

Precious Metals: Turning around a historically unprofitable sector

Assuming coverage of the North American senior precious metals sector

We are assuming coverage of the North American senior precious metal mining sector. We recommend a market weight positioning for the sector, predicated upon a supportive macroeconomic environment for gold, and positive structural industry changes that have been realized, but valuation which we forecast already fairly reflects this.

Key Takeaways:

- **Economic uncertainty and asset price valuations have appropriately increased interest in gold.** In the context of global trade uncertainty, a reintroduction of monetary stimulus, global debt imbalances, and the reduction of alternative safe haven investments, gold has increased by 14% year-to-date to US\$1,464/oz and gold stocks have increased 28%. In our view, policy response and its impact on markets will remain an overwhelming price factor for the foreseeable future, and constructively, the ability to reverse ongoing policy stimulus represents a challenge for central banks. However, real rates, a key driver for gold prices, are already at extreme lows and further compression from today's levels from this response could be limited in scope.
- **Signals are evident that a gold equity sector positive turnaround is in progress.** Despite a positive backdrop for gold prices over the past decade, historical profitability generated by the gold equity sector has lagged all other major sectors by a wide margin. While this historical financial performance is disappointing, important positive structural changes have been realized in recent years that have changed the outlook. These include balance sheet repair, improved operating cost structures, a renewed focus upon return of capital to shareholders, and consolidation emerging as a significant theme. We believe these factors materially limit potential downside risks for gold equities and improve gold equity investment prospects from purely a macro trading vehicle to their individual merits.
- **Qualitative outlook is constructive, quantitative valuation not yet compelling.** While gold equity valuation today represents a considerable improvement from the past, the reality is that gold-focused investors have likely become acclimatized to subpar valuations. Following gold equities' underperformance, we forecast the sector at spot now trades in line with broader generalist investment options on an FCF/EV basis (2020/21E 4.2%/4.7%, vs. S&P500 4.2%/5.0%), although we believe more attractive valuation is a prequalifying condition given historical capital allocation missteps as well as the sector's higher-volatility, higher-cyclicality, and low asset duration. Nonetheless, current FCF/EV valuation represents a material improvement vs. historical estimates. Recent increased dividend rates by the group are commendable, although gold equities generate half the dividend yield and one quarter the total shareholder yield (i.e. including buybacks) compared to US equities.
- **Our coverage includes 15 North American senior gold producer and royalty companies.** Our relative coverage rankings outline Outperform ratings for BTG, GOLD, WPM; Sector Perform ratings for AEM, AGI, AU, FNV, IAG, KGC, NEM; and Underperform ratings for EGO, NGD, RGLD. We are restricted on KL, DGC. On a relative basis, the royalty and streaming group now trades at a premium to the producer group and we see lower relative investment merits today. In general, the majority of our production and cost forecasts are in line with consensus estimates, although we view capital guidance as a broader key upcoming risk. On a fully loaded basis (i.e. FCF breakeven before debt changes, dividends, and true growth capital), we calculate slight cost inflation for our coverage of US\$1,239/oz in 2020E, a 2% increase to our calculated \$1,213/oz estimate in 2019E.

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All values in Currency unless otherwise noted.

Priced as of market close
November 29, 2019 ET (unless otherwise stated).

For Required Non-U.S. Analyst and Conflicts Disclosures, please see page 186.

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Agnico Eagle
Alamos Gold
B2Gold
Barrick Gold
Detour Gold
Eldorado Gold
Franco Nevada
IAMGOLD
Kinross Gold
Kirkland Lake Gold
Newmont Goldcorp
New Gold
Royal Gold
Wheaton Precious Metals
Yamana Gold

Global Precious Metals Coverage

Agnico Eagle (JW)	Hecla Mining (MM)	Roxgold (WL)
Alacer Gold (MM)	Hochschild Mining (JB)	Royal Gold (JW)
Alamos Gold (JW)	IAMGOLD (JW)	Sabina Gold & Silver (MM)
AngloGold Ashanti (JB)	Kinross Gold (JW)	Sandstorm Gold (MO)
B2Gold (JW)	Kirkland Lake Gold (JW)	Saracen Mineral Holdings (PH)
Barrick Gold (JW/JB)	Marathon Gold (MM)	Sibanye-Stillwater (JB)
Centamin (JB)	New Gold (JW)	Silver Lake Resources (PH)
Centerra Gold (MO)	Newcrest Mining (PH)	SilverCrest (MM)
Coeur Mining (MM)	Newmont Goldcorp (JW)	SSR Mining (MM)
Continental Gold (MM)	Northern Star (PH)	St. Barbara (PH)
Dacian Gold (PH)	OceanaGold (PH)	Teranga Gold (WL)
Detour Gold (JW)	Osisko Gold Royalties (MO)	TMAC Resources (MM)
Dundee Precious Metals (MM)	Osisko Mining (MM)	Torex Gold (MM)
Endeavour Mining (JB/WL)	Pan American Silver (MM)	Wheaton Precious Metals (JW)
Evolution Mining (PH)	Polymetal (JB)	Yamana Gold (JW)
Eldorado Gold (JW)	Premier Gold (MM)	
Franco Nevada (JW)	Pretium (MM)	
Fresnillo (JB)	Ramelius Resources (PH)	
Gold Road Resources (PH)	Regis Resources (PH)	
Guyana Goldfields (MM)	Resolute Mining (PH)	

Other Mining Coverage

Anglo American (TB)	Largo Resources (AW)	Vale S.A. (TB)
Antofagasta (TB)	Lundin Mining (SC)	Warrior Met Coal (SC)
BHP Group Limited (PH)	Major Drilling Group (SC)	Western Areas (PH)
BHP Group PLC (TB)	Nevada Copper (SC)	
Cameco (AW)	New Century Resources (PH)	
Capstone Mining (SC)	Nexa Resources (SC)	
Central Asia Metals (JB)	NexGen Energy (AW)	
CF Industries Holdings (AW)	Nutrien (AW)	
First Quantum Minerals (SC)	OZ Minerals (PH)	
Fortescue Metals Group (PH)	Petra Diamonds (JB)	
Freeport-McMoRan (SC)	Rio Tinto Limited (PH)	
Glencore (TB)	Rio Tinto PLC (TB)	
Highfield Resources Limited (PH)	Sandfire Resources NL (PH)	
HudBay Minerals (SC)	Sheffield Resources (PH)	
Imperial Metals (SC)	South32 (PH)	
Independence Group (PH)	Teck Resources (SC)	
Ivanhoe Mines (SC)	The Mosaic Company (AW)	
James Hardie Industries (PH)	Trevali Mining (SC)	
KAZ Minerals (JB)	Turquoise Hill Resources (SC)	
Labrador Iron Ore Royalty (SC)	Uranium Participation (AW)	

Note: Bracketed initials following company denotes covering analyst; JB – James Bell; TB – Tyler Broda; PH – Paul Hissey; SC – Sam Crittenden; WL – Wayne Lam; MM – Mark Mihaljevic; MO – Melissa Oliphant; JW – Josh Wolfson; AW – Andrew Wong

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IAMGOLD Corporation	
Kinross Gold Corporation	
Newmont Goldcorp Corporation	
New Gold Inc.	
Royal Gold Inc.	
Wheaton Precious Metals Corp.	
Yamana Gold Inc.	

Macroeconomic and gold themes

Key Takeaways:

- In response to additional monetary easing in 2019, global sovereign bond yields have declined and negative yielding debt has increased. As the availability of global safe haven assets has declined, gold's relevance has increased.
- Real rates represent the largest driver of long-term gold prices, in our view. The ability of central banks to reduce stimulus is a challenge, encouraging lower real and nominal interest rates for a longer period, and supportive of recent price appreciation in gold.
- Declines in long-term rates have overwhelmingly reflected a reduction in real rate expectations, and limited changes to inflation expectations. Current real rates are at extreme lows and further compression from today's levels could be limited in scope, representing a challenge to significant price appreciation in gold.
- Global trade disputes in 2019 have the potential to impact future economic growth. Although we believe the growth outlook remains favourable today, the risk of an upcoming recession has increased. Gold's performance during and surrounding periods of US economic recession has been mixed.
- Current net speculative futures and options positions are elevated and just shy of all-time highs. In our view, elevated current net long positioning represents a short-term risk to the gold price, should positioning decline.

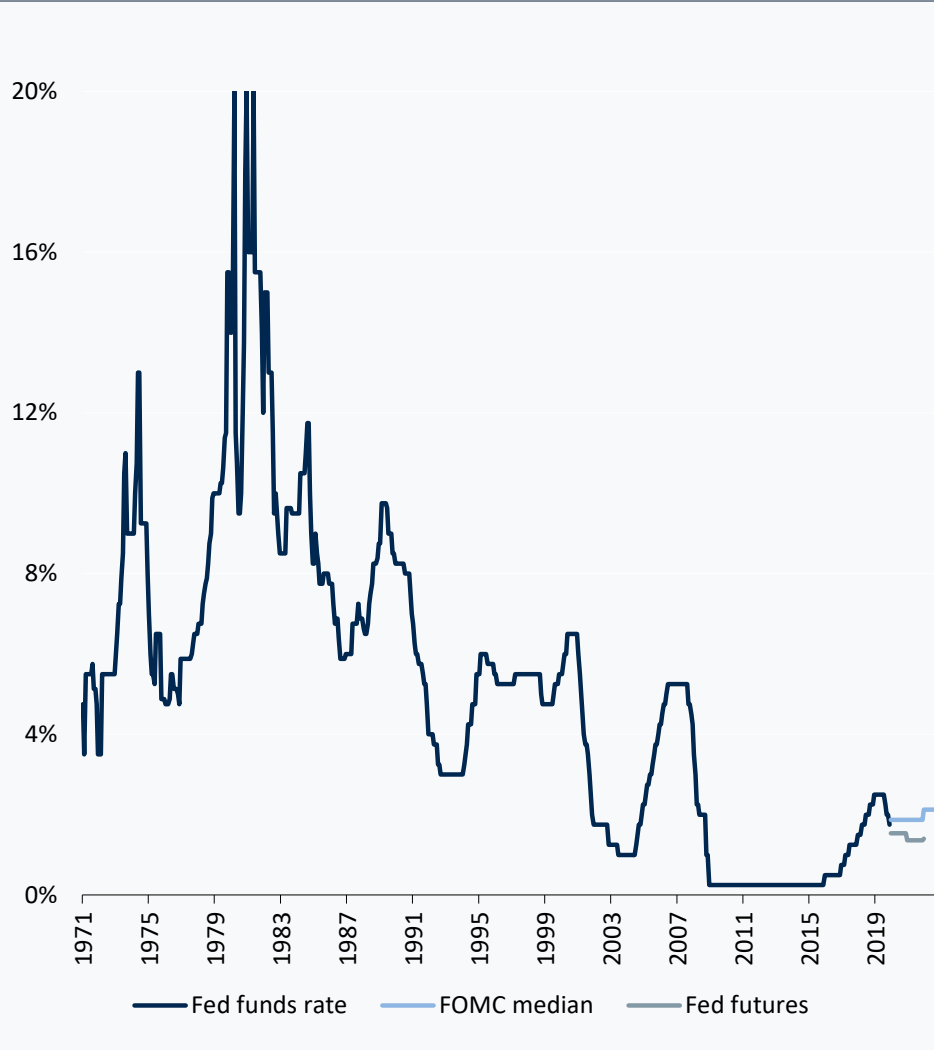


Capital
Markets

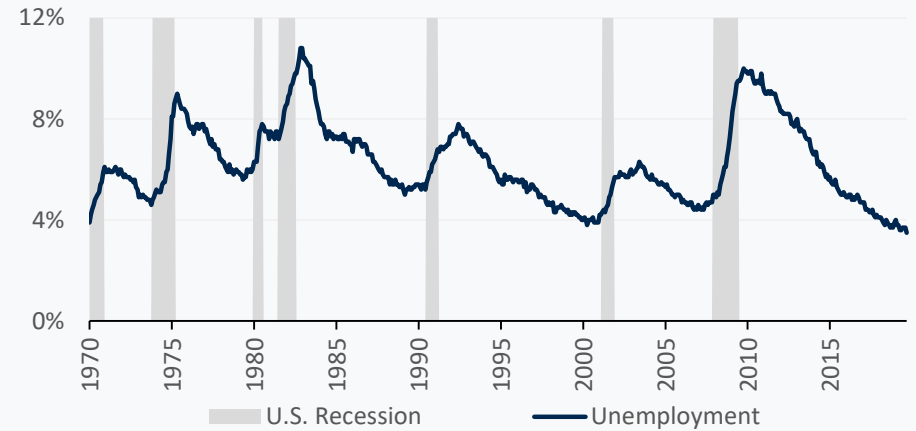
Macroeconomic themes: US monetary policy expectations outline a relatively stable outlook

In response to heightened economic and trade uncertainties, policy easing expectations sharply increased in late 2018, preceding US Federal Reserve monetary stimulus in 2019. Despite global trade uncertainties that have developed, the impact thus far to US economic growth has been muted. Current policy guidance outlines no additional monetary easing in 2020, while market-based expectations outline an additional 1-2 rate cuts.

US Federal reserves funds rate and future projections



US unemployment



US Real GDP

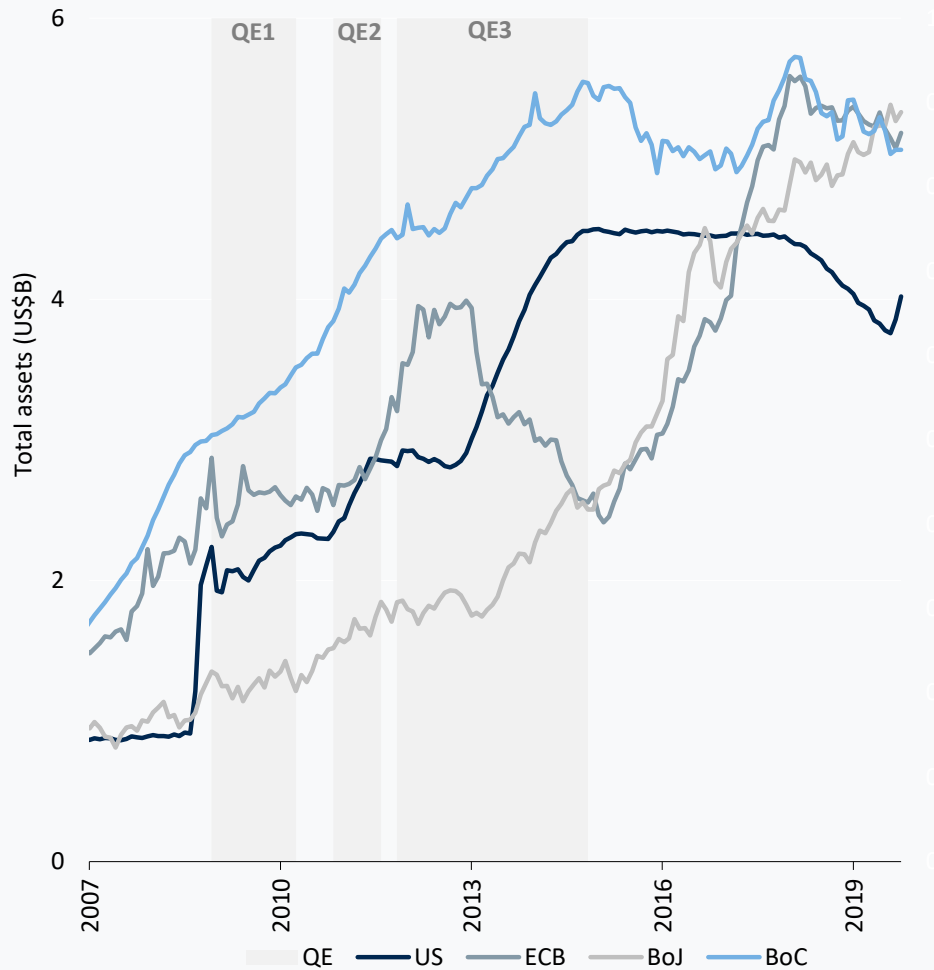


Source: Bloomberg, RBC Capital Markets

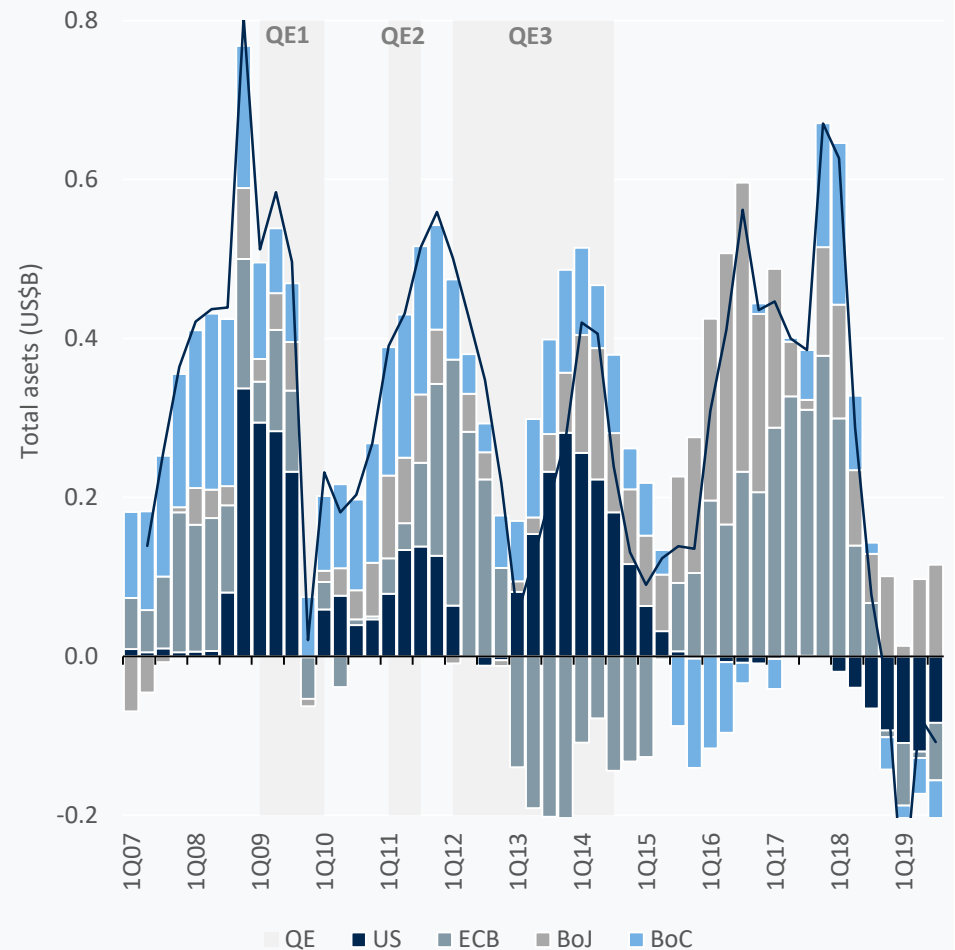
Macroeconomic themes: Global central banks have continued to support looser monetary policy

In addition to short-term interest rate setting, central banks have the ability to accumulate assets, which can act as an additional monetary stimulus tool to reduce long-term yields, encourage lending, and contribute to economic growth. More recently, a reversal of this stimulus in response to favourable growth has been brief. Long-term, a reversal of this historical asset accumulation could pressure yields higher, a risk for gold.

Central banks balance sheets



Central banks balance sheets 1Y rolling change



Source: Bloomberg, RBC Capital Markets

Macroeconomic themes: Recent shifts in monetary policy have been supportive for gold

In response to a re-emergence of monetary policy easing in 2019, global yields have declined and negative yielding debt has increased. As the availability of global safe haven assets has declined, gold's relevance has increased. These factors have contributed to the metal's rise to a 7-year high above US\$1,550/oz. More recently, the amount of outstanding negative yielding debt has begun to decline, slightly pressuring gold lower.

Global negative yielding debt



Bond yields by country

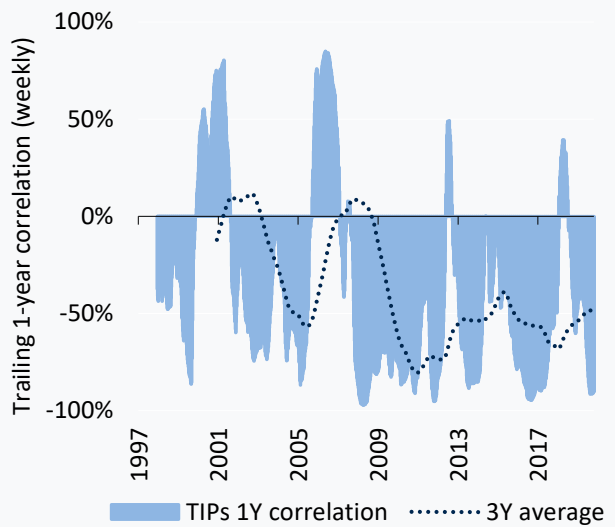
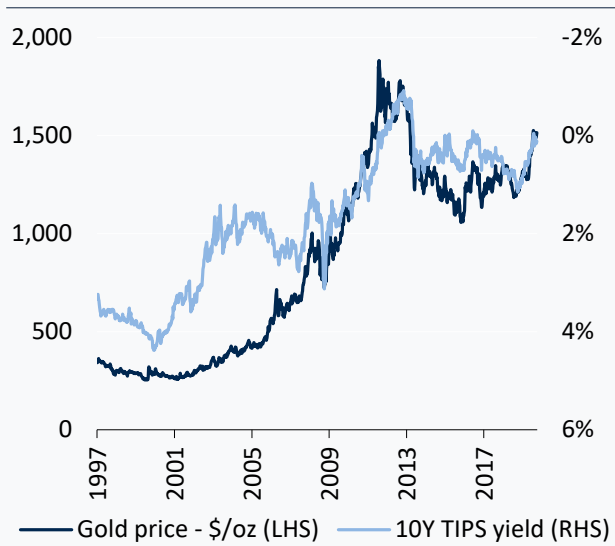
	2Y	3Y	5Y	7Y	10Y	15Y	30Y
China	2.7%	2.8%	3.0%	3.2%	3.2%	3.4%	3.8%
Mexico (USD)	2.1%	1.7%	2.6%	3.1%	3.3%	3.6%	4.2%
Brazil (USD)	1.9%	NA	NA	3.1%	3.8%	NA	4.9%
United States	1.6%	1.6%	1.6%	1.7%	1.8%	NA	2.3%
Canada	1.5%	1.5%	1.5%	1.5%	1.5%	NA	1.6%
South Korea	1.5%	1.5%	1.6%	NA	1.8%	NA	1.7%
Australia	0.8%	0.7%	0.8%	1.0%	1.2%	1.4%	1.8%
Italy	0.0%	0.3%	0.6%	0.9%	1.2%	1.7%	2.3%
New Zealand	1.0%	NA	1.1%	1.3%	1.4%	1.7%	NA
United Kingdom	0.6%	0.5%	0.5%	0.5%	0.7%	1.0%	1.3%
Greece	NA	0.3%	0.5%	0.9%	1.4%	1.9%	NA
Spain	-0.4%	-0.3%	-0.1%	0.1%	0.4%	0.8%	1.3%
Portugal	-0.5%	-0.4%	-0.1%	0.1%	0.3%	0.7%	1.2%
Japan	-0.2%	-0.2%	-0.2%	-0.2%	-0.1%	0.1%	0.4%
Sweden	-0.4%	NA	-0.4%	NA	0.0%	0.1%	NA
France	-0.6%	-0.6%	-0.4%	-0.3%	0.0%	0.2%	0.8%
Netherlands	-0.6%	-0.7%	-0.5%	-0.4%	-0.2%	-0.1%	0.2%
Germany	-0.6%	-0.7%	-0.6%	-0.5%	-0.3%	-0.2%	0.2%
Switzerland	-0.9%	-0.8%	-0.8%	-0.7%	-0.6%	-0.4%	-0.2%

Source: Bloomberg, RBC Capital Markets

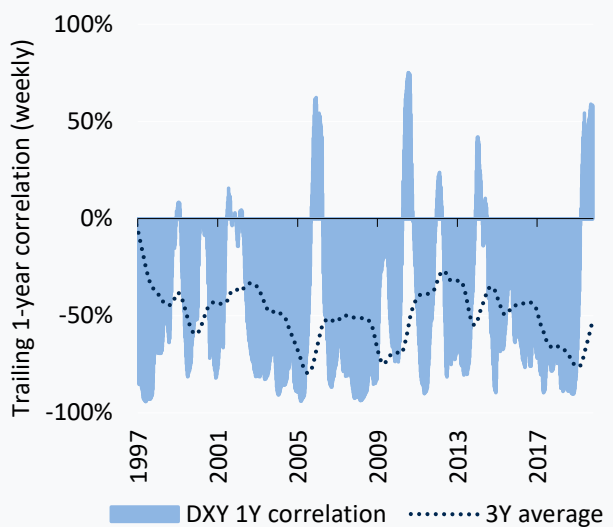
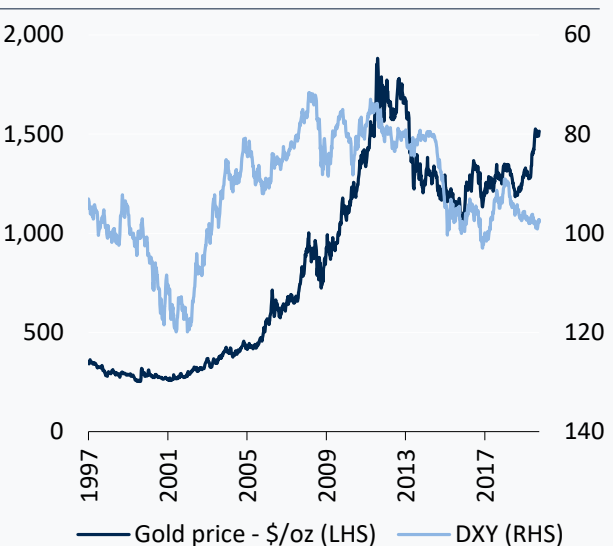
Macroeconomic themes: Gold demonstrates a stronger correlation to real yields and the dollar

Over the long term, gold demonstrates an inverse correlation to real interest rates and the US dollar. However, these correlations can occasionally disconnect from one another short-term. Gold demonstrates a low consistent correlation to the broader equity market short-term.

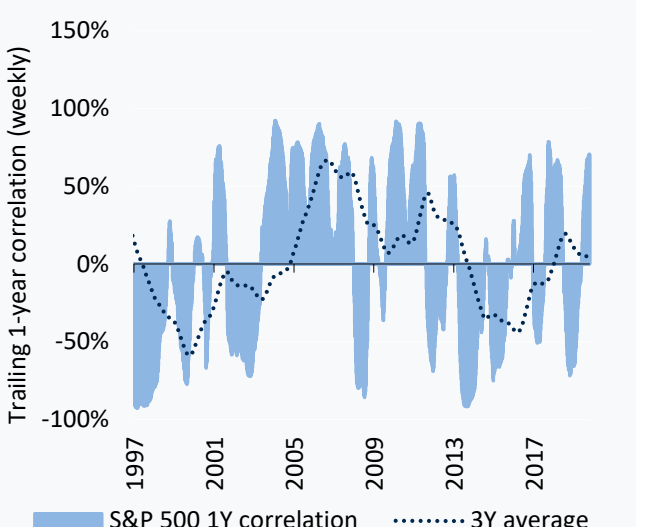
10-year TIPS yield vs. gold



DXY vs. gold



S&P500 Total Return vs. gold

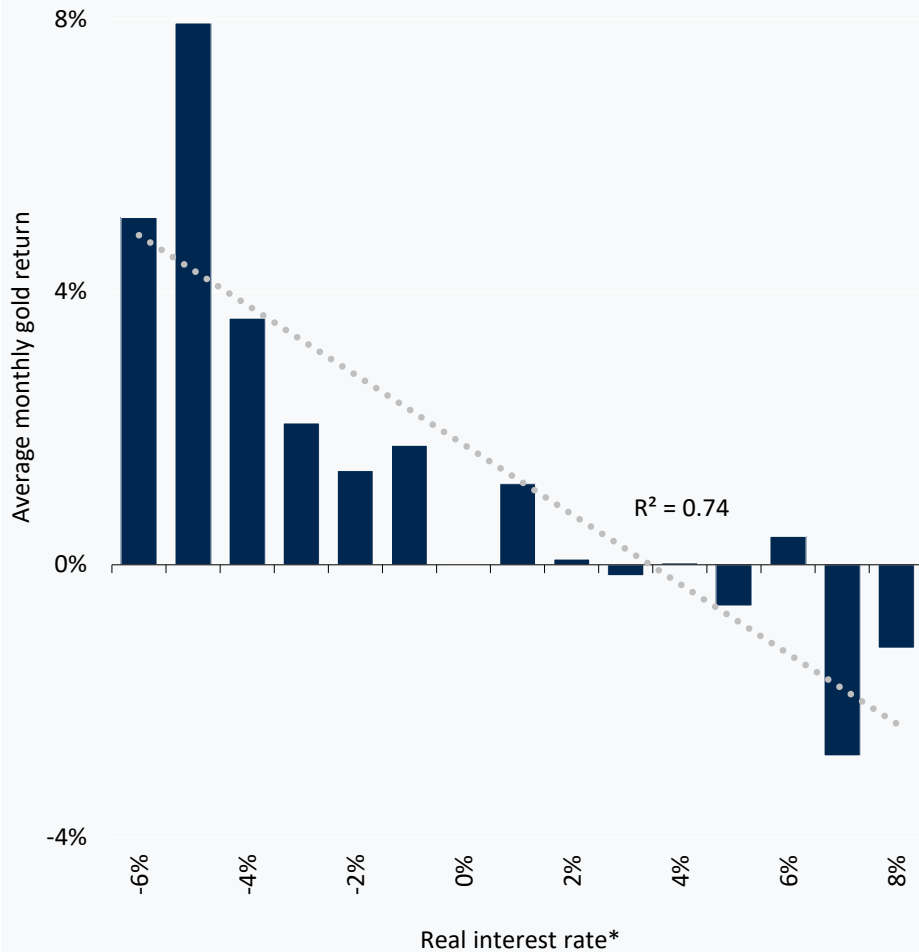


Source: Bloomberg, RBC Capital Markets

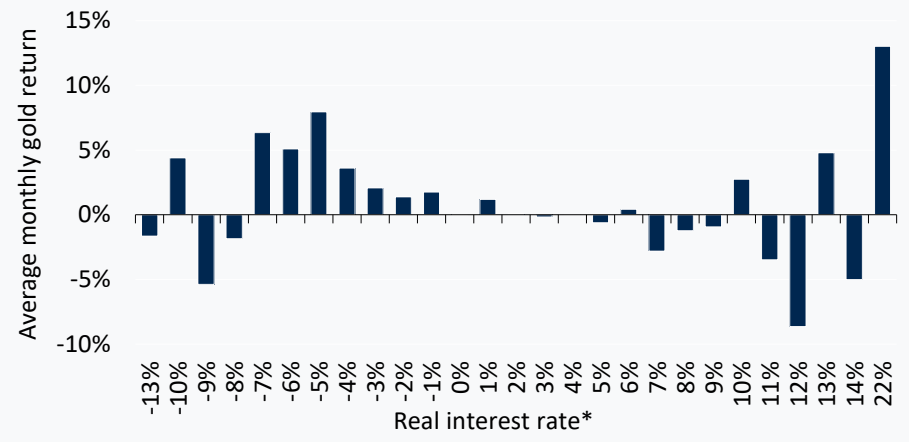
Macroeconomic themes: Gold is most consistently correlated to real yields

Over the long-term, month-over-month gold price changes demonstrate a strong inverse correlation to that of calculated real rates. Gold has not necessarily performed poorly during periods of positive, but low, real interest rates.

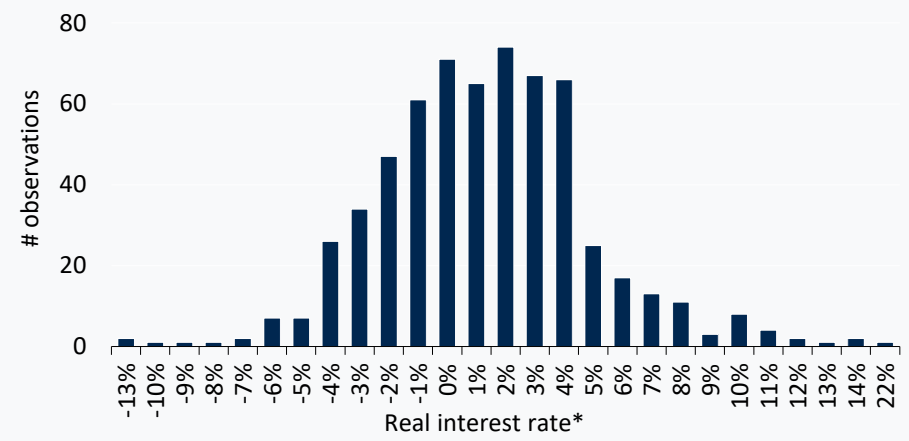
US real interest rates vs monthly gold performance (1968-2018)
95% of observations



100% of observations



Frequency of observations



Notes: Real interest rate calculated as the monthly yield of US one-year t-notes with constant maturity adjusted for inflation. Inflation represented by annualized month over month CPI to match duration. Source: Bloomberg, RBC Capital Markets

Macroeconomic themes: Bond yields have declined, reflecting lower real interest rate expectations

10-year Treasury yields have declined sharply over the long-term. These changes overwhelmingly reflect a decline in real rate expectations, and limited changes to inflation expectations. Recent real rate declines are consistent with higher realized gold prices, but in our view, the ability for real rates to decline further from current low levels of ~0% is viewed as low and represents a headwind to the potential for significantly higher gold prices.

Nominal and real 10-year treasury yields

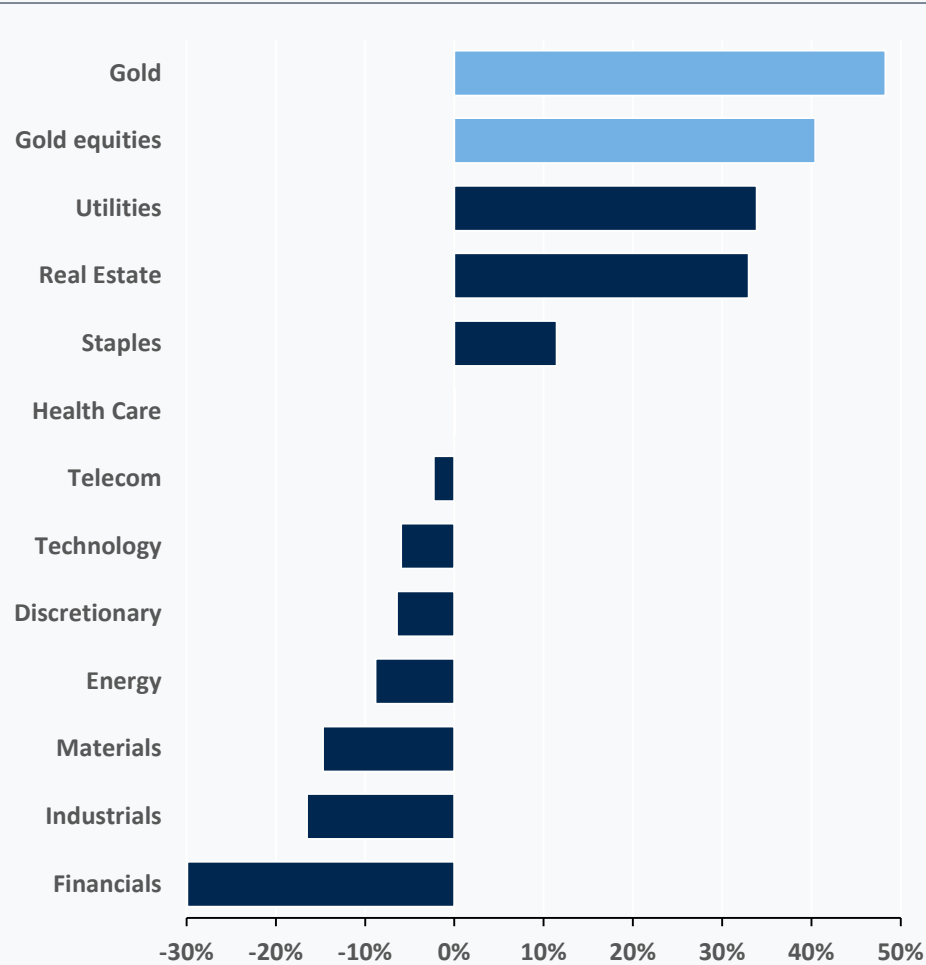


Notes: Implied inflation calculated as the difference between nominal and real 10Y yields
Source: Bloomberg, RBC Capital Markets

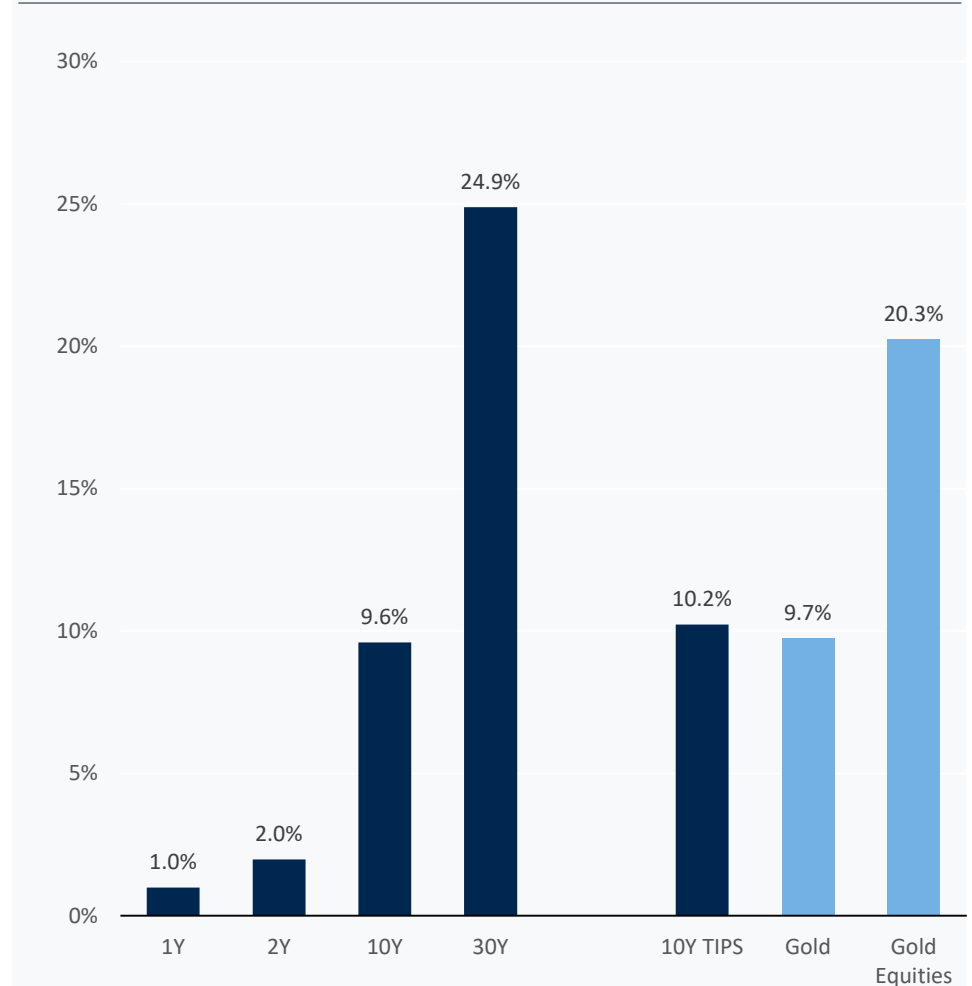
Macroeconomic themes: Real rate changes have varying effects on assets

Changes in real rate yields demonstrate a strong inverse correlation to both gold and gold equities, compared to other market investments. In recent years, changes in interest rates have overwhelmingly been driven by real interest rate changes and future interest rate changes could be expected to have a material impact on gold and gold equity prices.

Sector correlation to TIPS



Price changes for a 1% decline in nominal interest rates



Notes: LHS - Correlations are in relation to the TIPS notes index ETF (weekly since 2014) which is a combination of 1-5Y (~40%), 5-10Y (~40%) and +15Y (~20%) yields; Industry metrics measured by S&P 500 GICS, gold equities measured by XAU Index; RHS - Price change for Treasuries based upon a parallel shift in the Treasury curve. Implied change for gold based upon a change in solely real interest rates calculated from a linear regression of gold and 10-year TIPS yields; Implied change for gold equities based upon weekly beta of gold stocks to gold for a trailing 1-year period, multiplied by the expected change in gold
 Source: Bloomberg, RBC Capital Markets estimates

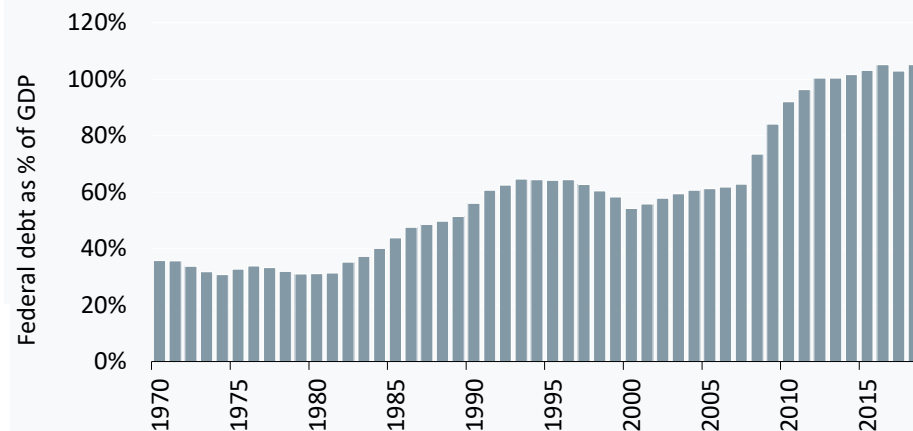
Macroeconomic themes: Debt to GDP is elevated, challenging the outlook for higher rates

Elevated government debt to GDP levels represents a challenge to the potential for rising interest rates. To counter these liabilities, countries are motivated to increase growth or depreciate local currencies, which has the potential to be positive for gold.

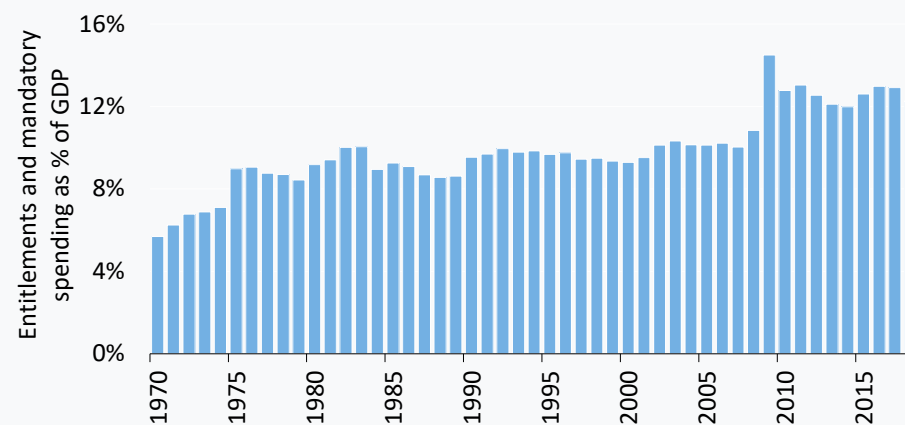
Debt to GDP: global developed markets

Rank	Country	Debt to GDP (%)
1	Japan	236
2	Greece	182
3	Italy	132
4	Portugal	126
5	Singapore	111
6	Belgium	103
7	Spain	98
8	France	97
9	Canada	90
10	United Kingdom	87
11	United States	82
12	Austria	79
13	Ireland	69
14	Germany	64
15	Finland	61
16	Israel	61
17	Netherlands	57
18	Switzerland	43
19	Australia	42
20	Iceland	41
21	Sweden	41
22	Norway	37
23	Denmark	36
24	New Zealand	26
25	Hong Kong	0

US Federal debt to GDP



US government spending to GDP



Macroeconomic themes: Inflation has remained contained, despite monetary stimulus

Real rates are in part driven by realized and expected inflation. Despite elevated monetary stimulus, including near-zero interest rates in developed countries and the accumulation of central bank balance sheet assets, inflation has not materialized.

Inflation: Historical inflation and core inflation



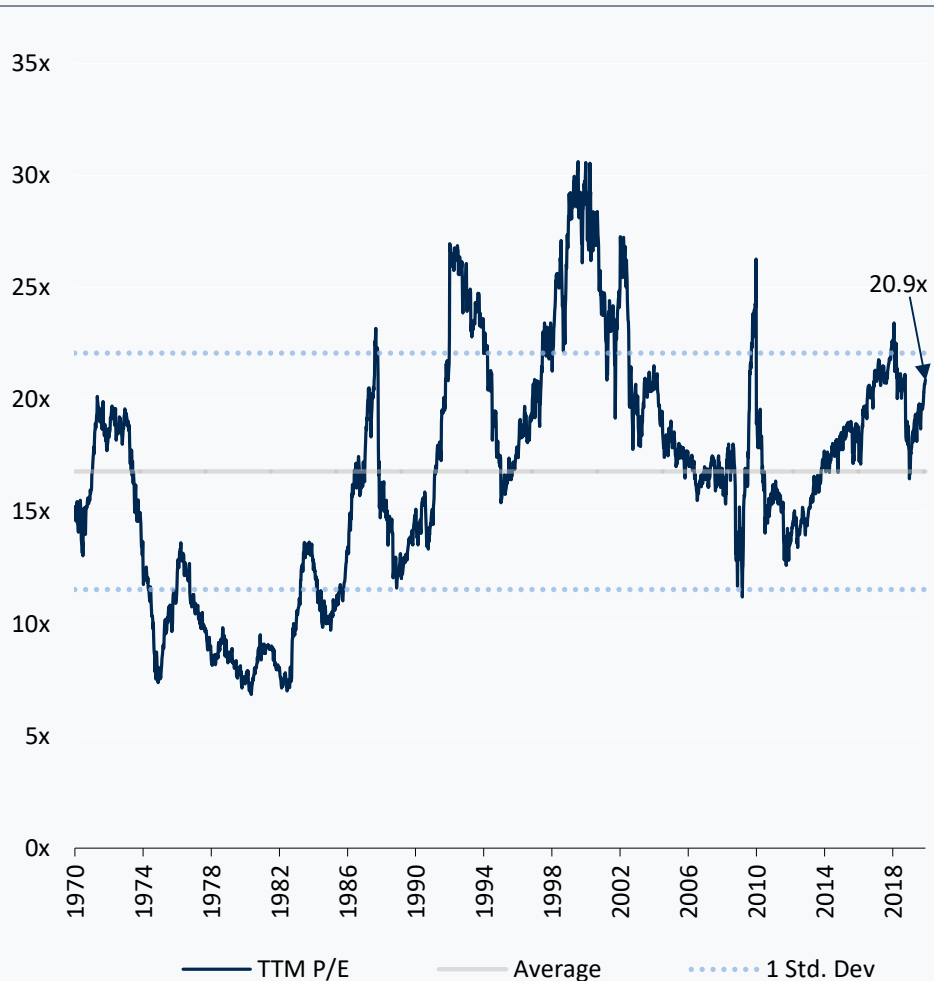
Notes: Project inflation based on the US CPI economic forecast (YoY %). Forecasts are derived from the latest monthly and quarterly surveys conducted by Bloomberg and from forecasts submitted by various banks.

Source: Bloomberg, RBC Capital Markets

Macroeconomic themes: Equity market valuation is above longer-term averages

In spite of heightened economic uncertainty, equity markets have performed favourably in 2019. Valuations are currently above long-term averages, but are within 1 standard deviation.

