, higher-grade sections of the mine could be selectively mined.

Exhibit 26: Lake Shore Gold metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Summary (C$MM)					
Gold Price (US$/oz)	$1,266	$1,153	$1,100	$1,100	$1,100
Gold Production (Koz)	185.70	181.83	175.85	189.78	34.06
All-in Sustaining Costs - AISC ($/oz)	$882	$834	$756	$646	$863
Operating Cash Flow (Adjusted)	$111	$97	$79	$105	$21
Growth Capex	$0	$0	$0	$0	$0
Sustaining/Mine Project Capex	($57)	($35)	($18)	($13)	($10)
Total Capex	($57)	($35)	($18)	($13)	($10)
Operating Free Cash Flow	**$54**	**$62**	**$62**	**$92**	**$11**
Debt Repayments	($47)	($7)	$0	($104)	$0
Borrowings	$0	$0	$0	$0	$0
Net Borrowings:	($47)	($7)	$0	($104)	$0
Free Cash Flow to Equity	**$7**	**$55**	**$62**	**($11)**	**$11**
Dividends	$0	$0	$0	$0	$0
Other Cash Flows	$14	($5)	($8)	$0	$0
Net Free Cash Flow	**$21**	**$50**	**$54**	**($11)**	**$11**
Cash Balance	**$54**	**$105**	**$158**	**$147**	**$158**
Long Term Debt	$96	$104	$104	$0	$0
Shareholders' Equity & Minority Interest	$472	$480	$489	$513	$515
Total EBITDA	$115	$100	$84	$111	$19
Debt to Total Capital	0.2x	0.2x	0.2x	0.0x	0.0x
LTD-to-EBITDA	0.8x	1.0x	1.2x	0.0x	0.0x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$54	$115	$191	$203	$218
$1,100/oz	**$54**	**$105**	**$158**	**$147**	**$158**
$1,000/oz	$54	$94	$126	$91	$98

Source: Company reports, RBC Capital Markets estimates

- At $1,100 gold, we believe that the company has sufficient funds to pay down $104MM of convertible debentures in 2017. With a conversion price of C$1.40, the market has concerns about significant equity dilution if the $104MM convertible debenture were to be satisfied with shares versus cash.
- We assume that the 144 Zone development at Timmins West continues, allowing LSG to extend the overall mine life of its Timmins mines. Exploration expenses are expected to remain high as well given the relatively short reserve life.
- The company has seen a sharp improvement in operating costs with the weak Canadian dollar and as grade control and operating efficiencies have improved.

Exhibit 27: Perseus metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	181	212	208	222	245
All-in Sustaining Costs - AISC (US$/oz)	$1,351	$870	$1,252	$1,048	$1,136
Operating Cash Flow	$19	$108	$19	$38	$50
Project Capex	$0	$0	$0	$0	$0
Sustaining Capex	($48)	($36)	($47)	($25)	($66)
Total Capex	($48)	($36)	($47)	($25)	($66)
Operating Free Cash Flow	**($29)**	**$72**	**($28)**	**$13**	**($16)**
Debt Repayments	$0	$0	$0	$0	($50)
Borrowings	$0	$0	$50	$0	$0
Net Borrowings:	$0	$0	$50	$0	($50)
Free Cash Flow to Equity	**($29)**	**$72**	**$22**	**$13**	**($66)**
Dividends	$0	($2)	($2)	($0)	($1)
Other	$30	$11	$0	$0	($20)
Net Cash Flow	**$1**	**$80**	**$20**	**$13**	**($87)**
Cash Balance	**$37**	**$117**	**$136**	**$149**	**$62**
Long Term Debt	$0	$0	$50	$50	$0
Shareholders' Equity	$460	$572	$568	$572	$583
Total EBITDA	$6	$146	$27	$41	$54
Debt to Total Capital	0%	0%	8%	8%	0%
LTD-to-EBITDA	0.0x	0.0x	1.9x	1.2x	0.0x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
US$1,200/oz	$37	$117	$153	$184	$116
US$1,100/oz	$37	$117	$136	$149	$62
US$1,000/oz	$37	$117	$117	$106	($5)

Source: Company reports, RBC Capital Markets estimates

- We have assumed that under a weak gold price scenario Perseus elects not to move forward with the development of the Sissingue project in Ivory Coast.
- Perseus should remain FCF positive over the medium term at US$1,100/oz due to the positive impact of the company’s hedging programme. At US$1,000/oz, the company becomes FCF neutral in 2016 and then FCF negative after that.