S&P TTM P/E ratio



S&P FTM P/E ratio

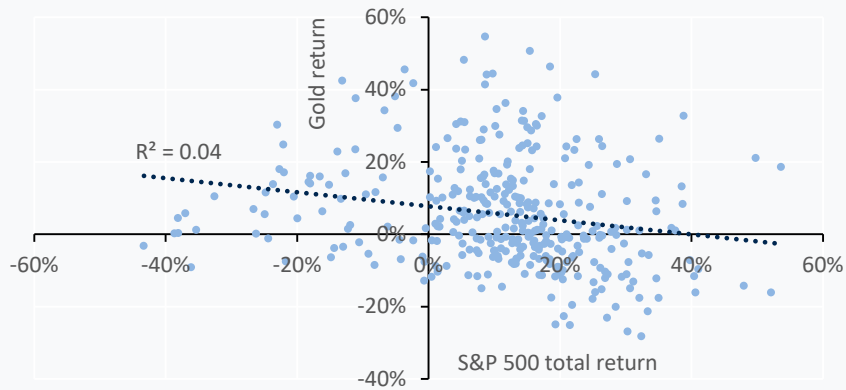


Source: Bloomberg, RBC Capital Markets

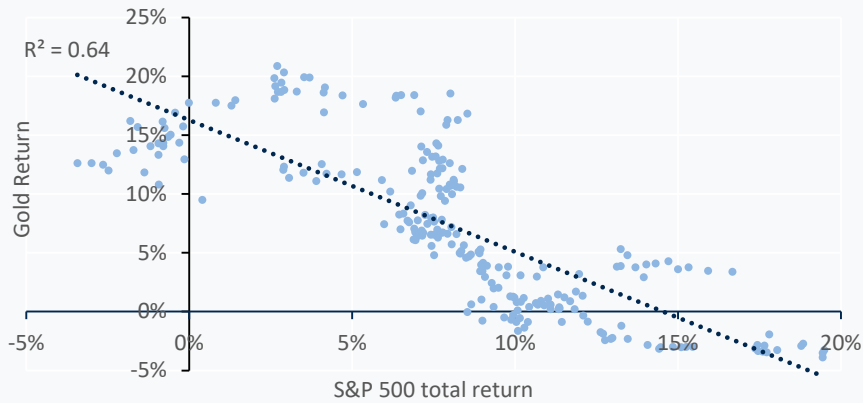
Macroeconomic themes: Long-term gold returns are inversely correlated to the market

Gold demonstrates no meaningful correlation to US equities over shorter time periods; however, over long periods of time, annualized gold performance has been inversely correlated with US equity returns. In our view, forecast lower equity returns could justify increased allocation to gold, albeit with less predictable short-term results.

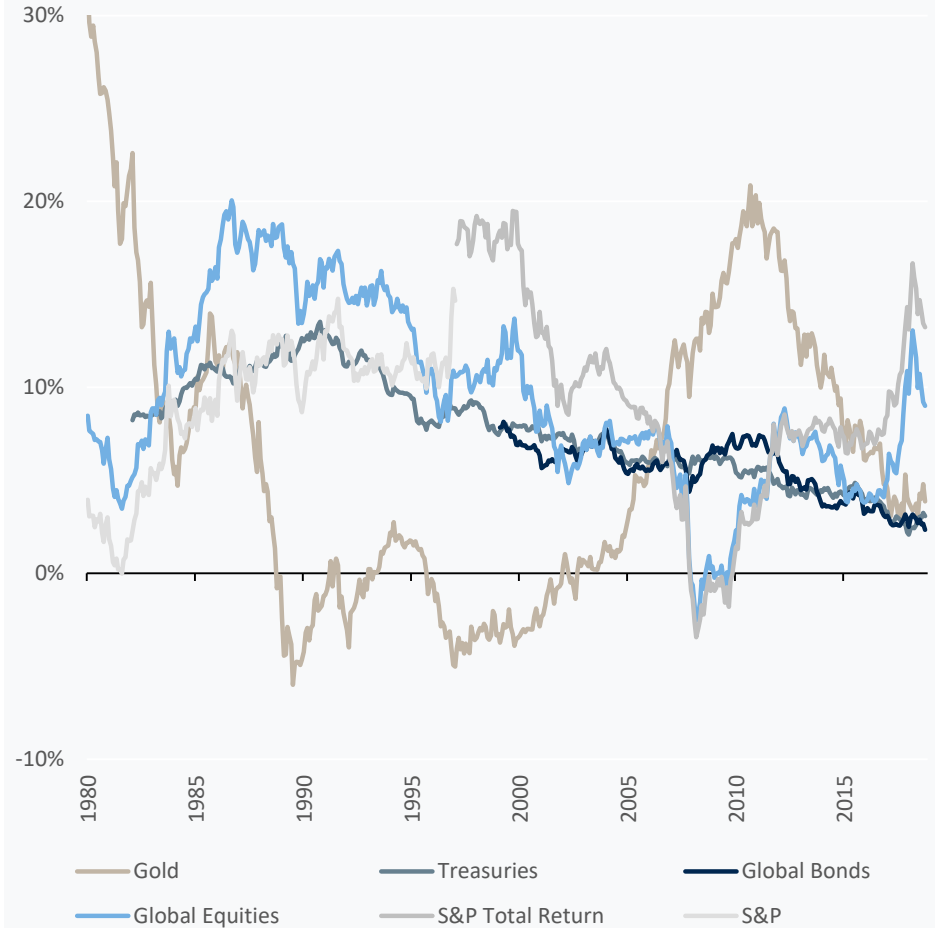
S&P 500 Total Return vs gold – 1Y



S&P 500 Total Return vs gold – 10Y annualized



Rolling 10Y returns by asset



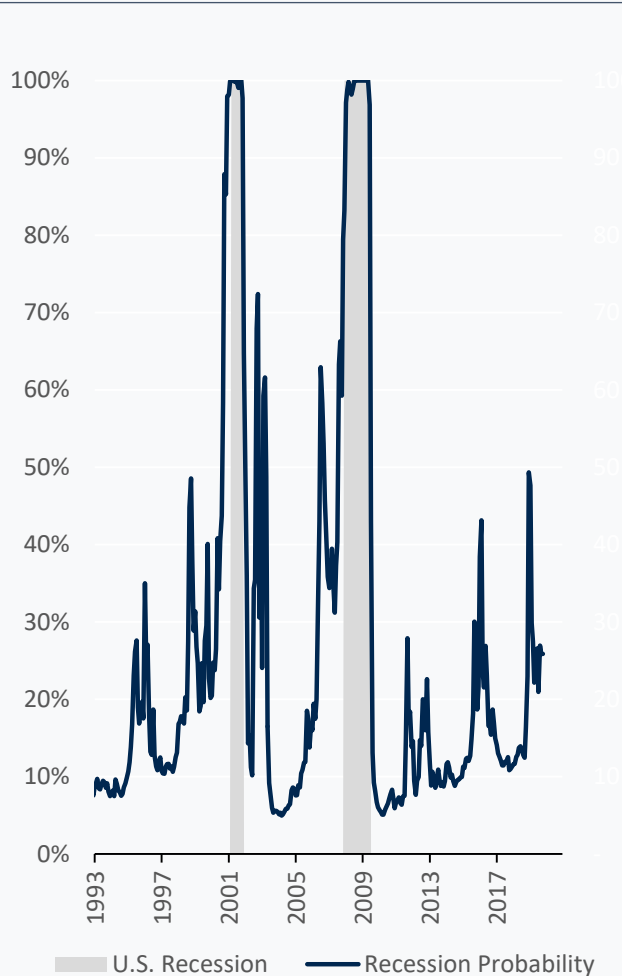
Notes: LHS – Data on monthly basis from 1990 to present; S&P represented by S&P 500 total return; RHS – Treasuries return represented by Bloomberg Barclays US Treasury Total Return Unhedged USD; Global Bonds return represented by Bloomberg Barclays Global-Aggregate Total Return Index Value Unhedged USD; S&P represented by S&P 500 total return from 1998-present, and S&P excluding dividends from 1980-1997 due to data availability; Global equities represented by MSCI World Net Total Return USD Index

Source: Bloomberg, RBC Capital Markets

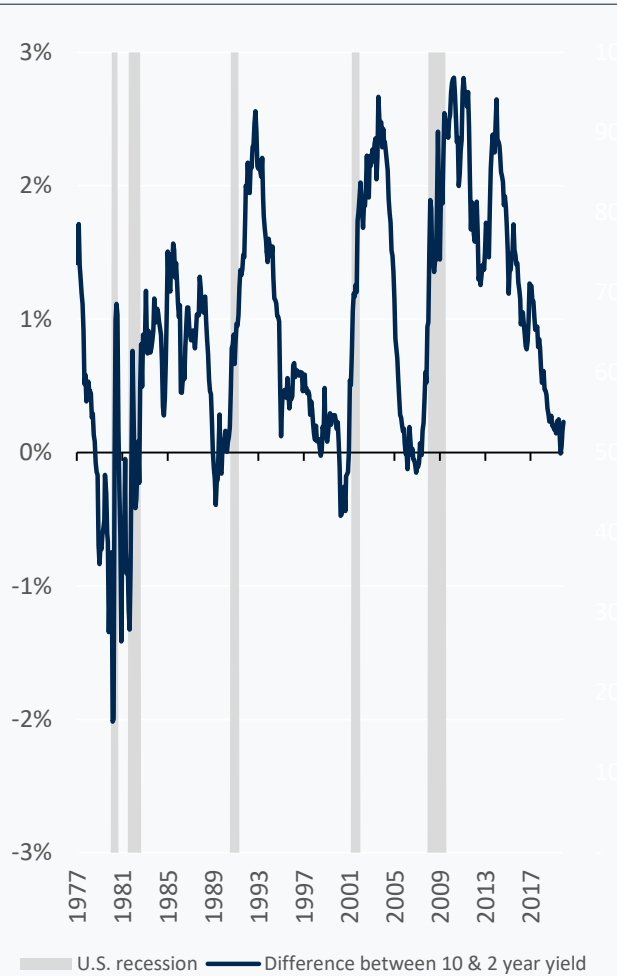
Macroeconomic themes: Assessing recession risk and the opportunity for additional policy response

Recession probability risks have increased, but remain a low probability near term. While the yield curve's inversion in 2019 may signal elevated potential risk of an upcoming recession, it is worthwhile acknowledging central bank intervention may have reduced this indicator's significance, and a conflicting outlook from other recession indicators.

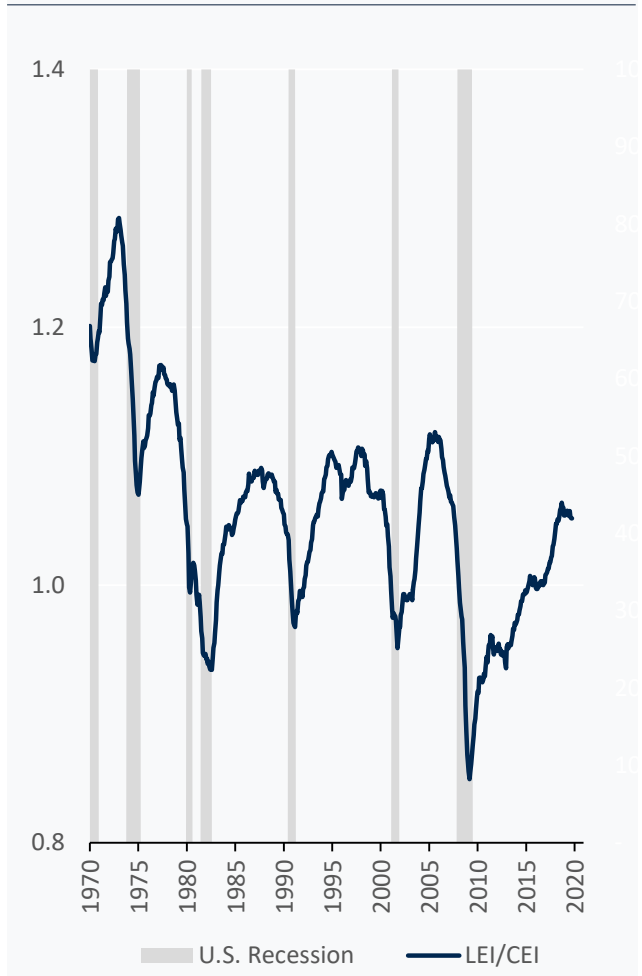
Recession probability index



Yield curve



LEI/CEI index

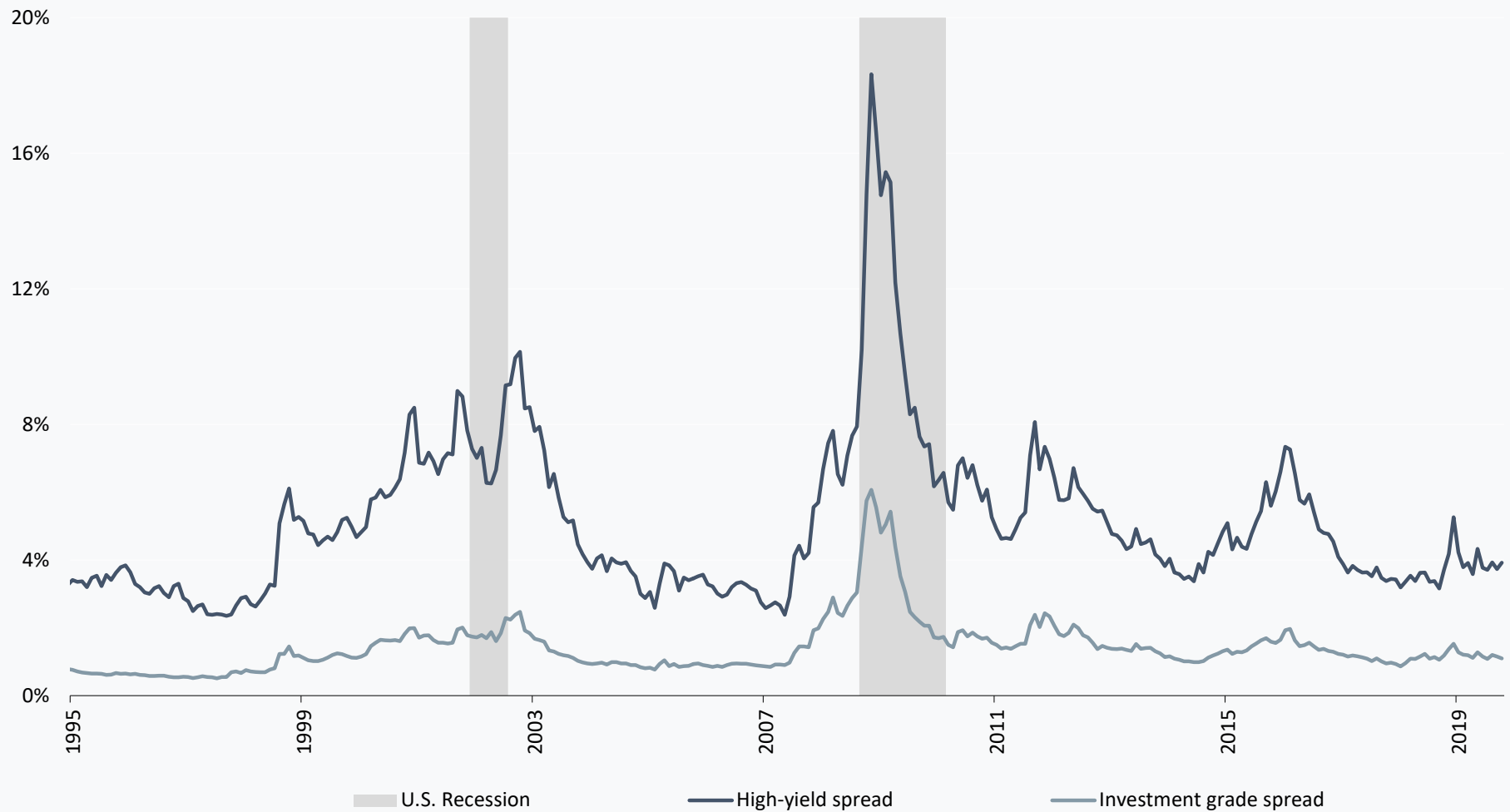


Notes: Recession probability measured by Bloomberg recession probability index over a 12 month forward-looking period
 Source: Bloomberg, RBC Capital Markets

Macroeconomic themes: Credit spreads remain tight and risk appetite is high

Widening high yield and investment grade credit spreads typically precede economic weakness. Current spreads are narrow, suggesting low perceived funding risks and that risk appetite remains high. Credit is generally less liquid than equities; corporate bond and high yield ETFs have become larger holders of debt over time, introducing a change in the market that could yield less predictable outcomes in times of elevated stress.

High-yield and investment grade spreads

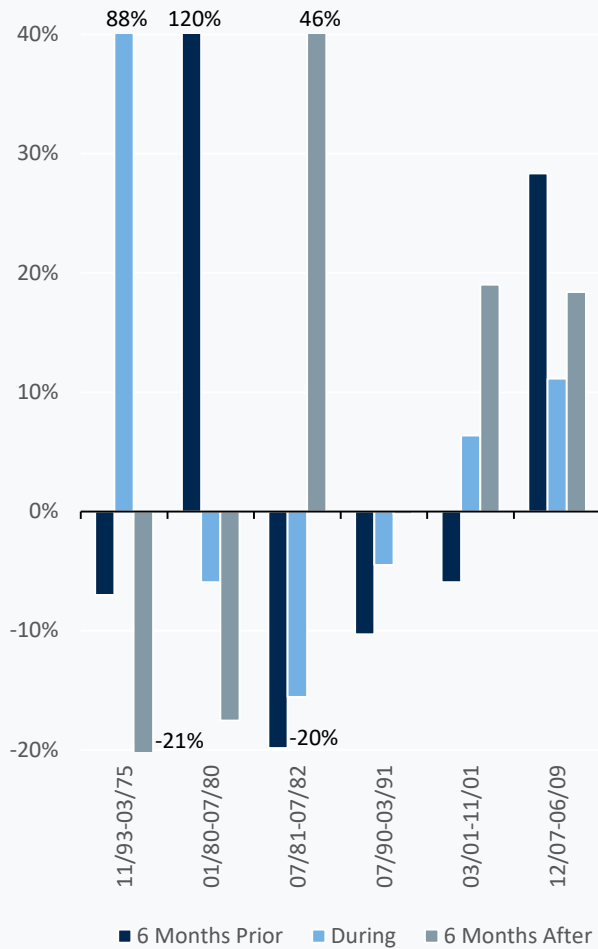


Notes: High-yield spread represented by Bloomberg Barclays US Corporate High Yield Average OAS; Investment grade spread represented by US Agg Corporate Avg OAS
Source: Bloomberg, RBC Capital Markets

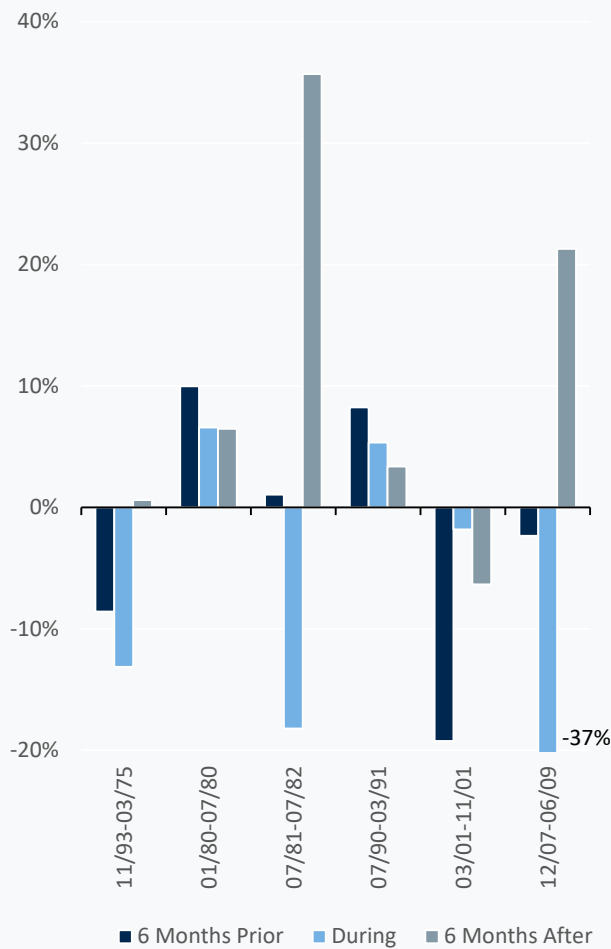
Macroeconomic themes: Recession conditions demonstrate a mixed outcome for assets

While gold is viewed as a safe haven asset, strictly isolating its performance track record during, before, and after historical recession conditions has demonstrated a mixed outcome. Similar mixed results have been demonstrated for the S&P500, while Treasuries demonstrate a more consistently positive outcome during recessions.

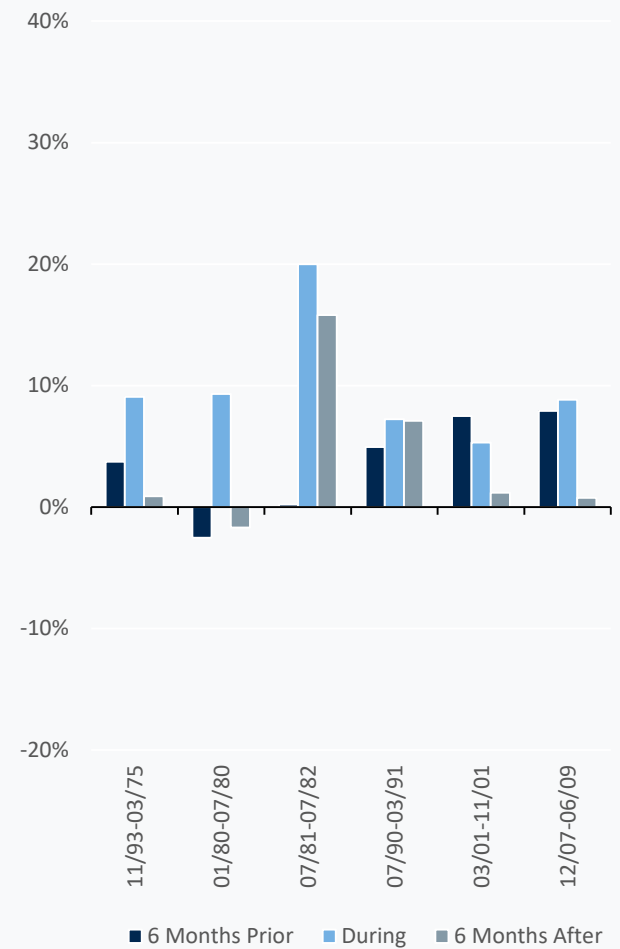
Gold returns and recessions



S&P returns and recessions



Treasury returns and recessions

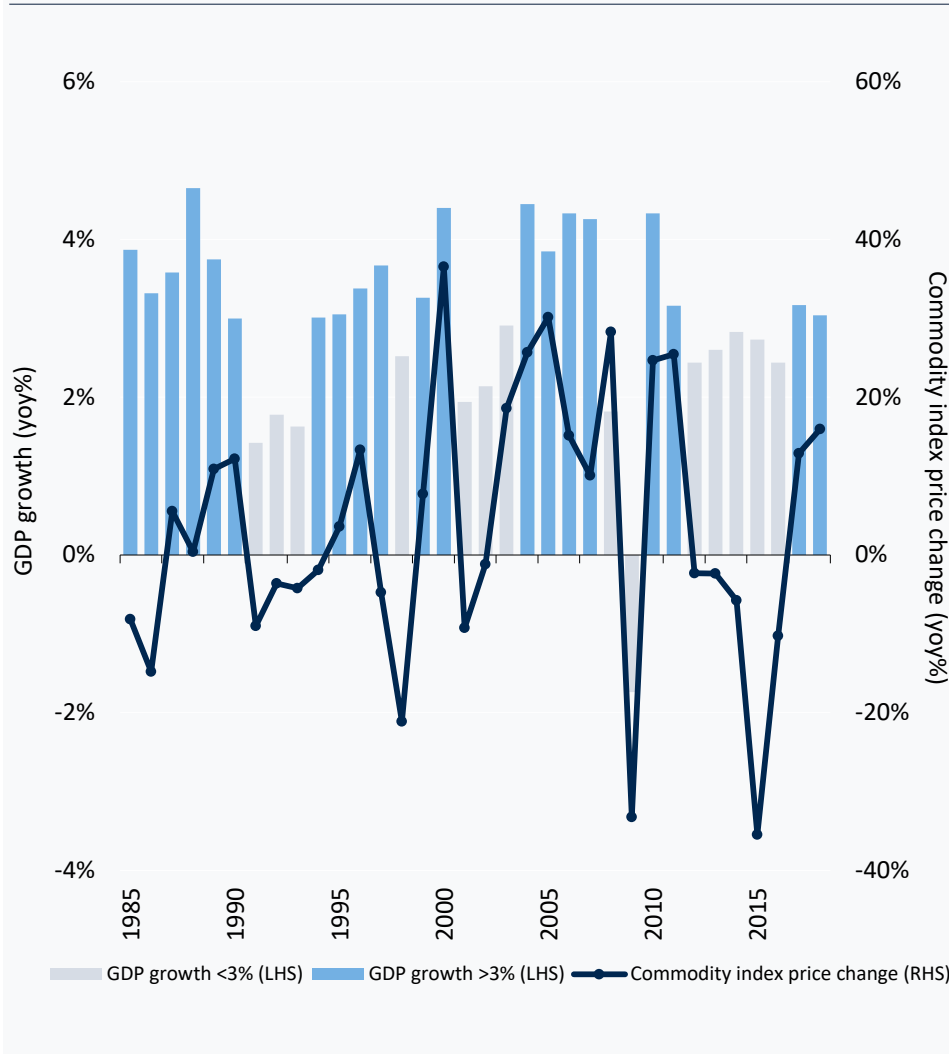


Notes: S&P returns are by price and do not include dividends; Treasury returns represented from Bloomberg Barclays US treasury total return unhedged USD
Source: Bloomberg, RBC Capital Markets

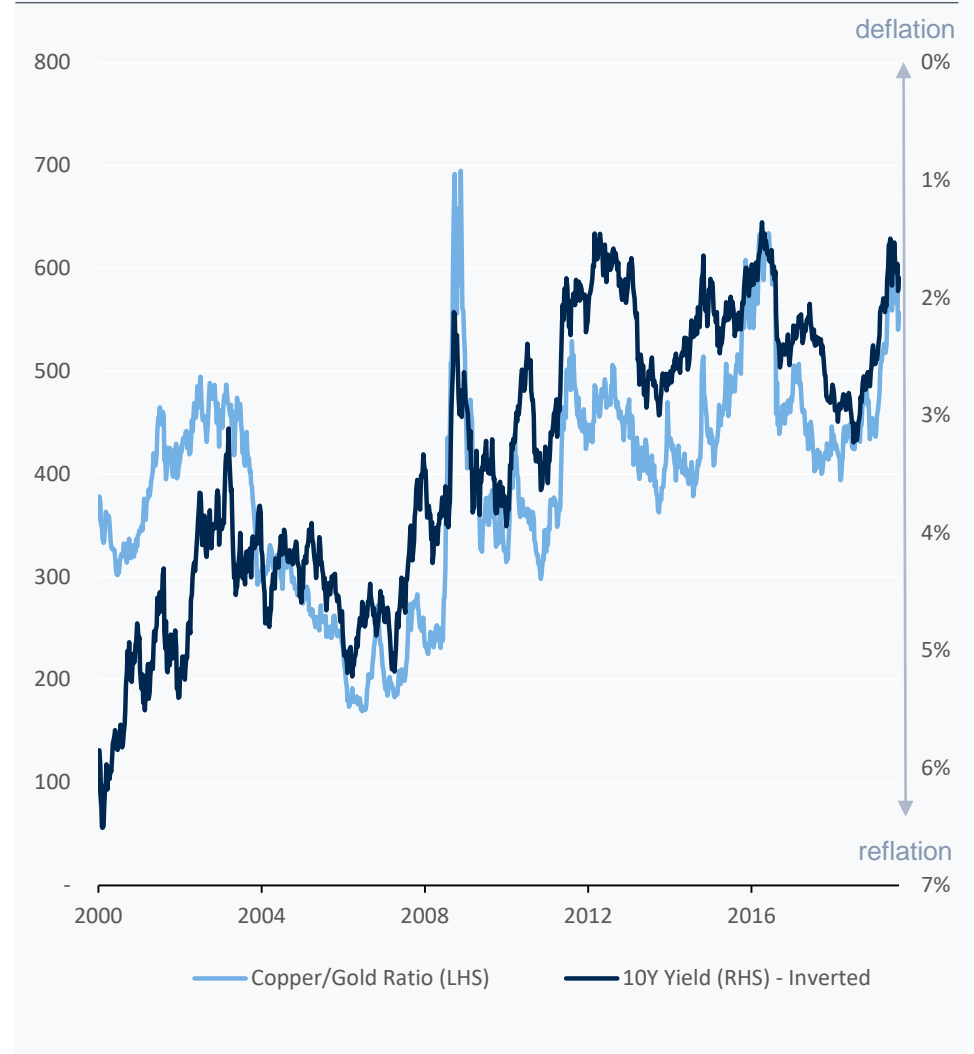
Macroeconomic themes: Growth is positive for commodity price performance

Global GDP growth above 3% has historically produced positive average annual returns for commodity price indices over the past 35 years. On a relative basis, declining interest rates represent an increasing risk of deflation, where gold demonstrates outperformance relative to copper, while the opposite performance is present when reflation conditions are present

GDP growth vs growth in commodity prices



Copper/gold ratio vs. 10Y yield

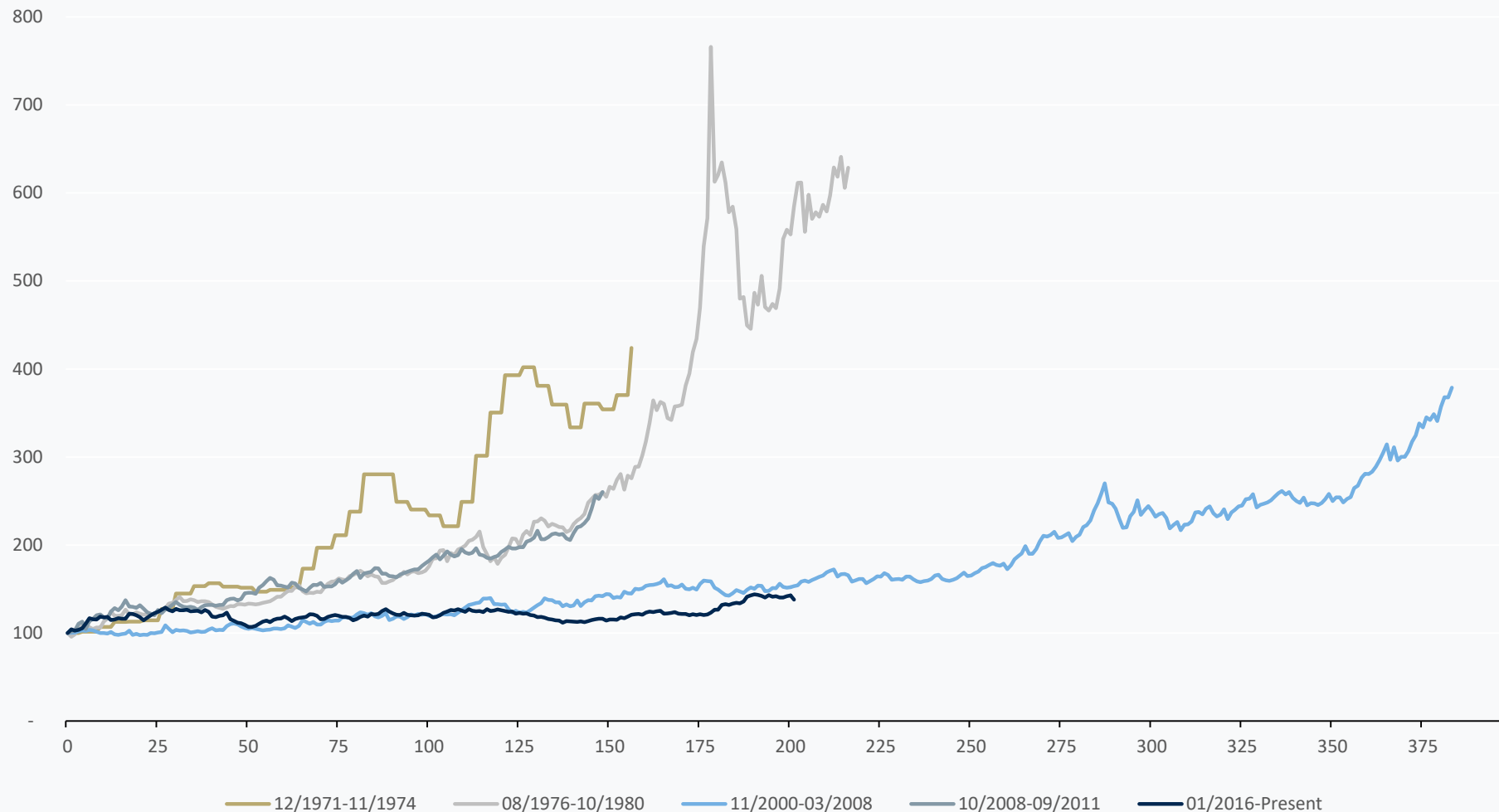


Source: Bloomberg, RBC Capital Markets

Gold themes: Current gold bull market returns are not abnormal relative to the past

Bull market gold cycles demonstrate wide variability in both price performance and duration. From gold's most recent cyclical low price of \$1,050/oz in 2015, more than 200 weeks have lapsed. The duration of the current cycle is longer than average, while price percentage returns have been below average.

Historical gold bull markets

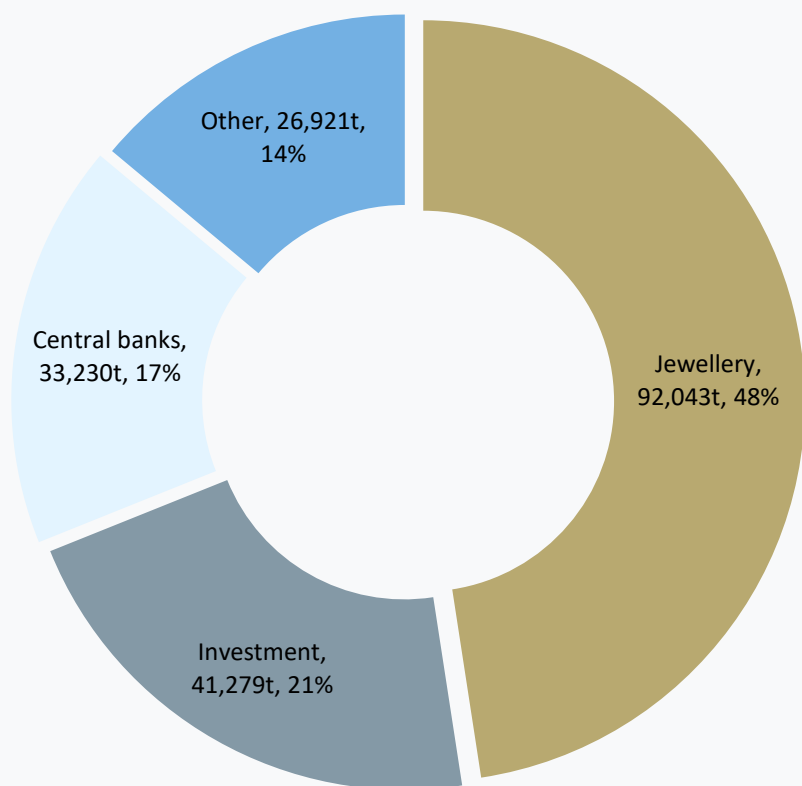


Notes: 1971-present; Time is measured in weeks where T=0 is beginning of the bull market; Bull markets begin with a value of 100
Source: Bloomberg, RBC Capital Markets

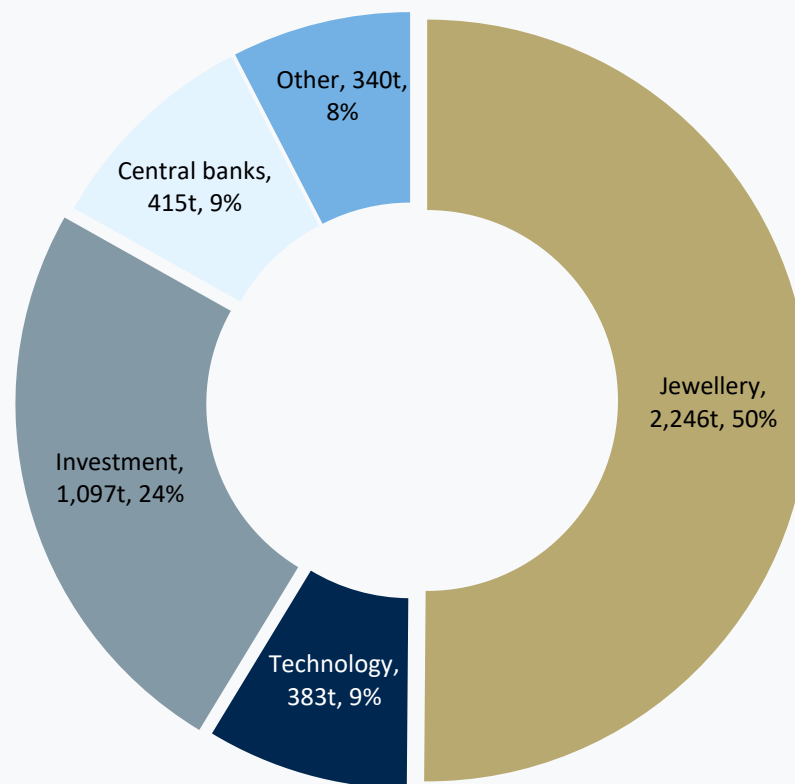
Gold themes: Gold supply is represented by mines and changes in above ground inventories

Unlike traditional commodities that are consumed or utilized, mined gold remains stored above ground as inventories and can return as supply to the market. Supply is typically viewed as mine production and recycling, while demand is typically viewed as jewellery, central bank purchases, and industrial/technology usage. Traditional consumers can occasionally become suppliers (i.e. central bank sales and individual holdings liquidation).

2018 year-end estimated above-ground inventories by sector



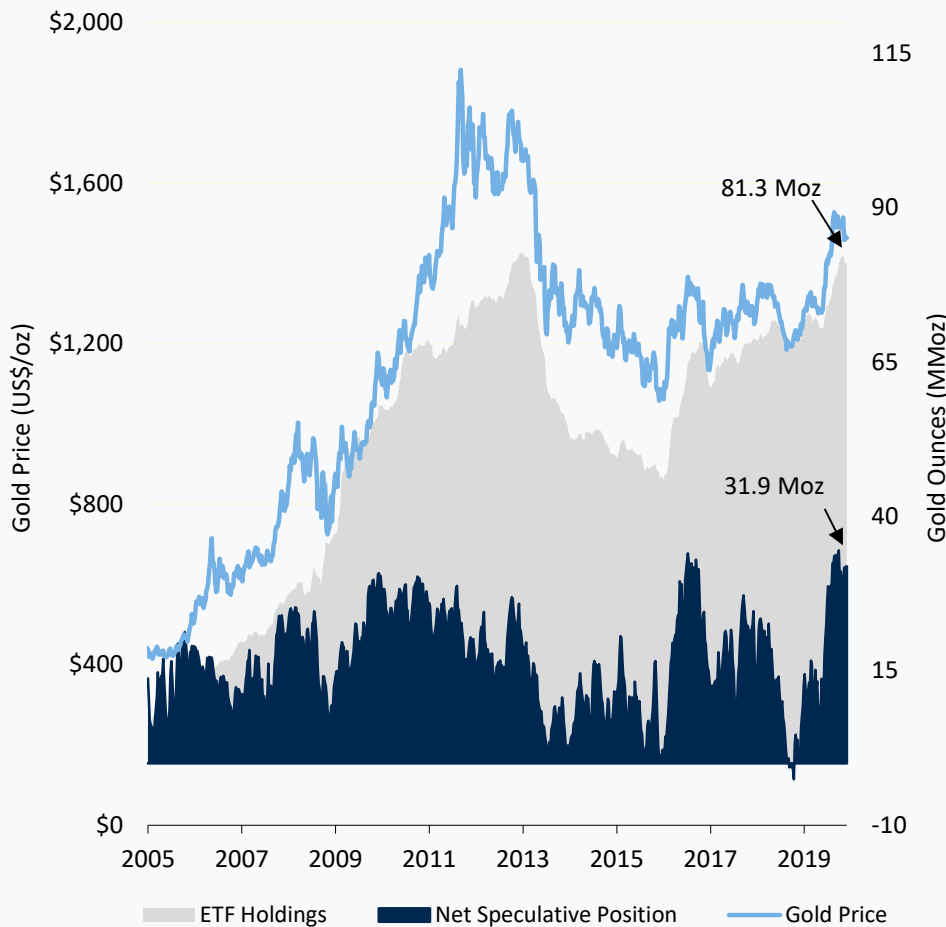
5-year average annual demand by sector



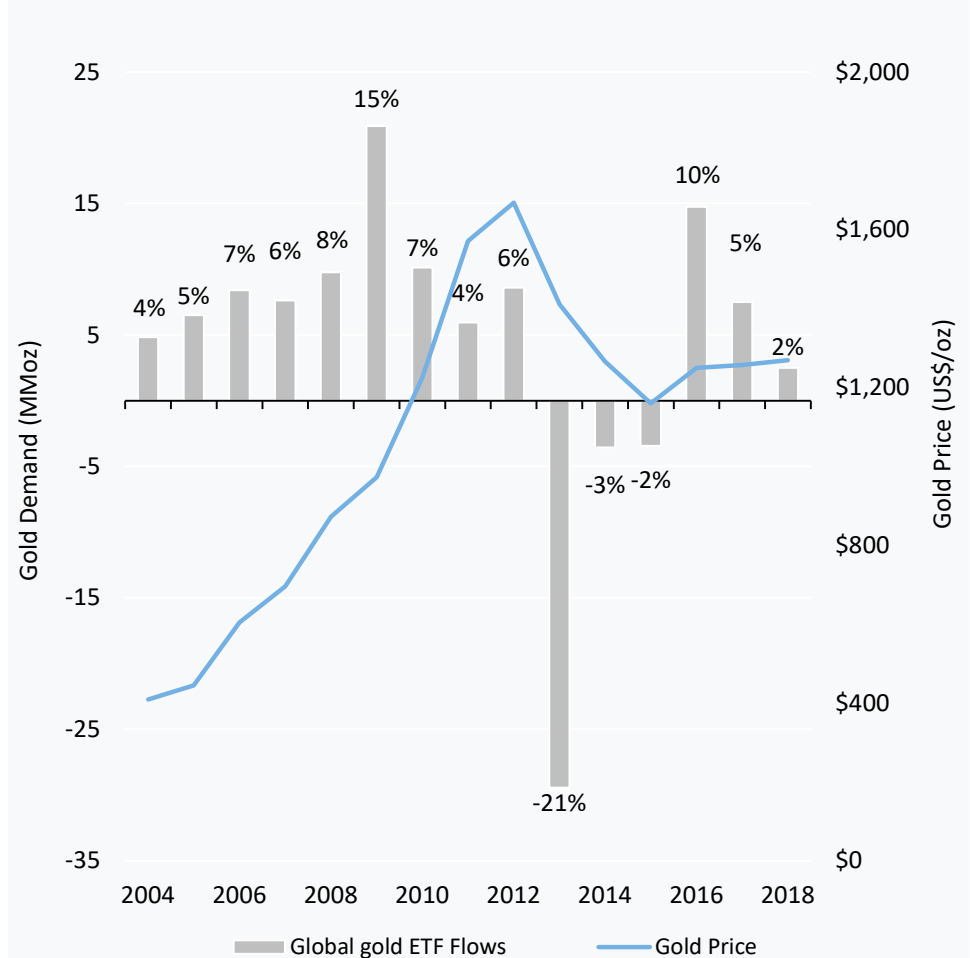
Gold themes: Global ETF flows are a meaningful investment demand factor

Physical gold ETFs were first introduced in 2004, and have now become an influential factor in investment flows for the gold sector. Gold ETFs represent a real-time indicator of investment demand, traditionally an opaque component of the market. ETF investment flows can also represent supply to the gold market, when net disinvestment is present.

Gold ETF and net speculative futures positioning



Gold ETF demand and its percentage of annual mine supply

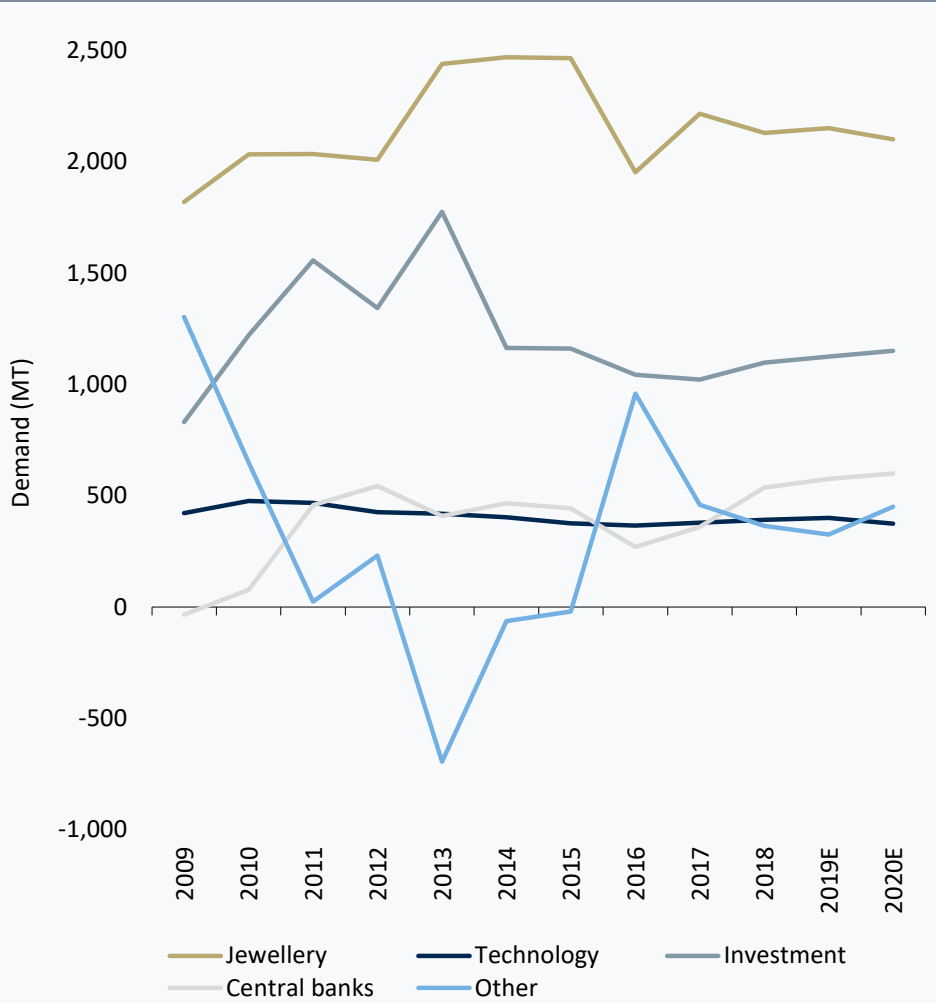


Notes: LHS - Priced as of December 2, 2019. ETF holdings represent global gold holdings (81.3 Moz current) and net speculative position represents Comex gold futures (31.9 Moz current);
 RHS – Percentages reflect global gold ETF flow demand as a percentage of annual global supply
 Source: Bloomberg, RBC Capital Markets

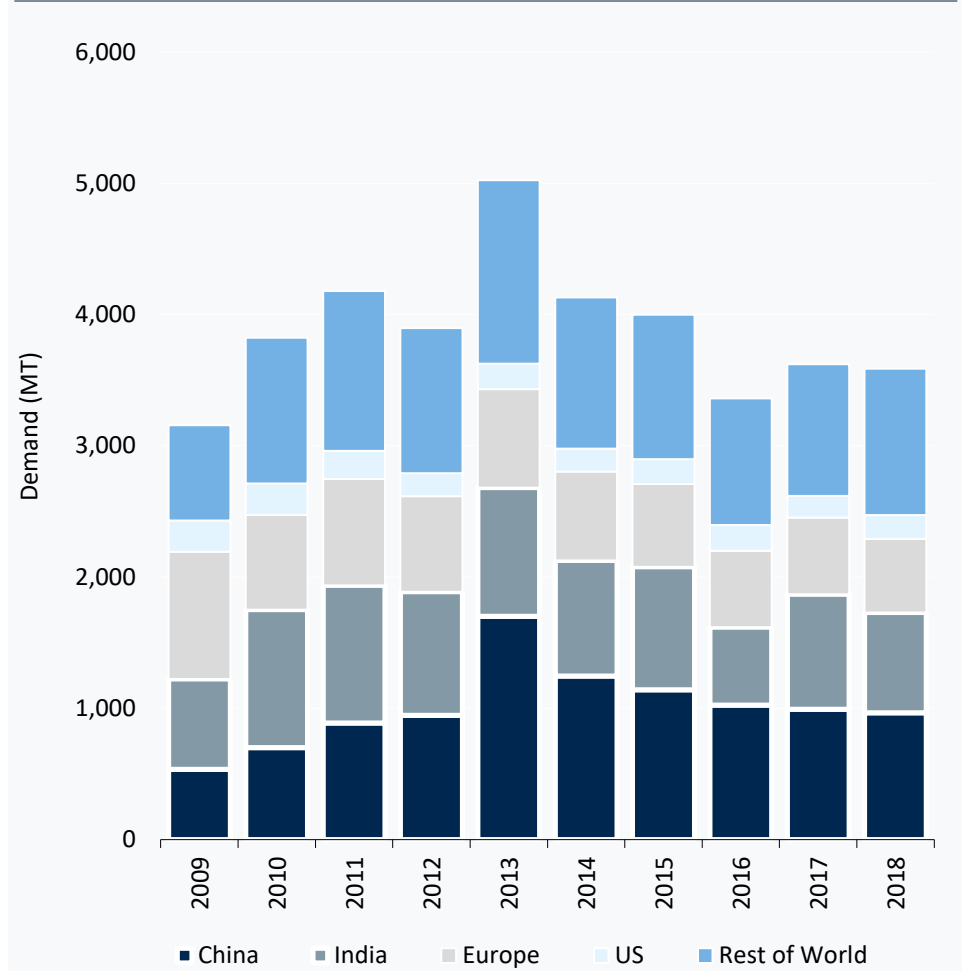
Gold themes: Emerging markets are a key factor of gold demand

Gold demand is heavily influenced by China and India. In general, emerging market currency trends and economic activity can have a meaningful impact on demand trends.

Trends of key buyer groups



Demand by country

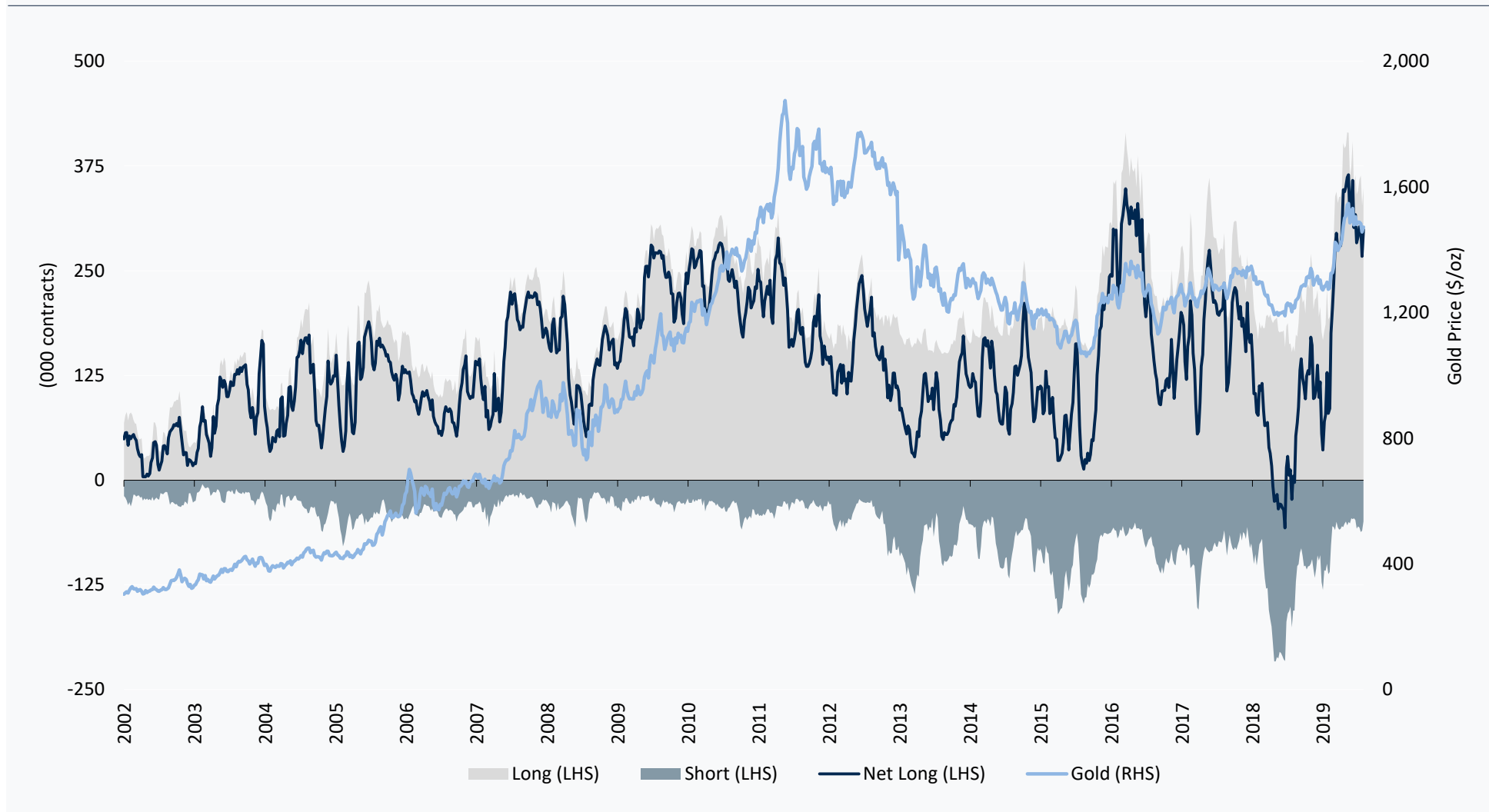


Notes: 2019 and 2020 estimates by RBC Capital Markets
 Source: GFMS, Metals Focus, RBC Capital Markets

Gold themes: Current net long speculative positioning is elevated

Current net speculative futures and options positions are elevated and just shy of all-time highs. Futures positioning represents a coincident gold indicator and can be a short-term price driver. In our view, elevated current net long positioning represents a risk to the gold price, should positioning decline.

Gold net speculative long and short positioning

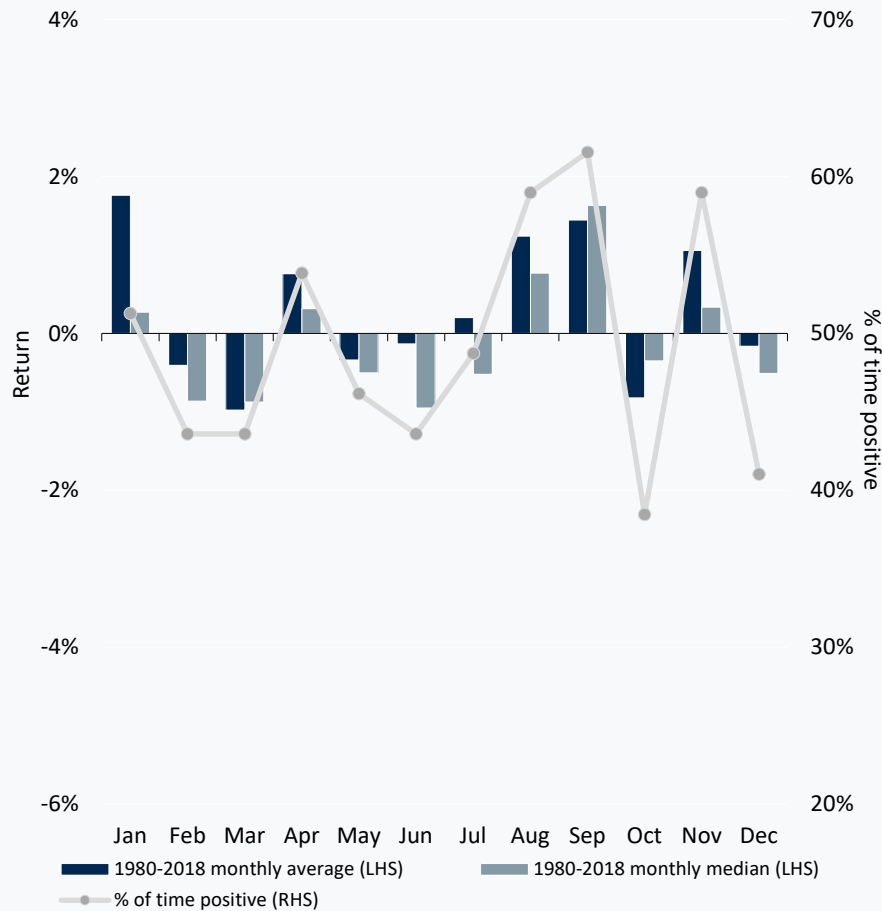


Source: Bloomberg, RBC Capital Markets

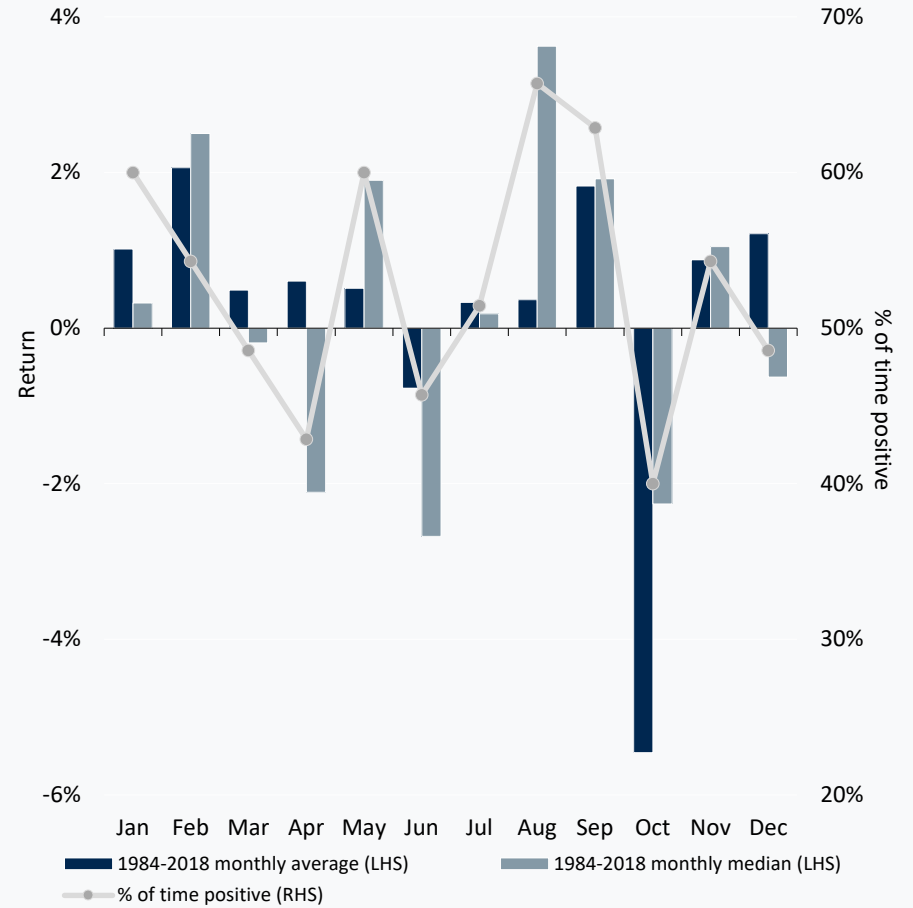
Gold themes: Evaluating gold and equity price seasonality

Positive gold price seasonality has traditionally been exhibited in August, September, and November. Stronger positive gold equity price seasonality is exhibited in February, May, August, September, and November. Gold price seasonality may be a function of stocking trends ahead of key gold buying events and holidays.

Gold price seasonality



Gold equity seasonality

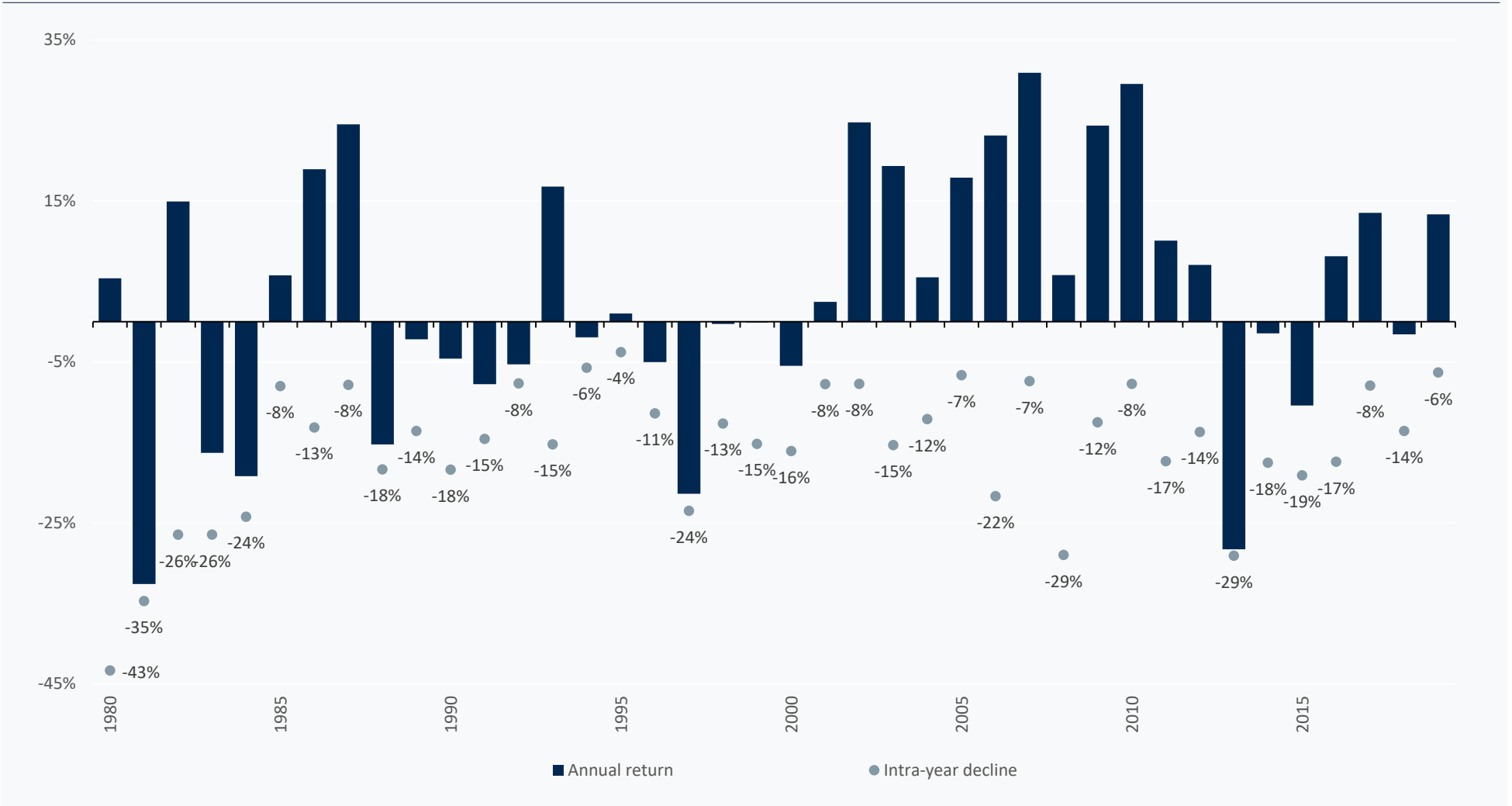


Source: Bloomberg, RBC Capital Markets

Gold themes: Gold price volatility is elevated and price declines can be sizable

Since 1980, calendar year gold price returns have been a median +4% while intra-year maximum losses have been a median 14%. Price volatility for gold is high and material corrections can be experienced even when prices are increasing.

Annual gold price returns and intra-year declines



Notes: 2019 shows YTD figures; Intra-year drops refers to the largest price decline experienced from a high to a subsequent low during the year.
Source: Bloomberg, RBC Capital Markets

Gold equity themes

Key Takeaways:

- Over the past 15 years, gold equities have underperformed both their implied operating leverage provided by gold as well as the gold price itself. The sector has generated returns on equity well below the broader market, a function of poor capital allocation, elevated shareholder dilution, and the impact of prior high cost inflation.
- While past equity price performance has been disappointing for the sector, gold equity valuation has substantially improved and is now competitive on certain metrics relative to the broader US market. Constructively, the sector in recent years has also managed to contain costs and reduce leverage. These factors, in our view, substantially reduce sector downside risks.
- We estimate producer fully loaded costs of US\$1,239/oz in 2020E, a 2% increase compared to 2019 estimates. Over a 3-year trailing period, we calculate underlying unit per tonne costs have increased at a modest annualized rate of 1%, well below historical averages. Cost containment has been a key theme which we believe has reduced the risk for the sector at lower gold prices.
- Due to the gold mining sector's shorter-duration, depleting asset bases, we believe ongoing elevated capital spending is required. Capital spending for gold producers has historically correlated to gold price changes, overall amplifying sector commodity price performance cyclicity and presenting margin contraction risk should current higher gold prices materialize.
- Gold producer management teams have placed a greater emphasis upon outlining attainable production and operating guidance targets in recent years, and the overwhelming majority of producers now achieve or exceed outlined targets.
- Passive gold-focused ETF assets are a noteworthy factor in the sector today, now representing a >6% ownership in underlying equity holdings. Given the gold sector low total market capitalization of ~US\$300b, ETF flows can have a sizable impact on underlying gold equity holdings. These changes also have potential consequences for gold sector proxy voting and equity funding.
- Gold producers face greater ESG scrutiny than other sectors, a function of the group's high environmental impact and greater social exposure risks associated with operating in geopolitically less stable countries. Governance, in particular, remains a key theme for investors, where gold companies lag other sectors.



Capital
Markets

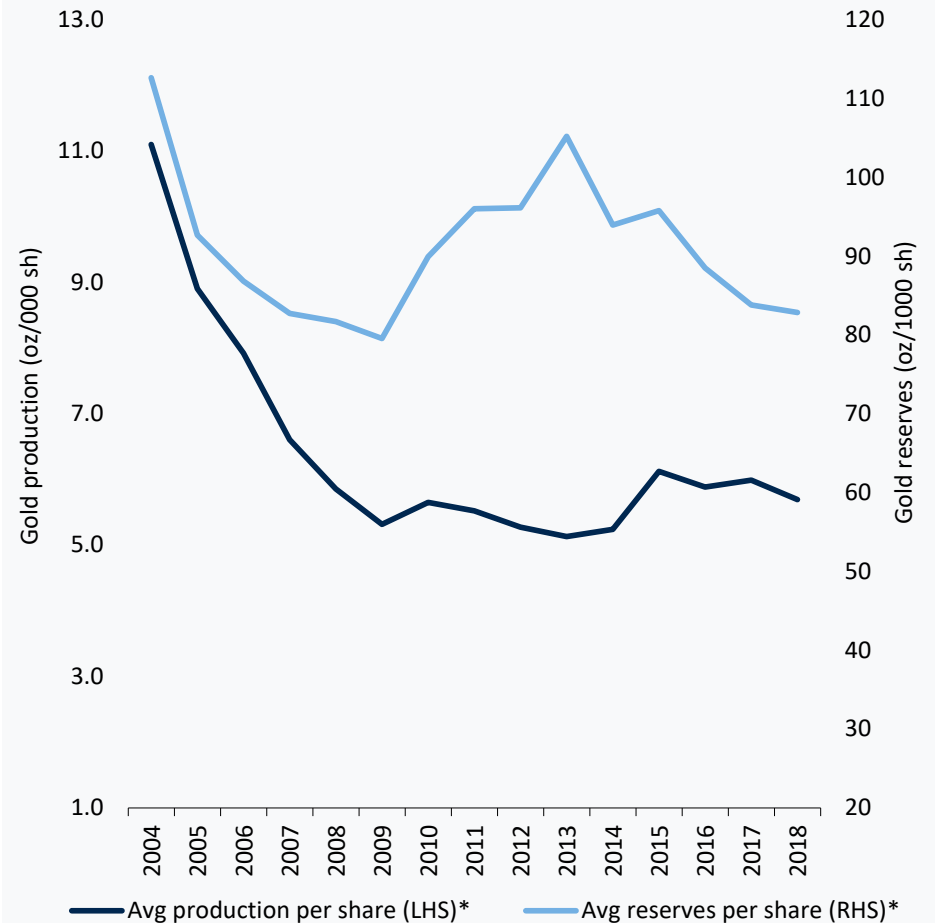
Gold equity themes: Gold equities have underperformed the price of gold

Over time, gold equities have underperformed both their implied operating leverage provided by gold as well as the gold price itself. This performance has broadly been a function of poor capital allocation, shareholder dilution, and the impact of cost inflation.

Trailing 15Y gold equities performance vs. gold price



Gold producer coverage avg. production & reserves per share



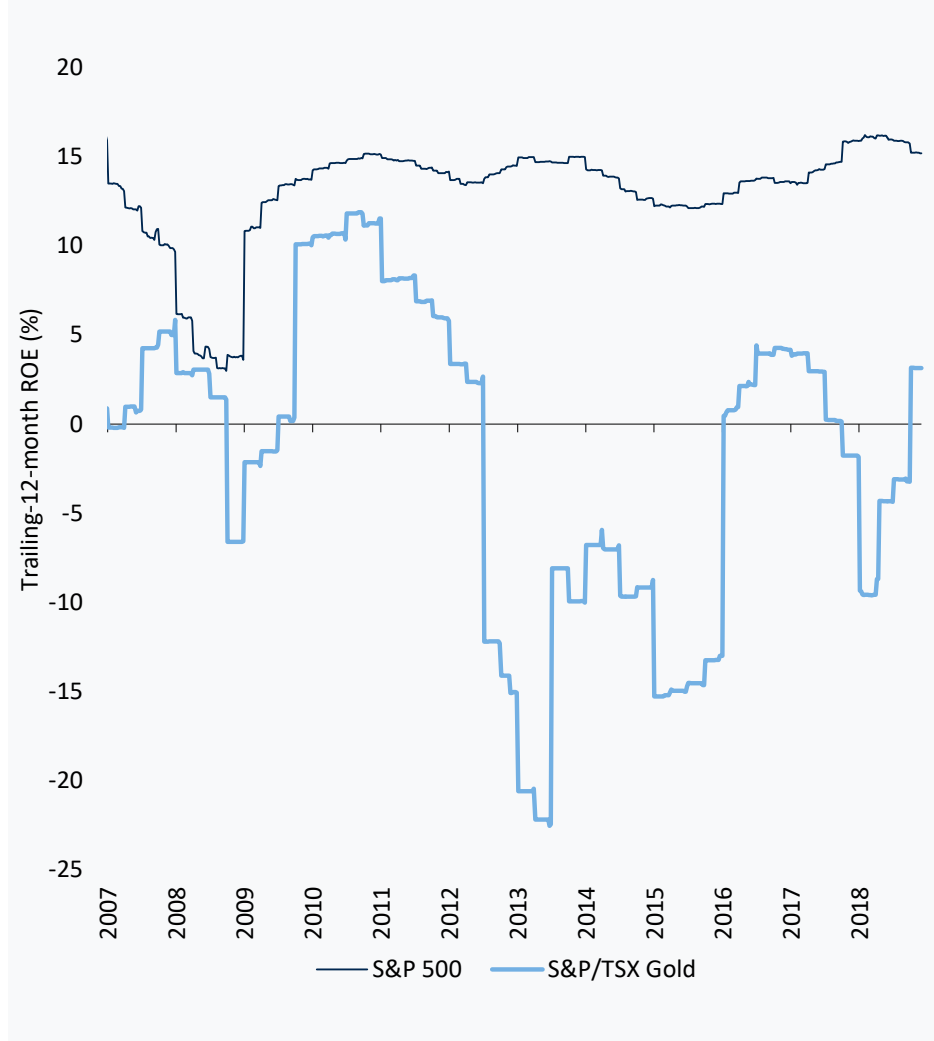
Note: *Market cap weighted average gold production and gold reserves per share for our gold producer coverage universe including AEM, AGI, AUJ, BTG, EGO, GOLD, IAG, KGC, NEM and NGD, as well as RRS (acq'd by Barrick Q1/19) and GG (acq'd by NEM Q2/19).

Source: Bloomberg, Company reports, RBC Capital Markets

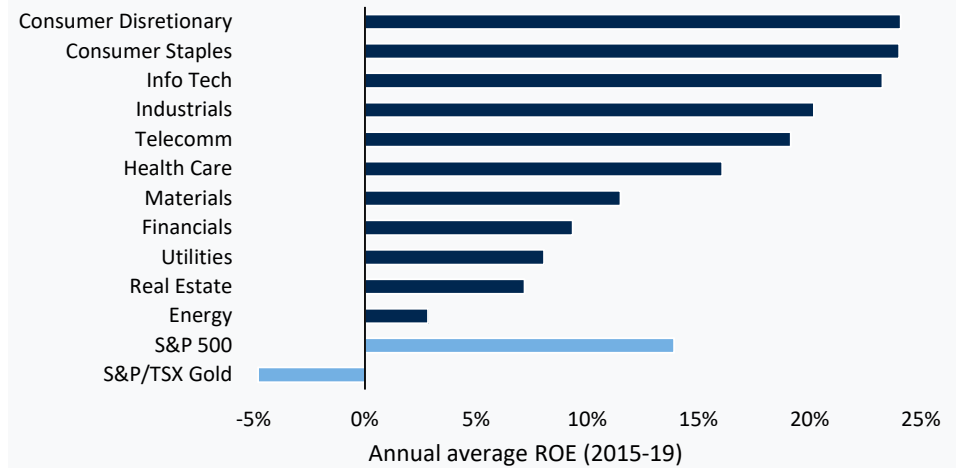
Gold equity themes: Returns generated for gold equities have lagged the broader market

Return on equity generated by the gold sector has historically lagged the broader market. Lower shareholder equity returns generated correlate to weaker share price performance and potentially justify lower valuation multiples than broader investment opportunities.

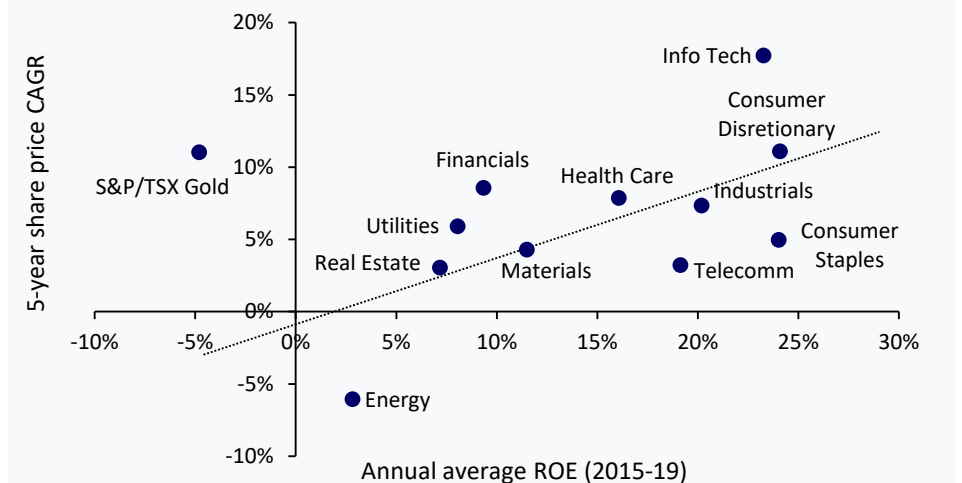
Return on equity (ROE) over time for gold equities and S&P 500



5-year historical annual average ROE by sector



5-year average annual ROE vs. performance by sector

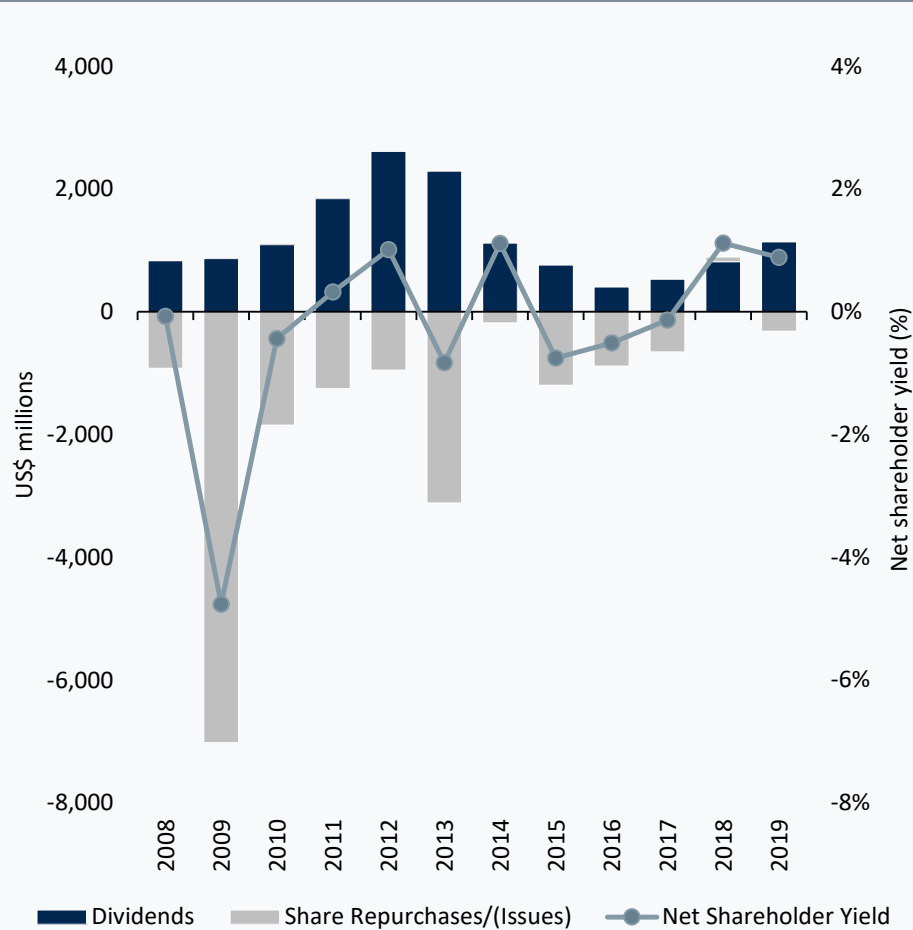


Note: ROE for gold equities measured by S&P/TSX Global Gold Index. ROE and performance for S&P 500 sectors measured by GICS indices, with the exception of real estate, measured by US MSCI index. Source: Bloomberg, RBC Capital Markets

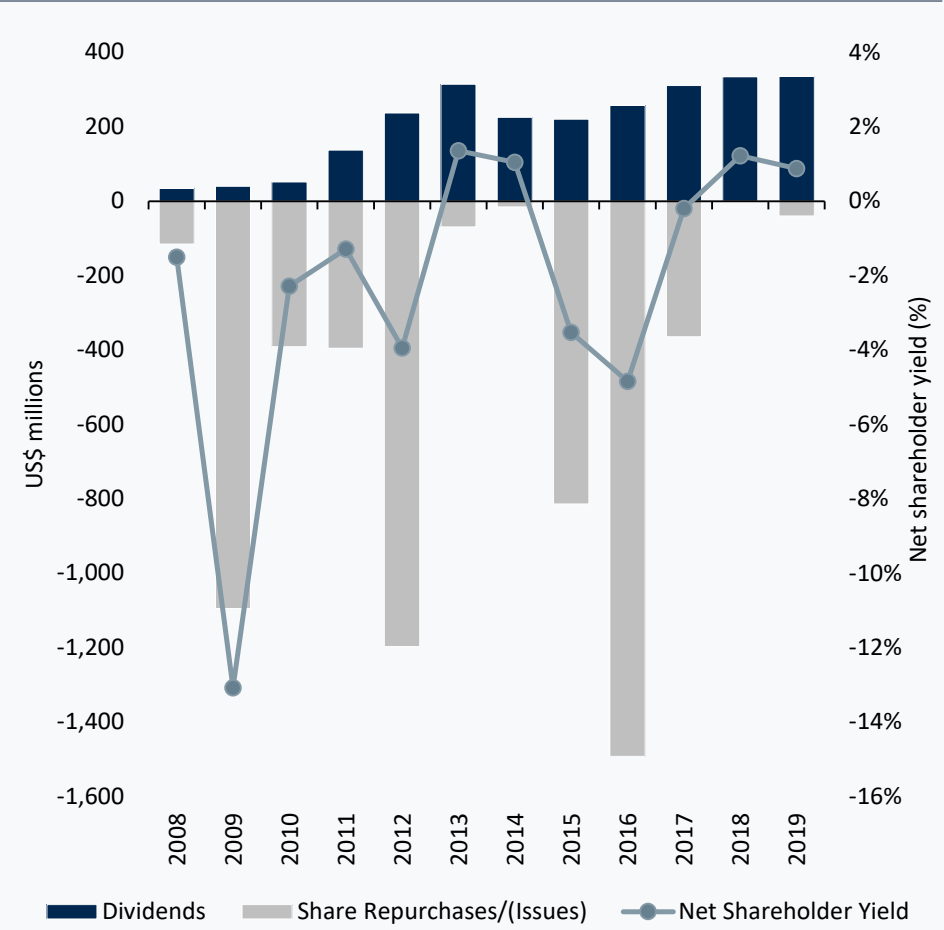
Gold equity themes: Despite dividend growth, companies have relied upon equity issuance for funding

Gold companies have historically remained reliant upon external equity capital to fund cyclical working capital needs, development, and M&A. While dividends have grown in importance over the past decade, dividends net of equity issued has been negative most years over this period.

Gold producer dividends and share repurchases/(issues)



Royalty company dividends and share repurchases/(issues)



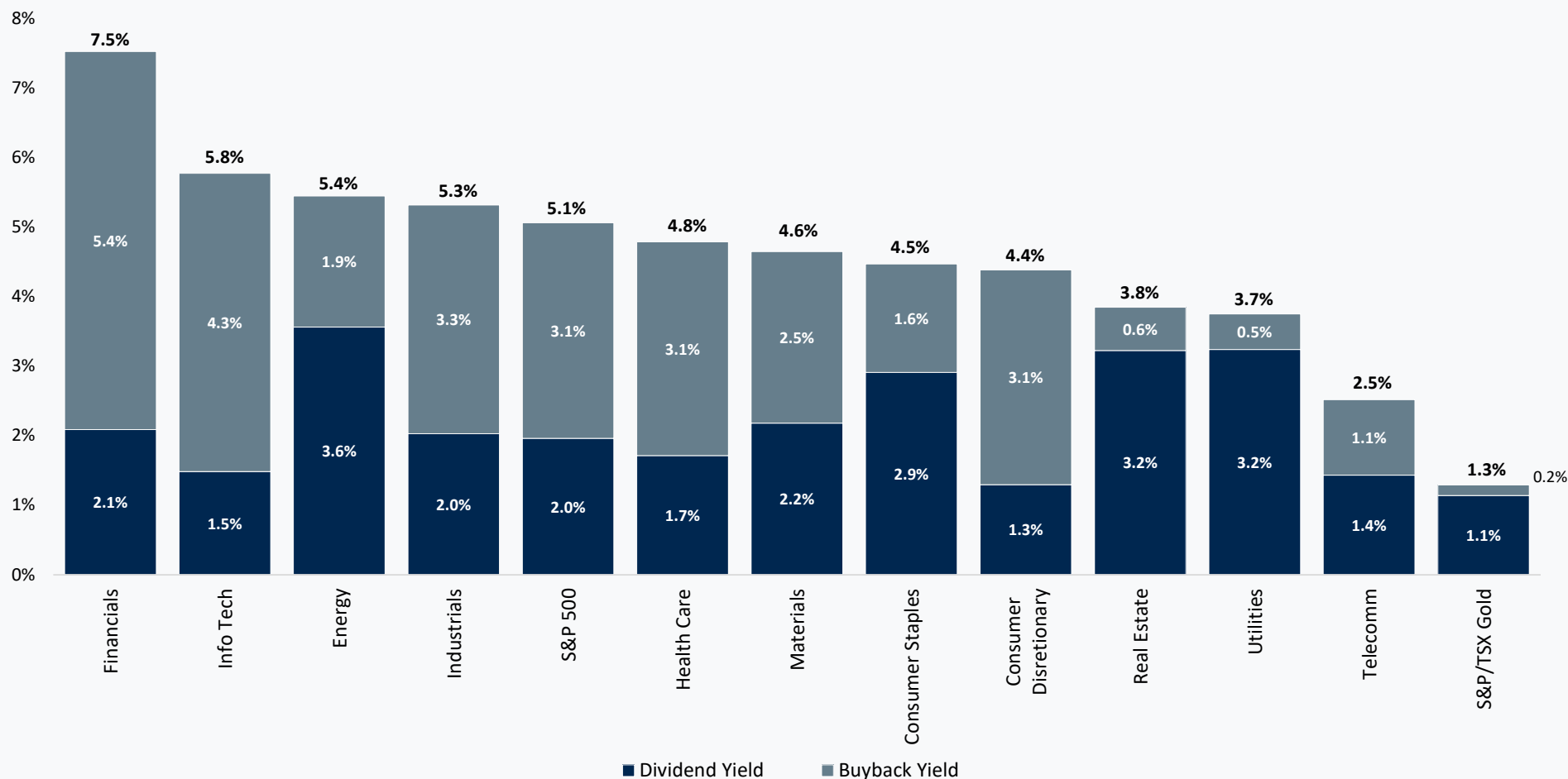
Notes: Shareholder yield equals dividends plus net share repurchases/(issues) as a percentage of historical annual average market cap. Data for gold producer coverage universe including AEM, AGI, AUJ, BTG, EGO, GOLD, IAG, KGC, NEM and NGD, as well as RRS (acq'd by Barrick Q1/19) and GG (acq'd by NEM Q2/19).

Source: Bloomberg, Company reports, RBC Capital Markets

Gold equity themes: Dividends have improved, but are not yet competitive for generalists investors

Corporate cash can be returned to shareholders via both dividends or share buybacks, which combined represent shareholder yield. More recently, growing dividends have become an important theme for gold companies to improve their relative competitiveness. Despite this focus, gold dividends lag the S&P500. On a gross shareholder yield basis, returns for the gold sector are lower than other sectors.

Trailing 12-month shareholder yield (dividend and buyback)

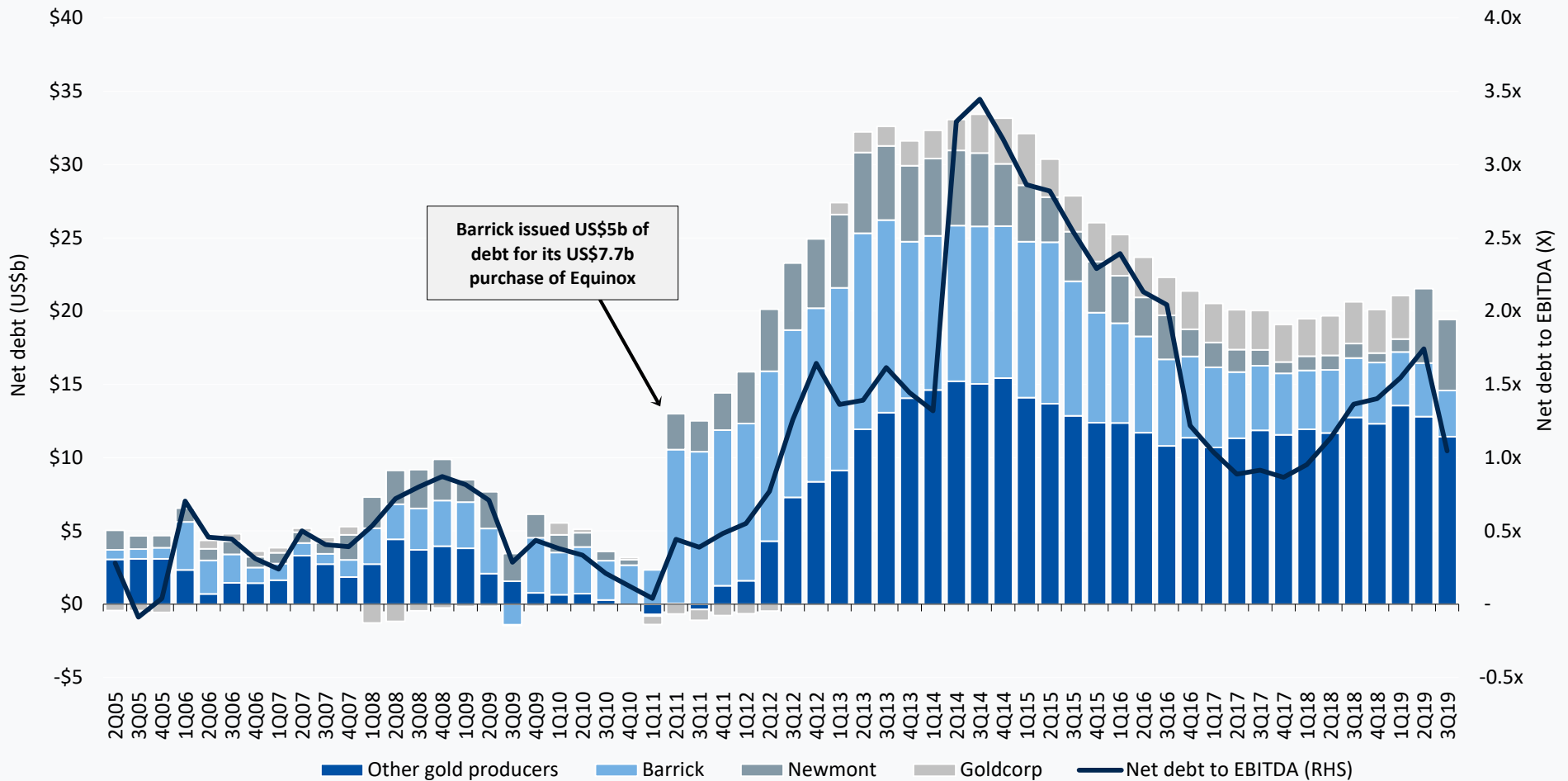


Note: Yields for gold equities measured by S&P/TSX Global Gold Index. Yields for S&P 500 sectors measured by GICS indices.
Source: Bloomberg, RBC Capital Markets

Gold equity themes: Producer net debt positioning has improved

From 2011-14, net debt outstanding for gold producers increased, a function of increasing financial leverage assumed to fund development and acquisitions. Following gold's decline in 2013, net debt to EBITDA credit ratios sharply increased. More recently, debt reduction has become a focus for gold producers and is no longer viewed as a material risk for the sector today.

Net debt for top 25 gold producers

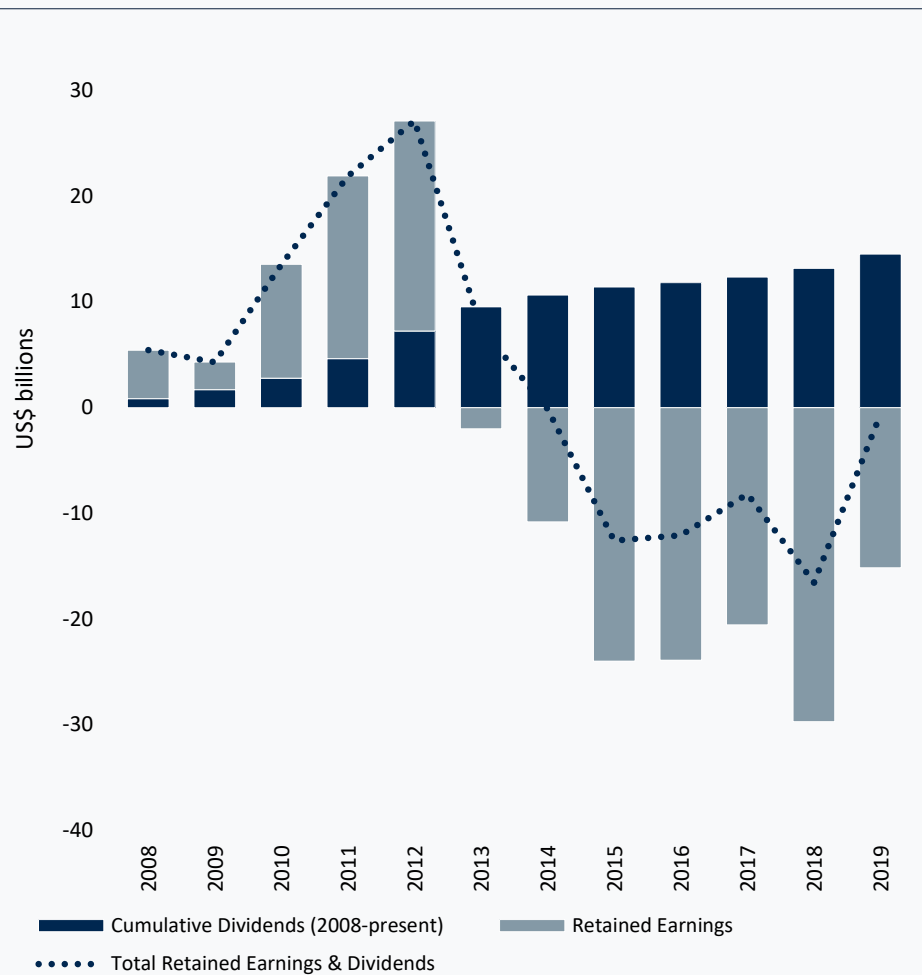


Note: Data for Goldcorp included until 1Q19, at which point the company was acquired by Newmont.
Source: Bloomberg, RBC Capital Markets

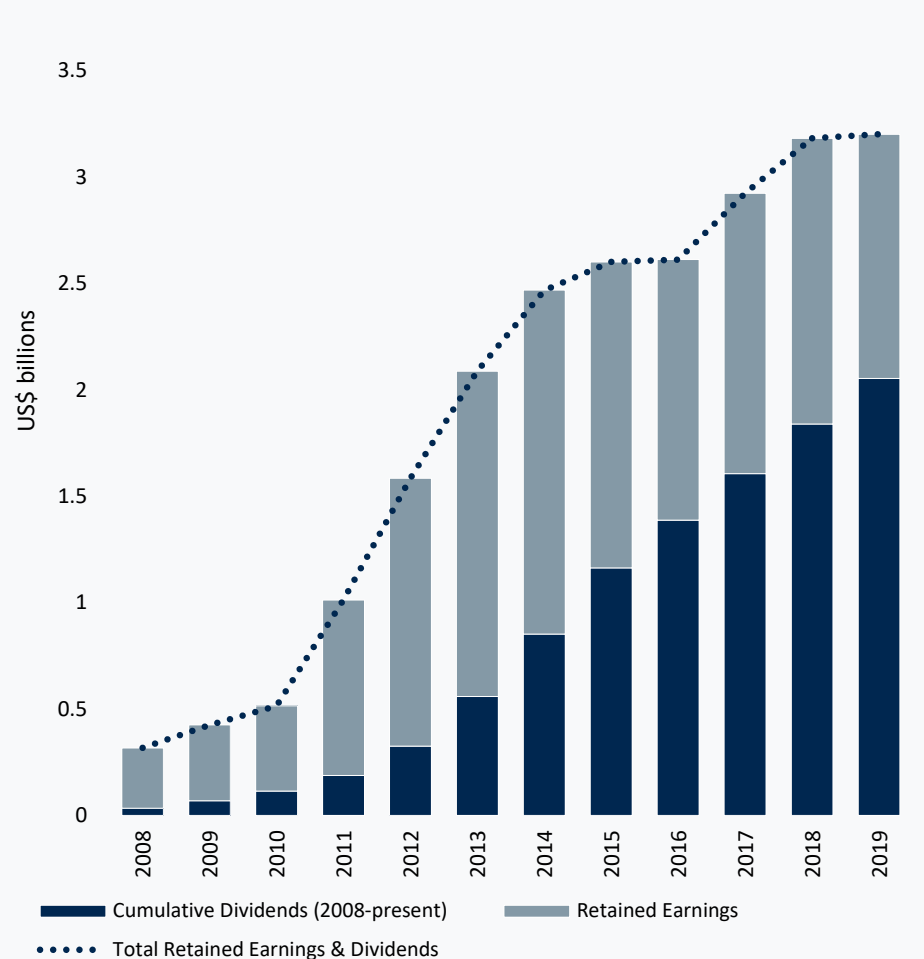
Gold equity themes: Cumulative producer profits over time are negative

Retained earnings for gold producers are materially negative, in part reflecting considerable losses and write-downs steadily reported from 2012-2015. These results were a product of poor capital allocation and dilutive M&A at cyclical peaks, capital and operating cost inflation, and declines in the gold price. More recently, an improvement in gold prices, cost containment, and fewer capital allocation missteps have improved the earnings outlook

Gold producer cumulative profits over time



Royalty company cumulative profits over time



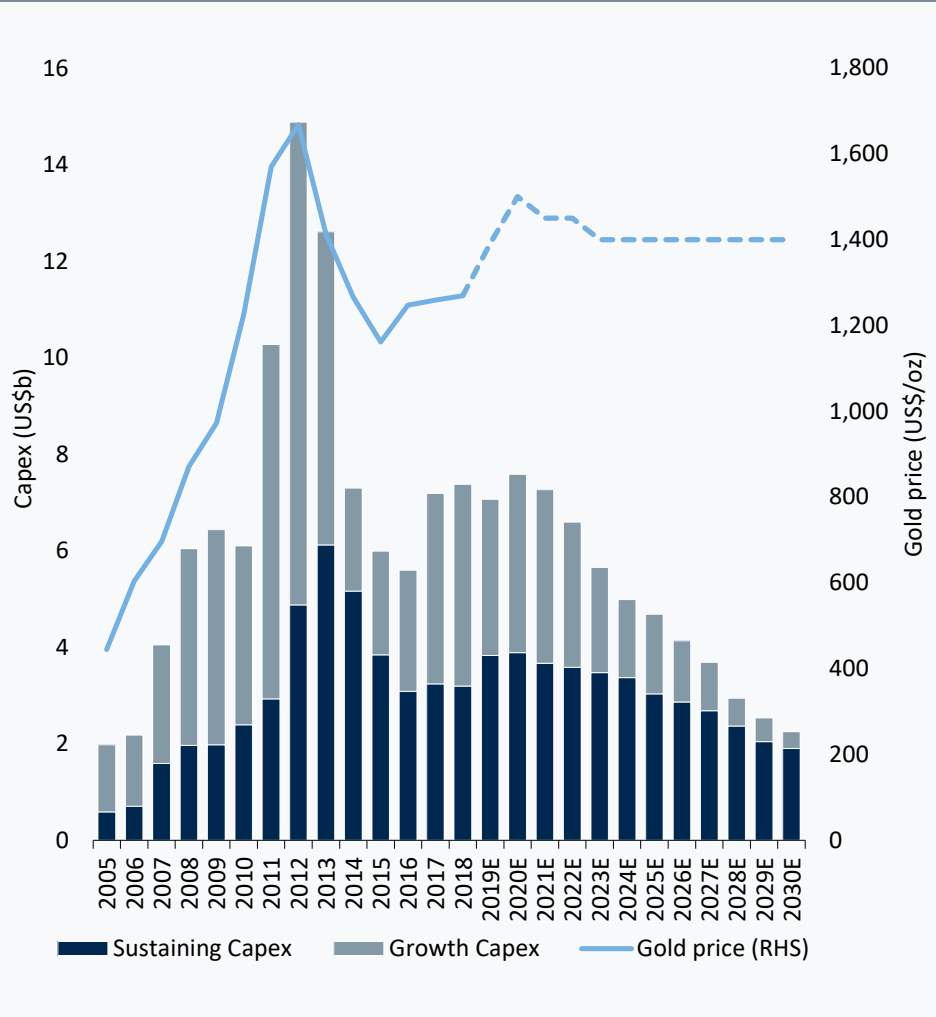
Note: Data for our gold producer coverage universe including AEM, AGI, AU, BTG, EGO, GOLD, IAG, KGC, NEM and NGD, as well as RRS (acq'd by Barrick Q1/19) and GG (acq'd by NEM Q2/19). Royalty coverage universe of FNV, RGLD and WPM. 2019 figures are as at Q3/19.