Exhibit 28: Primero metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,267	$1,130	$1,100	$1,100	$1,100
Gold Production (Koz)	190	227	260	268	261
All-in Sustaining Costs - AISC ($/oz)	$1,226	$987	$902	$868	$828
Operating Cash Flow - Levered	$69	$76	$105	$109	$105
Ongoing Capex	($84)	($62)	($65)	($65)	($59)
Growth Capex - Existing Mines	($10)	($10)	($10)	($10)	($10)
Growth Capex - New Mines	($18)	($19)	($13)	($8)	($5)
Total Capex	($112)	($91)	($88)	($83)	($74)
Operating Free Cash Flow	**($43)**	**($15)**	**$17**	**$26**	**$31**
Debt Repayments	($59)	($46)	($54)	($0)	-
Total Borrowings	$37	$75	-	-	-
Net Borrowings	($21)	$29	($54)	($0)	-
Free Cash Flow to Equity	**($64)**	**$14**	**($37)**	**$26**	**$31**
Dividends	-	-	-	-	-
Other	($13)	$0	-	-	-
Net Cash Flow	**($77)**	**$14**	**($37)**	**$26**	**$31**
Cash - Ending Balance	**$27**	**$42**	**$5**	**$32**	**$62**
Total Debt	$95	$129	$75	$75	$75
Shareholders' Equity	$748	$734	$736	$744	$755
Total EBITDA	$77	$85	$106	$117	$120
Debt to Total Capital	11%	15%	9%	9%	9%
Total Debt-to-EBITDA	1.2x	1.5x	0.7x	0.6x	0.6x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$27	$59	$45	$93	$145
$1,100/oz Au & $14.50/oz Ag	$27	$42	$5	$32	$62
$1,000/oz Au & $13.25/oz Ag	$27	$26	($34)	($30)	($20)

Source: Company reports, RBC Capital Markets estimates

- Unlike many of its peers that have longer-dated debt, Primero has approximately $54 million due in 2016.
- Although we believe the company's debt is manageable, Primero's balance sheet does not appear as strong on paper as some of its peers with longer-dated debt.
- However, given solid sustaining cash flow from San Dimas even at $1,000/oz, we believe the company will be able to refinance its debt through the issuance of additional longer-term debt (traditional and/or convertible) and potentially by temporarily drawing down on its line of credit.
- Based on our analysis and assuming that the company does not restructure its debt or reduce sustaining capital/exploration, Primero's balance sheet would begin to come under pressure around $1,100/oz gold.
- Additional capital flexibility could be provided should the company defer capital spending at Black Fox (capital expenditures funded entirely by asset), temporarily defer exploration spending at San Dimas, and/or reduce corporate overhead.
- Should gold prices deteriorate further, Primero could also look to place Black Fox on care and maintenance.

Exhibit 29: Semafo metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	214	238	177	153	153
All-in Sustaining Costs - AISC ($/oz)	$768	$753	$844	$937	$937
Operating Cash Flow	$120	$80	$69	$48	$41
Project Capex	($28)	($18)	($14)	($14)	($14)
Sustaining Capex	($41)	($19)	($15)	($15)	($15)
Total Capex	($69)	($37)	($29)	($29)	($29)
Operating Free Cash Flow	**$51**	**$43**	**$41**	**$19**	**$13**
Debt Repayments	$0	$0	$0	$0	$0
Borrowings	$0	$90	($30)	($30)	$0
Net Borrowings:	$0	$90	($30)	($30)	$0
Free Cash Flow to Equity	**$51**	**$133**	**$11**	**($11)**	**$13**
Dividends	$0	($12)	($12)	($12)	($12)
Other	($6)	($93)	$1	$1	$1
Net Cash Flow	**$45**	**$28**	**($0)**	**($22)**	**$2**
Cash Balance	**$128**	**$156**	**$156**	**$133**	**$135**
Long Term Debt	$0	$90	$60	$30	$30
Shareholders' Equity	$504	$557	$560	$548	$537
Total EBITDA	$119	$110	$65	$43	$43
Debt to Total Capital	0%	14%	10%	5%	5%
LTD-to-EBITDA	0.0x	0.8x	0.9x	0.7x	0.7x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$128	$167	$183	$176	$192
$1,100/oz	$128	$156	$156	$133	$135
$1,000/oz	$128	$145	$128	$89	$74

Source: Company reports, RBC Capital Markets estimates

- Under our ex growth scenario, we assume that Semafo elects not to proceed with the development of Natougou, which was acquired through the acquisition of Orbis Gold in 2015.
- We believe that Semafo should be FCF positive at both US$1,000/oz and US$1,100/oz in 2015. In 2016, the company should be marginally FCF positive at US$1,100/oz but would be FCF negative at US$1,000.
- The company should be able to maintain a dividend at US$1,100 but would probably need to suspend the dividend if a US$1,000/oz price were to persist for a prolonged period.