Source: Bloomberg, RBC Capital Markets

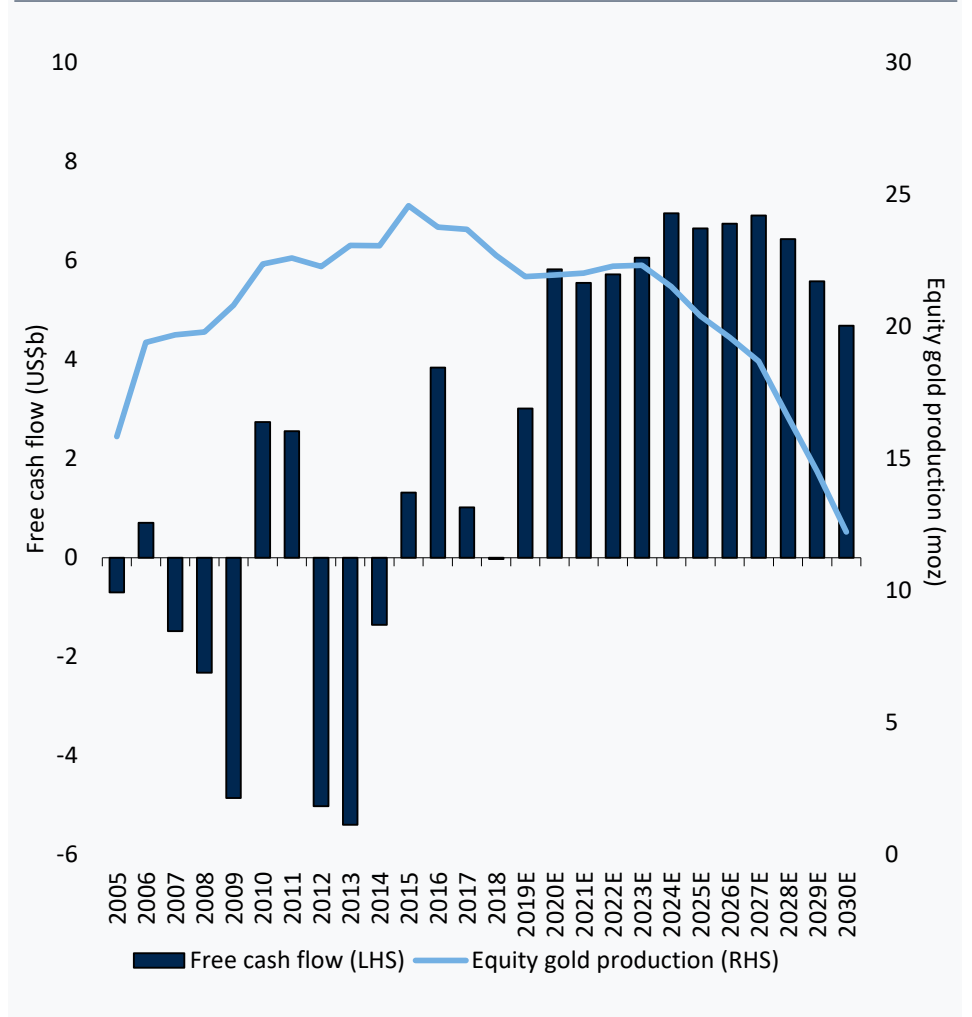
Gold equity themes: Producer capital spending is correlated with the gold price

Capital spending for gold producers has historically correlated to gold price changes, resulting in greater spending in high-price environments and cuts being necessitated when financial flexibility is reduced at the lows, overall amplifying sector cyclicality. We forecast producers have the potential to generate good free cash flow in 2019 and beyond, but see the potential need for rising capital spending to sustain long-term production volumes.

Gold producer coverage capital spending



Gold producer coverage free cash flow and production

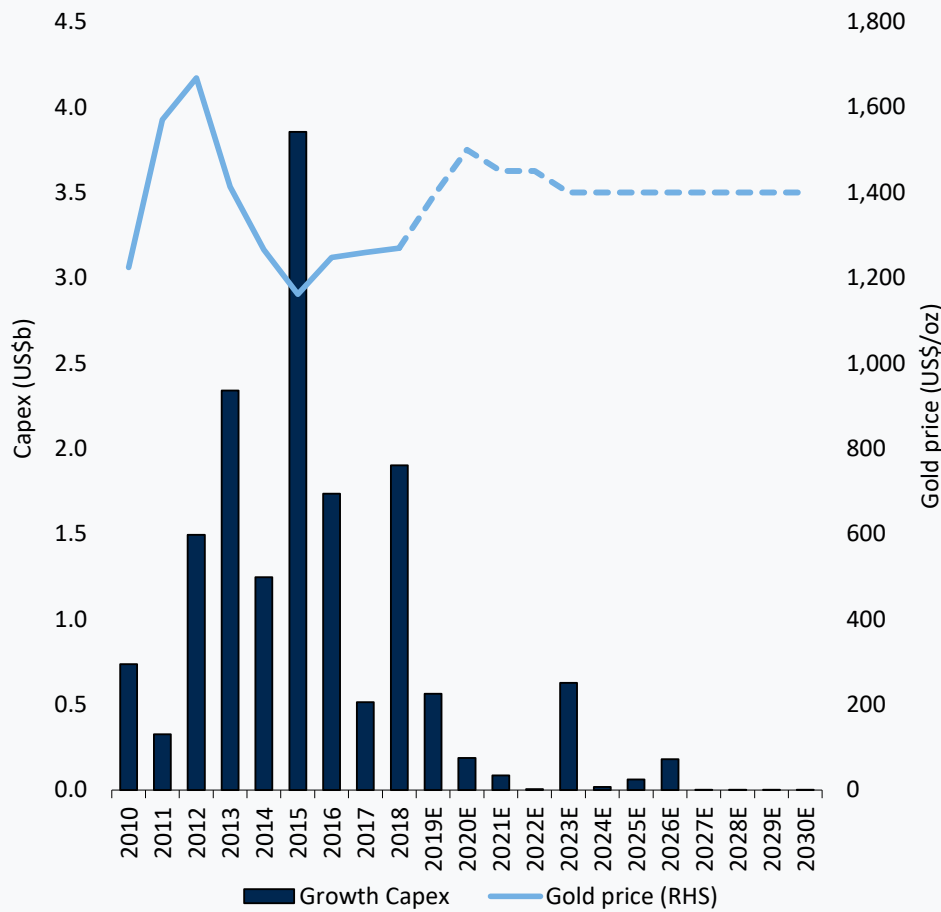


Note: Data for our gold producer coverage universe including AEM, AGI, AUJ, BTG, EGO, GOLD, IAG, KGC, NEM and NGD, as well as RRS (acq'd by Barrick Q1/19) and GG (acq'd by NEM Q2/19). Forecast FCF is at RBC price deck, which incorporates a long-term gold price of \$1,400/oz. Source: Company reports, RBC Capital Markets estimates

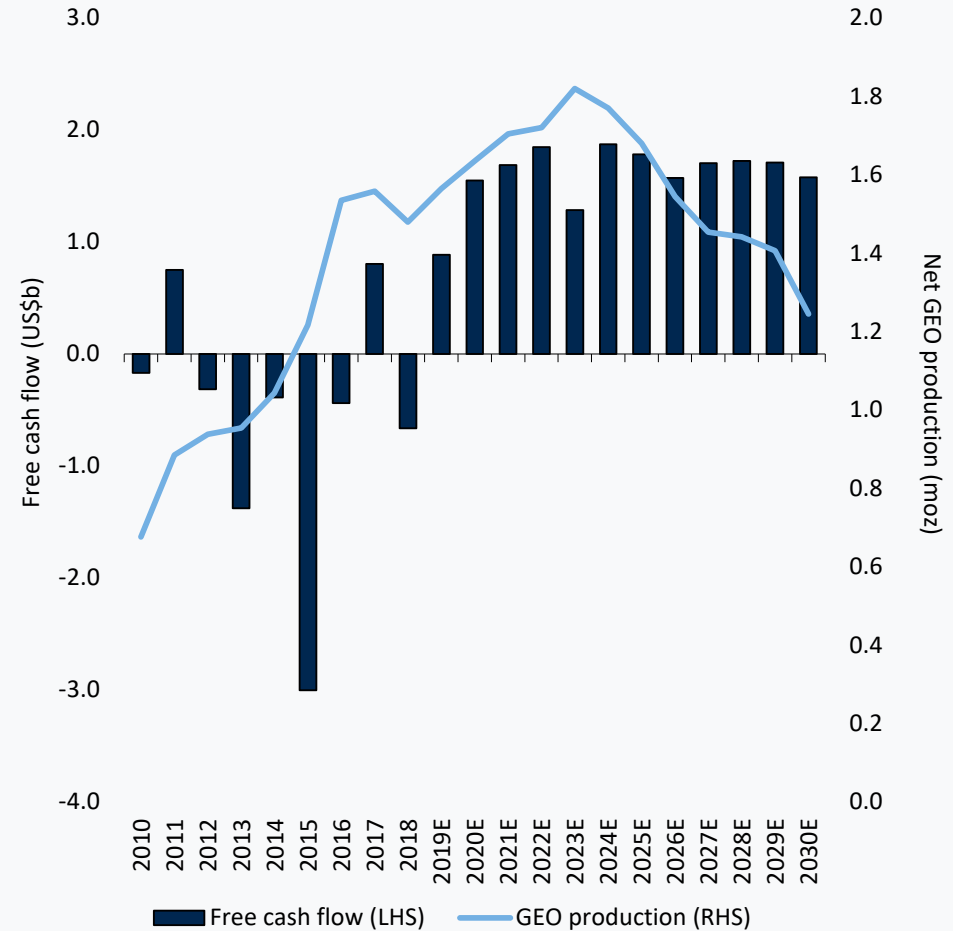
Gold equity themes: Royalty capital spending is inversely correlated with the gold price

Royalty and streaming companies benefit from a counter-cyclical business investment model. As a source of funding to mining operators, royalty and streaming companies' ability to invest increases during low price cycles, when capital is scarce. Transaction investments by the royalty sector tend to be larger in size, resulting in more volatile capital spending and free cash flow profiles for the group.

Royalty & streaming coverage capital spending



Royalty & streaming coverage free cash flow and production



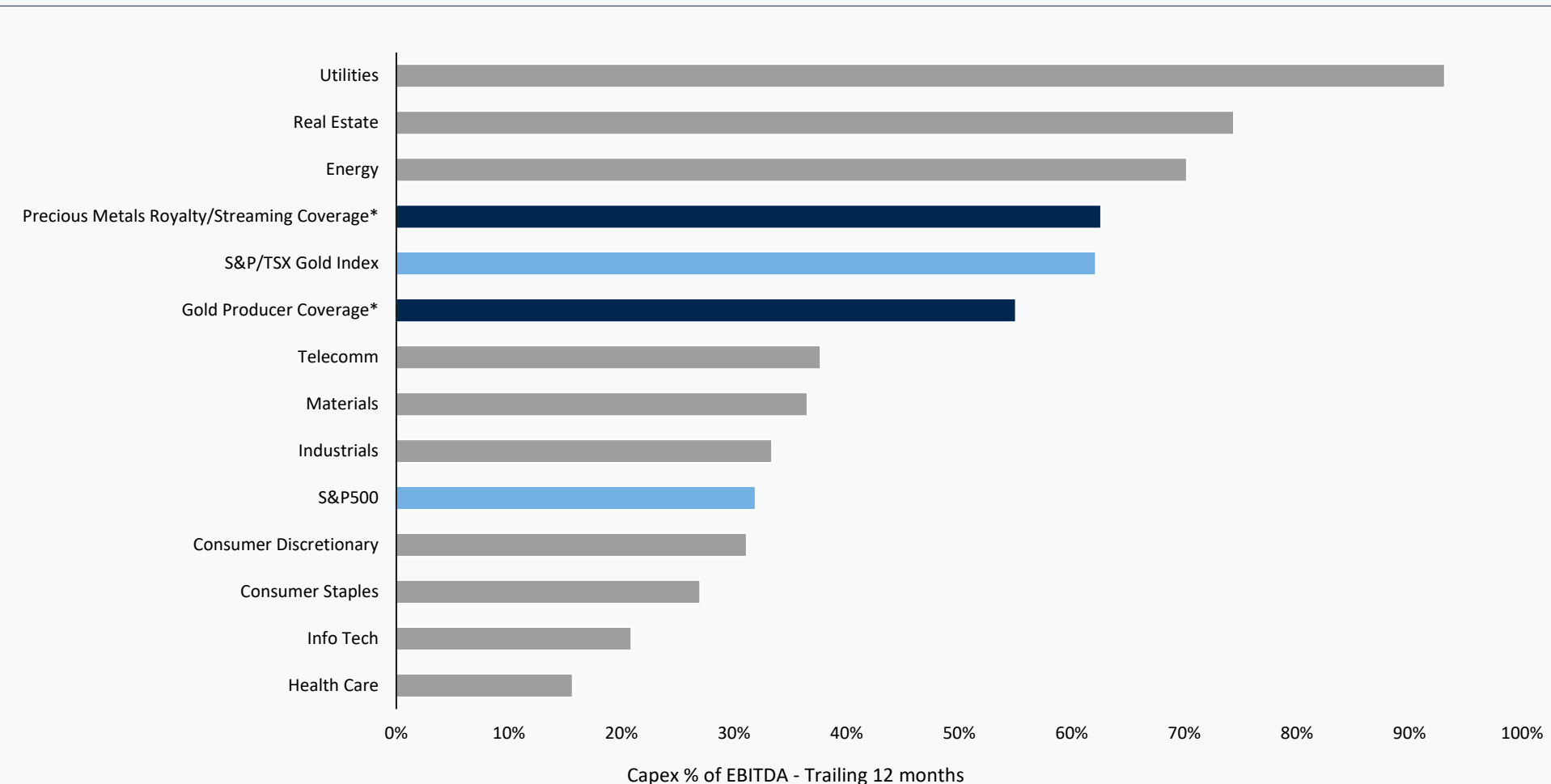
Note: Includes coverage universe of FNV, RGLD and WPM. Capex forecasts do not assume any new royalty/stream transactions, beyond existing portfolio investment requirements. Forecast FCF is at RBC price deck, which incorporates a long-term gold price of \$1,400/oz.

Source: Company reports, RBC Capital Markets estimates

Gold equity themes: Capital spending relative to other sectors is elevated

Relative to other sectors, gold companies operate by investing much more heavily in capital spending. Putting aside the highly cyclical nature of the business, valuation through the cycle for the sector should be lower than that of the broader market. Gold mining has been a capital-heavy, low-return business over the past decade.

Capex as a percentage of EBITDA by sector

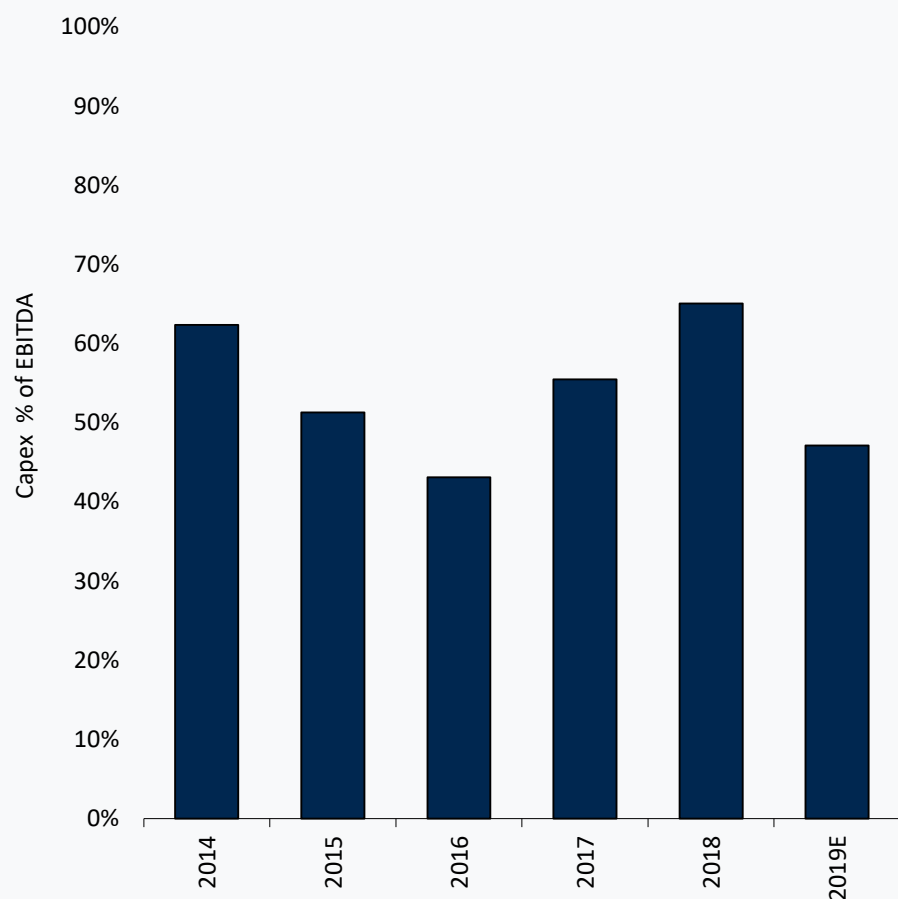


Note: Data for our gold producer coverage universe includes AEM, AGI, AUJ, BTG, EGO, GOLD, IAG, KGC, NEM and NGD, as well as RRS (acq'd by Barrick Q1/19) and GG (acq'd by NEM Q2/19). Royalty coverage universe of FNV, RGLD, WPM.
Source: Company reports, RBC Capital Markets

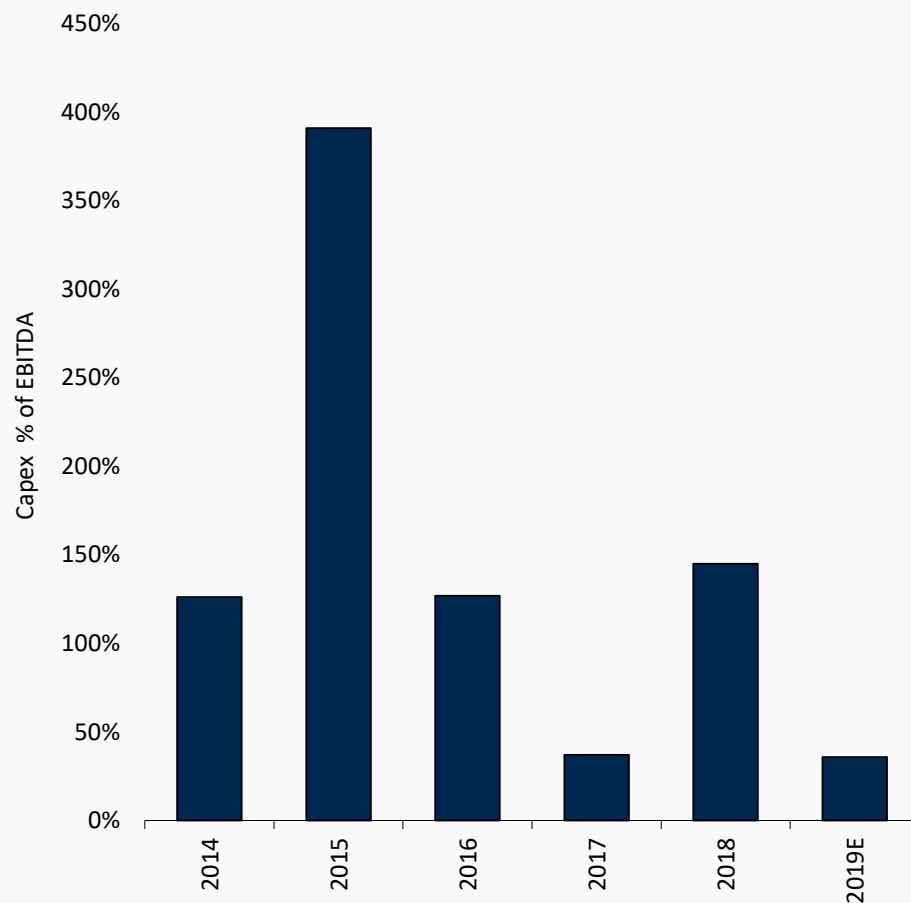
Gold equity themes: High ongoing capital spending is required to sustain or grow the business

Gold producers operate shorter-duration, depleting assets. As a result, producers are required to heavily reinvest capital on an ongoing basis. Although royalty companies have no sustaining capital requirements, the financial performance of a royalty company is linked to an underlying depleting asset, and new acquisitions over time are pursued to either grow or offset operating declines.

Gold producer capital spending as a percentage of EBITDA



Royalty company capital spending as a percentage of EBITDA

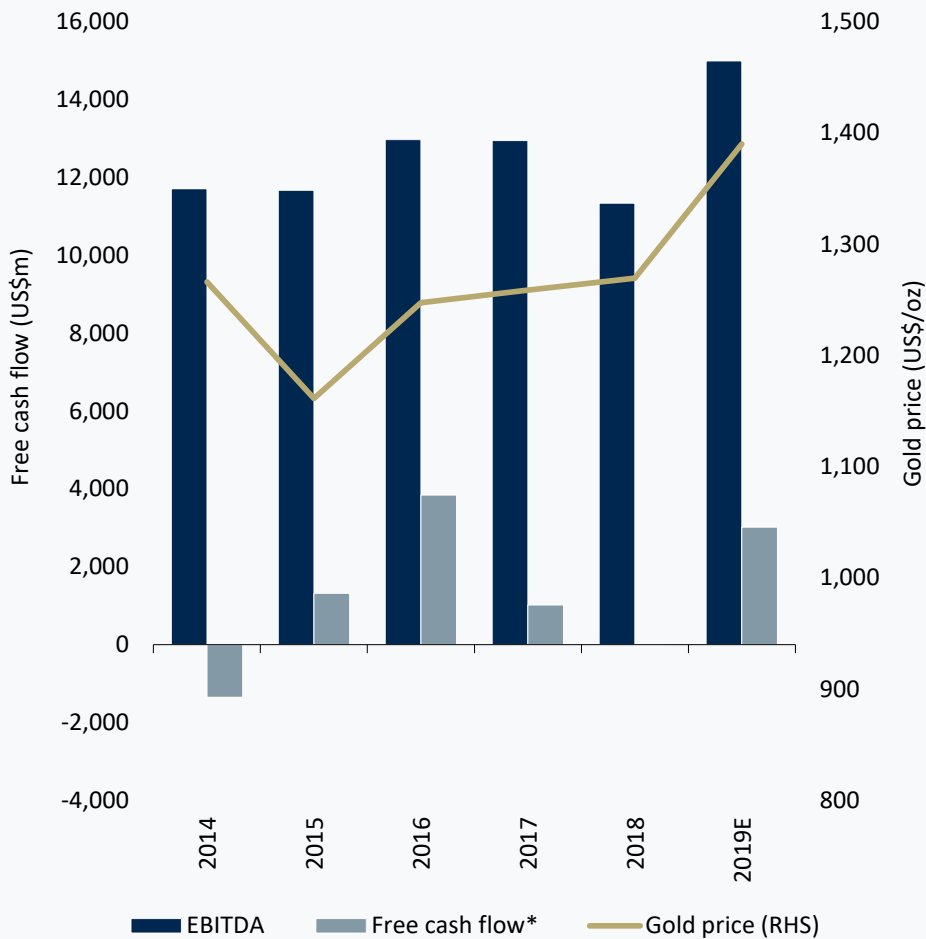


Note: Data for our coverage universe includes AEM, AGI, AUJ, BTG, EGO, GOLD, IAG, KGC, NEM and NGD, FNV, RGLD, WPM as well as RRS (acq'd by Barrick Q1/19) and GG (acq'd by NEM Q2/19). Source: Bloomberg, Company reports, RBC Capital Markets estimates

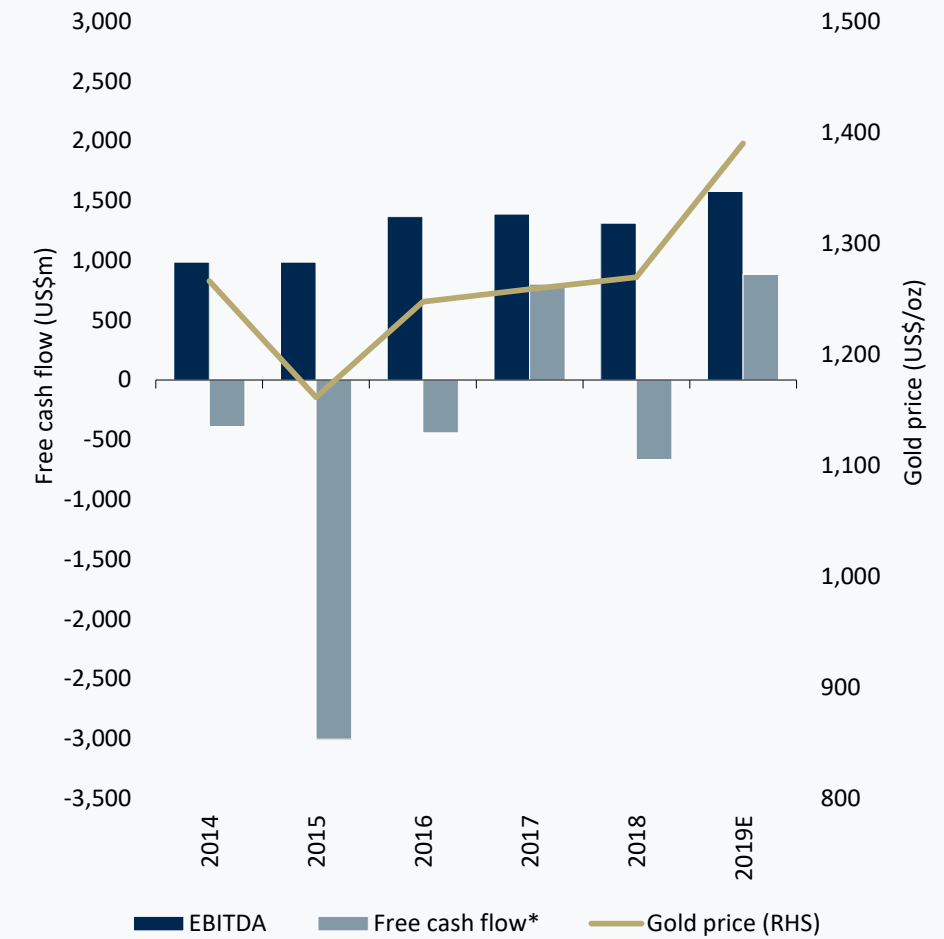
Gold equity themes: High ongoing capital spending limits EBITDA to FCF conversion

Historically, gold producers have generated sizable EBITDA but little free cash flow, given the capital-intensive nature of the business and trend of sustaining and growth capital inflation in higher gold price environments. While royalty companies have no ongoing capital commitments and benefit from lower offshore taxation, royalty FCF has been low due to ongoing high investment in new transactions.

Gold producers



Royalty companies

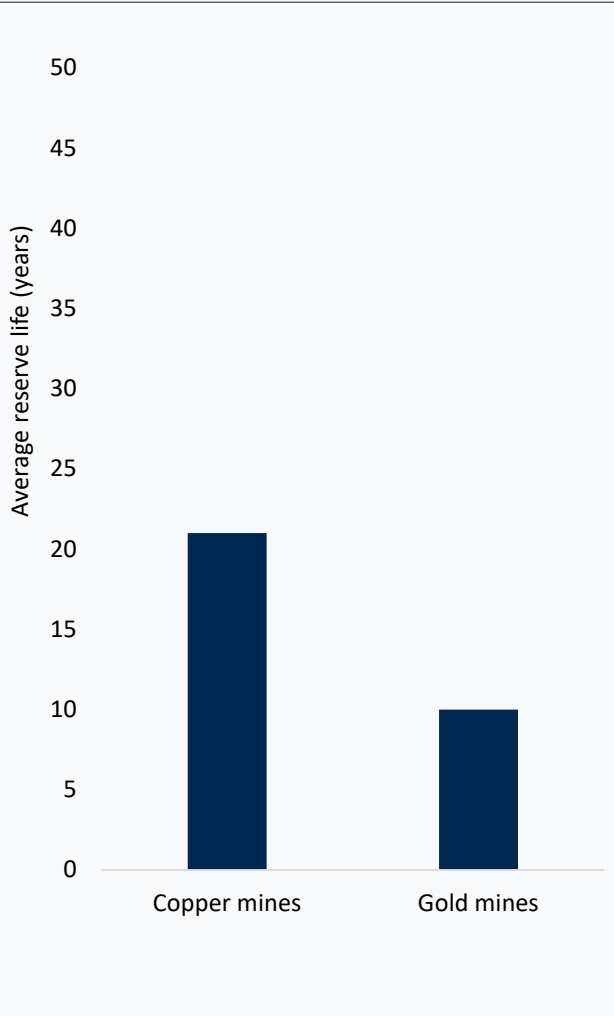


Notes: *Free cash flow defined as operating cash flow after working capital changes less total capex. Data for our coverage universe including AEM, AGI, AUY, BTG, EGO, GOLD, IAG, KGC, NEM, NGD, FNV, RGLD, WPM as well as RRS (acq'd by Barrick Q1/19) and GG (acq'd by NEM Q2/19). Source: Bloomberg, Company reports, RBC Capital Markets estimates

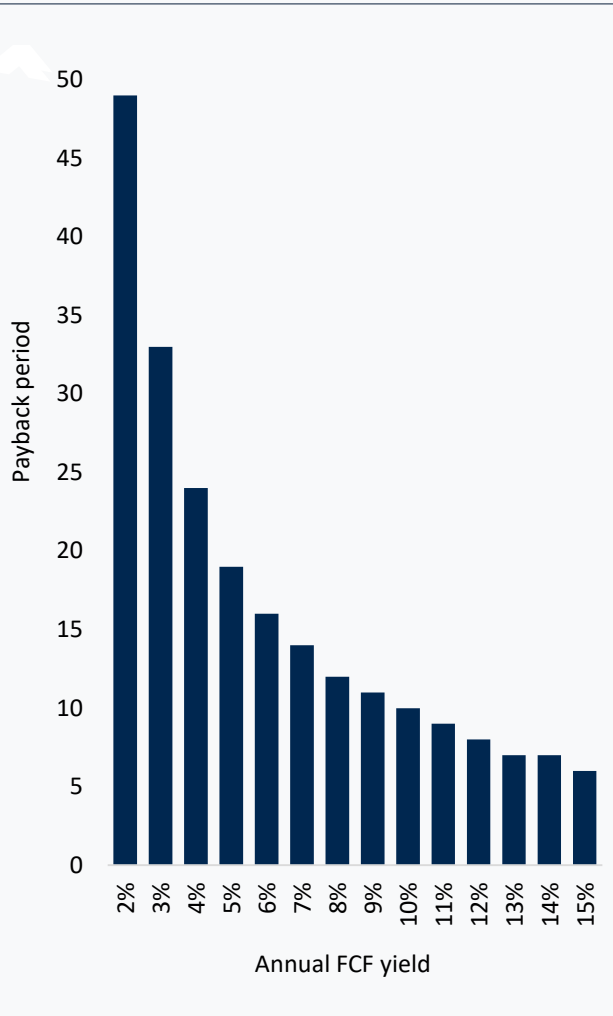
Gold equity themes: Producers are challenged by low duration portfolios

We calculate the average producing gold mine under coverage has a defined reserve mine life of ~10 years, roughly half the duration of copper assets. For reference, a 7% yielding business implies a 14 year undiscounted mine life or 25 year mine life at a 5% discount rate. Gold sector valuation implies dramatically longer mine life than those defined by reserves.

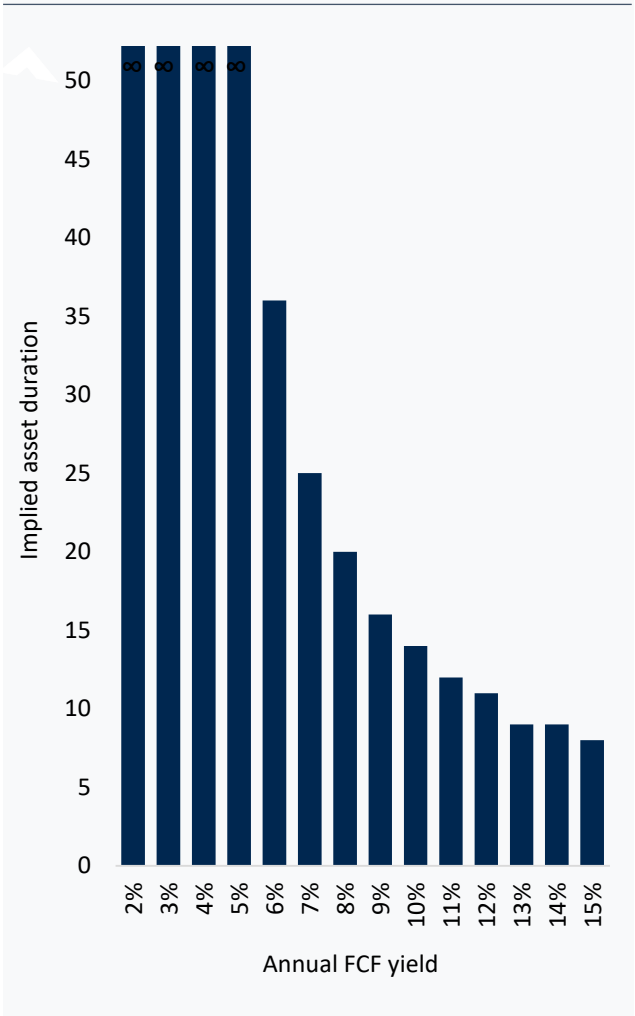
Average gold vs. copper reserve lives for assets in operation



Payback period implied by given annual FCF yield



Duration required for breakeven NPV 5% at given annual FCF yield

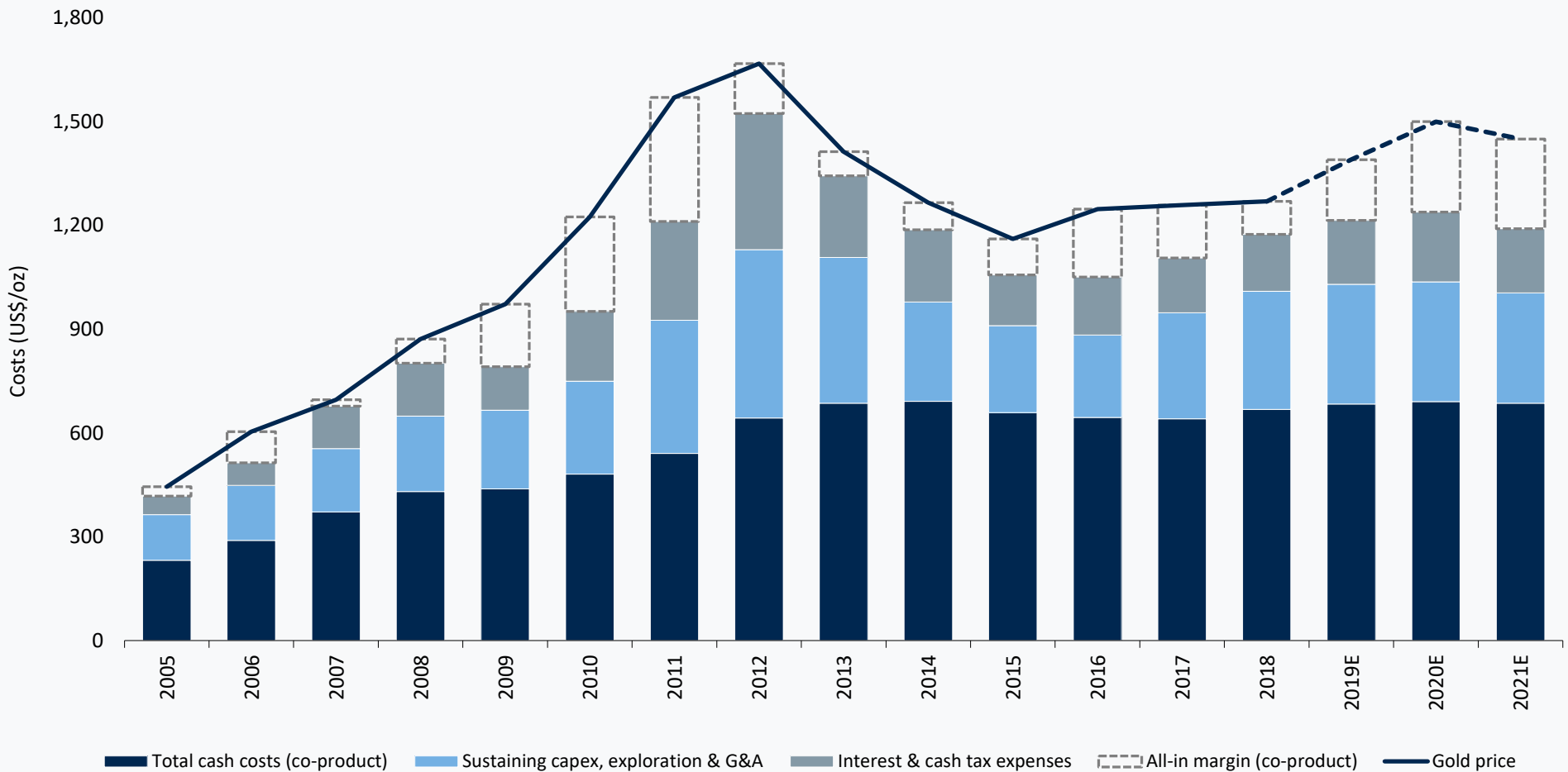


Note: Copper reserve life based on Wood Mackenzie data. Gold reserve life estimated for our coverage universe including AEM, AGI, AUY, BTG, EGO, GOLD, IAG, KGC, NEM and NGD. Source: Bloomberg, Wood Mackenzie, RBC Capital Markets estimates

Gold equity themes: Producer costs are highly correlated to price

We calculate gold producer costs on a fully-loaded basis, representing break-even prices per ounce before dividends, debt repayment, and true growth capital for greenfield projects. We calculate the correlation between costs and the gold price has been 97% over the last 15 years, thereby eroding the ability for companies to benefit from margin expansion when prices rise, but also allowing for cost insulation when prices have declined.

Gold producer coverage cost structure and margin over time



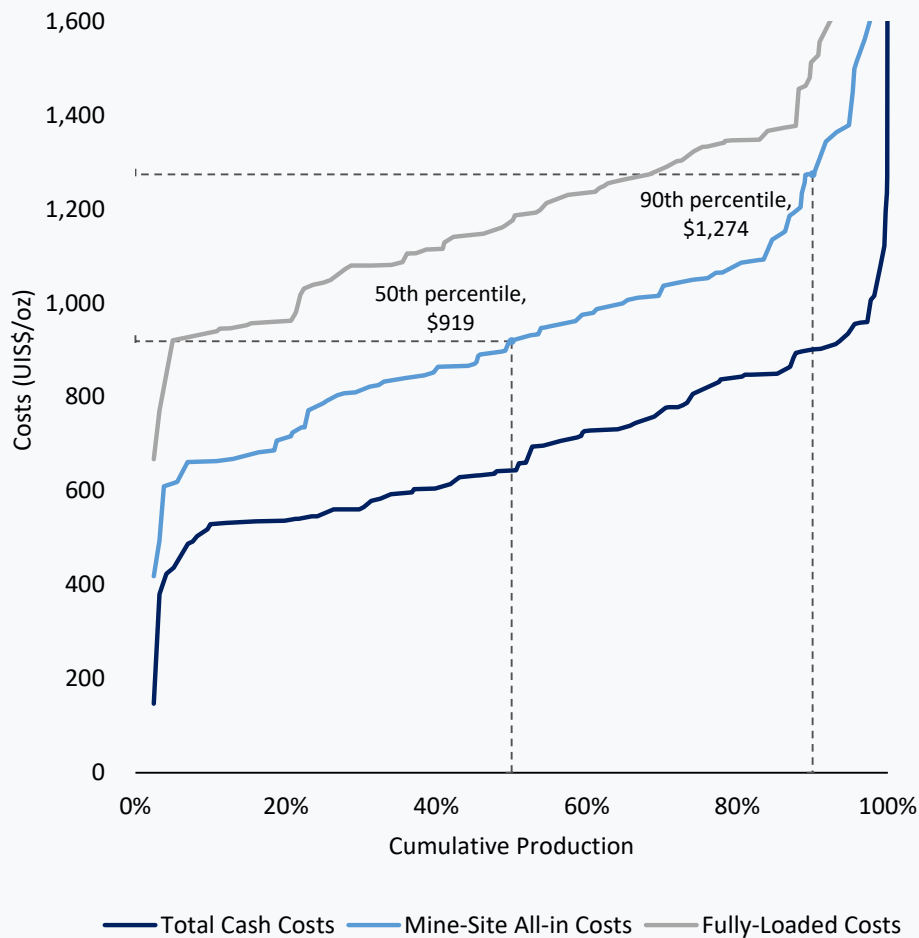
Note: Data for our gold producer coverage universe including AEM, AGI, AUY, BTG, EGO, GOLD, IAG, KGC, NEM and NGD, as well as RRS (acq'd by Barrick Q1/19) and GG (acq'd by NEM Q2/19).

Source: Company reports, RBC Capital Markets estimates

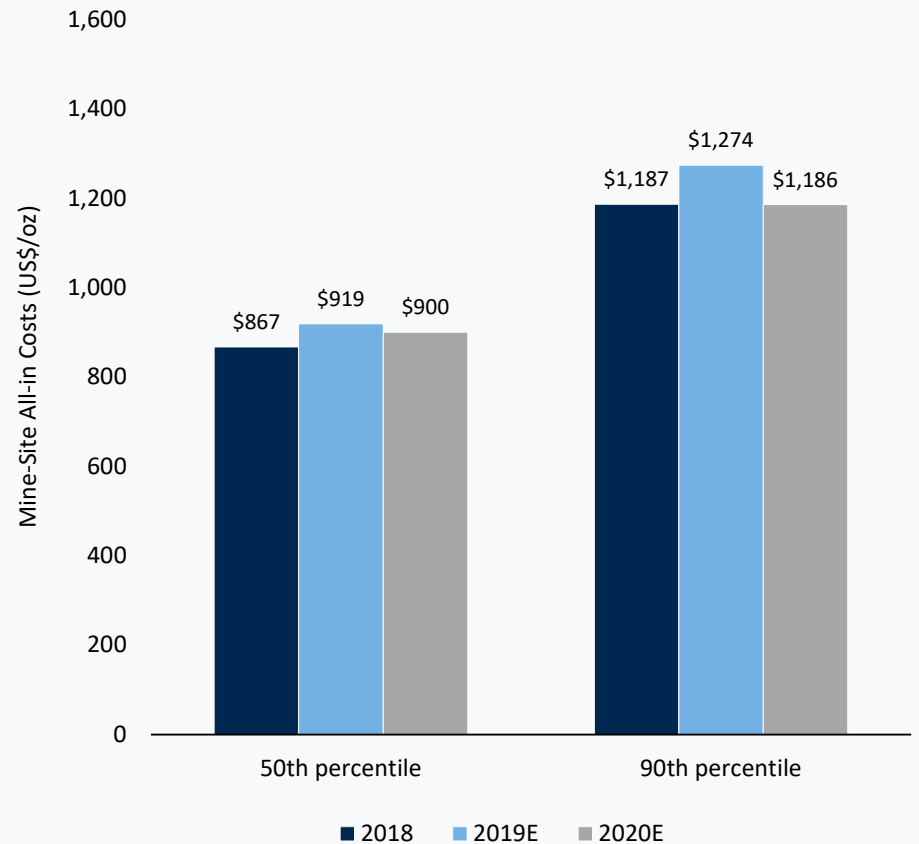
Gold equity themes: Calculating the cost to produce an ounce

We evaluate costs on several metrics, including Total Cash Costs (i.e. operating costs), Mine Site All-In Costs (i.e. site level capital and operating costs), and Fully-Loaded Costs (i.e. corporate FCF breakeven costs before debt changes, dividends, and growth capital). Where gold prices remain above Mine Site All-In Costs, companies are motivated to continue operations, even if a company is unable to generate FCF at the corporate level.

Gold coverage cost curves, 2019E



Gold coverage mine-site all-in costs, 2018-20E



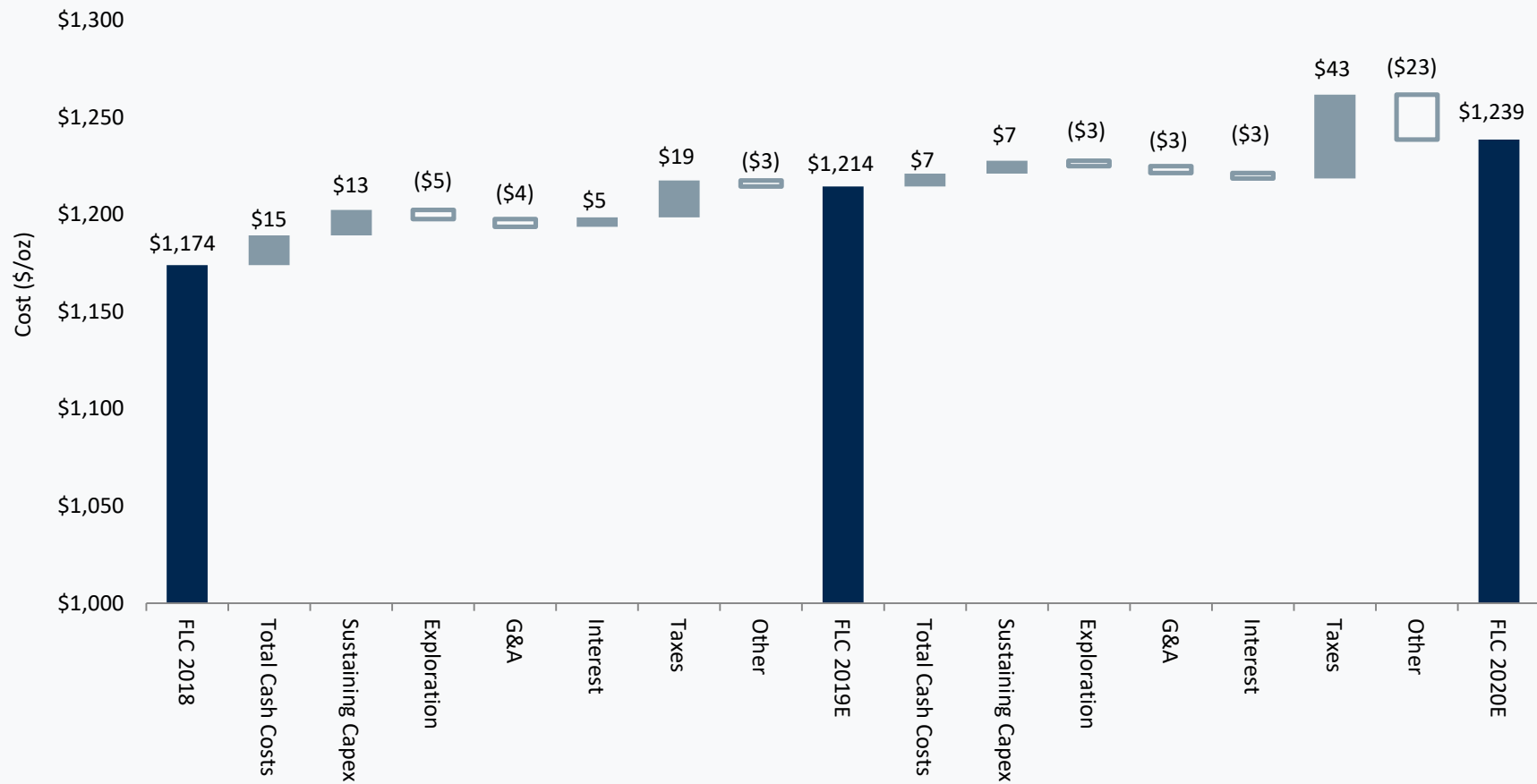
Note: Data for mines operated by our gold producer coverage universe including AEM, AGI, AUJ, BTG, EGO, GOLD, IAG, KGC, NEM and NGD. Median cost curve figures can vary from estimated coverage costs due to the impact of equity ownership interests in the underlying assets.

Source: Bloomberg, RBC Capital Markets estimates

Gold equity themes: We forecast relatively stable sector costs in 2020E

On a fully loaded basis, we calculate gold production costs of US\$1,214/oz in 2019E for companies under coverage. Our cost forecasts in 2020E are \$1,239/oz, a 2% increase YoY, where higher taxes due to higher gold prices largely offset stable underlying on site costs. We note that returns on invested capital, debt repayment, true growth capital spending, and dividends require gold prices above this level.

Drivers of change in gold producers' fully loaded costs (FLC) per ounce (2018 to 2020E)



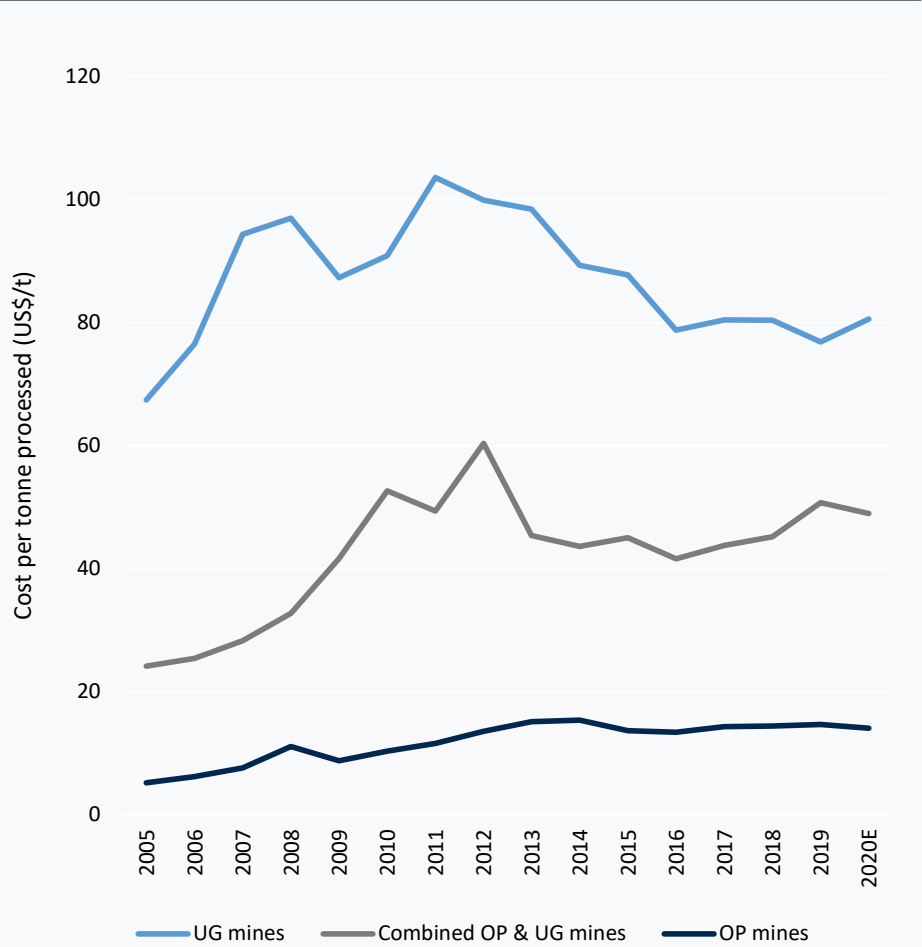
Note: Data for our gold producer coverage universe includes AEM, AGI, AU, BTG, EGO, GOLD, IAG, KGC, NEM and NGD, as well as RRS (acq'd by Barrick Q1/19) and GG (acq'd by NEM Q2/19). Sustaining capex includes mine-site project capital.

Source: Bloomberg, RBC Capital Markets estimates

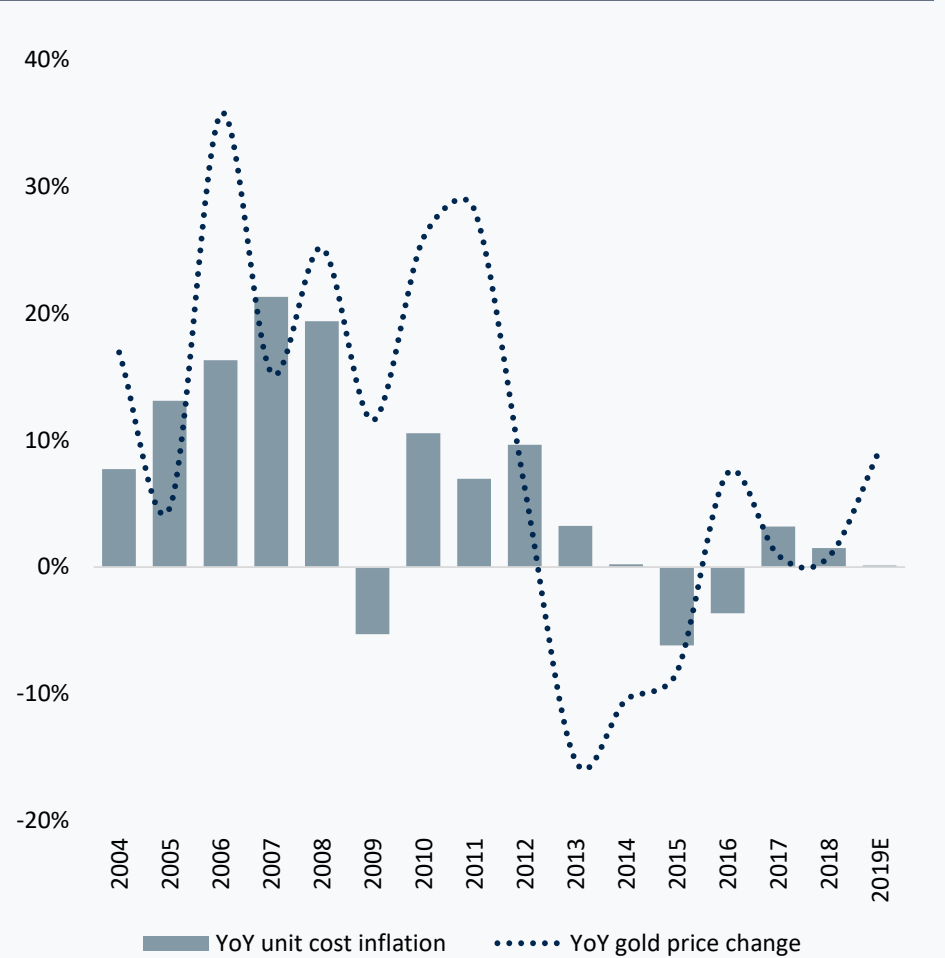
Gold equity themes: Unit cost mining inflation over time has sharply declined

In recent years, cost containment has been a key focus for gold producers in response to a lower gold price environment. We calculate median per tonne unit cost inflation for mines under coverage has annualized 1% over a trailing three-year period and 60% of operations have maintained unit costs at an annualized inflation range of -4% to +4% over this period. Recent inflation rates are well below historical averages.

Unit costs per tonne processed by mine type over time



Median year-over-year change in unit costs per tonne

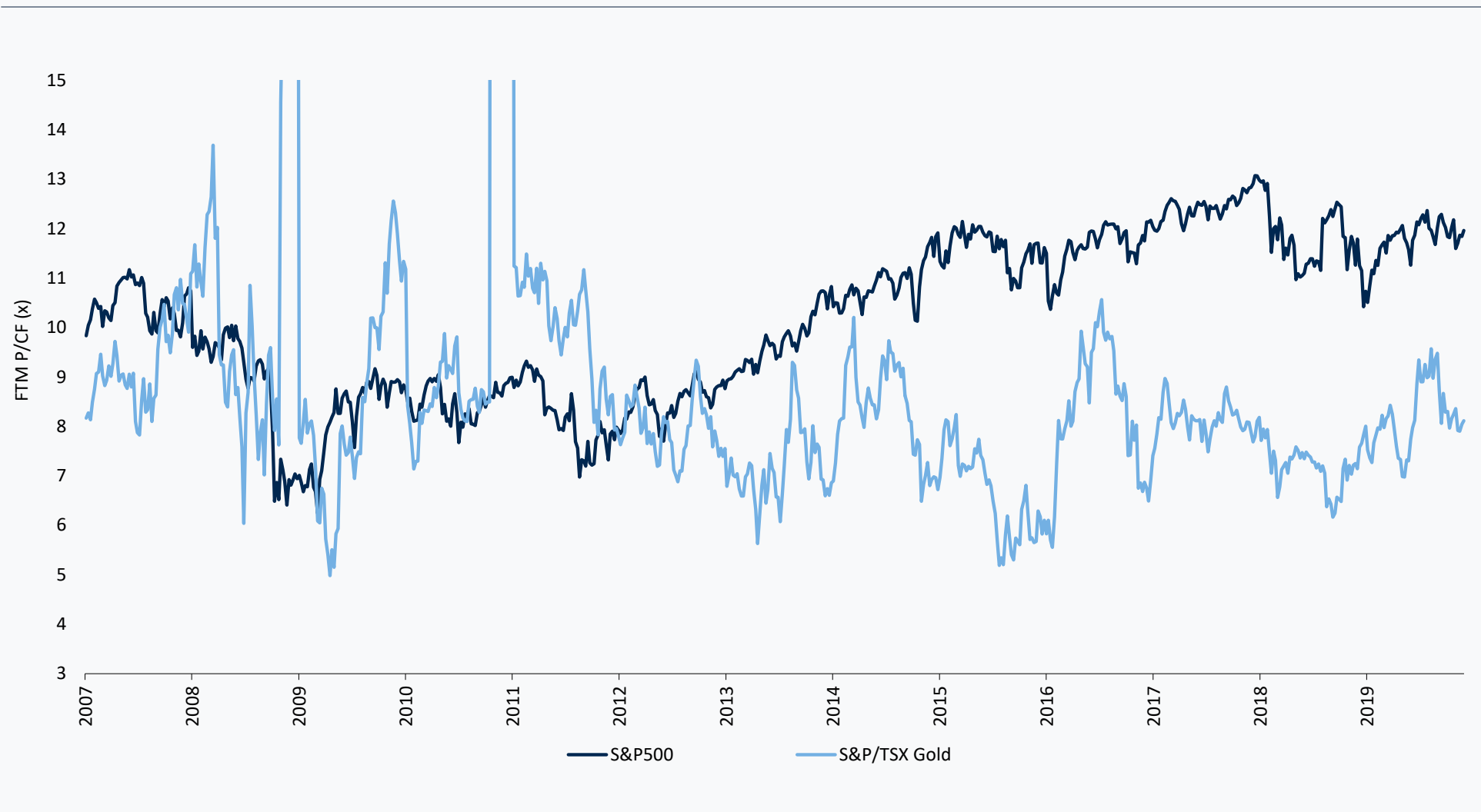


Note: Data for our gold producer coverage universe. Average costs per tonne processed including total mining, processing and mine-site G&A, weighted by tonnes processed.
Source: Company reports, RBC Capital Markets estimates

Gold equity themes: Consensus P/CF valuation now looks more attractive than US equities

Forward-looking P/CF valuation for North American listed gold equities has declined over time and is now well below the broader US equity market valuation. In our view, lower gold valuation in part reflects below-average historical returns on capital and above-average ongoing capital spending requirements that are not captured within operating cash flow.

1-year forward consensus P/CF for North American gold equities vs S&P 500

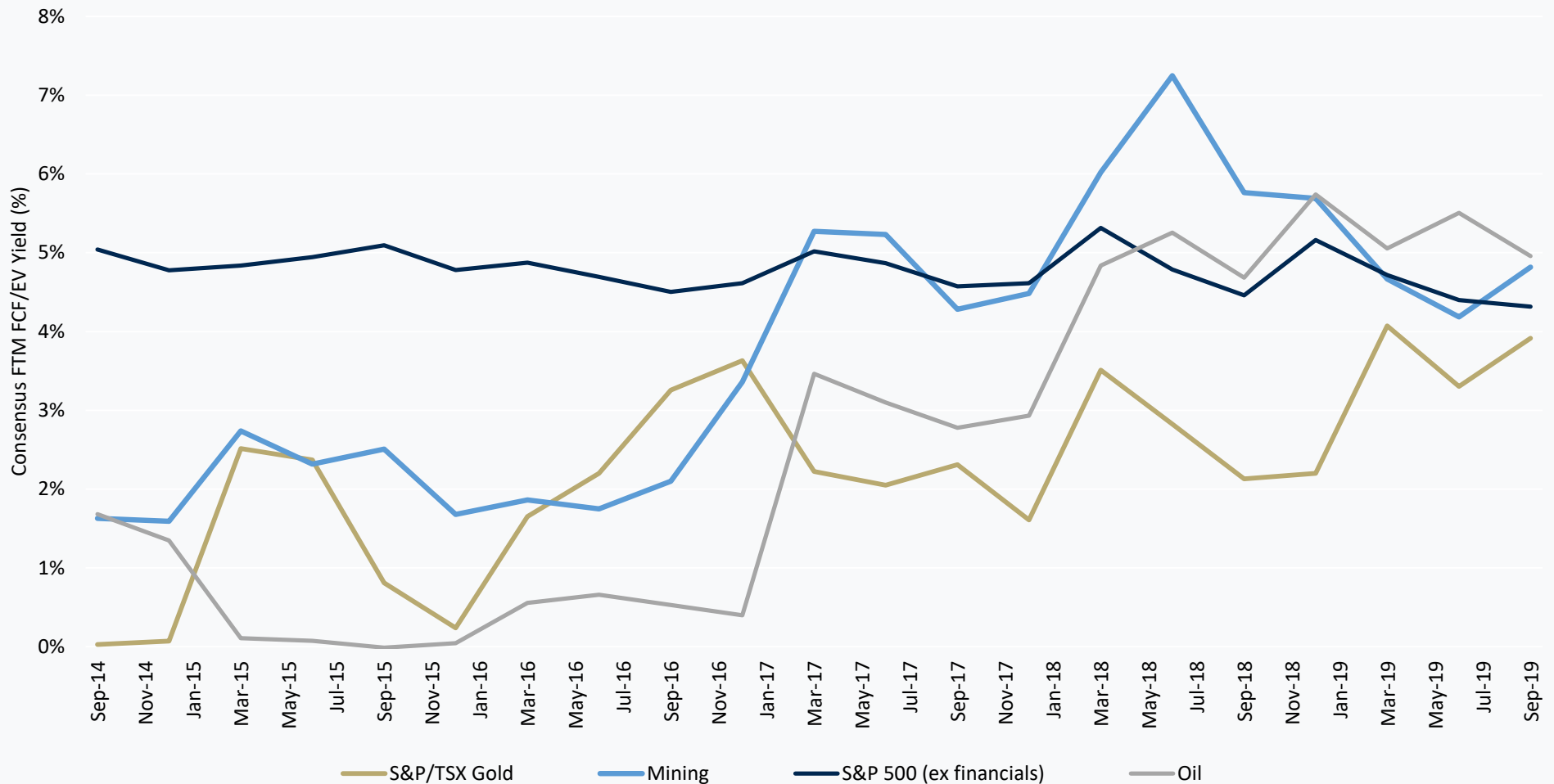


Note: P/CF of North American listed gold equities measured by the S&P/TSX Global Gold index
Source: Bloomberg, RBC Capital Markets

Gold equity themes: Consensus FCF/EV valuation has improved over time

FCF/EV valuation for the gold equity sector has considerably improved over time. While consensus estimates outlining these figures remain below that of generalist investment options and other commodity-linked sectors, the valuation gap has substantially declined, potentially indicating that gold equities today represent a better investment opportunity than in the past.

Historical consensus 1-year forward FCF/EV yield

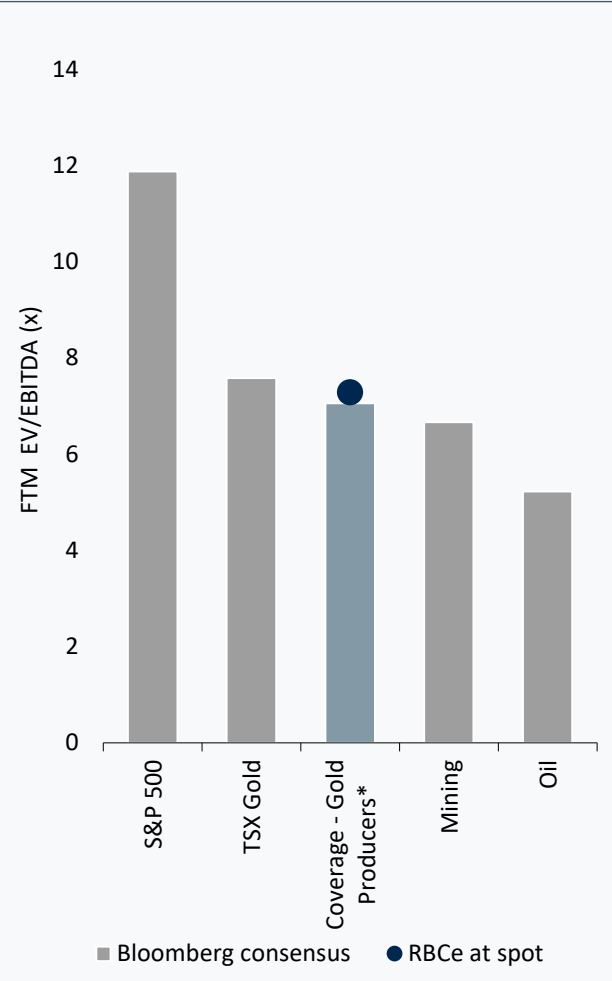


Source: Bloomberg, RBC Capital Markets

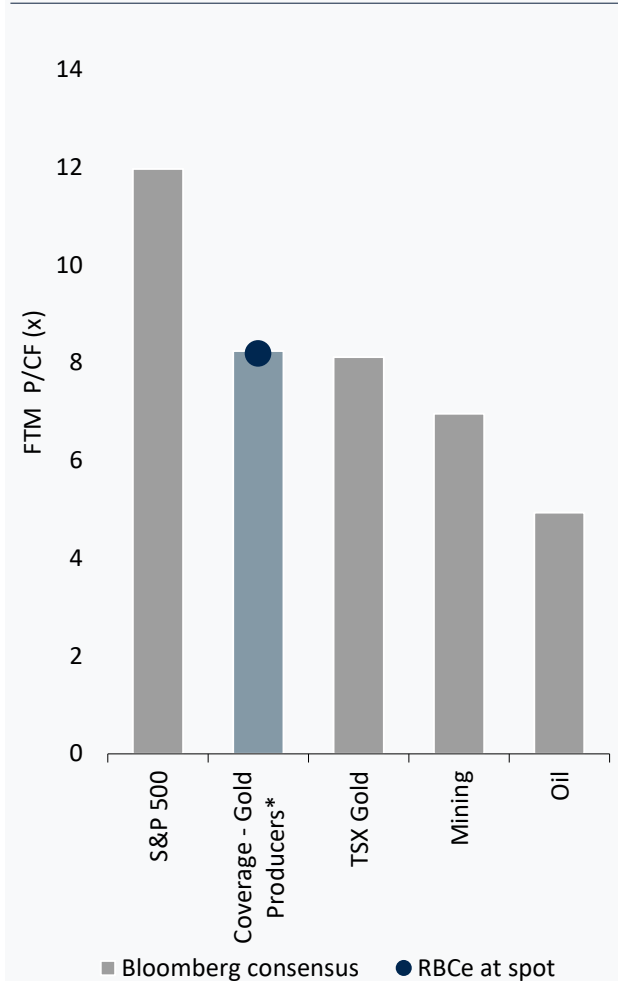
Gold equity themes: Gold equity valuation now looks more comparable to other resource sectors

On an EV/EBITDA and P/CF basis, consensus forecasts outline that gold equities trade at valuations below that of the broader US market, but above that of other resource sectors. On an FCF/EV basis, consensus estimates outline gold equities trailing both US equities and other US equities.

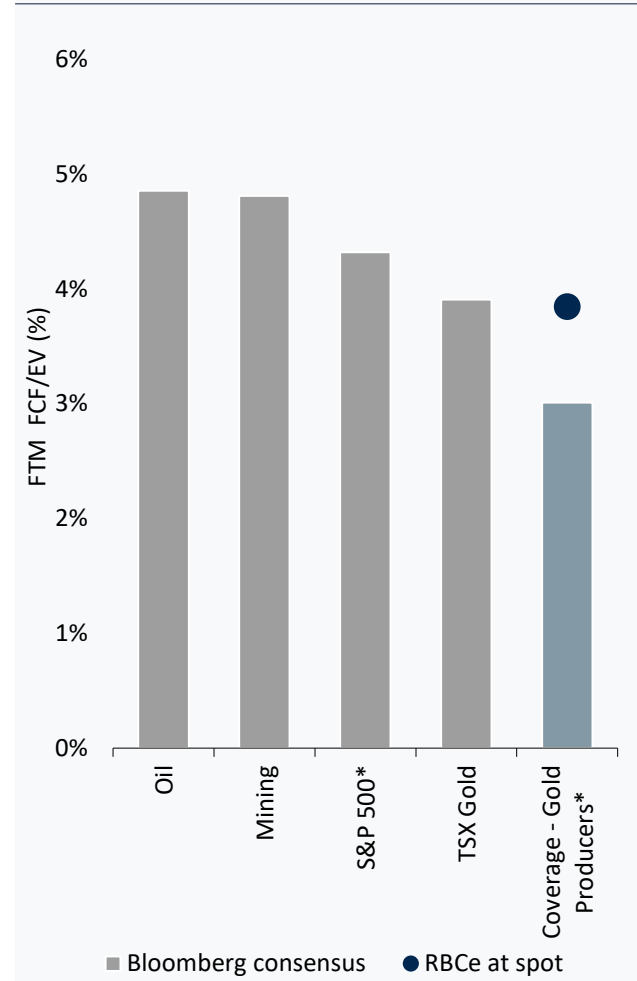
1-year forward consensus EV/EBITDA



1-year forward consensus P/CF



1-year forward consensus FCF/EV



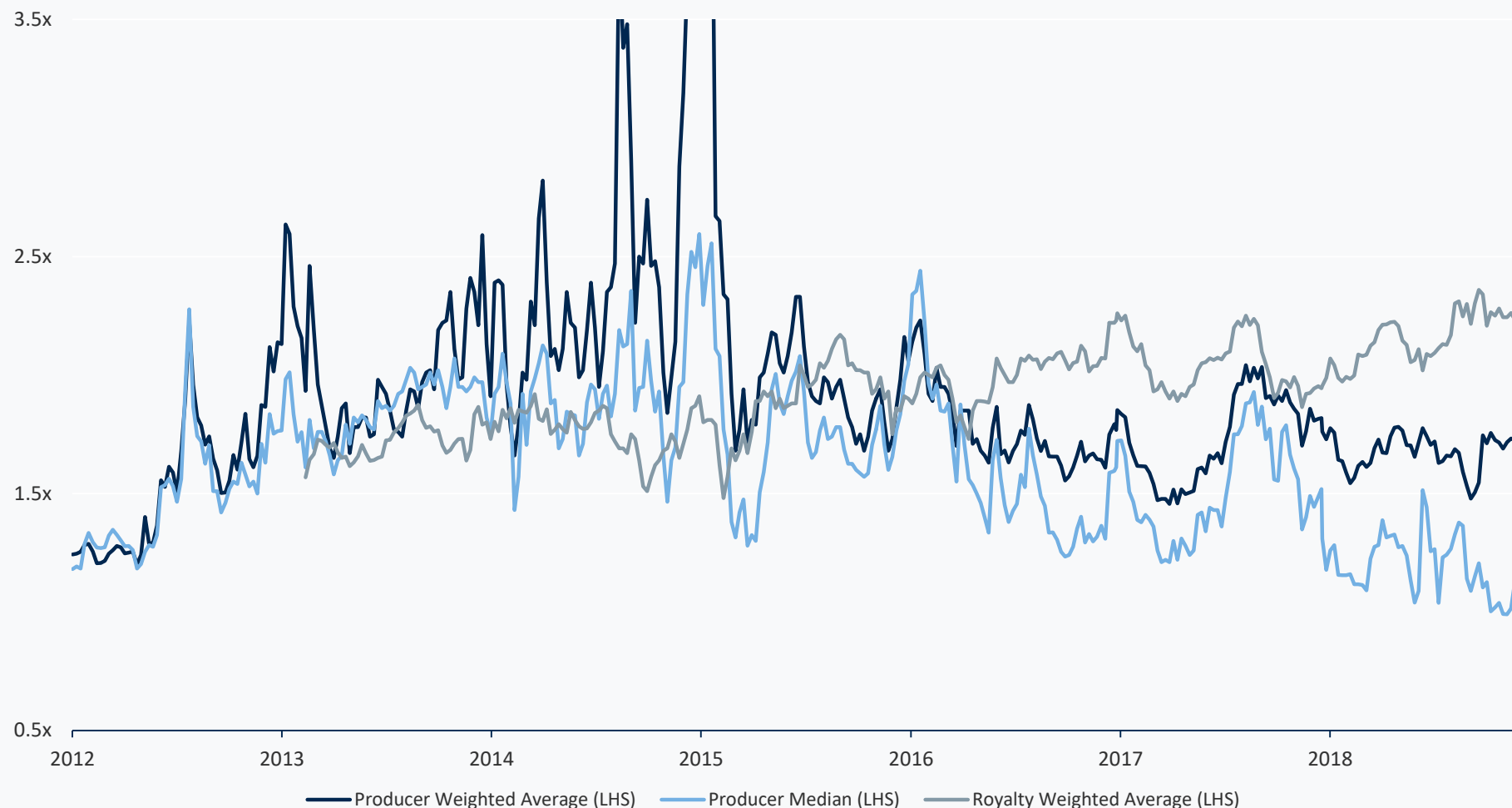
Notes: *Data for our gold producer coverage universe includes AEM, AGI, AU, BTG, EGO, GOLD, IAG, KGC, NEM and NGD. Consensus EV/EBITDA and FCF/EV multiples as of September 30, 2019, RBC Capital Markets estimates and consensus P/CF multiples priced as of market close November 29, 2019 ET. S&P 500 FCF/EV excluding Financials sector.

Source: Bloomberg, RBC Capital Markets estimates.

Gold equity themes: We calculate P/NAV at spot gold valuation has remained stable

Since 2015, weighted average producer P/NAV at spot gold valuation has largely remained stable at ~1.8x. This average is overwhelmingly influenced by larger capitalization senior producer group. On a median basis for our coverage, valuation has contracted as intermediate producers have compressed on a relative basis. Over time, the royalty group has gained a larger premium valuation at spot gold.

Risk-weighted historical P/NAV at spot gold



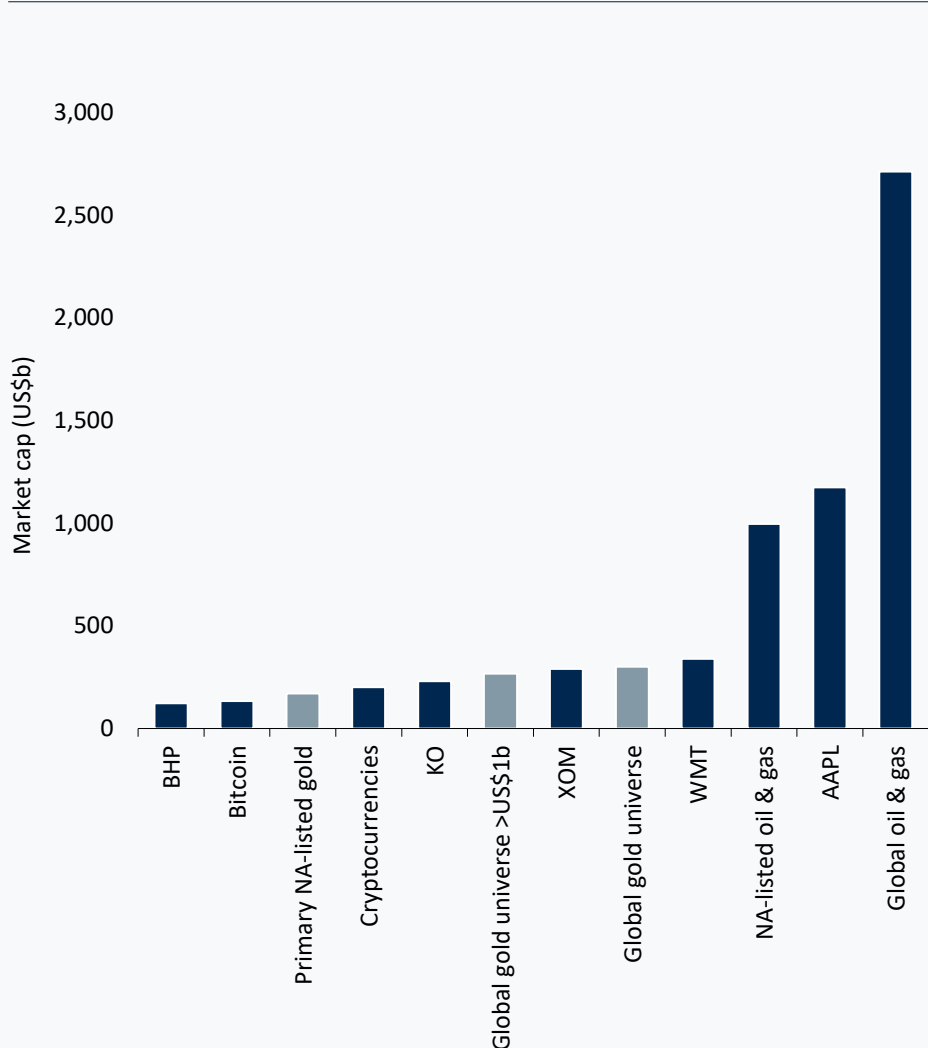
Note: Forecasts generally incorporate a 5% discount rate for gold assets and 8% for base metals assets. Higher discount rates are applied to higher risk assets.

Source: Bloomberg, RBC Capital Markets

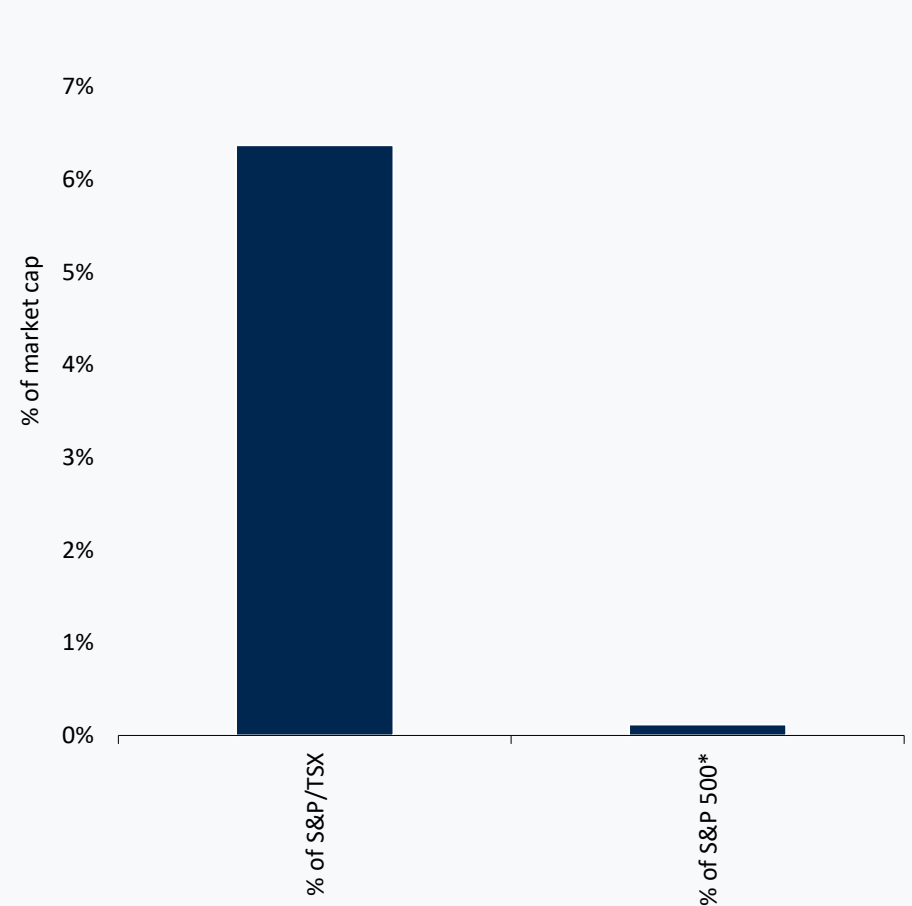
Gold equity themes: Gold equity capitalization relevance is low from a global perspective

In comparison to the gold market, where above ground inventories are a significant US\$10t, the sum of all public gold equities globally is ~US\$300b. In the US, gold equities account for a trivial 0.1% of the S&P 500 benchmark, while in Canada, gold equities represent a more meaningful 6% of the benchmark major index.

Market cap of gold equities in context



Gold equities weighting in S&P/TSX and S&P 500 indices

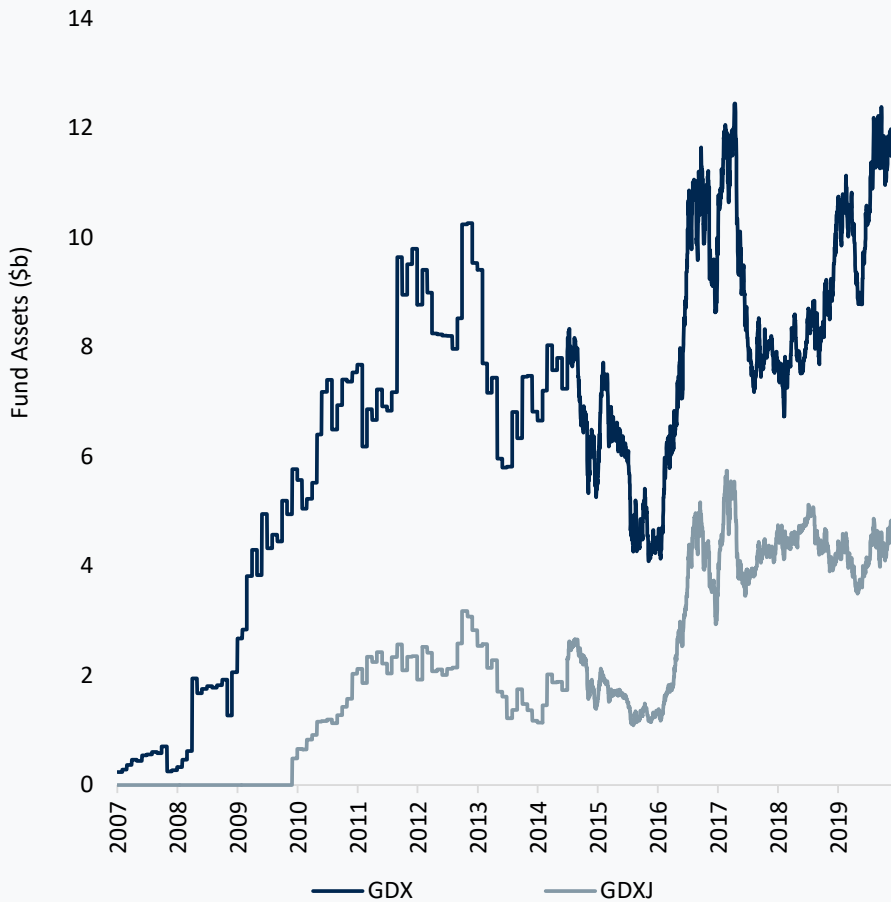


Note: *NEM is the only gold company in the S&P 500 index.
Source: Bloomberg, RBC Capital Markets

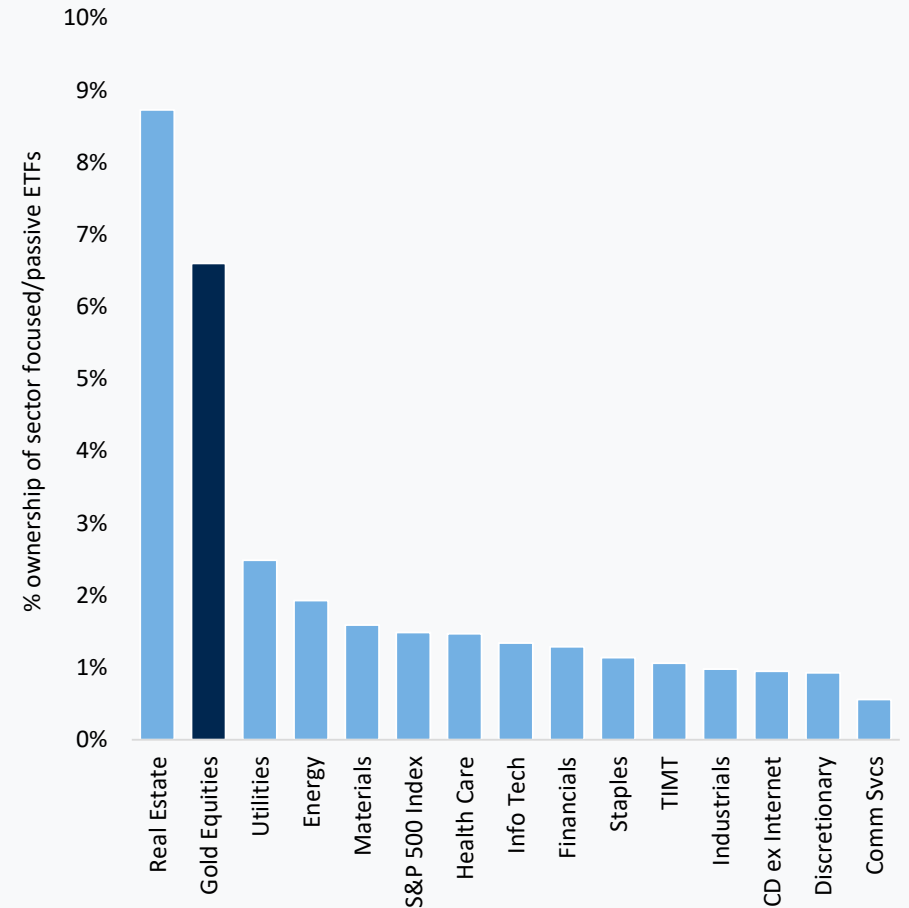
Gold equity themes: Gold equity ETFs are an influential market factor

Passive sector-focused AUM for gold equities largely consists of the GDX and GDXJ ETFs. Combined, these ETFs total \$17B in AUM, compared to the ~\$260B float-adjusted market capitalization of its underlying holdings. The impact of constituent changes and ETF flows can have a material impact on underlying sector equities. A rising proportion of passive equity holders has implications for proxy voting and shareholder equity offers.

GDX and GDXJ fund assets



Ownership of sector-focused/passive ETFs by sector

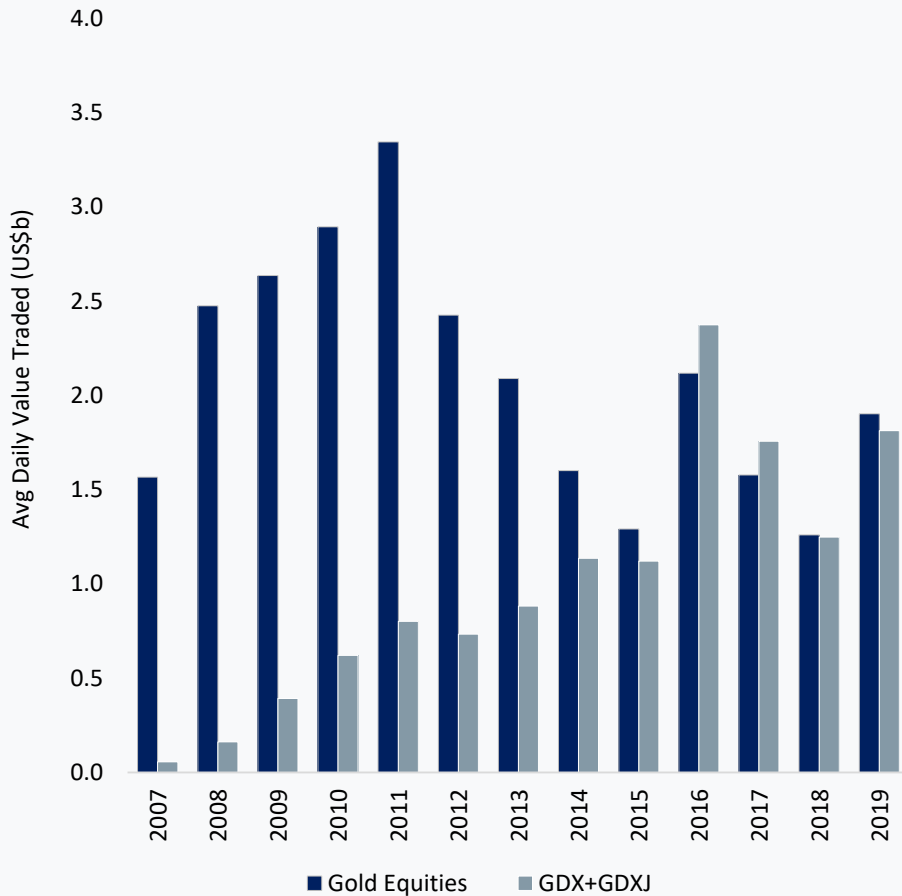


Note: LHS - Percentage ownership based on float-adjusted market capitalization.
Source: Bloomberg, RBC Capital Markets

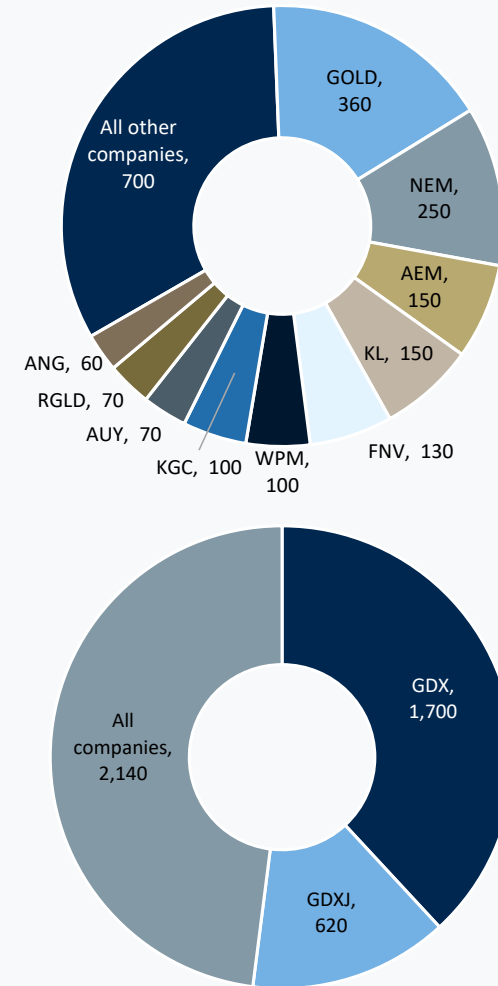
Gold equity themes: Generalist relevance is partially constrained by equity liquidity

The trading liquidity of the GDX and GDXJ is approximately equal to that of all North American listed gold equities combined. Among the equities, GOLD and NEM account for approximately 30% of recent trading value. Seven large cap names (GOLD, NEM, AEM, KL, FNV, WPM and KGC) together comprise nearly 60% of trading value, limiting the relevance of smaller cap names for generalist investors.

Trading liquidity of gold ETFs vs RBC NA gold coverage



Trailing 3-month value traded for NA-listed gold equities (US\$b)

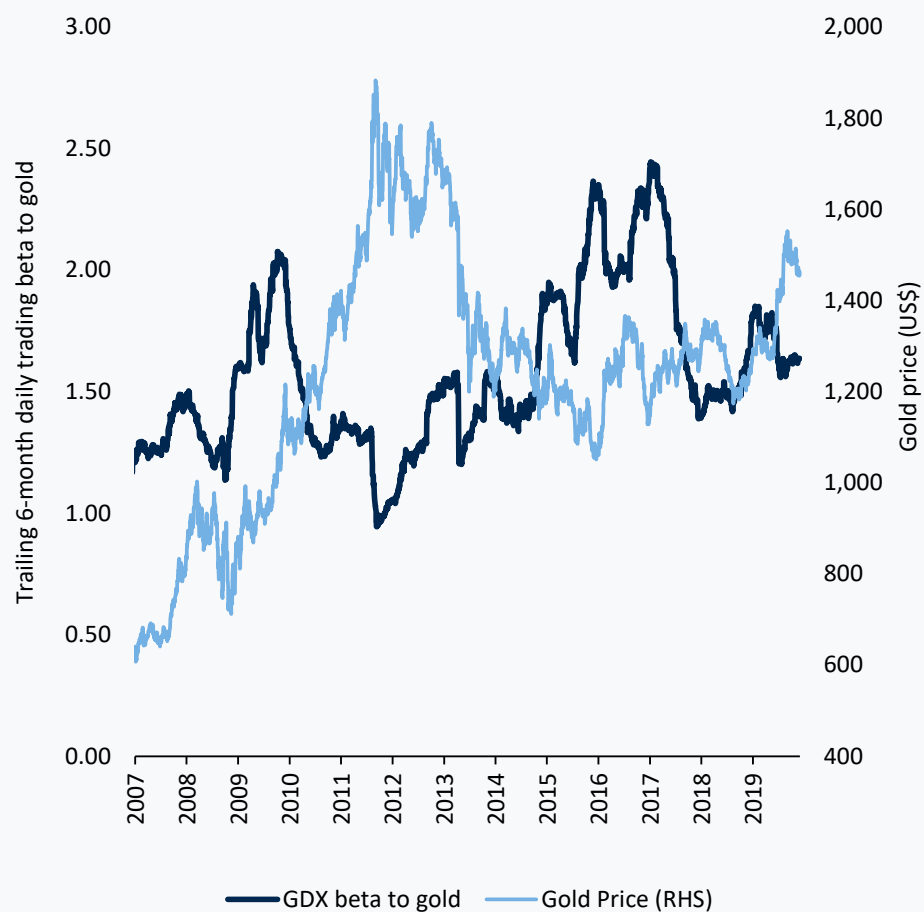


Source: Bloomberg, RBC Capital Markets

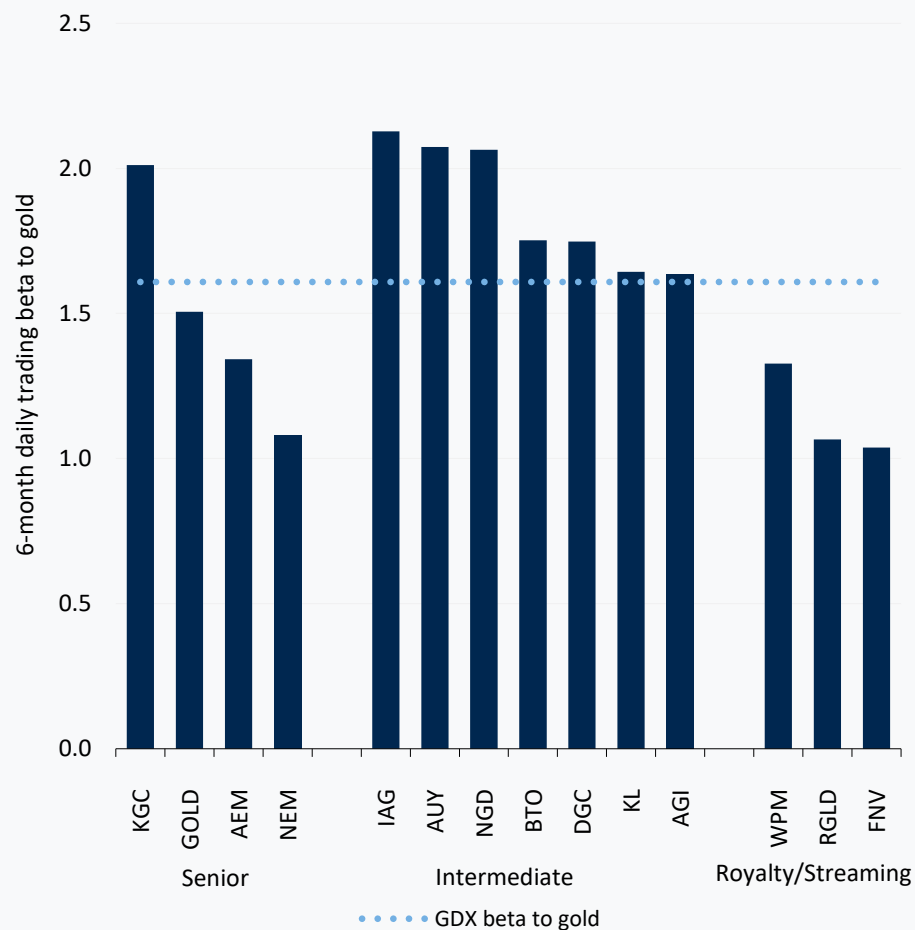
Gold equity themes: Gold equity beta is inversely correlated to gold price performance

The beta of gold equities to the gold price is inversely related to the gold price. Royalty companies maintain a lower beta relative to producers, reflecting high operating margins for the royalty business and lower operating leverage.