Exhibit 30: Teranga metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	186	191	186	222	235
All-in Sustaining Costs - AISC ($/oz)	$1,033	$912	$1,013	$1,022	$1,018
Operating Cash Flow	$49	$40	$39	$32	$21
Project Capex	($5)	($46)	($30)	$0	($4)
Sustaining Capex	($15)	($7)	($15)	($15)	($15)
Total Capex	($20)	($53)	($45)	($15)	($18)
Operating Free Cash Flow	**$29**	**($12)**	**($6)**	**$17**	**$3**
Debt Repayments	($73)	($4)	$0	$0	$0
Borrowings	$135	$0	$0	$0	$0
Net Borrowings:	$62	($4)	$0	$0	$0
Free Cash Flow to Equity	**$91**	**($16)**	**($6)**	**$17**	**$3**
Dividends	$0	$0	$0	$0	$0
Other	($70)	($4)	($4)	($3)	($4)
Net Cash Flow	**$21**	**($21)**	**($10)**	**$13**	**($1)**
Cash Balance	**$36**	**$15**	**$5**	**$19**	**$18**
Long Term Debt	$0	$0	$0	$0	$0
Shareholders' Equity	$516	$537	$545	$553	$562
Total EBITDA	$100	$77	$56	$55	$56
Debt to Total Capital	0%	0%	0%	0%	0%
LTD-to-EBITDA	0.0x	0.0x	0.0x	0.0x	0.0x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$36	$21	$23	$47	$65
$1,100/oz	$36	$15	$5	$19	$18
$1,000/oz	$36	$9	($12)	($10)	($29)

Source: Company reports, RBC Capital Markets estimates

- Teranga should be FCF negative in 2015 under all three price scenarios. The company should be FCF negative if the price were below US$1,200/oz in 2016 and below US$1,100 in 2017.
- Teranga finished Q1 2015 with a cash balance of US$39 million. We believe that it may need to raise additional funds in 2016 if the gold price were to remain at US$1,000/oz or to make adjustments to the Reserve and mine plan at Sabodala to focus on higher-grade material.

Exhibit 31: Timmins Gold metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price ($/oz)	$19.00	$15.50	$14.50	$14.50	$14.50
Copper Price ($/lb)	$3.11	$2.60	$2.51	$2.51	$2.51
Gold Production (Koz)	120	122	129	134	138
All-in Sustaining Costs - AISC ($/oz)	$1,006	$990	$1,094	$1,089	$1,089
Operating Cash Flow	$33	$26	$15	$16	$16
Project Capex	($10)	($15)	($12)	($2)	$0
Sustaining Capex	($10)	($10)	($12)	($12)	($12)
Total Capex	($20)	($25)	($24)	($14)	($12)
Operating Free Cash Flow	**$13**	**$1**	**($9)**	**$2**	**$4**
Debt Repayments	($5)	$0	$0	$0	$0
Borrowings	$0	$0	$0	$0	$0
Net Borrowings:	($5)	$0	$0	$0	$0
Free Cash Flow to Equity	**$8**	**$1**	**($9)**	**$2**	**$4**
Dividends	$0	$0	$0	$0	$0
Other	($4)	$0	$0	$0	$0
Net Cash Flow	**$5**	**$1**	**($9)**	**$2**	**$4**
Cash Balance	**$27**	**$28**	**$19**	**$21**	**$25**
Long Term Debt	$13	$13	$13	$13	$13
Shareholders' Equity	$214	$215	$205	$195	$183
Total EBITDA	$41	$28	$11	$12	$12
Debt to Total Capital	6%	6%	6%	6%	7%
LTD-to-EBITDA	0.3x	0.5x	1.2x	1.1x	1.1x