6-month trailing daily beta of GDJ to the gold price



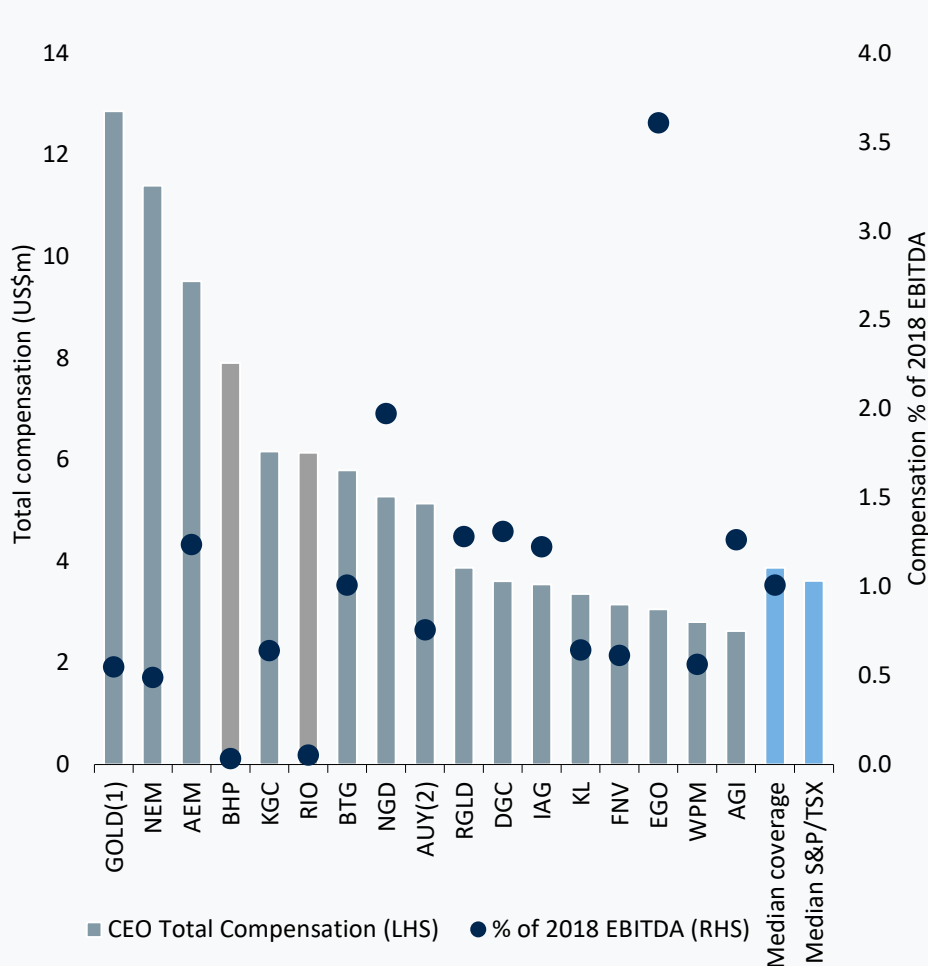
6-month daily beta to gold by company



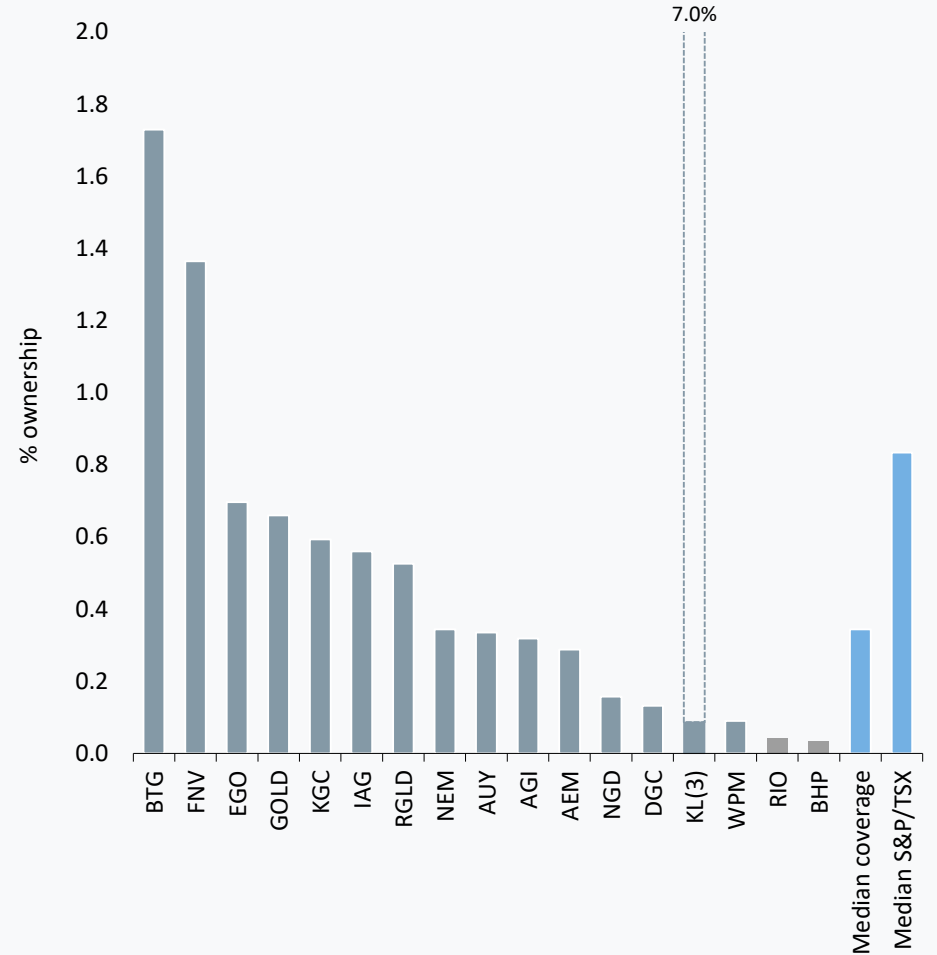
Gold equity themes: Management alignment and incentives are a key shareholder focus

Relative to the TSX composite, gold equity executive compensation is above-average and insider ownership is below-average, causing the potential for misalignment between executives and investors. A structural challenge for this to be addressed is that gold companies benchmark executive compensation against other gold peers. Compensation is now part of a broader governance emphasis within ESG investor framework.

CEO compensation (2018)



Insider ownership

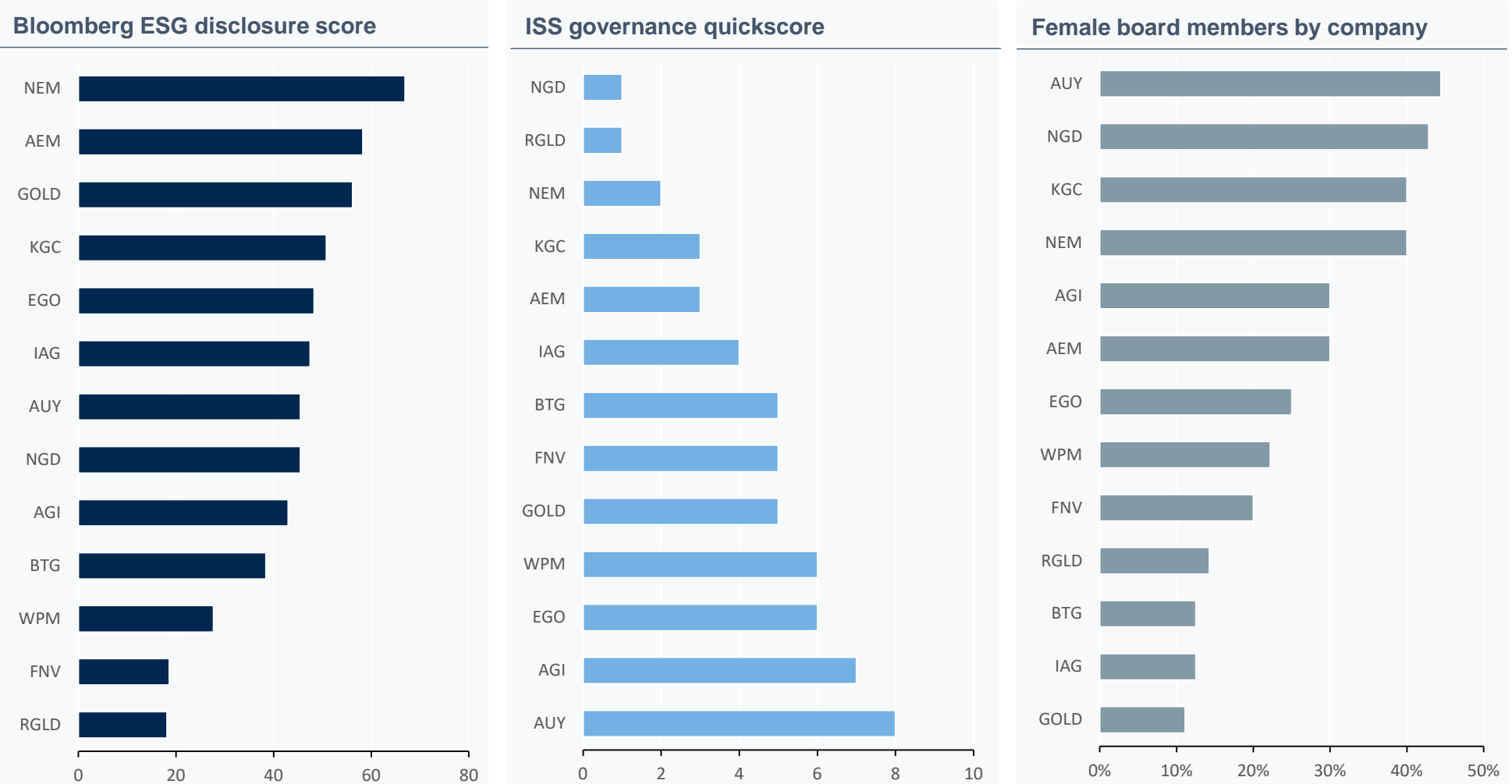


Notes: (1) Barrick compensation shown for Chairman John Thornton; Mark Bristow became CEO in January 2019 and a 2018 compensation figure is not available. (2) Yamana compensation shown for current Executive Chairman Peter Marrone, who served as Chairman & CEO until August 2018. (3) Kirkland Lake Gold holdings include 6.9% strategic interest by Eric Sprott. BHP and RIO shown for purpose of comparison of gold coverage universe to large diversified mining companies.

Source: Bloomberg, Company reports, RBC Capital Markets

Gold equity themes: Growing importance of ESG factors

Gold producers face greater ESG scrutiny than other sectors, a function of the group's high environmental impact (energy, water, and emissions), as well as the greater social exposure risks of operating in geopolitically less stable countries. Despite this complexity, companies can be equally compared against each other. While ESG factors can be quantifiable, we note nuanced items can influence overall scores.



Notes: ESG disclosure score is a proprietary Bloomberg score based on the extent of a company's Environmental, Social, and Governance (ESG) disclosure. The score ranges from 0.1 for companies that disclose a minimum amount of ESG data to 100 for those that disclose every data point collected by Bloomberg. Each data point is weighted in terms of importance, with data such as Greenhouse Gas Emissions carrying greater weight than other disclosures. The score is also tailored to different industry sectors. This score measures the amount of ESG data a company reports publicly, and does not measure the company's performance on any data point.

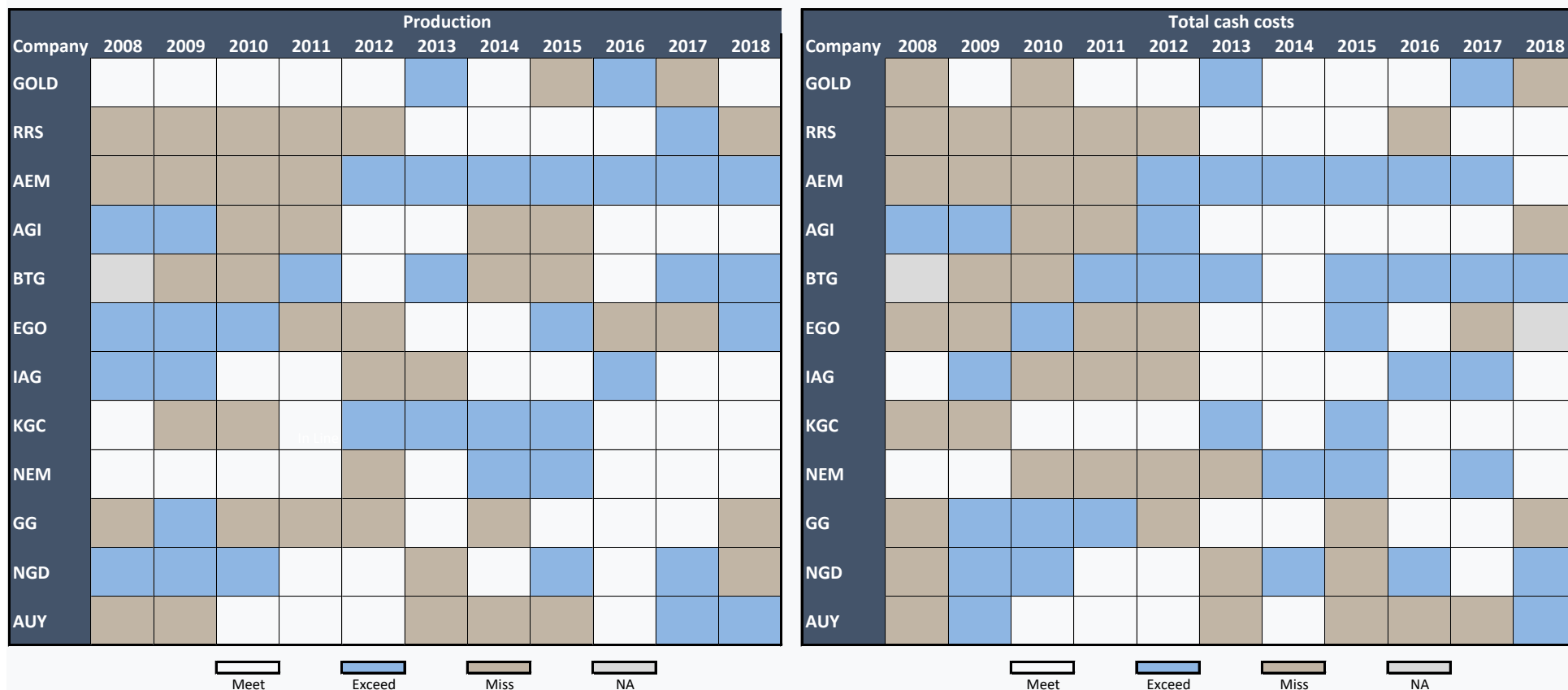
ISS governance quickscore is an overall score assigned by Institutional Shareholder Services (ISS) to the company's governance practices. The score ranges from 1 for best to 10 for worst.

Source: Bloomberg, RBC Capital Markets

Gold equity themes: Producer guidance achievement has improved

Historically, gold producers have delivered below-guidance results for both production and operating costs. More recently, management teams have placed a greater emphasis upon outlining achievable targets and results now reflect this consideration change. The overwhelming majority of producers now achieve or exceed outlined targets.

Execution track record by company



Note RRS represents Randgold, prior to its acquisition by Barrick at year-end 2018. GG represents Goldcorp, prior to its acquisition by Newmont in 2019.
Source: Company reports, RBC Capital Markets

Coverage themes

Key Takeaways:

- We are assuming coverage on 15 North American precious metals equities. Our coverage outlines Outperform ratings for BTG, GOLD, WPM; Sector Perform ratings for AEM, AGI, AUY, FNV, KGC, IAG, NEM; and Underperform ratings for EGO, NGD, RGLD. We are restricted on KL, DGC.
- On average, analyst ratings for companies under coverage are represented by the consensus with 50% Buy ratings, 47% Hold ratings and 3% Sell ratings. Our coverage is represented with 23% Outperform ratings, 54% Sector Perform ratings and 23% Underperform ratings.
- For companies under coverage, we forecast 2019/20 EPS estimates that are lower than consensus by -12%/-13% on average and CFPS estimates that are higher than consensus by 3%/1% on average.
- We forecast that the majority of companies under coverage are positioned to achieve guidance in 2019, with our estimates relatively in-line with consensus for 2020. In general, we forecast higher capital spending in 2020E than consensus and believe this represents a risk for many producers in 1Q20.



Capital
Markets

Coverage themes: Our ratings are based upon relative expected performance

On average, analyst ratings for companies under coverage are represented with 50% Buy ratings, 47% Hold ratings and 3% Sell ratings. Our coverage is represented with 23% Outperform ratings, 54% Sector Perform ratings and 23% Underperform ratings. For companies under coverage, we forecast 2019/20 EPS estimates that are lower than consensus by -12%/-13% on average and CFPS estimates that are largely in line with consensus and compare +3%/+1% on average.

RBC rating and estimates versus consensus at RBC price deck

Ticker	RBC Rating	RBC Target (\$)	Analyst Ratings			2019E EPS		2020E EPS		2019E CPS		2020E CPS		
			Buy	Hold	Sell	RBC (US\$)	Consensus (US\$)	RBC (US\$)	Consensus (US\$)	RBC (US\$)	Consensus (US\$)	RBC (US\$)	Consensus (US\$)	
Royalties														
Franco-Nevada	FNV US	SP	106.00	7	9	0	1.76	1.69	2.33	2.11	3.32	3.20	4.00	3.82
Royal Gold	RGLD US	U	115.00	1	9	3	2.12	2.07	3.10	2.59	4.77	4.58	5.48	5.27
Wheaton Precious Metals	WPM US	O	33.00	14	2	0	0.59	0.57	0.79	0.88	1.19	1.17	1.40	1.46
Large Producers														
Agnico Eagle	AEM US	SP	61.00	14	4	1	1.03	0.96	2.19	1.73	3.71	3.74	5.56	5.18
Barrick Gold	GOLD US	O	20.00	10	14	0	0.47	0.50	0.61	0.72	1.68	1.84	2.07	2.24
Kinross Gold	KGC US	SP	5.00	8	11	0	0.31	0.31	0.41	0.38	0.88	0.86	1.04	1.00
Kirkland Lake Gold	KL US	R	R	R	R	R	R	R	R	R	R	R	R	R
Newmont Goldcorp	NEM US	SP	45.00	13	6	0	1.28	1.35	1.89	2.27	4.19	3.94	4.91	5.42
Intermediate Producers														
Alamos Gold	AGI US	SP	6.50	9	5	0	0.19	0.22	0.25	0.30	0.73	0.73	0.78	0.75
B2Gold	BTG US	O	4.50	16	1	0	0.25	0.21	0.37	0.31	0.47	0.47	0.68	0.60
Detour Gold	DGC CN	R	R	R	R	R	R	R	R	R	R	R	R	R
Eldorado Gold	EGO US	U	6.50	5	7	1	0.08	0.11	0.64	0.85	1.00	1.01	1.99	2.13
IAMGOLD	IAG US	SP	3.75	4	10	0	-0.02	0.02	0.26	0.24	0.84	0.50	0.96	0.86
New Gold	NGD US	U	0.65	0	13	1	-0.05	-0.05	-0.02	0.02	0.30	0.37	0.33	0.42
Yamana Gold	AUY US	SP	3.75	8	7	2	0.12	0.15	0.17	0.19	0.51	0.53	0.65	0.67

Coverage themes: RBCe 2020 forecasts are in line with consensus, while capital spending is higher

We forecast that the majority of companies under coverage are positioned to achieve guidance in 2019, with our estimates relatively in-line with consensus for 2020. In general, we forecast higher capital spending in 2020E than consensus and believe this represents a risk for upcoming producer guidance in 1Q20.

RBC operating forecasts versus guidance & consensus

	2019E					2019 guidance		2020E				2020E consensus		
	Prod'n (koz)	AISC (US\$/oz)	TCC (US\$/oz)	FCF (\$m)	CAPEX (\$m)	Prod'n (koz)	AISC (US\$/oz)	Prod'n (koz)	AISC (US\$/oz)	TCC (US\$/oz)	CAPEX (\$m)	Prod'n (koz)	TCC (US\$/oz)	CAPEX (\$m)
Royalties														
Franco-Nevada	502	NA	269	121	489	490-500	NA	571	NA	268	56	549	317	61
Royal Gold	339	NA	240	236	73	NA	NA	524*	NA	225	128	525*	281	123
Wheaton Precious Metals	676	NA	411	529	2	671	NA	948*	NA	411	3	1025*	398	NA
Large Producers														
Agnico Eagle	1,781	882	647	96	803	1,770-1,780	875-925	2,011	805	608	695	1,999	622	573
Barrick Gold	5,377	891	683	1,049	1,655	5,100-5,600	870-920	5,305	945	681	2,260	5,251	663	1,718
Kinross Gold	2,493	967	698	32	1,064	2,500 (+/- 5%)	995 (+/- 5%)	2,446	1,000	728	948	2,438	697	801
Kirkland Lake Gold	R	R	R	R	R	950-1,000	520-560	R	R	R	R	R	R	R
Newmont Goldcorp	6,247	967	728	1,110	1,491	6,300	965	6,753	969	748	1,862	7,065	705	1,889
Intermediate Producers														
Alamos Gold	489	963	725	3	256	480-520	920-960	465	980	742	235	449	705	255
B2Gold	868	793	567	206	225	935-975	835-875	969	718	543	242	981	526	204
Detour Gold	R	R	R	R	R	570-605	1,175-1,250	R	R	R	R	R	R	R
Eldorado Gold	397	991	574	-38	211	390-420	900-1,000	511	892	618	209	534	582	146
IAMGOLD	770	1,109	890	-89	273	765-810	1,090-1,130	810	1,137	819	375	813	822	235
New Gold	499	1,297	845	-47	247	465-520	1,330-1,420	330	1,038	865	213	358	726	265
Yamana Gold	1,017	881	668	-30	394	1,010	920-960	878	926	673	336	885	628	271

Notes: (1) Guidance based on equity gold production and by-product all-in sustaining costs unless otherwise noted. Our estimate is adjusted to be comparable with guidance; (2) AISC calculations vary by company and may not be consistent with the World Gold Council's definition of AISC; (3) KGC, FNV, NGD, RGLD, WPM, and AUJ production based on gold-equivalent, with NGD & AUJ 2020E figures shown as gold and RGLD & WPM 2020E figures shown as revenue *(\$USM); (4) BTG guidance based on consolidated production and include Nicaragua assets, whereas our estimates exclude the contribution of Nicaragua assets post divestiture; (5) EGO guidance based on consolidated production; (6) RGLD figures shown as calendar year and not fiscal year as reported

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Coverage themes: RBC published price deck

Our published forecasts are based upon a 2020E gold price of US\$1,500 and long-term estimated prices of US\$1,400/oz.

RBCCM precious metal price forecasts (US\$/oz)

Metal	2018A	2019E	2020E	2021E	2022E	2023E	Long-Term
Gold	\$1,269	\$1,390	\$1,500	\$1,450	\$1,450	\$1,400	\$1,400
Silver	\$15.72	\$16.23	\$17.50	\$17.50	\$17.50	\$17.50	\$17.50
Platinum	\$880	\$861	\$950	\$1,000	\$1,075	\$1,075	\$1,100
Palladium	\$1,030	\$1,526	\$1,575	\$1,500	\$1,350	\$1,150	\$1,100

RBCCM base metal price forecasts (US\$/lb)

Metal	2018A	2019E	2020E	2021E	2022E	2023E	Long-Term
Aluminum	\$0.96	\$0.81	\$0.80	\$0.83	\$0.90	\$0.90	\$0.99
Copper	\$2.95	\$2.72	\$3.00	\$2.75	\$2.75	\$2.75	\$3.00
Lead	\$1.02	\$0.91	\$1.00	\$1.00	\$1.00	\$1.00	\$0.85
Moly	\$11.86	\$11.40	\$9.50	\$9.50	\$9.50	\$9.50	\$9.38
Nickel	\$5.95	\$6.00	\$6.00	\$6.50	\$7.00	\$8.00	\$8.00
Uranium	\$24.53	\$26.48	\$30.00	\$35.00	\$65.00	\$65.00	\$65.00
Zinc	\$1.33	\$1.16	\$1.05	\$1.00	\$1.00	\$1.00	\$1.00

RBCCM currency forecasts

Currency	2018A	2019E	2020E	2021E	2022E	2023E	Long-Term
Euro	\$1.18	\$1.11	\$1.10	\$1.11	\$1.13	\$1.14	\$1.15
Canadian dollar	\$0.77	\$0.76	\$0.76	\$0.77	\$0.78	\$0.79	\$0.80
Australian dollar	\$0.75	\$0.69	\$0.67	\$0.69	\$0.71	\$0.73	\$0.75
Mexican peso	\$19.22	\$19.26	\$19.14	\$18.98	\$18.82	\$18.66	\$18.50
Chilean peso	\$640.32	\$701.88	\$740.23	\$712.68	\$685.12	\$657.56	\$630.00
Brazilian real	\$3.63	\$3.94	\$4.00	\$3.90	\$3.80	\$3.70	\$3.60
Argentine peso	\$26.42	\$47.00	\$52.48	\$48.86	\$45.24	\$41.62	\$38.00
Turkish lira	\$4.71	\$5.69	\$6.27	\$5.96	\$5.64	\$5.32	\$5.00
Russian ruble	\$62.54	\$64.57	\$62.58	\$61.94	\$61.29	\$60.65	\$60.00
South African rand	\$13.17	\$14.51	\$15.50	\$15.00	\$14.50	\$14.00	\$13.50

Source: Bloomberg, RBC Capital Markets estimates

Coverage themes: Target prices are based upon a blend of NAV and 2020/21E SFCF

Our target prices are based upon a blend of our risk-weighted NAV and 2020E/21E sustainable FCF (SFCF). SFCF is defined as operating cash flow less capital spending, adjusting to exclude greenfield growth development. SFCF measures a company's discretionary cash generation capacity that can be allocated to growth, debt repayment, or return of capital. Companies investing capital in new projects are not penalized, unlike FCF.

	Target price	Rating	Projected 12-month return	Target NAV multiple	Target SFCF multiple	TTM P/NAV at Spot			TTM EV/SFCF at Spot (2020/21)		
						Median	High	Low	Median	High	Low
Royalty Companies											
FNV	\$106.00	SP	8%	2.5	28	2.3	2.5	2.1	21	24	17
RGLD	\$115.00	U	-2%	2.2	25	2.3	2.8	2.1	20	24	18
WPM	\$33.00	O	19%	2.3	27	1.9	2.2	1.7	19	23	15
				2.3	27						
Large Producers											
AEM	\$61.00	SP	2%	2.2	30	2.1	2.5	1.7	27	32	22
GOLD	\$20.00	O	19%	1.8	23	1.7	2.5	1.5	19	23	16
KGC	\$5.00	SP	15%	1.0	16	1.1	1.3	0.7	16	>50	10
NEM	\$45.00	SP	17%	1.7	23	1.9	2.7	1.2	20	28	15
				1.7	23						
Intermediate Producers											
AGI	\$6.50	SP	15%	1.0	19	0.9	1.1	0.6	24	>50	13
AUY	\$3.75	SP	5%	1.6	20	1.8	2.8	1.2	17	27	14
BTG	\$4.50	O	22%	1.5	15	1.8	2.2	1.4	9	12	8
EGO	\$6.50	U	-17%	0.7	17	0.6	0.7	0.3	44	>50	20
IAG	\$3.75	SP	4%	0.8	19	0.8	1.1	0.6	35	>50	11
NGD	\$0.65	U	-22%	1.1	16	1.5	>5.0	0.8	>50	>50	>50
				1.1	18						

Notes: (1) SFCF is defined as operating cash flow less capital spending, adjusting to exclude the impact of new greenfield growth projects. (2) TTM valuations represent our current forecasts back-tested utilizing historical spot pricing and equity pricing over a 12-month period. (3) Priced as of market close November 29, 2019 ET.

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Coverage themes: We assess relative risks and opportunities to determine target multiples

We evaluate a company's risks and opportunities relative to its peer group to formulate our target multiples. In addition to these risk factors, we assess a company's current valuation and the sensitivity of our forecasts to varying factors to arrive at our company ratings.

	Asset Duration	Cost Profile	Geopol. Risk	Concentr'n Risk	Financial Leverage	Historical Execution	Historical ROE	Consensus Risk	Overall relative	Target NAV Multiple	Target SFCF Multiple	EBITDA to SFCF Convers.	Equiv. EBITDA Multiple
Royalty Companies													
FNV										2.5	28	94%	26
RGLD										2.2	25	90%	23
WPM										2.3	27	96%	26
										2.3	27	94%	25
Large Producers													
AEM										2.2	30	39%	12
GOLD										1.8	23	50%	11
KGC										1.0	16	36%	6
NEM										1.7	23	43%	10
										1.5	21	43%	9
Intermediate Producers													
AGI										1	19	41%	8
AUY										1.6	20	37%	7
BTG										1.5	15	61%	9
EGO										0.7	17	23%	4
IAG										0.8	19	24%	5
NGD										1.1	16	19%	3
										1.0	17	36%	6

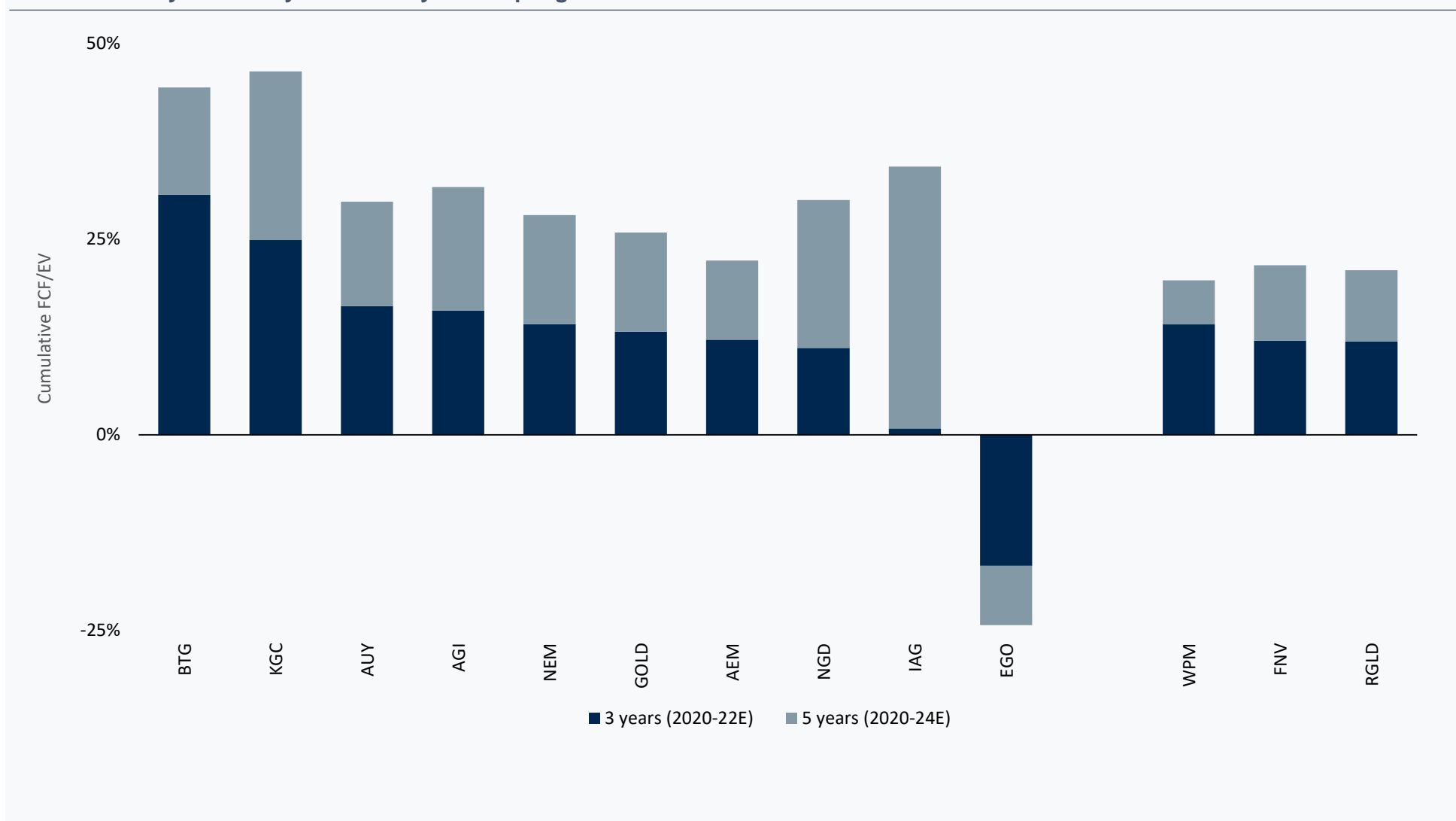
Highest relative ranking ← → Lowest relative ranking

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Coverage themes: With great cash flow comes great responsibility

Where capital can be productively utilized, the acceleration of free cash flow represents an opportunity for good allocators. Historically for gold producers, returns generated have been below the cost of capital and therefore the generation of free cash flow has unusually represented a risk, rather than opportunity. Although low duration asset portfolios can represent a company risk, high free cash flow and good capital allocation can offset this.

Cumulative 3-year and 5-year FCF/EV yield at spot gold

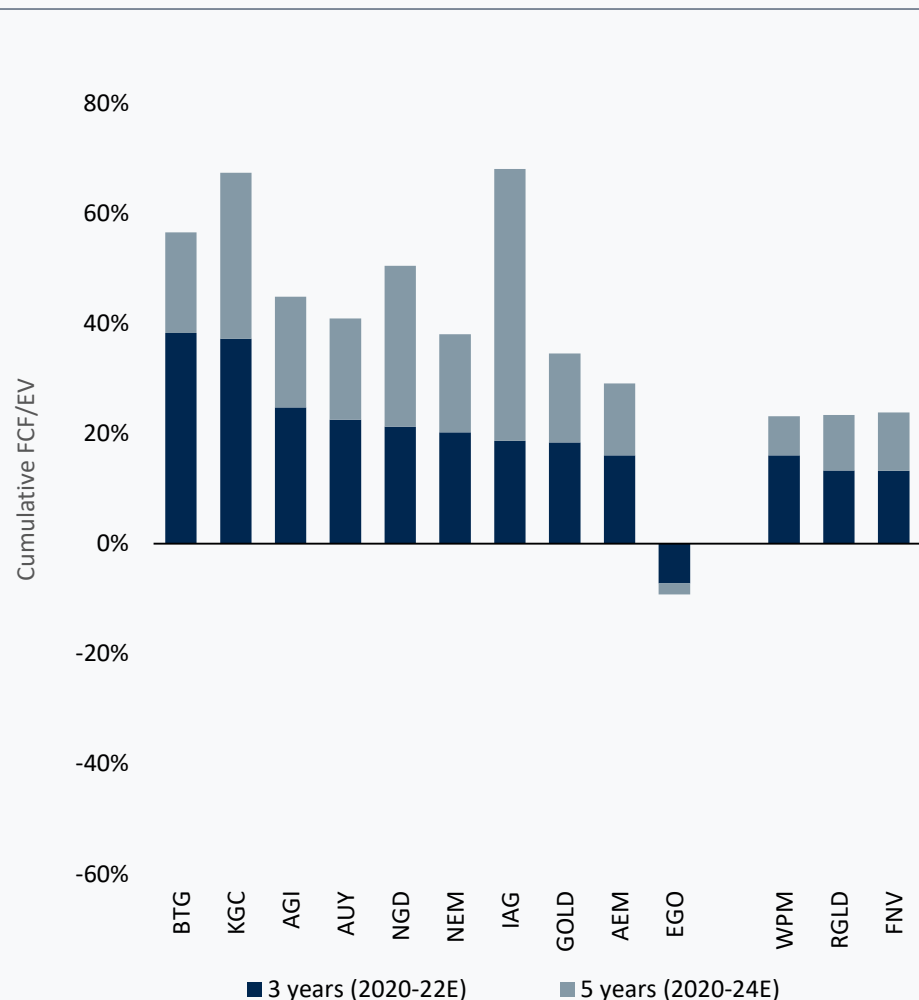


Source: Bloomberg, RBC Capital Markets estimates

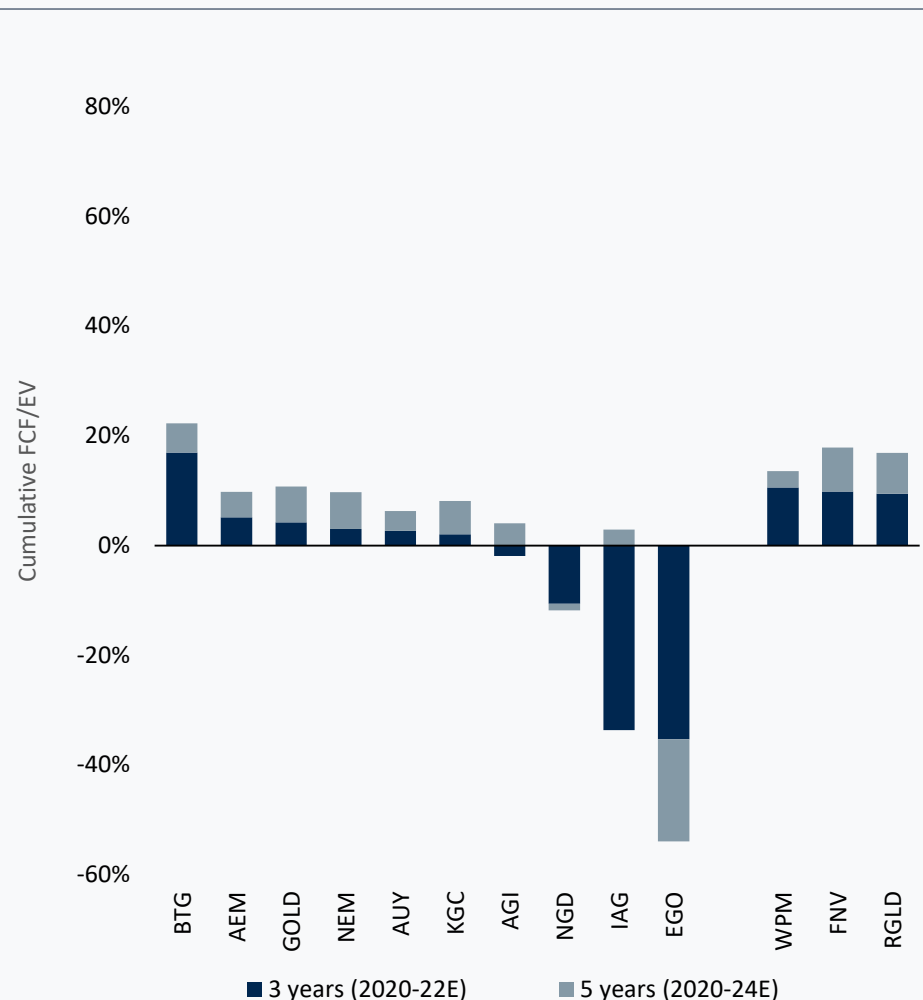
Coverage themes: Assessing opportunities and risks at different gold prices

Higher gold prices represent the opportunity for companies under coverage to generate windfall cash flows. At lower gold prices, the ability for some companies under coverage to advance project development portfolios could be compromised. In either price scenario, the royalty and streaming sector maintain greater cash flow stability.

Upside scenario: Cumulative FCF/EV yields at \$1,600/oz gold



Downside scenario: Cumulative FCF/EV yields at \$1,200/oz gold

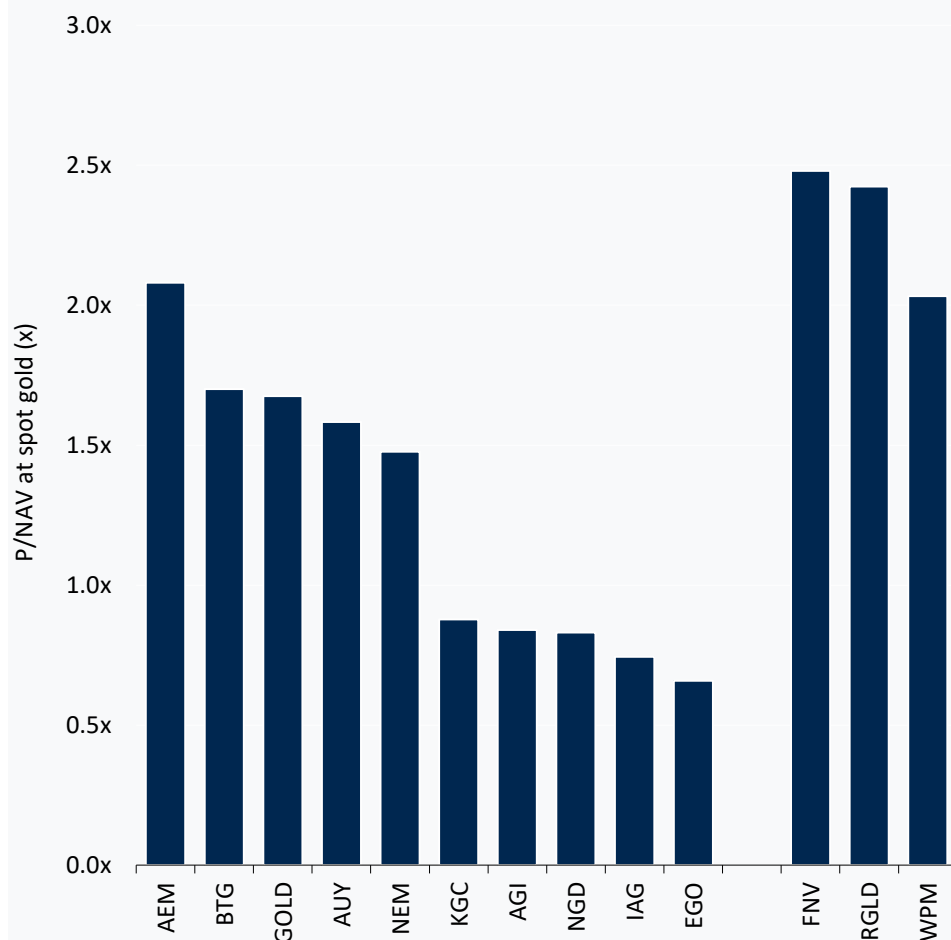


Source: Bloomberg, RBC Capital Markets estimates

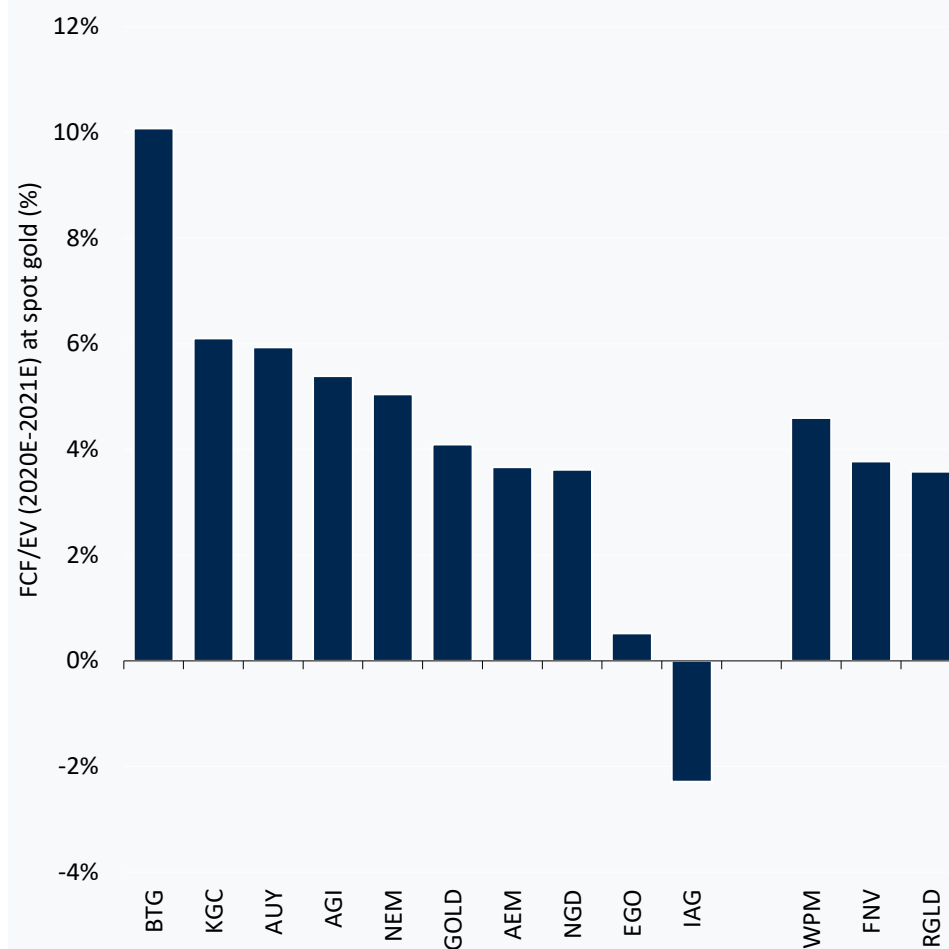
Coverage themes: Relative P/NAV and FCF/EV comparison

At spot gold prices, we calculate that producers under coverage currently trade at a weighted average P/NAV of 1.47x and FCF/EV yield (2020-2021E) of 4.6%, with royalty companies trading at 2.31x and 4.0%, respectively.