	Cash Balance Sensitivity Analysis (US$MM)				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$27	$32	$32	$44	$58
$1,100/oz Au & $14.50/oz Ag	$27	$28	$19	$21	$25
$1,000/oz Au & $13.25/oz Ag	$27	$24	$5	($3)	($9)

Source: Company reports, RBC Capital Markets estimates

- **Timmins Gold – Lower grades constrain ability to generate FCF at $1,100/oz gold**
- **FCF constrained at lower gold prices:** We estimate that Timmins would be unable to generate positive free cash flow below $1,100 gold barring a change in mine plan to increase grades and limit sustaining capital spending. A continued decline in gold grade at San Francisco has placed downward pressure on margins although the company expects grades to trend higher through the year. While the cash balance would decline, the company has limited debt on its balance sheet ($15MM at end of Q1/15), leaving it with some flexibility.
- **Deferral of growth projects:** If gold prices fell to $1,100/oz or below, we would expect the project pipeline to be deferred. This includes the recently acquired Caballo Blanco and Ana Paula projects, which continue to be developed through permitting and feasibility study, respectively. As well, development of the secondary La Chicharra pit could be deferred, and the highest-grade material could be mined from San Francisco to squeeze cash costs as low as possible.
- Note: The numbers exclude the development of Caballo Blanco and Ana Paula.

Exhibit 32: Fresnillo metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Silver Equiv .Production (adj, Koz)	4,650	3,751	3,751	3,751	3,751
AISC ($/AuEq oz)	$674	$615	$550	$532	$0
Operating Cash Flow	$122	$372	$507	$551	$670
Project Capex	($111)	($339)	($248)	($85)	$0
Sustaining Capex	($315)	($315)	($315)	($315)	($315)
Total Capex	($426)	($654)	($563)	($400)	($315)
Operating Free Cash Flow	**($304)**	**($281)**	**($56)**	**$151**	**$355**
Debt Repayments	$0	$0	$0	$0	$0
Borrowings	$0	$0	$350	$0	$0
Net Borrowings:	$0	$0	$350	$0	$0
Free Cash Flow to Equity	**($304)**	**($281)**	**$294**	**$151**	**$355**
Dividends	($87)	($34)	($89)	($158)	($171)
Other	($702)	$28	$30	$31	$29
Net Cash Flow	**($1,093)**	**($287)**	**$234**	**$23**	**$214**
Cash Balance	**$449**	**$162**	**$397**	**$420**	**$634**
Long Term Debt	$796	$796	$1,146	$1,146	$1,146
Shareholders' Equity	$2,275	$2,309	$2,398	$2,556	$2,727
Total EBITDA	$567	$445	$647	$844	$880
Debt to Total Capital	26%	26%	32%	31%	30%
LTD-to-EBITDA	1.4x	1.8x	1.8x	1.4x	1.3x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014E**	**2015E**	**2016E**	**2017E**	**2017E**
$1,200/oz	$449	$155	$428	$497	$768
$1,100/oz	$449	$162	$397	$420	$634
$1,000/oz	$449	$167	$362	$340	$497

Source: Company reports, RBC Capital Markets estimates

- We have assumed that Fresnillo completes the development of the San Julien project, which should start commissioning this year, but places its other development projects on hold, including the build-out of Herradura and Orisyvo. We believe it is likely that the high-grade, low-cost Juanicipio project would continue to be developed at lower prices.
- At US$1,100/oz, we expect FRES to be FCF negative in 2015 although the company should become FCF positive in 2016. At US$1,000/oz, the company should be FCF negative in 2015 before becoming FCF positive again in 2016, driven by the assumption that most new project development activities are suspended.
- We would not expect Fresnillo to pay a dividend at US$1,000/oz in 2015; however, it would be in a position to do so again in 2016 assuming the capex deferrals. We also do not think that the company would need to raise additional funds if capex were deferred under the price scenarios tested.

Exhibit 33: Hecla metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Silver Price ($/oz)	$18.46	$15.73	$14.50	$14.50	$14.50
Gold Price ($/oz)	$1,262	$1,152	$1,100	$1,100	$1,100
Silver Production (Moz)	11.1	11.1	11.1	12.4	13.5
Gold Production (Koz)	187	180	185	197	200
All-in Sustaining Costs - AISC ($/oz) - Silver Mines	$12.96	$13.08	$13.14	$12.38	$11.50
All-in Sustaining Costs - AISC ($/oz) - Gold Mines	$1,143	$1,084	$973	$947	$935
Operating Cash Flow - Levered	$129	$77	$73	$87	$103
Ongoing Capex	($72)	($67)	($66)	($67)	($68)
Growth Capex - Existing Mines	($39)	($72)	($46)	($31)	($13)
Growth Capex - New Mines	-	-	($13)	-	-
Total Capex ($M)	($111)	($139)	($125)	($98)	($81)
Operating Free Cash Flow	**$18**	**($62)**	**($52)**	**($11)**	**$22**
Debt Repayments	($9)	($10)	($7)	($4)	($3)
Total Borrowings	-	-	-	-	-
Net Borrowings	($9)	($10)	($7)	($4)	($3)
Free Cash Flow to Equity	**$9**	**($71)**	**($59)**	**($16)**	**$20**
Dividends	($4)	($4)	($4)	($4)	($4)
Other	($7)	($12)	-	-	-
Net Cash Flow	**($3)**	**($88)**	**($63)**	**($20)**	**$15**
Cash - Ending Balance	**$210**	**$122**	**$58**	**$38**	**$54**
Long Term Debt	$522	$514	$507	$503	$500
Shareholders' Equity	$1,397	$1,391	$1,359	$1,330	$1,305
Total EBITDA	$145	$109	$102	$117	$133
Debt to Total Capital	27%	27%	27%	27%	28%
LTD-to-EBITDA	3.6x	4.7x	5.0x	4.3x	3.7x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$210	$136	$103	$115	$162
$1,100/oz Au & $14.50/oz Ag	$210	$122	$58	$38	$54
$1,000/oz Au & $13.25/oz Ag	$210	$107	$14	($38)	($57)

Source: Company reports, RBC Capital Markets estimates

- Assuming that Hecla completes sinking of the #4 shaft at Lucky Friday and development of the low-capital San Sebastian project, we expect that it can maintain its current spending plans down to approximately ~$14/oz silver.
- Additional flexibility could be gained if the company is able to bring San Sebastian into production earlier than we currently forecast given the potential to accelerate the asset's strong forecast free cash flow.
- At $13.25/oz silver and $1,000/oz gold, we estimate that the company would likely need an additional $100 million in capital to complete its current development plans.
- In the current market, we believe that the company may look to reduce corporate and exploration expenditures.

Exhibit 34: Hochschild metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price	$1,266	$1,153	$1,100	$1,100	$1,100
Silver Price	$19.09	$15.52	$14.50	$14.50	$14.50
Copper Price	$3.11	$2.60	$2.51	$2.51	$2.51
Silver Equiv .Production (Koz)	24,247	22,240	23,950	29,089	31,835
AISC ($/AuEq oz)	$1,043	$890	$901	$830	$825
Operating Cash Flow	$94	$43	$45	$52	$76
Project Capex	($200)	($75)	$0	$0	$0
Sustaining Capex	($115)	($65)	($80)	($80)	($80)
Total Capex	($315)	($140)	($80)	($80)	($80)
Operating Free Cash Flow	**($221)**	**($97)**	**($35)**	**($28)**	**($4)**
Debt Repayments	($458)	$0	$0	$0	$0
Borrowings	$482	$0	$0	$0	$0
Net Borrowings:	$24	$0	$0	$0	$0
Free Cash Flow to Equity	**($197)**	**($97)**	**($35)**	**($28)**	**($4)**
Dividends	($10)	$0	$0	$0	$0
Other	$43	$0	$0	$0	$0
Net Cash Flow	**($164)**	**($97)**	**($35)**	**($28)**	**($4)**
Cash Balance	**$116**	**$19**	**($16)**	**($44)**	**($48)**
Long Term Debt	$469	$469	$469	$469	$469
Shareholders' Equity	$799	$720	$610	$542	$477
Total EBITDA	$136	$114	$75	$86	$120
Debt to Total Capital	37%	39%	43%	46%	50%
LTD-to-EBITDA	3.5x	4.1x	6.2x	5.4x	3.9x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz	$116	$33	$28	$43	$84
$1,100/oz	$116	$19	($16)	($44)	($48)
$1,000/oz	$116	$4	($59)	($130)	($180)

Source: Company reports, RBC Capital Markets estimates

- Hochschild would be FCF negative under all three scenarios in 2015 and 2016 but would be FCF positive at $1,200/oz in 2017. The company could consider closing the higher-cost Pallancata mine in Peru.
- Under the lower gold and silver price scenarios, we have assumed that Hochschild completes the ramp-up of the Inmaculada project in Peru but does not move forward with any other project developments.
- The company has already suspended its dividend and we believe it is unlikely to be resumed at prevailing metal prices. Given the company's relatively high gearing, we believe that at lower prices Hochschild may need to raise between US$60 million (US$1,100/oz scenario) and US$180 million (US$1,000/oz scenario) in order to maintain a positive cash balance by the end of 2018, assuming no other operational or corporate changes.