Risk-weighted P/NAV at spot gold



FCF/EV yield (2020E/21E) at spot gold

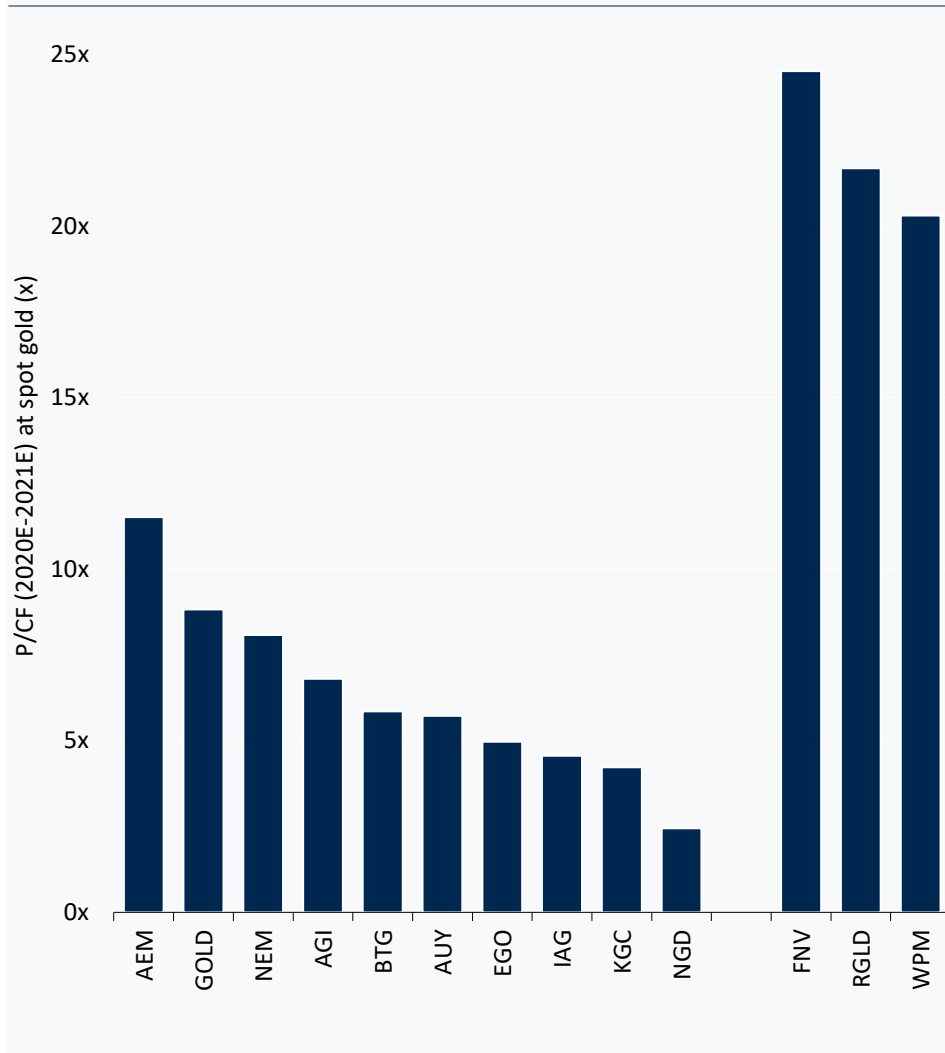


Note: Forecasts generally incorporate a 5% discount rate for gold assets and 8% for base metals assets. Higher discount rates are applied to higher risk assets.
Source: Bloomberg, RBC Capital Markets estimates

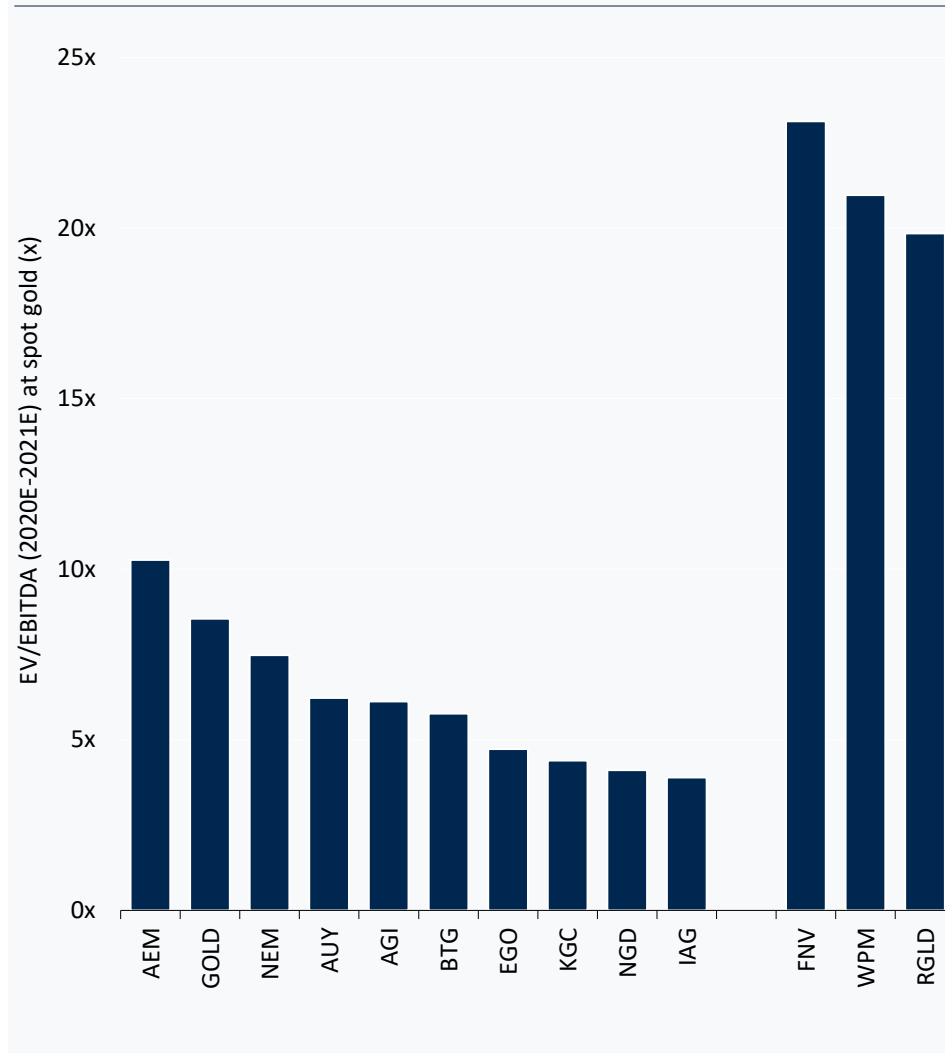
Coverage themes: Relative P/CF and EV/EBITDA comparison

At spot gold prices, we calculate that producers under coverage currently trade at an average P/CF (2020-2021E) of 7.7x and EV/EBITDA (2020-2021E) of 7.3x, with royalty companies trading at 22.4x and 21.7x, respectively.

P/CF (2020-2021E) at spot gold



EV/EBITDA (2020-2021E) at spot gold

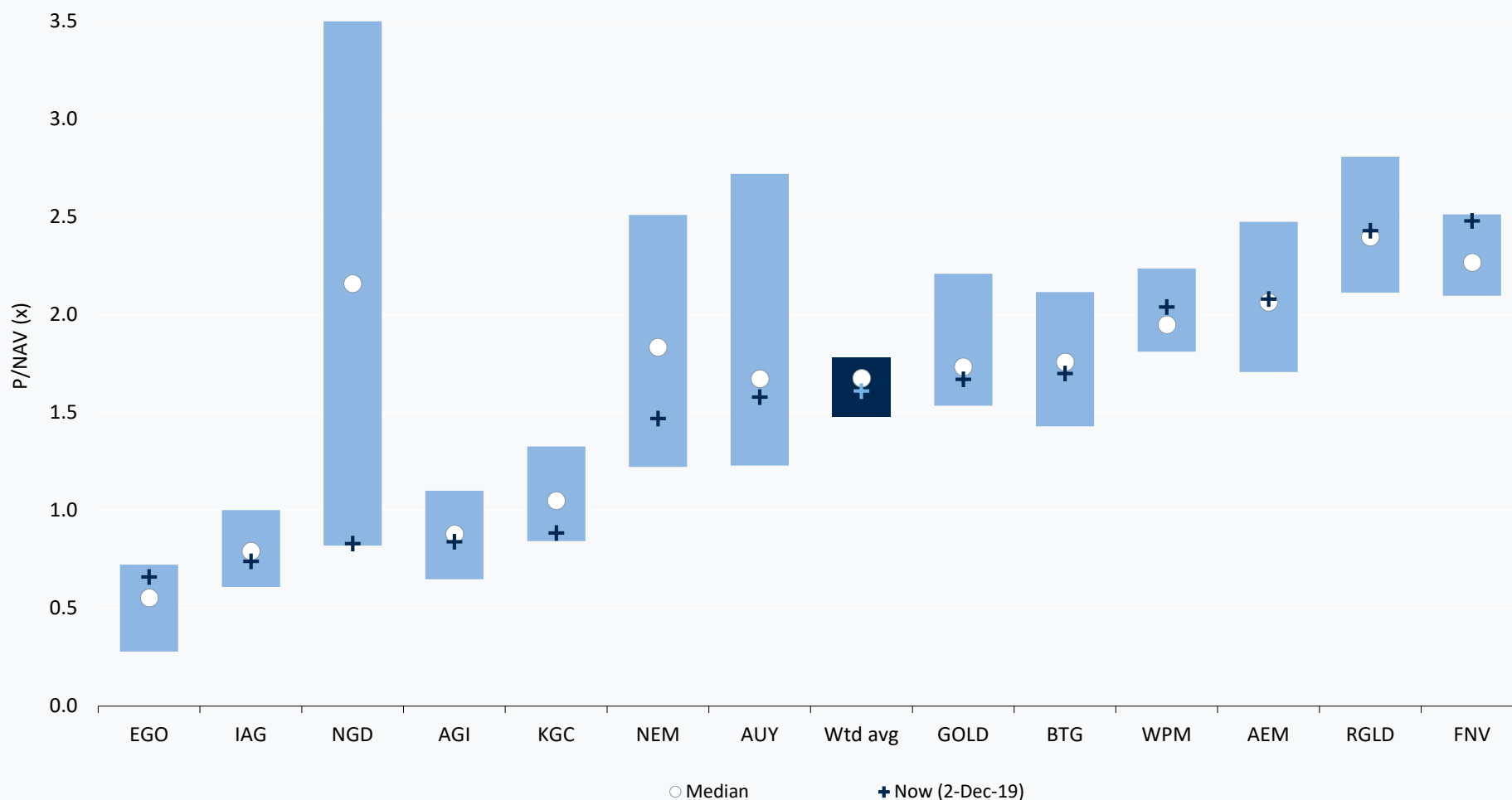


Source: Company reports, Bloomberg, RBC Capital Markets estimates

Coverage themes: RBC P/NAV at spot relative and absolute comparison over time

Our valuation analysis for companies under coverage includes the assessment of a company relative to its peers as well as its own historical trading ranges over time.

Risk-weighted P/NAV at spot gold today, 1-year historical range and median



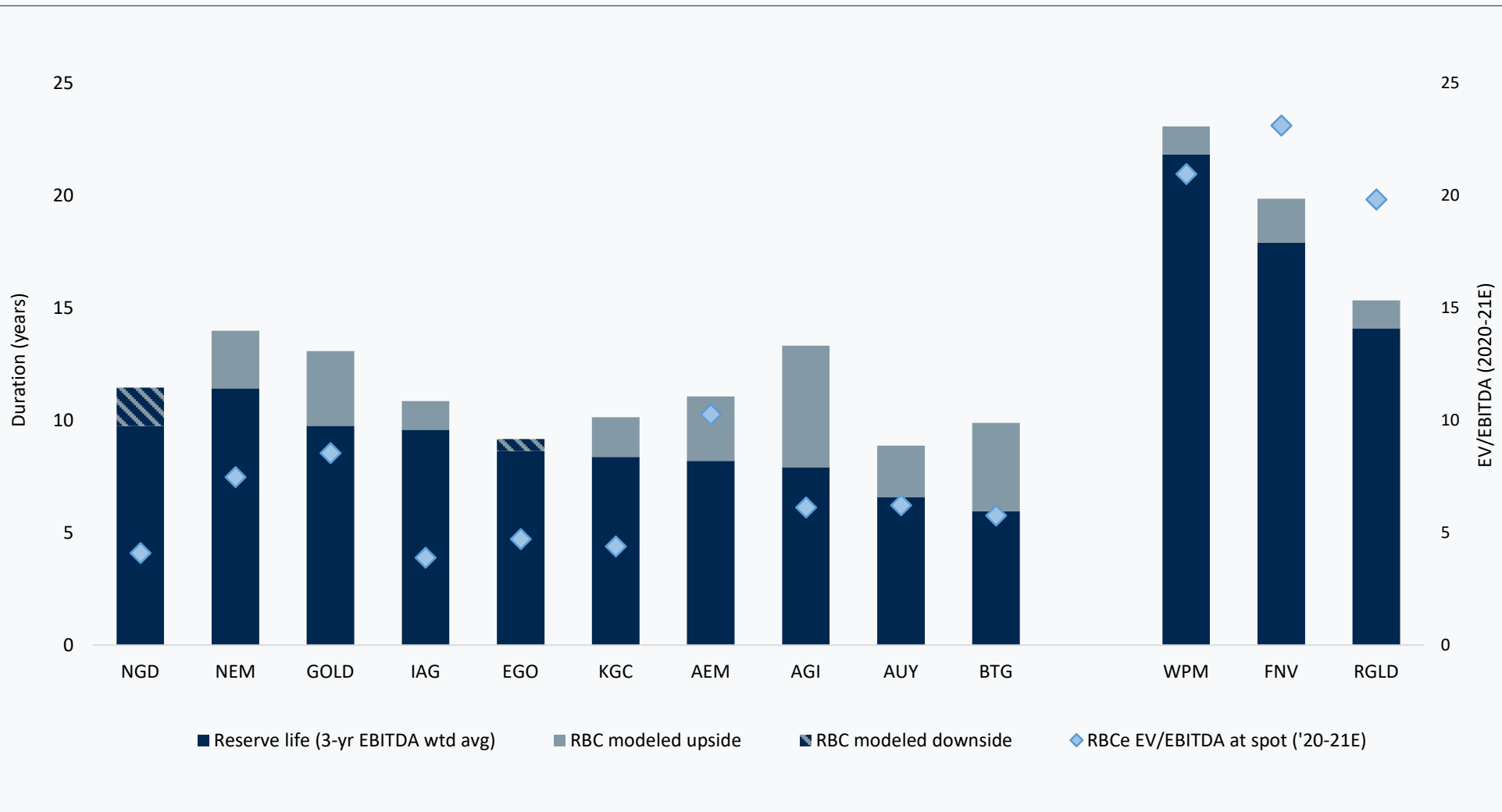
Note: NAVs for companies under coverage evaluated on a risk-weighted basis. Forecasts generally incorporate a 5% discount rate for gold assets and 8% for base metals assets. Higher discount rates are applied to higher risk assets.

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Coverage themes: Asset duration comparison for operating mines

We calculate existing gold mines in operation under coverage maintain an average implied reserve life of 10 years. The portfolios of royalty & streaming companies have a longer implied duration of 18 years, reflecting their exposure to by-product precious metals production from large-scale base metals mines. New project development can extend mine life for corporate production beyond these figures, but requires up-front capital.

Implied reserve life for currently operating assets and RBC modeled upside/downside (weighted by EBITDA)

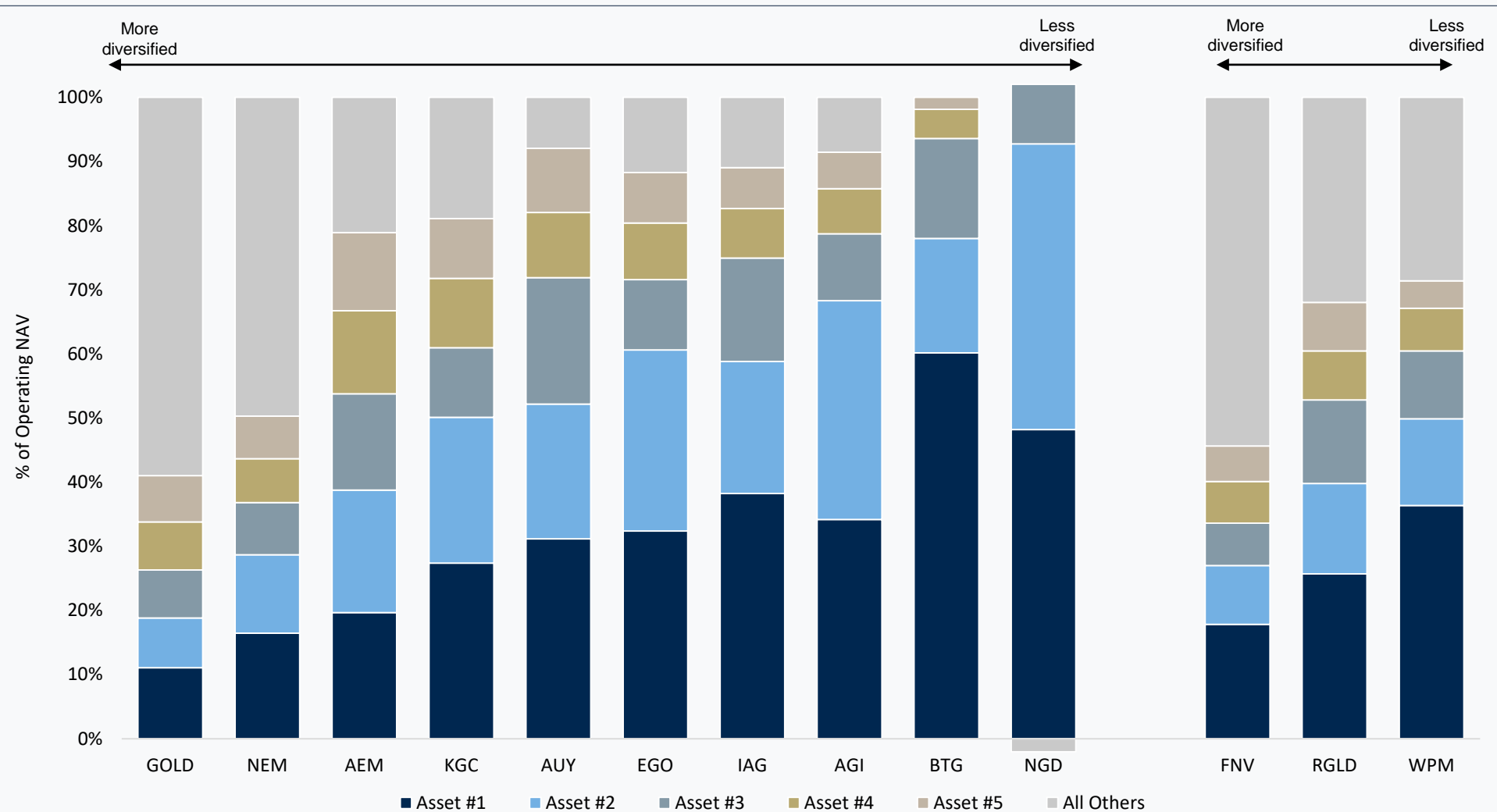


Notes: Reserve lives calculated based on forecast throughput and weighted by 2019-21E EBITDA.
Source: Bloomberg, Company reports, RBC Capital Markets estimates

Coverage themes: Asset concentration risk comparison

The large cap gold producers and royalty & streaming companies demonstrate greater portfolio diversification, which supports higher valuation multiples relative to less diversified companies with greater single-asset operating/development, financial and geopolitical risk exposure.

Estimated operating NAV contribution of 5 largest assets vs. all others

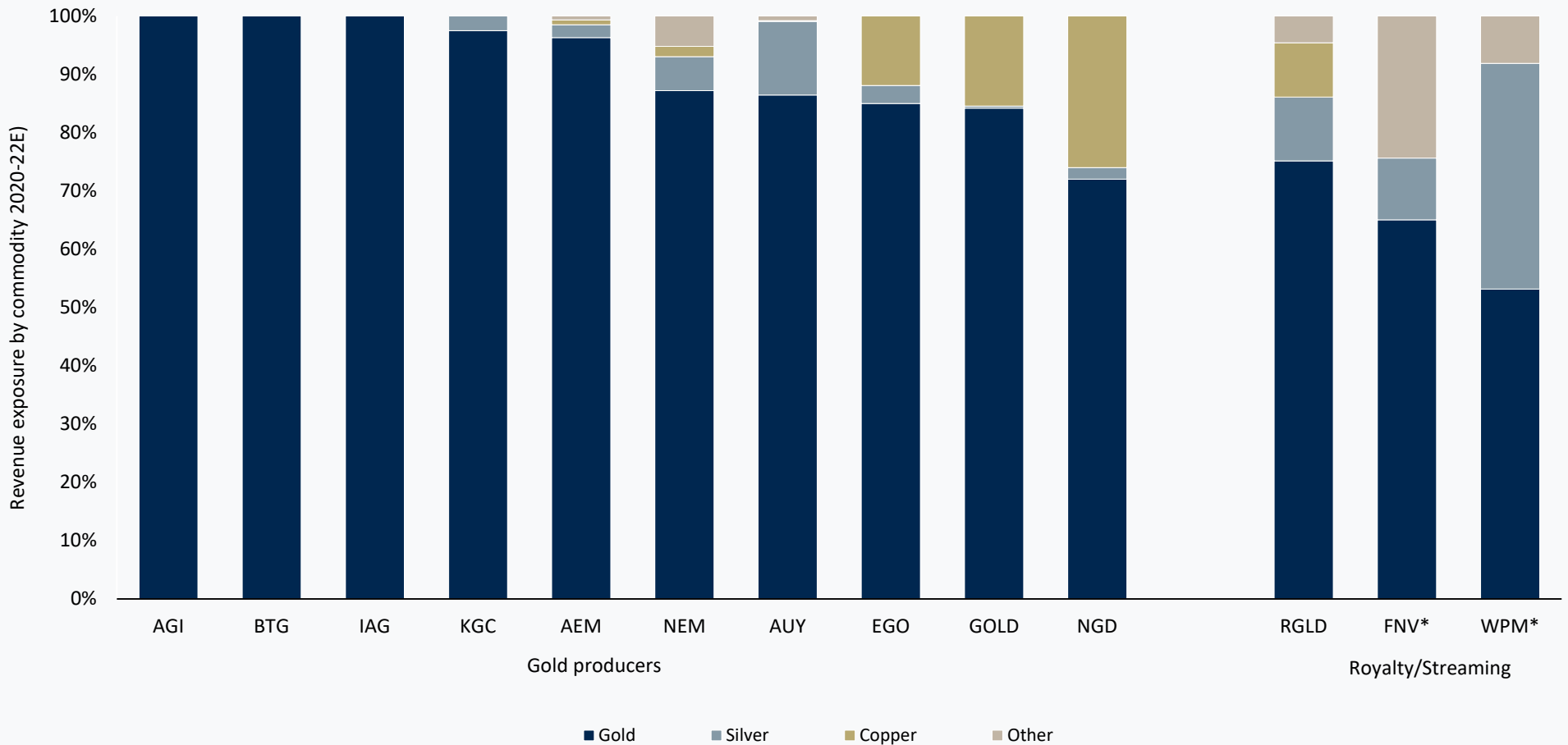


Source: Company reports, RBC Capital Markets estimates

Coverage themes: Commodity exposure comparison

On average, gold accounts for approximately 90% of company revenue for producers, with copper exposure averaging 6% and silver exposure 3%. Royalty companies average less exposure to gold, with approximately 65% of revenues gold related, 20% silver, and 10% copper.

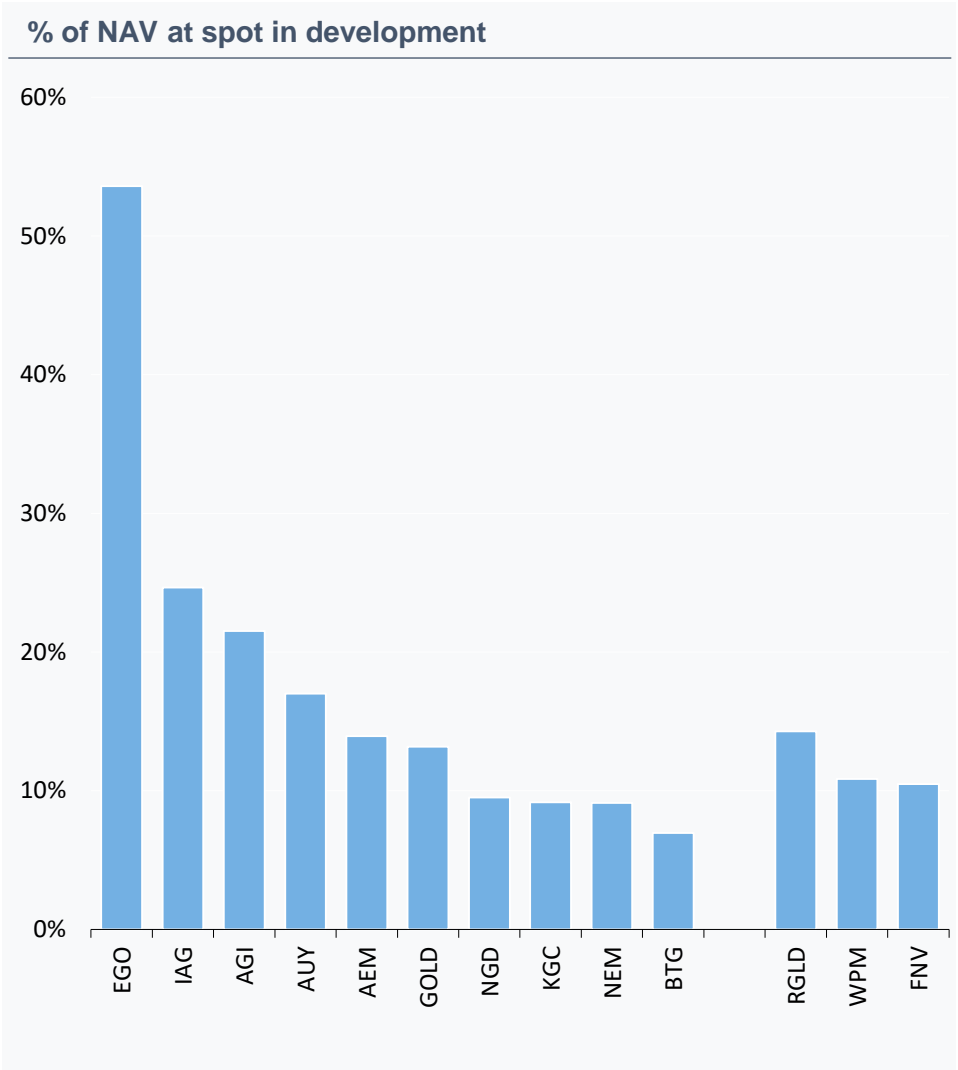
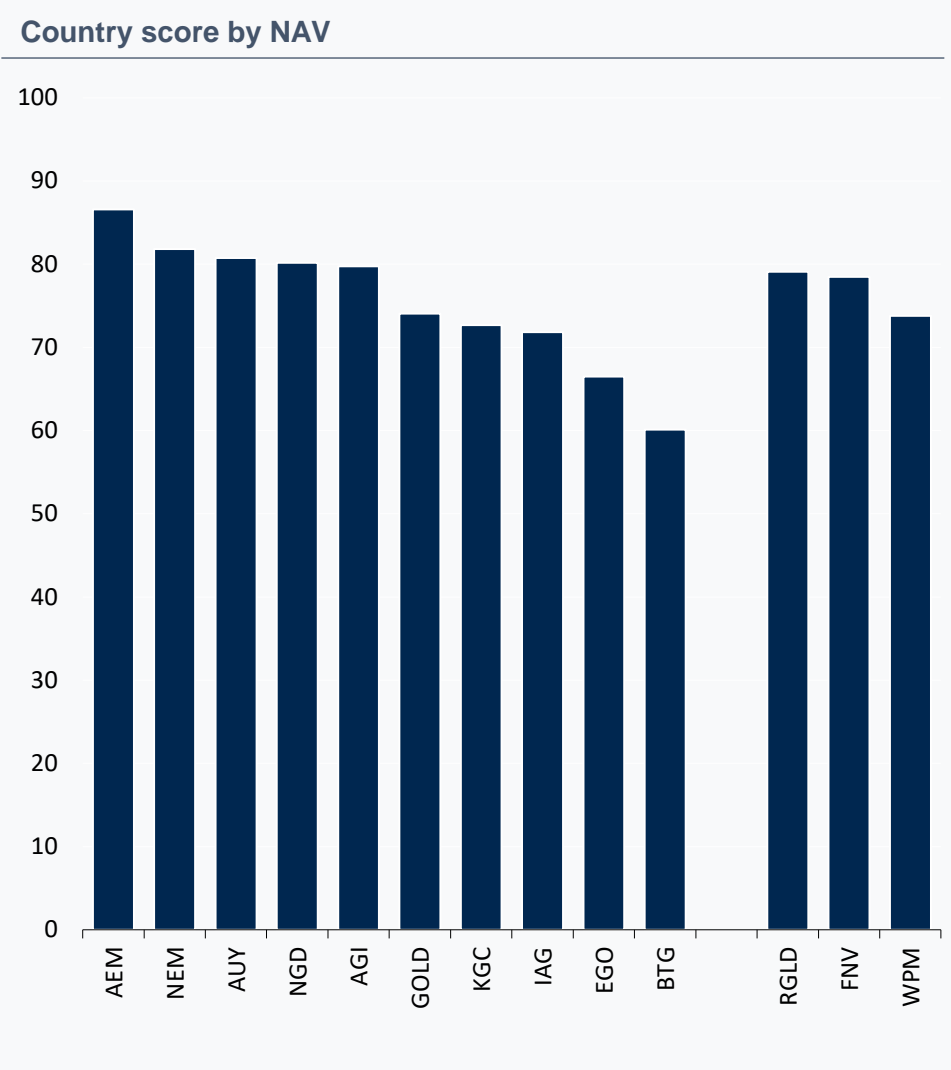
Forecast revenue breakdown by commodity, 2020-22E



Notes: Revenue forecasts at spot prices. *FNV Other is primarily oil & gas revenue. WPM Other is palladium and cobalt.
Source: Company reports, RBC Capital Markets estimates

Coverage themes: Country score and proportion of NAV in development comparison

Companies which operate in lower ranked jurisdictions may have more downside risk reflected in their trading multiples. Similarly, companies with a high percentage of their total NAV in development projects may also see this risk reflected.



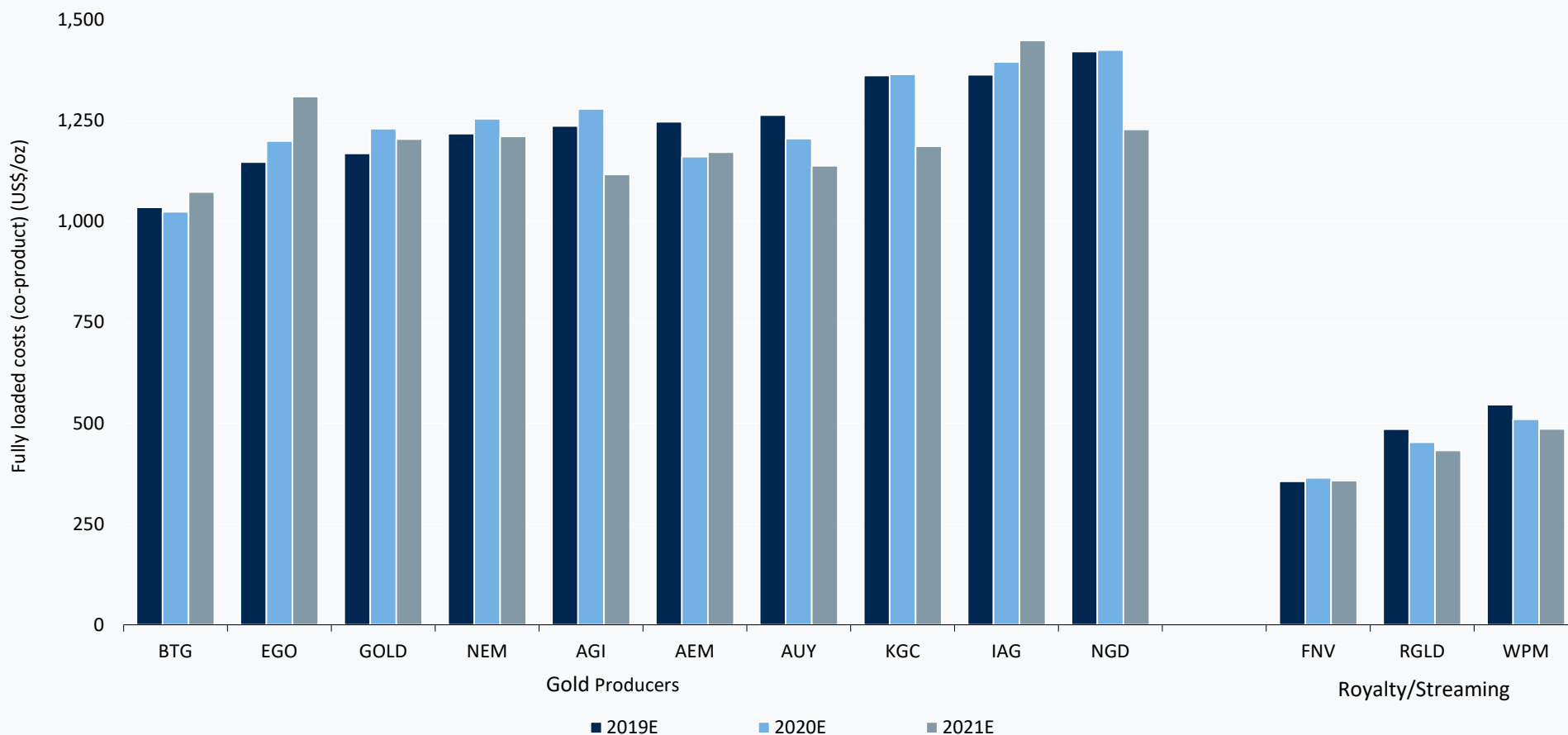
Notes: LHS – Country score rankings are based on the Policy Perception Index (PPI) of the 2018 Fraser Institute Survey of Mining Companies. A higher country score implies a more favourable operating jurisdiction.

Source: Fraser Institute Survey of Mining Companies (2018), Bloomberg, Company reports, RBC Capital Markets

Coverage themes: Fully loaded cost comparison

We forecast that companies under coverage could report a 2% decrease in fully loaded costs over the 2019 to 2021 period.

2019-2021E gold producer and royalty/streaming fully loaded costs (sorted by 2019E)

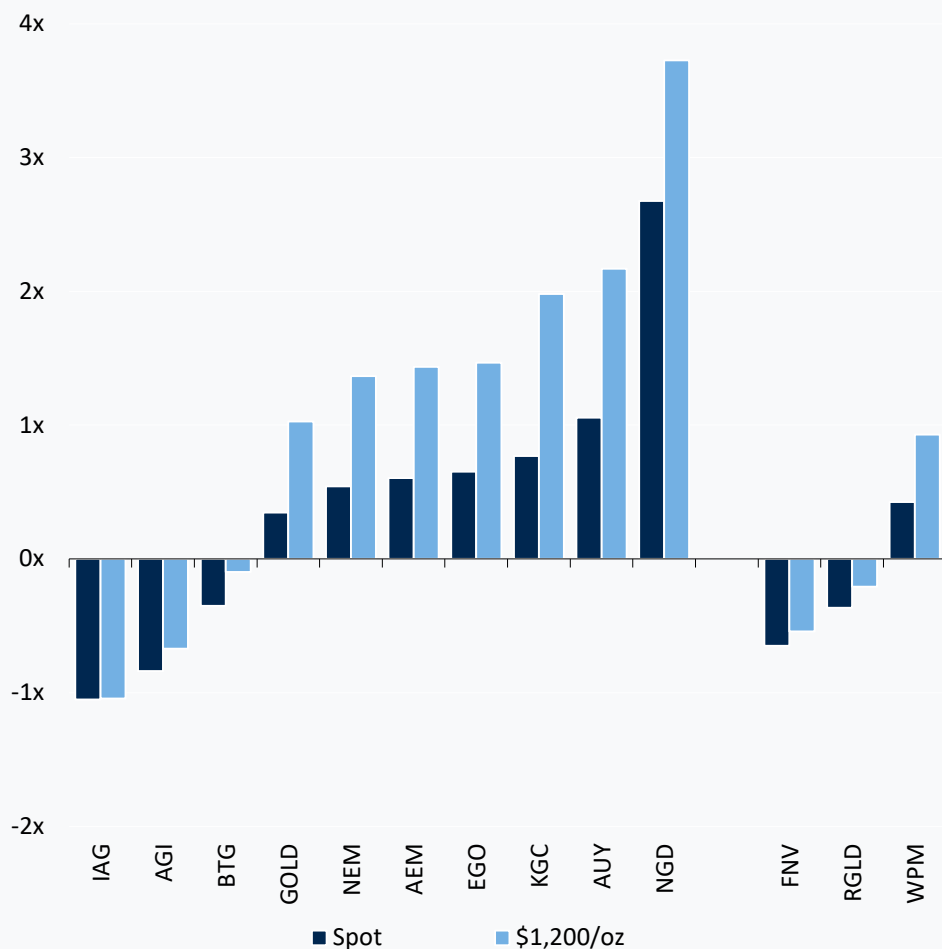


Note: Fully loaded costs represent FCF breakeven costs before debt changes, dividends, and true growth capital.
 Source: Bloomberg, Company reports, RBC Capital Markets estimates

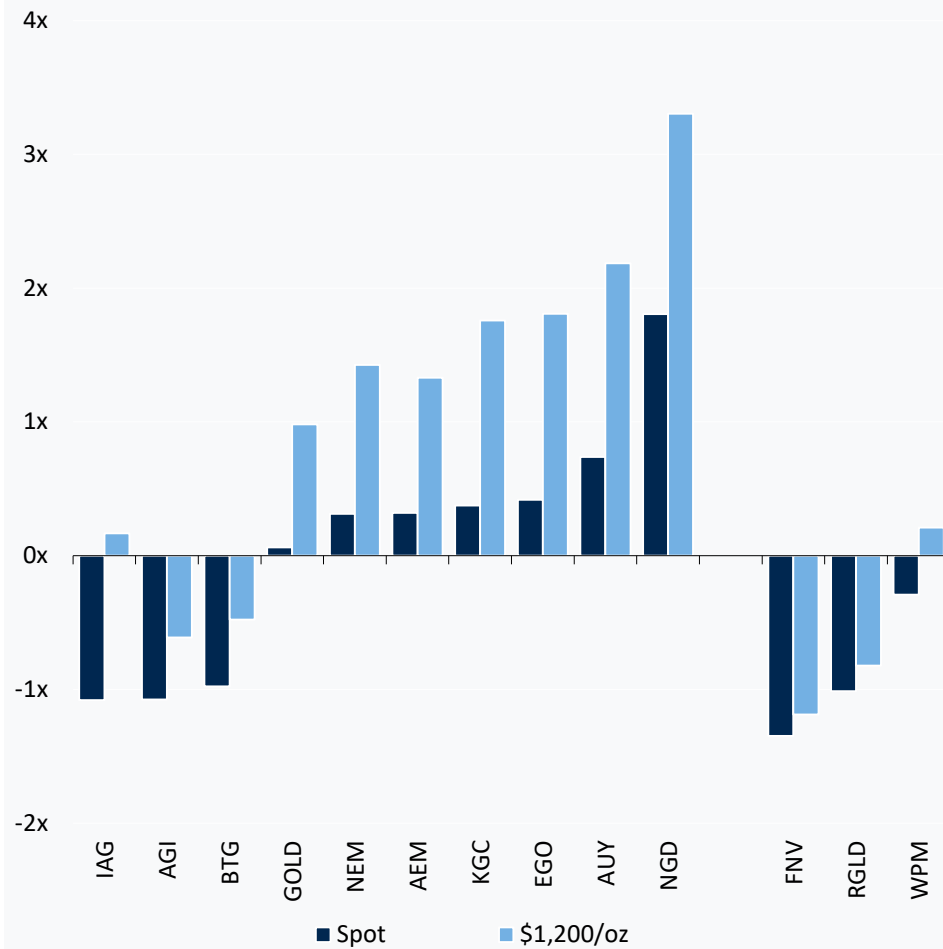
Coverage themes: Credit risk comparison at spot and lower gold prices

We forecast leverage for all companies under coverage to remain manageable in 2020/21, assuming spot gold prices. When assuming lower gold prices of US\$1,200/oz, in our view almost all companies under coverage are forecast to maintain manageable debt levels.

2020E net debt to EBITDA



2021E net debt to EBITDA

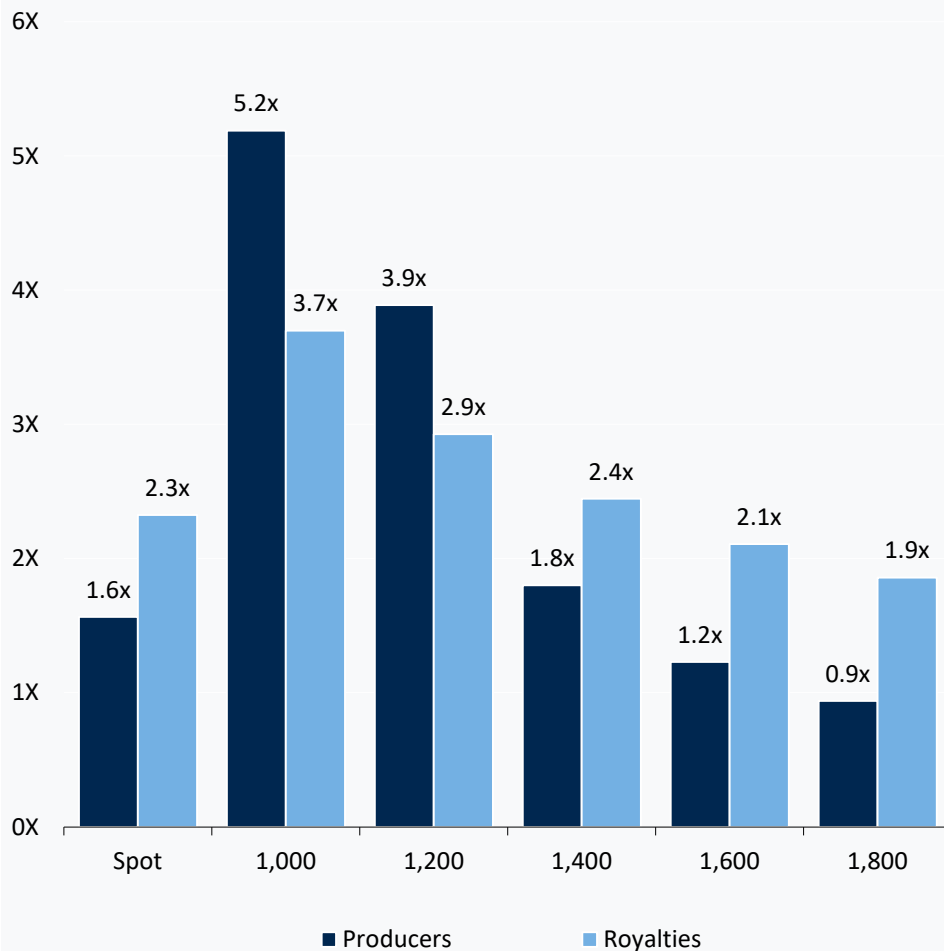


Source: Bloomberg, RBC Capital Markets estimates

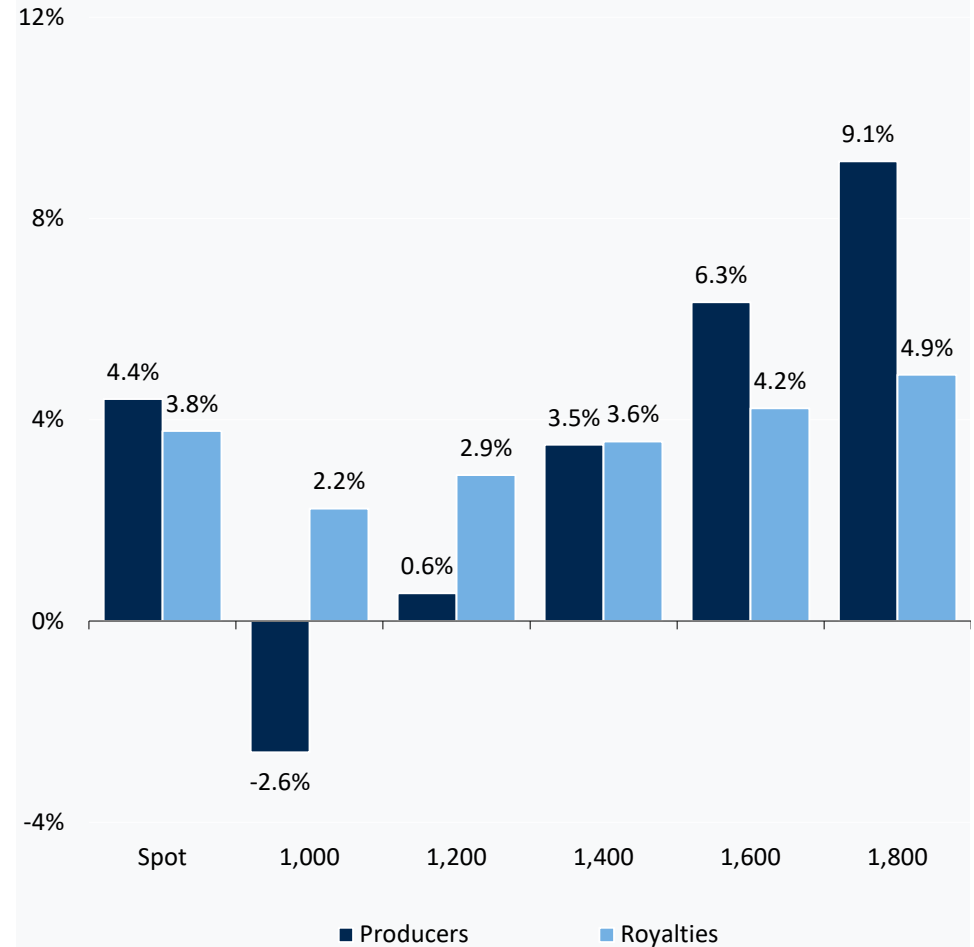
Coverage themes: Producer and royalty sensitivity to gold prices comparison

Over the gold cycle, the royalty business model has generated above-average share price returns at lower volatility to producers, supporting a higher valuation. We calculate that at spot gold, current share prices reflect the royalty group carrying a substantial premium on a P/NAV basis and slight premium on an FCF/EV basis (2020-2021E) relative to the producer group. Assuming gold prices of \$1,350-\$1,400/oz, the two groups would be in line.