Exhibit 35: Pan American Silver metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Silver Price ($/oz)	$18.52	$15.52	$14.50	$14.50	$14.50
Silver Production (Moz)	26.1	25.8	26.4	25.9	27.2
All-in Sustaining Costs - AISC ($/oz)	$16.62	$15.99	$15.09	$13.64	$11.62
Operating Cash Flow - Levered	$103	$59	$60	$101	$158
Ongoing Capex	($99)	($80)	($79)	($91)	($101)
Growth Capex - Existing Mines	($35)	($150)	($110)	($30)	-
Growth Capex - New Mines	($1)	($0)	-	-	-
Total Capex	($135)	($230)	($189)	($121)	($101)
Operating Free Cash Flow	**($32)**	**($171)**	**($130)**	**($19)**	**$57**
Debt Repayments	($22)	($63)	($3)	($2)	-
Total Borrowings	$15	$5	-	-	-
Net Borrowings	($8)	($58)	($3)	($2)	-
Free Cash Flow to Equity	**($40)**	**($229)**	**($133)**	**($21)**	**$57**
Dividends	($76)	($42)	($31)	($31)	($31)
Other	$13	$5	-	-	-
Net Cash Flow	**($103)**	**($266)**	**($164)**	**($52)**	**$25**
Cash - Ending Balance	**$330**	**$63**	**($101)**	**($153)**	**($128)**
Long Term Debt	$60	$5	$2	-	-
Shareholders' Equity & Minority Interests	$1,570	$1,413	$1,249	$1,088	$953
Total EBITDA	$125	$89	$65	$112	$175
Debt to Total Capital	4%	0%	0%	0%	0%
LTD-to-EBITDA	0.5x	0.1x	0.0x	0.0x	0.0x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$330	$82	($43)	($52)	$23
$1,100/oz Au & $14.50/oz Ag	$330	$63	($101)	($153)	($128)
$1,000/oz Au & $13.25/oz Ag	$330	$43	($158)	($252)	($274)

Source: Company reports, RBC Capital Markets estimates

- Even at $15.75/oz silver and $1,200/oz gold prices, we expect that Pan American is likely to need to further reduce its dividend ($31 million annually) to maintain its balance sheet strength while investing in its operations including brownfields expansions at La Colorada and Dolores.
- With limited leverage, a recently implemented $300 million credit facility, and improving free cash flow potential as its lower-cost expansions come on-line, we expect that Pan American could also fund a portion of the capital expenditures through debt.
- However, given the current price environment, we believe it may be prudent for Pan American to reduce its dividend and potentially look to stagger the expansions of La Colorada and Dolores.

Exhibit 36: Silver Standard metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
Gold Price ($/oz)	$1,261	$1,153	$1,100	$1,100	$1,100
Silver Price ($/oz)	$19.19	$15.52	$14.50	$14.50	$14.50
Silver Equivalent Production (Moz)	17.4	25.1	22.8	22.9	22.6
All-in Sustaining Costs - AISC ($/oz)	$18.47	$14.30	$13.79	$14.00	$14.06
Operating Cash Flow - Levered	$47	$66	$43	$42	$40
Ongoing Capex	($58)	($60)	($51)	($54)	($53)
Growth Capex - Existing Mines	-	-	-	-	-
Growth Capex - New Mines	-	-	-	-	-
Total Capex	($58)	($60)	($51)	($54)	($53)
Operating Free Cash Flow	**($11)**	**$6**	**($8)**	**($12)**	**($12)**
Debt Repayments	$0	($6)	-	-	-
Total Borrowings	$6	-	-	-	-
Net Borrowings	$6	($6)	-	-	-
Free Cash Flow to Equity	**($5)**	**$0**	**($8)**	**($12)**	**($12)**
Dividends	-	-	-	-	-
Other	($219)	($0)	-	-	-
Net Cash Flow	**($224)**	**($0)**	**($8)**	**($12)**	**($12)**
Cash - Ending Balance	**$184**	**$183**	**$175**	**$163**	**$151**
Long Term Debt	$271	$265	$265	$265	$265
Shareholders' Equity	$511	$507	$501	$494	$485
Total EBITDA	$35	$80	$56	$54	$51
Debt to Total Capital	35%	34%	35%	35%	35%
LTD-to-EBITDA	7.7x	3.3x	4.7x	5.0x	5.2x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Gold Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au & $15.75/oz Ag	$184	$194	$208	$218	$227
$1,100/oz Au & $14.50/oz Ag	$184	$183	$175	$163	$151
$1,000/oz Au & $13.25/oz Ag	$184	$171	$142	$108	$74

Note: Cash balance does not include market value of the company's Pretium stake
Source: Company reports, RBC Capital Markets estimates

- Although Silver Standard is likely to generate limited operating free cash flow at current silver and gold prices, the company's relatively strong balance sheet and longer-dated debt provide it with a reasonable buffer over the next few years.
- At $14.50/oz silver and $1,100/oz gold, Silver Standard's cash balance is expected to weaken only modestly and is forecast to remain above $150 million through 2018.
- At $13.25/oz silver and $1,000/oz gold, the company's balance sheet would weaken but remain manageable, with its cash balance estimated at around $75 million at the end of 2017.
- In addition to its cash position, Silver Standard's stake in Pretium is currently worth ~$80 million.
- Although the company's balance sheet is relatively solid, we expect that Silver Standard could look to fill the void expected to be left by Pirquitas (expected to be depleted post-2018), through the acquisition of a producing asset that could change not only the company's balance sheet strength but also its free cash flow potential.

Exhibit 37: Tahoe Resources metrics at $1,100/oz gold and $14.50/oz silver (ex-growth)

	2014	2015E	2016E	2017E	2018E
Free Cash Flow Analysis (US$MM)					
RBC Commodity Price Assumptions:					
Silver Price (US$/oz)	$18.67	$15.52	$14.50	$14.50	$14.50
Gold Price (US$/oz)	$1,235	$1,153	$1,100	$1,100	$1,100
Lead Price (US$/oz)	$0.96	$0.84	$0.83	$0.83	$0.83
Zinc Price (US$/oz)	$1.03	$0.96	$0.95	$0.95	$0.95
Silver Production (in concentrate) (Moz)	20.30	20.47	19.67	19.57	19.70
All-in Sustaining Costs - AISC ($/oz)	$9.16	$9.75	$9.56	$9.37	$9.33
Gold Production (koz)	-	210	251	263	248
All-in Sustaining Costs - AISC ($/oz)	-	$759	$687	$795	$842
Operating Cash Flow (Adjusted)	$119	$157	$254	$233	$212
Project Capex	($44)	($57)	($19)	$0	$0
Sustaining Capex	($13)	($55)	($51)	($57)	($50)
Total Capex	($58)	($112)	($70)	($57)	($50)
Operating Free Cash Flow	**$61**	**$44**	**$183**	**$176**	**$162**
Debt Repayments	($25)	($50)	($35)	$0	$0
Borrowings	$25	$0	$0	$0	$0
Net Borrowings:	$0	($50)	($35)	$0	$0
Free Cash Flow to Equity	**$61**	**($6)**	**$148**	**$176**	**$162**
Dividends	$0	($34)	($54)	($54)	($54)
Other	$4	$21	$0	$0	$0
Net Free Cash Flow	**$65**	**($19)**	**$94**	**$122**	**$109**
Cash Balance	**$74**	**$120**	**$214**	**$336**	**$445**
Long Term Debt	$50	$35	-	-	-
Shareholders' Equity & Minority Interest	$873	$2,292	$2,453	$2,593	$2,623
Total EBITDA	$164	$231	$292	$277	$256
Debt to Total Capital	5%	2%	0%	0%	0%
LTD-to-EBITDA	0.3x	0.2x	0.0x	0.0x	0.0x

	Cash Balance Sensitivity Analysis				
Long-Term Flat Commodity Price	**2014**	**2015E**	**2016E**	**2017E**	**2018E**
$1,200/oz Au; $15.75/oz Ag	$74	$148	$289	$460	$615
$1,100/oz Au; $14.50/oz Ag	$74	$120	$214	$336	$445
$1,000/oz Au; $13.25/oz Ag	$74	$91	$139	$213	$275

Source: Company reports, RBC Capital Markets estimates

- Tahoe's Escobal silver mine in Guatemala has very robust economics with AISC of ~$7/oz and 20 million ounces of annual silver production. The two gold mines in Peru are forecast to contribute ~250Koz at ~$850/oz AISC.
- We expect Tahoe to pay down $35 million in debt in early 2016 and we believe the company can sustain the $0.24/share dividend for a ~2% yield, even down to a $1,000 gold/$12 silver price.
- Tahoe is well positioned to acquire a low-cost gold producer or development project, or earn into a significant equity position as the operator in a major project should an opportunity become available.
- Phase I of the Shahuindo mine development is included in our new capital forecast, as is an increase in sustaining capex for all three mines. At $1,000 gold/$13.25 silver, the company clearly has the capacity for further capital investments and the Phase II expansion at Shahuindo.

Companies mentioned

Acacia Mining Plc (LSE: ACA.LN; GBp239; Outperform)
Agnico Eagle Mines Limited (NYSE: AEM; $22.72; Outperform)
Alacer Gold Corp. (TSX: ASR.TO; C$2.28; Sector Perform)
Alamos Gold Inc. (NYSE: AGI; $3.36; Outperform)
AngloGold Ashanti Limited (JSE: ANG SJ; ZAc8,534; Outperform)
Argonaut Gold Inc. (TSX: AR.TO; C$1.44; Outperform)
B2Gold Corp. (TSX: BTO.TO; C$1.50; Outperform)
Barrick Gold Corporation (NYSE: ABX; $7.41; Sector Perform)
Centamin PLC (LSE: CEY.L; GBp53.60; Sector Perform; Speculative Risk)
Centerra Gold Inc. (TSX: CG.TO; C$5.79; Sector Perform; Speculative Risk)
Detour Gold Corporation (TSX: DGC.TO; C$11.35; Outperform)
Dundee Precious Metals Inc. (TSX: DPM.TO; C$2.22; Outperform)
Eldorado Gold Corporation (NYSE: EGO; $3.22; Outperform)
Franco-Nevada Corporation (TSX: FNV.TO; C$51.50; Outperform)
Fresnillo Plc (LSE: FRES.L; GBp629; Outperform)
Goldcorp Inc. (NYSE: GG; $12.89; Sector Perform)
Gold Fields Limited (JSE: GFI SJ; ZAc3,435; Outperform)
Hecla Mining Company (NYSE: HL; $2.07; Sector Perform)
Hochschild Mining Plc (LSE: HOC LN; GBp85.75; Sector Perform)
IAMGOLD Corporation (NYSE: IAG; $1.35; Underperform)
Kinross Gold Corporation (NYSE: KGC; $1.66; Sector Perform)
Klondex Mines Ltd. (TSX: KDX.TO; C$2.91; Outperform; Speculative Risk)
Lake Shore Gold (TSX: LSG.TO; C$1.13; Outperform)
New Gold Inc. (AMEX: NGD; $2.17; Outperform)
Newmont Mining Corporation (NYSE: NEM; $18.16; Outperform)
Osisko Gold Royalties Ltd. (TSX: OR CN; C$12.75; Sector Perform)
Pan American Silver Corporation (NASDAQ: PAAS; $6.59; Sector Perform)
Perseus Mining Limited (ASX: PRU.AX; AUD0.36; Sector Perform)
Polymetal International plc (LSE: POLY LN; GBp478; Outperform)
Primero Mining Corp. (NYSE: PPP; $2.80; Outperform)
Randgold Resources Ltd. (LSE: RRS.L; GBp3,817; Sector Perform)
Royal Gold, Inc. (NASDAQ: RGLD; $51.22; Outperform)
Semafo Inc. (TSX: SMF.TO; C$2.57; Sector Perform)
Silver Standard Resources Inc. (NASDAQ: SSRI; $5.41; Sector Perform)
Silver Wheaton Corp. (NYSE: SLW; $12.57; Outperform)
Tahoe Resources Inc. (TSX: THO.TO; C$11.27; Outperform)
Teranga Gold Corporation (TSX: TGZ.TO; C$0.53; Sector Perform)
Timmins Gold Corp. (TSX: TMM.TO; C$0.43; Sector Perform)
Yamana Gold Inc. (NYSE: AUY; $2.12; Sector Perform)

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