P/NAV sensitivity to gold prices



FCF/EV (2020-2021E) sensitivity to gold prices

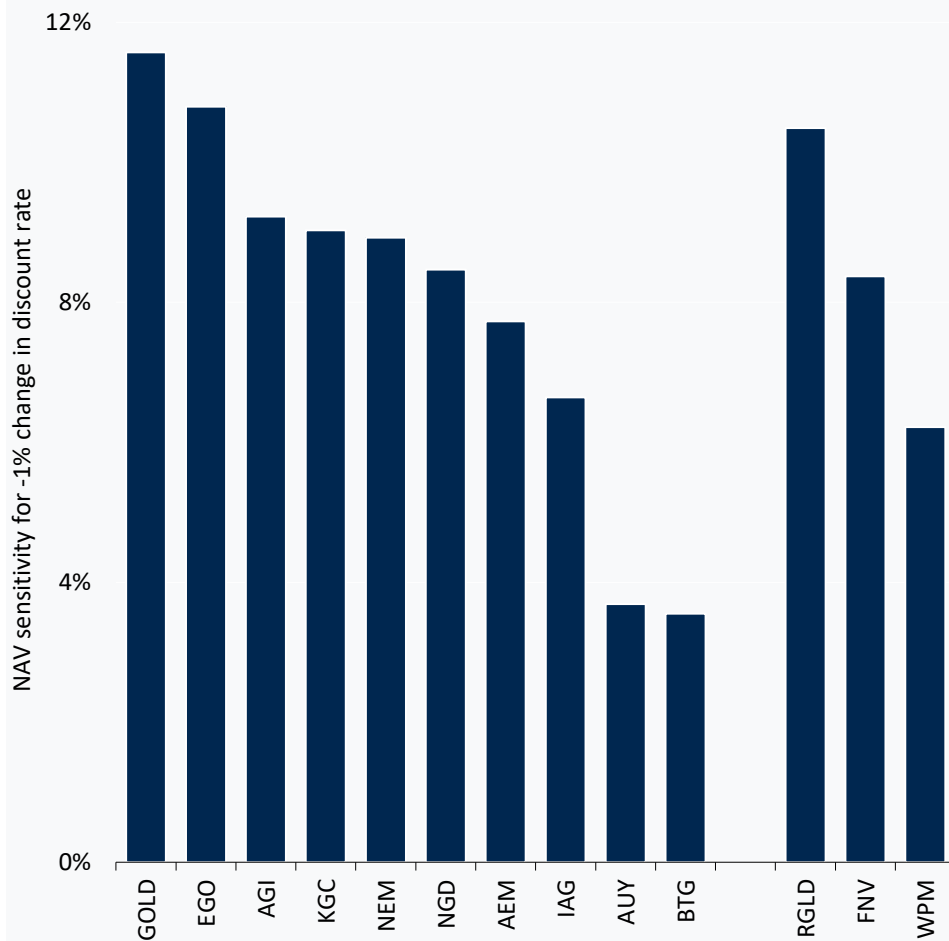


Notes: Producers and royalties values represent coverage universe weighted by market capitalization for P/NAV and weighted by enterprise value for FCF/EV.
Source: Bloomberg, Company reports, RBC Capital Markets estimates

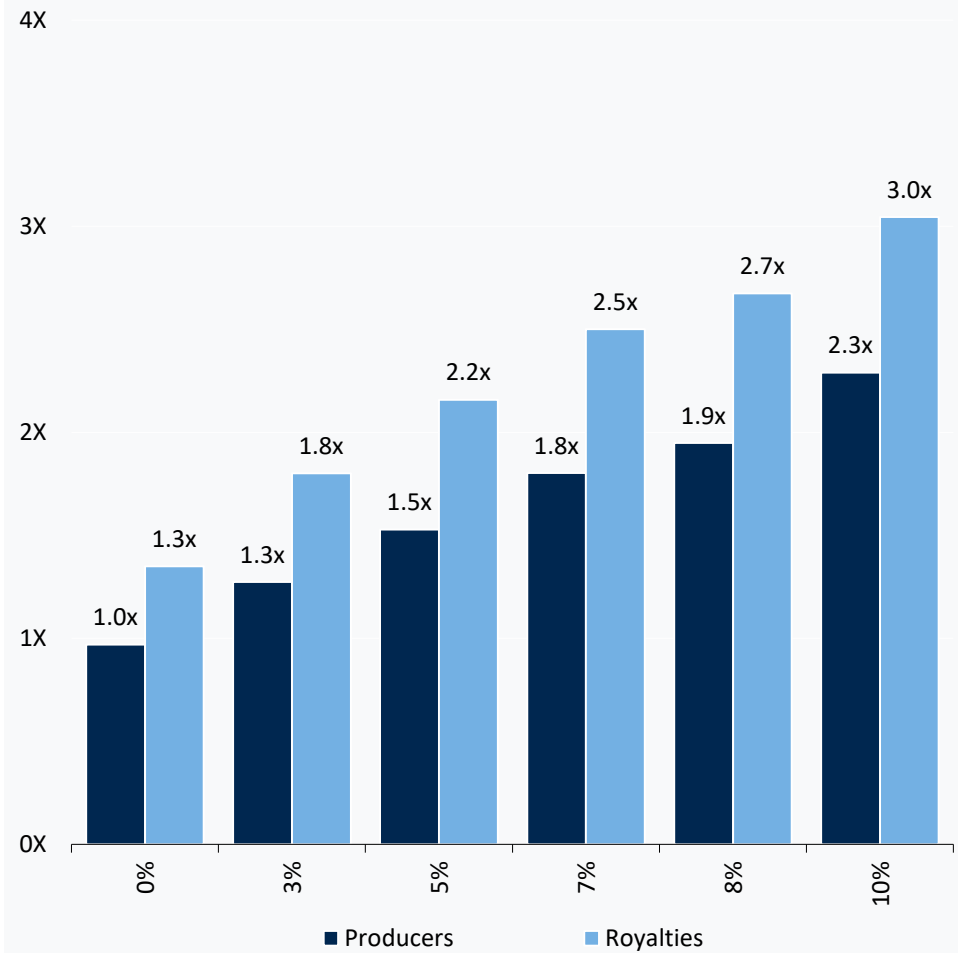
Coverage themes: Sensitivity to discount rate changes comparison

We calculate our estimated NAV's for companies under coverage would increase by an average 8% for every 1% decrease in discount rate.

NAV at spot sensitivity for -1% change in discount rate



P/NAV at spot sensitivity to discount rates

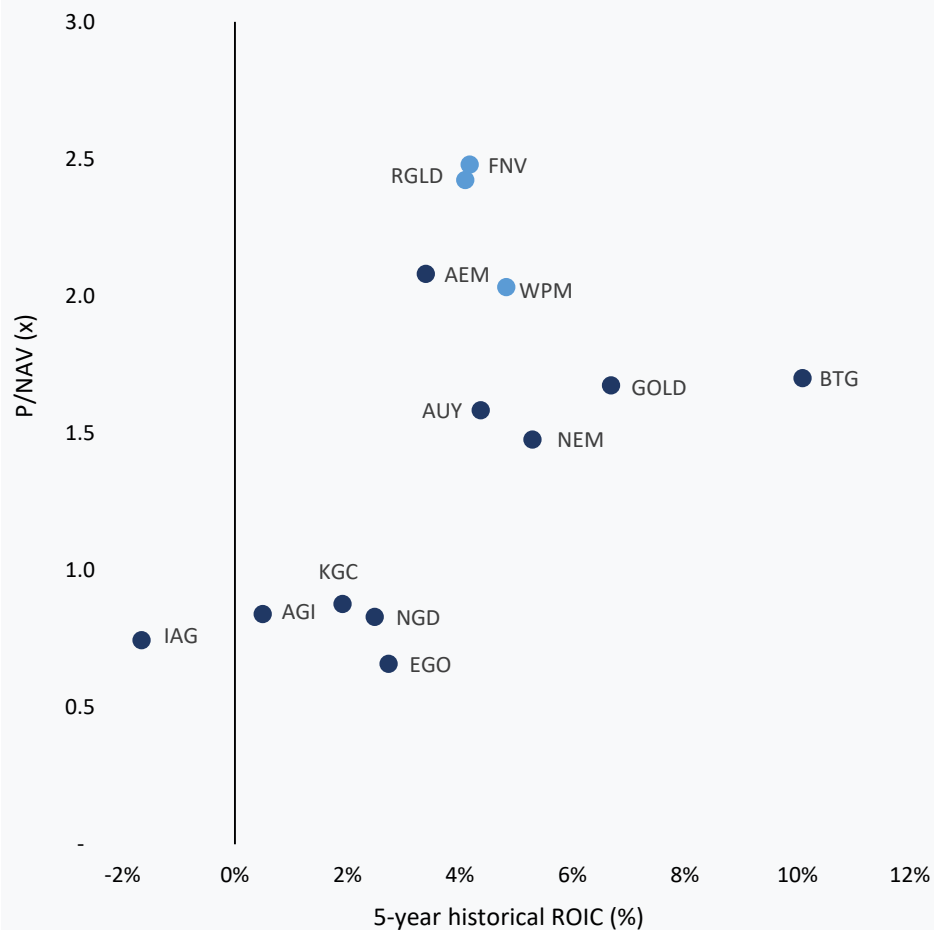


Notes: RHS - Producers and royalties values represent coverage universe weighted average by market capitalization.
Source: Bloomberg, Company reports, RBC Capital Markets estimates

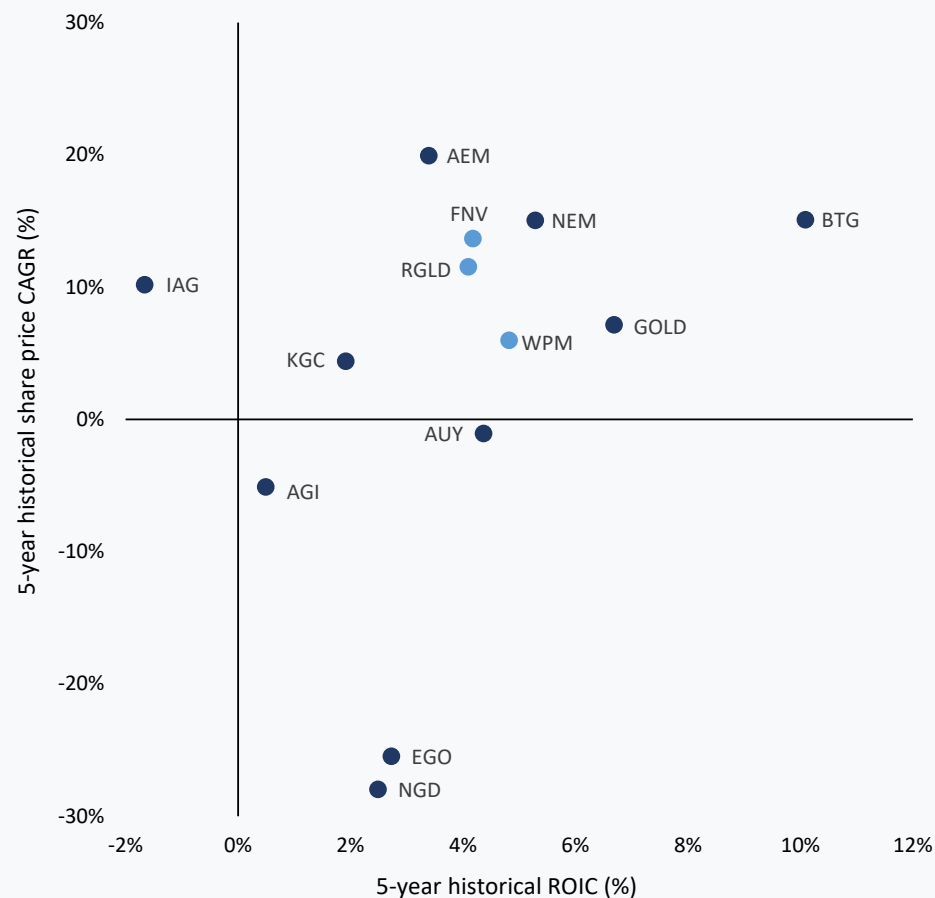
Coverage themes: ROIC vs. P/NAV and share price performance

Companies that have historically generated higher returns should be rewarded with higher valuations and experience higher share price appreciation over time, in our view.

5-year historical ROIC vs. P/NAV at spot gold



5-year historical ROIC vs. share price performance



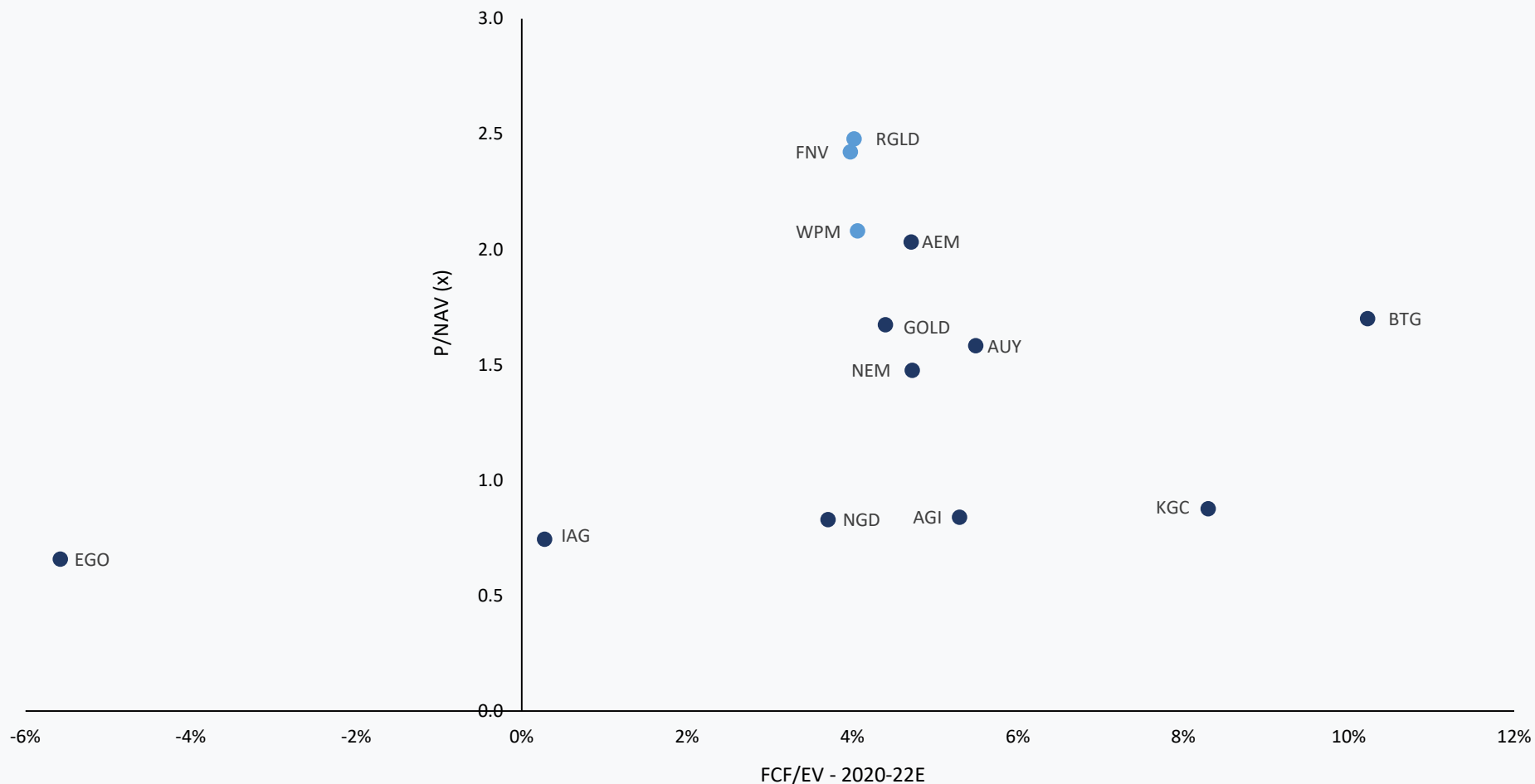
Note: ROIC calculated as net operating profit after tax divided by total assets.

Source: Bloomberg, Company reports, RBC Capital Markets

Coverage themes: FCF/EV vs. P/NAV at spot gold

Traditionally, companies that are capable of compounding capital productively should be rewarded with a higher valuation when free cash flow is generated up-front, in our view. Where capital can be misallocated, such as the historical trend in the gold sector, higher free cash flow up front could counter-intuitively represent a risk.

P/NAV vs. 3-year FCF/EV yield at spot gold

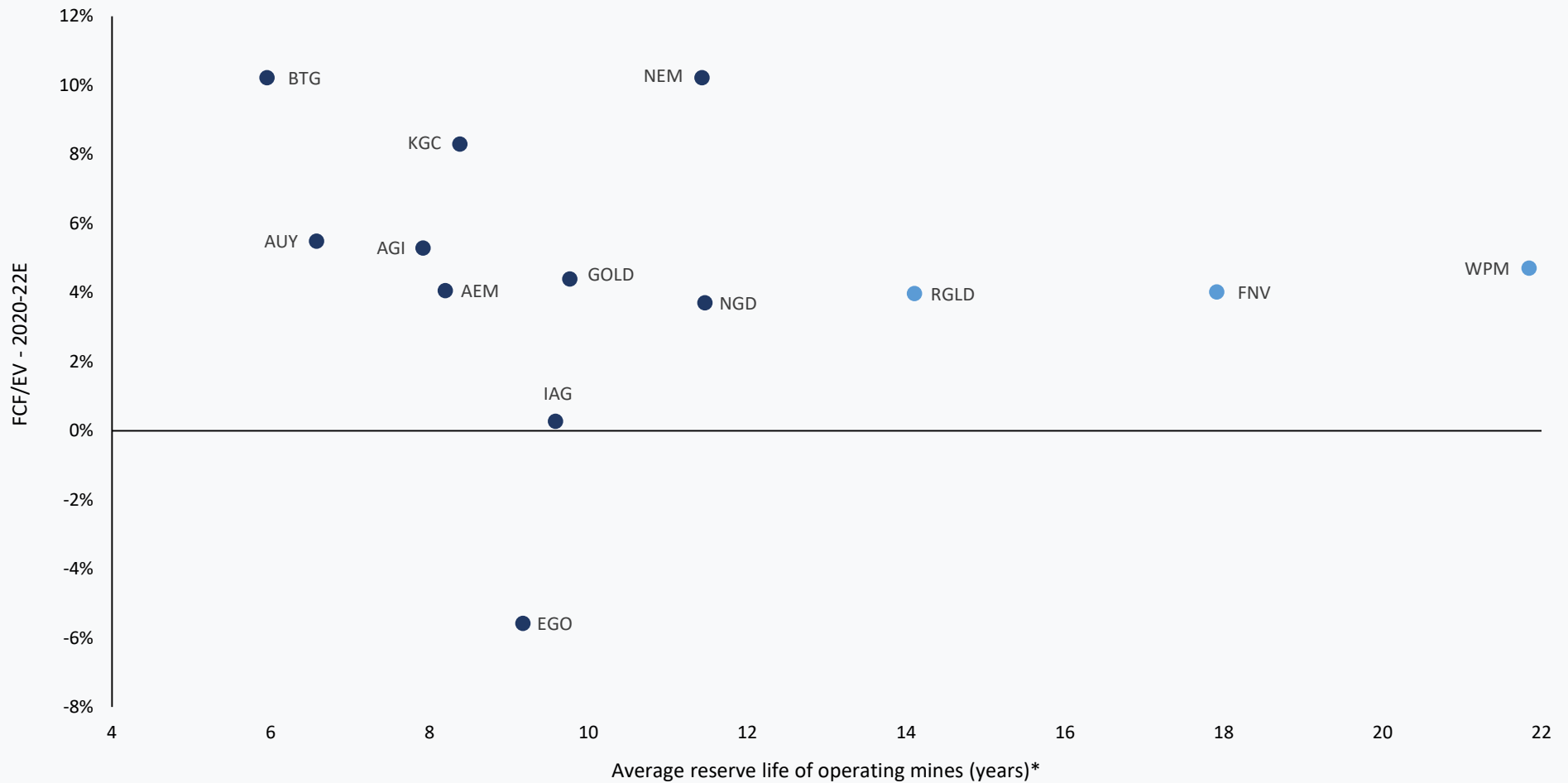


Source: Bloomberg, Company reports, RBC Capital Markets estimates

Coverage themes: FCF/EV vs. operating asset reserve life

We believe companies with higher duration operating portfolios should be rewarded with higher FCF/EV valuation. Long-term portfolio assets allow for better long-term planning, and a lower ongoing necessity to reinvest capital heavily in the short-term.

3-year EBITDA-weighted average estimated reserve life vs. FCF/EV yield at spot gold



Notes: *Reserve lives calculated based on reported reserves and calculated throughput at existing operating mines, weighted by 2019-21E EBITDA.

Source: Company reports, RBC Capital Markets estimates, Bloomberg

Comparable Tables



Capital
Markets

Comparable tables: Summary statistics at spot gold and silver

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	Price 29-Nov-19	Rating (1)	Target Price at RBC Deck	Basic Mkt Cap (US\$m)	Enterprise Value (US\$m)	P/NAV at Spot (2) (3) (4)	% NAV in Develop. (5)	P/CF at Spot (CY) (4)			FCF/EV Yield at Spot (CY) (6) (7)			EV/EBITDA at Spot (CY) (6)			2020E Dividend Yield (CY)	Analyst (8)
									2019E	2020E	2021E	2019E	2020E	2021E	2019E	2020E	2021E		
Royalty Companies																			
Franco-Nevada Corporation	FNV US	US\$98.32	SP	\$106.00	\$18,541	\$18,692	2.48x	10%	29.8x	25.4x	23.6x	0.6%	3.6%	3.9%	28.4x	23.9x	22.4x	1.0%	JW
Royal Gold, Inc.	RGLD US	US\$117.27	U	\$115.00	\$7,683	\$7,732	2.42x	14%	24.6x	22.2x	21.2x	3.0%	2.8%	4.3%	22.1x	20.2x	19.5x	1.0%	JW
Wheaton Precious Metals Corp.	WPM US	US\$27.64	O	\$33.00	\$12,306	\$13,168	2.03x	10%	23.4x	20.4x	20.2x	4.0%	4.6%	4.6%	23.3x	21.0x	20.9x	1.4%	JW
Average							2.31x		26.4x	22.9x	21.8x	2.2%	3.8%	4.2%	25.2x	22.1x	21.3x		
Large Producers																			
Agnico Eagle Mines Limited	AEM US	US\$59.60	SP	\$61.00	\$14,175	\$15,652	2.08x	15%	16.1x	11.1x	11.9x	0.6%	3.7%	3.6%	14.7x	10.3x	10.2x	1.2%	JW
Barrick Gold Corporation	GOLD US	US\$16.80	O	\$20.00	\$29,867	\$32,180	1.67x	14%	10.0x	8.7x	9.0x	3.2%	3.7%	4.5%	8.8x	8.5x	8.6x	1.2%	JW/JB
Kinross Gold Corporation	KGC US	US\$4.33	SP	\$5.00	\$5,427	\$6,894	0.88x	11%	5.0x	4.3x	4.1x	0.4%	4.0%	8.2%	5.2x	4.5x	4.2x	-	JW
Newmont Goldcorp Corporation	NEM US	US\$38.40	SP	\$45.00	\$31,474	\$35,903	1.48x	7%	9.2x	8.2x	8.0x	3.1%	4.8%	5.3%	10.2x	7.6x	7.4x	1.5%	JW
Average							1.55x		9.7x	8.2x	8.3x	2.5%	4.2%	4.9%	9.5x	7.8x	7.7x		
Intermediate Producers																			
Alamos Gold Inc.	AGI US	US\$5.67	SP	\$6.50	\$2,218	\$2,032	0.84x	23%	7.7x	7.6x	6.1x	0.1%	2.9%	7.9%	7.2x	6.7x	5.5x	0.7%	JW
B2Gold Corp.	BTG US	US\$3.68	O	\$4.50	\$3,776	\$3,996	1.70x	7%	7.9x	5.6x	6.1x	5.1%	10.7%	9.4%	6.4x	5.1x	6.4x	1.1%	JW
Eldorado Gold Corporation	EGO US	US\$7.84	U	\$6.50	\$1,242	\$1,612	0.66x	53%	7.9x	4.1x	5.8x	-2.4%	5.7%	-4.6%	7.2x	4.2x	5.3x	-	JW
IAMGOLD Corporation	IAG US	US\$3.62	SP	\$3.75	\$1,694	\$1,465	0.74x	24%	4.3x	3.9x	5.2x	-6.1%	4.0%	-8.5%	6.1x	3.2x	4.5x	-	JW
New Gold Inc.	NGD US	US\$0.84	U	\$0.65	\$562	\$1,128	0.83x	9%	2.8x	2.8x	2.1x	-4.2%	-1.1%	8.4%	4.4x	4.6x	3.6x	-	JW
Yamana Gold Inc.	AUY US	US\$3.58	SP	\$3.75	\$3,403	\$4,405	1.58x	18%	7.0x	5.7x	5.7x	-0.7%	5.6%	6.3%	6.1x	6.2x	6.3x	1.1%	JW
Average							1.09x		6.4x	5.2x	5.3x	0.0%	5.9%	4.8%	6.2x	5.1x	5.6x		
Total average							1.64x		11.2x	9.4x	9.5x	2.2%	4.2%	4.7%	10.7x	8.9x	8.9x		

(1) O - Outperform, SP - Sector Perform, U - Underperform, R - Restricted. Refer to disclosures for more information

(2) Discount rate applied on a risk-weighted basis. Generally 5% for gold assets, higher for base metal assets or high technical/political risk

(3) NAVPS at spot calculated at spot gold prices, spot silver prices, spot or forward curve base metals, and spot FX rates

(4) Average weighted according to market capitalization

(5) Percent of NAV attributed to mining assets/investments that are not currently in production

(6) Average weighted according to enterprise value

(7) Free cash flow = operating cash flow after working capital changes, less capital spending

(8) JW - Josh Wolfson, MM - Mark Mihaljevic, JB - James Bell, MO - Melissa Oliphant, WL - Wayne Lam

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: Summary statistics at price deck

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	Price 29-Nov-19	Rating (1)	Target Price at RBC Deck	Basic Mkt Cap (US\$m)	Enterprise Value (US\$m)	P/NAV at Deck (2) (3) (4)	% NAV in Develop. (5)	P/CF at Deck (CY) (4)			FCF/EV Yield at Deck (CY) (6) (7)			EV/EBITDA at Deck (CY) (6)			2020E Dividend Yield (CY)	Analyst (8)
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Average							2.32x		26.2x	22.1x	21.7x	2.2%	3.9%	4.3%	25.1x	21.3x	21.2x		
Large Producers																			
Agnico Eagle Mines Limited	AEM US	US\$59.60	SP	\$61.00	\$14,175	\$15,652	2.44x	14%	16.1x	10.7x	12.2x	0.6%	4.0%	3.4%	14.7x	9.9x	10.6x	1.2%	JW
Barrick Gold Corporation	GOLD US	US\$16.80	O	\$20.00	\$29,867	\$32,180	1.82x	13%	10.0x	8.1x	9.2x	3.3%	4.4%	4.2%	8.8x	8.0x	8.9x	1.2%	JW/JB
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Average							1.78x		9.6x	7.8x	8.5x	2.5%	4.7%	4.6%	9.4x	7.4x	8.0x		
Intermediate Producers																			
Alamos Gold Inc.	AGI US	US\$5.67	SP	\$6.50	\$2,218	\$2,032	0.96x	22%	7.7x	7.3x	6.2x	0.1%	3.5%	7.3%	7.2x	6.4x	5.7x	0.7%	JW
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New Gold Inc.	NGD US	US\$0.84	U	\$0.65	\$562	\$1,128	1.02x	10%	2.8x	2.5x	2.1x	-4.1%	0.7%	7.9%	4.4x	4.2x	3.7x	-	JW
Yamana Gold Inc.	AUY US	US\$3.58	SP	\$3.75	\$3,403	\$4,405	1.90x	17%	7.0x	5.5x	5.8x	-0.7%	6.1%	6.0%	6.1x	5.9x	6.4x	1.1%	JW
Average							1.24x		6.4x	5.0x	5.5x	0.0%	6.7%	4.5%	6.2x	4.9x	5.7x		
Total average							1.83x		11.1x	9.0x	9.7x	2.2%	4.7%	4.5%	10.7x	8.5x	9.2x		

- (1) O - Outperform, SP - Sector Perform, U - Underperform, R - Restricted. Refer to disclosures for more information
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(8) JW - Josh Wolfson, MM - Mark Mihaljevic, JB - James Bell, MO - Melissa Oliphant, WL - Wayne Lam

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: Financial ratios at spot gold and silver

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	EV (US\$m)	P/CF at Spot (CY) (1) (4)				FCF Yield at Spot (CY) (2) (3)				P/E at Spot (CY) (1) (4)				EV / EBITDA at Spot (CY) (3) (4)			
			2019E	2020E	2021E	2022E	2019E	2020E	2021E	2022E	2019E	2020E	2021E	2022E	2019E	2020E	2021E	2022E
Royalty Companies																		
Franco-Nevada Corporation	FNV US	\$18,692	29.8x	25.4x	23.6x	22.1x	0.6%	3.6%	3.9%	4.5%	56.3x	44.3x	39.4x	36.2x	28.4x	23.9x	22.4x	21.3x
Royal Gold, Inc.	RGLD US	\$7,732	24.6x	22.2x	21.2x	20.9x	3.0%	2.8%	4.3%	4.8%	55.5x	40.2x	38.4x	39.0x	22.1x	20.2x	19.5x	19.8x
Wheaton Precious Metals Corp.	WPM US	\$13,168	23.4x	20.4x	20.2x	19.0x	4.0%	4.6%	4.6%	4.9%	48.0x	37.3x	35.3x	31.0x	23.3x	21.0x	20.9x	20.1x
Average			26.4x	22.9x	21.9x	20.6x	2.2%	3.8%	4.2%	4.7%	53.3x	41.0x	37.6x	34.6x	25.2x	22.1x	21.3x	20.6x
Large Producers																		
Agnico Eagle Mines Limited	AEM US	\$15,652	16.1x	11.1x	11.9x	11.1x	0.6%	3.7%	3.6%	4.9%	58.3x	29.5x	29.6x	25.4x	14.7x	10.3x	10.2x	9.8x
Barrick Gold Corporation	GOLD US	\$32,180	10.0x	8.7x	9.0x	8.6x	3.2%	3.7%	4.5%	5.0%	36.1x	33.1x	33.3x	29.5x	8.8x	8.5x	8.6x	8.5x
Kinross Gold Corporation	KGC US	\$6,894	5.0x	4.3x	4.1x	4.0x	0.4%	4.0%	8.2%	12.7%	14.1x	11.7x	11.1x	10.0x	5.2x	4.5x	4.2x	4.0x
Newmont Goldcorp Corporation	NEM US	\$35,903	9.2x	8.2x	8.0x	7.9x	3.1%	4.8%	5.3%	4.1%	30.3x	22.4x	22.6x	22.6x	10.2x	7.6x	7.4x	7.3x
Average			10.1x	8.2x	8.3x	8.0x	2.5%	4.2%	4.9%	5.2%	34.1x	24.9x	24.8x	23.0x	9.5x	7.8x	7.7x	7.5x
Intermediate Producers																		
Alamos Gold Inc.	AGI US	\$2,032	7.7x	7.6x	6.1x	5.7x	0.1%	2.9%	7.9%	5.1%	30.2x	25.1x	16.2x	14.5x	7.2x	6.7x	5.5x	5.1x
B2Gold Corp.	BTG US	\$3,996	7.9x	5.6x	6.1x	5.8x	5.1%	10.7%	9.4%	10.5%	15.0x	10.5x	15.2x	16.3x	6.4x	5.1x	6.4x	6.4x
Eldorado Gold Corporation	EGO US	\$1,612	7.9x	4.1x	5.8x	5.7x	-2.4%	5.7%	-4.6%	-17.8%	-	13.9x	18.8x	25.5x	7.2x	4.2x	5.3x	5.1x
IAMGOLD Corporation	IAG US	\$1,465	4.3x	3.9x	5.2x	8.3x	-6.1%	4.0%	-8.5%	5.4%	-	15.9x	51.7x	18.9x	6.1x	3.2x	4.5x	3.4x
New Gold Inc.	NGD US	\$1,128	2.8x	2.8x	2.1x	1.8x	-4.2%	-1.1%	8.4%	3.9%	-	-	25.4x	11.8x	4.4x	4.6x	3.6x	3.2x
Yamana Gold Inc.	AUY US	\$4,405	7.0x	5.7x	5.7x	6.4x	-0.7%	5.6%	6.3%	4.6%	30.4x	25.0x	28.7x	33.0x	6.1x	6.2x	6.3x	6.9x
Average			6.5x	5.2x	5.3x	5.5x	0.0%	5.9%	4.8%	3.8%	32.3x	17.3x	20.3x	18.9x	6.2x	5.1x	5.6x	5.3x
Total average			11.6x	9.5x	9.5x	9.2x	2.2%	4.2%	4.7%	4.9%	37.8x	26.8x	26.9x	24.9x	10.7x	8.9x	8.9x	8.7x

(1) Averages calculated on a market cap weighted basis

(2) Free cash flow = operating cash flow after working capital changes, less capital spending

(3) Averages calculated on an enterprise value weighted basis. Ratios reflect current enterprise value and future year financial performance.

(4) Ratios equal to or less than 0 or greater than 100 are not displayed

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: Net asset value at different discount rates

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	Price 29-Nov-19	Reporting Currency	Spot NAVPS (1)					Spot P/NAV (2) (3)				NAV Sens for -1% Change Discount Rate (4)	
				Risk Weighted	0%	5%	8%	10%	Risk Weighted	0%	5%	8%		10%
Royalty Companies														
Franco-Nevada Corporation	FNV US	US\$98.32	US\$	\$39.65	\$69.48	\$43.44	\$35.11	\$31.09	2.48	1.42	2.26	2.80	3.16	8%
Royal Gold, Inc.	RGLD US	US\$117.27	US\$	\$48.38	\$71.62	\$50.49	\$43.38	\$39.19	2.42	1.64	2.32	2.70	2.99	6%
Wheaton Precious Metals Corp.	WPM US	US\$27.64	US\$	\$13.60	\$25.84	\$14.57	\$11.20	\$9.53	2.03	1.07	1.90	2.47	2.90	10%
Average									2.31	1.32	2.14	2.67	3.04	8%
Large Producers														
Agnico Eagle Mines Limited	AEM US	US\$59.60	US\$	\$28.65	\$42.62	\$28.65	\$23.18	\$20.24	2.08	1.40	2.08	2.57	2.94	8%
Barrick Gold Corporation	GOLD US	US\$16.80	US\$	\$10.03	\$19.96	\$10.75	\$8.05	\$6.68	1.67	0.84	1.56	2.09	2.52	12%
Kinross Gold Corporation	KGC US	US\$4.33	US\$	\$4.94	\$8.31	\$5.18	\$4.07	\$3.50	0.88	0.52	0.84	1.07	1.24	9%
Newmont Goldcorp Corporation	NEM US	US\$38.40	US\$	\$26.00	\$41.07	\$26.00	\$20.54	\$17.46	1.48	0.94	1.48	1.87	2.20	9%
Average									1.55	0.90	1.51	1.94	2.29	9%
Intermediate Producers														
Alamos Gold Inc.	AGI US	US\$5.67	US\$	\$6.75	\$11.57	\$7.15	\$5.57	\$4.79	0.84	0.49	0.79	1.02	1.18	9%
B2Gold Corp.	BTG US	US\$3.68	US\$	\$2.16	\$2.61	\$2.16	\$1.96	\$1.84	1.70	1.41	1.70	1.88	2.00	4%
Eldorado Gold Corporation	EGO US	US\$7.84	US\$	\$11.91	\$23.54	\$12.36	\$10.07	\$8.44	0.66	0.33	0.63	0.78	0.93	11%
IAMGOLD Corporation	IAG US	US\$3.62	US\$	\$4.86	\$6.80	\$4.81	\$4.00	\$3.57	0.74	0.53	0.75	0.90	1.01	7%
New Gold Inc.	NGD US	US\$0.84	US\$	\$1.01	\$1.45	\$1.01	\$0.80	\$0.65	0.83	0.57	0.83	1.04	1.30	8%
Yamana Gold Inc.	AUY US	US\$3.58	US\$	\$2.26	\$2.11	\$2.26	\$1.74	\$1.47	1.58	1.70	1.58	2.05	2.44	4%
Average									1.09	0.75	1.07	1.31	1.50	7%
Total average									1.64	0.97	1.58	2.00	2.34	8%

(1) NAVPS at spot calculated at spot gold prices, spot silver prices, and base metal forward curves. NAVPS calculated in reporting currency

(2) If reporting currency differs from share currency, P/NAV adjusted at spot FX rates

(3) Averages calculated on a market capitalization weighted basis

(4) Averages calculated on an equal weighted basis

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: Net asset value sensitivity to gold and silver price

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	Price 29-Nov-19	Reporting Currency	Preferred Discount Rate (1)	NAVPS (1) (2) (3)					P/NAV (2) (3) (4)				NAV Sens +10% Change at spot (5)	
					Spot	\$1,200 and \$13.96	\$1,400 and \$16.29	\$1,600 and \$18.61	\$1,800 and \$20.94	Spot	\$1,200 and \$13.96	\$1,400 and \$16.29	\$1,600 and \$18.61		\$1,800 and \$20.94
Royalty Companies															
Franco-Nevada Corporation	FNV US	US\$98.32	US\$	5%	\$39.65	\$33.14	\$38.07	\$43.02	\$47.92	2.48x	2.97x	2.58x	2.29x	2.05x	9%
Royal Gold, Inc.	RGLD US	US\$117.27	US\$	5%	\$48.38	\$40.22	\$46.40	\$52.62	\$58.88	2.42x	2.92x	2.53x	2.23x	1.99x	9%
Wheaton Precious Metals Corp.	WPM US	US\$27.64	US\$	5%	\$13.60	\$9.63	\$12.64	\$15.64	\$18.60	2.03x	2.87x	2.19x	1.77x	1.49x	16%
Average										2.31x	2.93x	2.43x	2.08x	1.82x	12%
Large Producers															
Agnico Eagle Mines Limited	AEM US	US\$59.60	US\$	5%	\$28.65	\$12.81	\$24.92	\$36.51	\$48.00	2.08x	4.65x	2.39x	1.63x	1.24x	30%
Barrick Gold Corporation	GOLD US	US\$16.80	US\$	5%	\$10.03	\$5.20	\$8.84	\$12.55	\$16.22	1.67x	3.23x	1.90x	1.34x	1.04x	27%
Kinross Gold Corporation	KGC US	US\$4.33	US\$	5%	\$4.94	\$1.73	\$4.17	\$6.55	\$8.89	0.88x	2.50x	1.04x	0.66x	0.49x	35%
Newmont Goldcorp Corporation	NEM US	US\$38.40	US\$	5%	\$26.00	\$10.97	\$22.43	\$33.54	\$44.50	1.48x	3.50x	1.71x	1.14x	0.86x	31%
Average										1.55x	3.45x	1.79x	1.21x	0.92x	31%
Intermediate Producers															
Alamos Gold Inc.	AGI US	US\$5.67	US\$	5%	\$6.75	\$3.60	\$5.98	\$8.33	\$10.61	0.84x	1.57x	0.95x	0.68x	0.53x	25%
B2Gold Corp.	BTG US	US\$3.68	US\$	5%	\$2.16	\$1.21	\$1.93	\$2.63	\$3.31	1.70x	3.04x	1.91x	1.40x	1.11x	23%
Eldorado Gold Corporation	EGO US	US\$7.84	US\$	5%	\$11.91	\$6.06	\$10.56	\$14.76	\$18.88	0.66x	1.29x	0.74x	0.53x	0.42x	26%
IAMGOLD Corporation	IAG US	US\$3.62	US\$	5%	\$4.86	\$1.60	\$4.10	\$6.43	\$8.64	0.74x	2.26x	0.88x	0.56x	0.42x	35%
New Gold Inc.	NGD US	US\$0.84	US\$	5%	\$1.01	\$0.01	\$0.78	\$1.48	\$2.08	0.83x	60.12x	1.08x	0.57x	0.40x	50%
Yamana Gold Inc.	AUY US	US\$3.58	US\$	5%	\$2.26	\$0.50	\$1.85	\$3.09	\$4.25	1.58x	7.20x	1.93x	1.16x	0.84x	39%
Average										1.09x	2.66x	1.26x	0.85x	0.64x	33%
Total average										1.64x	3.19x	1.86x	1.32x	1.03x	27%

(1) Discount rate varies by company. Generally 5% for gold assets, higher for base metal assets or high technical/political risk

(2) NAVPS calculated at preferred discount rate

(3) NAVPS calculated gold sensitivity price, silver sensitivity price, and spot or forward curve base metals. NAVPS calculated in reporting currency

(4) If reporting currency differs from share currency, P/NAV adjusted at spot FX rates. Average calculated on a market cap weighted basis

(5) Average calculated on an equal weighted basis

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: Free cash flow forecast sensitivity to gold and silver price

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	Reporting Currency	2020E FCF at Spot (CY) (\$m) (1)	2020E FCF/EV Sens +10% Change in Spot (CY) (2) (3)	2020E FCF / EV (CY) (1) (4) (5)				2021E FCF at Spot (CY) (\$m) (1)	2021E FCF/EV Sens +10% Change in Spot (CY) (2) (3)	2021E FCF / EV (CY) (1) (4) (5)					
					Spot	\$1,200 and \$13.96	\$1,400 and \$16.29	\$1,600 and \$18.61			\$1,800 and \$20.94	Spot	\$1,200 and \$13.96	\$1,400 and \$16.29	\$1,600 and \$18.61	\$1,800 and \$20.94
Royalty Companies																
Franco-Nevada Corporation	FNV US	US\$	\$676	0.4%	3.6%	2.9%	3.4%	4.0%	4.5%	\$734	0.4%	3.9%	3.2%	3.7%	4.3%	4.9%
Royal Gold, Inc.	RGLD US	US\$	\$219	0.4%	2.8%	2.1%	2.6%	3.2%	3.8%	\$334	0.5%	4.3%	3.5%	4.1%	4.8%	5.4%
Wheaton Precious Metals Corp.	WPM US	US\$	\$601	0.7%	4.6%	3.4%	4.3%	5.2%	6.1%	\$609	0.6%	4.6%	3.5%	4.3%	5.2%	6.1%
Average				0.5%	3.8%	2.9%	3.6%	4.2%	4.9%		0.5%	4.2%	3.3%	4.0%	4.7%	5.4%
Large Producers																
Agnico Eagle Mines Limited	AEM US	US\$	\$580	1.1%	3.7%	1.2%	3.1%	4.7%	6.3%	\$566	1.3%	3.6%	1.5%	3.2%	4.9%	6.7%
Barrick Gold Corporation	GOLD US	US\$	\$1,192	1.8%	3.7%	0.6%	3.0%	5.4%	7.7%	\$1,443	1.7%	4.5%	1.6%	3.7%	6.1%	8.4%
Kinross Gold Corporation	KGC US	US\$	\$278	4.0%	4.0%	-3.5%	2.2%	7.8%	13.3%	\$563	4.2%	8.2%	0.4%	6.3%	12.1%	17.9%
Newmont Goldcorp Corporation	NEM US	US\$	\$1,724	2.1%	4.8%	1.0%	3.9%	6.7%	9.5%	\$1,897	2.0%	5.3%	1.6%	4.4%	7.1%	9.9%
Average				2.2%	4.2%	0.6%	3.3%	6.0%	8.6%		2.3%	4.9%	1.5%	4.1%	6.8%	9.4%
Intermediate Producers																
Alamos Gold Inc.	AGI US	US\$	\$59	2.9%	2.9%	-2.3%	1.6%	5.5%	9.4%	\$161	3.3%	7.9%	1.9%	6.4%	11.0%	14.4%
B2Gold Corp.	BTG US	US\$	\$429	2.5%	10.7%	6.3%	9.7%	13.0%	16.4%	\$376	2.5%	9.4%	4.9%	8.3%	11.7%	15.2%
Eldorado Gold Corporation	EGO US	US\$	\$91	3.4%	5.7%	-0.5%	4.2%	8.8%	13.4%	-\$75	3.2%	-4.6%	-10.5%	-6.0%	-1.7%	2.7%
IAMGOLD Corporation	IAG US	US\$	\$58	6.2%	4.0%	-7.4%	1.2%	9.7%	18.0%	-\$125	5.9%	-8.5%	-19.8%	-11.1%	-3.0%	4.9%
New Gold Inc.	NGD US	US\$	-\$13	1.4%	-1.1%	-5.5%	-1.9%	0.1%	2.1%	\$94	4.2%	8.4%	0.1%	6.4%	12.3%	18.1%
Yamana Gold Inc.	AUY US	US\$	\$246	2.3%	5.6%	1.0%	4.6%	7.8%	10.9%	\$277	1.8%	6.3%	1.4%	5.2%	7.9%	10.1%
Average				3.1%	5.9%	0.5%	4.7%	8.6%	12.5%		3.5%	4.8%	-1.1%	3.4%	7.6%	11.4%
Total average				2.2%	4.2%	1.2%	3.5%	5.8%	8.0%		2.4%	4.7%	1.7%	4.0%	6.3%	8.5%

(1) Free cash flow defined as operating cash flow after working capital changes, less capital spending and preferred dividends

(2) Averages calculated on an equal weighted basis

(3) Figures are marked as '-' where changes in the gold price result in no change to free cash flow

(4) Averages calculated on an enterprise value weighted basis

(5) Current enterprise value assumed. EV not adjusted for future changes in capital structure

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: Sustaining free cash flow forecast sensitivity to gold and silver price

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	Reporting Currency	2020E		2020E SFCF / EV (CY) (1) (4) (5)					2021E		2021E SFCF / EV (CY) (1) (4) (5)				
			SFCF at Spot (CY) (\$m) (1)	SFCF/EV Sens +10% Change in Spot (CY) (2) (3)	Spot	\$1,200 and \$13.96	\$1,400 and \$16.29	\$1,600 and \$18.61	\$1,800 and \$20.94	SFCF at spot (CY) (\$m) (1)	SFCF/EV Sens +10% Change in Spot (CY) (2) (3)	Spot	\$1,200 and \$13.96	\$1,400 and \$16.29	\$1,600 and \$18.61	\$1,800 and \$20.94
Royalty Companies																
Franco-Nevada Corporation	FNV US	US\$	\$731	0.4%	3.9%	3.2%	3.7%	4.3%	4.8%	\$787	0.4%	4.2%	3.5%	4.0%	4.6%	5.2%
Royal Gold, Inc.	RGLD US	US\$	\$344	0.4%	4.5%	3.7%	4.3%	4.9%	5.5%	\$361	0.5%	4.7%	3.8%	4.5%	5.1%	5.8%
Wheaton Precious Metals Corp.	WPM US	US\$	\$601	0.7%	4.6%	3.4%	4.3%	5.2%	6.1%	\$609	0.6%	4.6%	3.5%	4.3%	5.2%	6.1%
Average				0.5%	4.2%	3.4%	4.0%	4.7%	5.3%		0.5%	4.4%	3.5%	4.2%	4.9%	5.6%
Large Producers																
Agnico Eagle Mines Limited	AEM US	US\$	\$590	1.1%	3.8%	1.3%	3.2%	4.8%	6.3%	\$584	1.3%	3.7%	1.7%	3.3%	5.0%	6.8%
Barrick Gold Corporation	GOLD US	US\$	\$1,642	1.8%	5.1%	2.0%	4.4%	6.8%	9.1%	\$2,013	1.7%	6.3%	3.4%	5.5%	7.9%	10.2%
Kinross Gold Corporation	KGC US	US\$	\$348	4.0%	5.1%	-2.5%	3.2%	8.8%	14.3%	\$770	4.2%	11.2%	3.4%	9.3%	15.1%	20.9%
Newmont Goldcorp Corporation	NEM US	US\$	\$1,937	2.1%	5.4%	1.6%	4.5%	7.3%	10.1%	\$2,138	2.0%	6.0%	2.3%	5.1%	7.8%	10.5%
Average				2.2%	5.0%	1.4%	4.1%	6.8%	9.4%		2.3%	6.1%	2.6%	5.2%	7.9%	10.6%
Intermediate Producers																
Alamos Gold Inc.	AGI US	US\$	\$89	2.9%	4.4%	-0.8%	3.1%	7.1%	11.0%	\$188	3.3%	9.2%	3.2%	7.8%	12.3%	15.7%
B2Gold Corp.	BTG US	US\$	\$442	2.5%	11.1%	6.6%	10.0%	13.4%	16.8%	\$386	2.5%	9.7%	5.1%	8.6%	12.0%	15.4%
Eldorado Gold Corporation	EGO US	US\$	\$115	3.4%	7.1%	1.0%	5.7%	10.3%	14.9%	\$41	3.2%	2.6%	-3.3%	1.2%	5.5%	9.9%
IAMGOLD Corporation	IAG US	US\$	\$119	6.2%	8.1%	-3.3%	5.4%	13.9%	22.2%	\$65	5.9%	4.4%	-6.9%	1.8%	9.9%	17.8%
New Gold Inc.	NGD US	US\$	-\$8	1.4%	-0.7%	-5.1%	-1.4%	0.6%	2.5%	\$99	4.2%	8.8%	0.5%	6.9%	12.7%	18.5%
Yamana Gold Inc.	AUY US	US\$	\$246	2.3%	5.6%	1.0%	4.6%	7.8%	10.9%	\$277	1.8%	6.3%	1.4%	5.2%	7.9%	10.1%
Average				3.1%	6.9%	1.4%	5.6%	9.5%	13.4%		3.5%	7.2%	1.3%	5.8%	9.9%	13.7%
Total average				2.2%	5.0%	1.9%	4.2%	6.5%	8.7%		2.4%	5.7%	2.8%	5.0%	7.3%	9.5%

(1) Free cash flow defined as operating cash flow after working capital changes, less capital spending and preferred dividends

(2) Averages calculated on an equal weighted basis

(3) Figures are marked as '-' where changes in the gold price result in no change to free cash flow

(4) Averages calculated on an enterprise value weighted basis

(5) Current enterprise value assumed. EV not adjusted for future changes in capital structure

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: EBITDA sensitivity to gold and silver price

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	Reporting Currency	2020E		2020E EV / EBITDA (CY) (2) (3)					2021E		2021E EV / EBITDA (CY) (2) (3)				
			EBITDA at Spot (CY) (\$m)	EBITDA sens +10% Change in Spot (CY) (1)	Spot	\$1,200 and \$13.96	\$1,400 and \$16.29	\$1,600 and \$18.61	\$1,800 and \$20.94	EBITDA at Spot (CY) (\$m)	EBITDA Sens +10% Change in Spot (CY) (1)	Spot	\$1,200 and \$13.96	\$1,400 and \$16.29	\$1,600 and \$18.61	\$1,800 and \$20.94
Royalty Companies																
Franco-Nevada Corporation	FNV US	US\$	\$783	10%	23.9x	29.1x	25.0x	21.8x	19.4x	\$835	10%	22.4x	27.3x	23.4x	20.5x	18.3x
Royal Gold, Inc.	RGLD US	US\$	\$383	10%	20.2x	24.7x	21.1x	18.4x	16.3x	\$396	10%	19.5x	24.0x	20.4x	17.8x	15.7x
Wheaton Precious Metals Corp.	WPM US	US\$	\$627	14%	21.0x	27.9x	22.3x	18.6x	16.0x	\$629	13%	20.9x	27.3x	22.2x	18.7x	16.1x
Average				11%	22.1x	27.8x	23.2x	20.0x	17.5x		11%	21.3x	26.6x	22.4x	19.3x	17.0x
Large Producers																
Agnico Eagle Mines Limited	AEM US	US\$	\$1,514	20%	10.3x	16.0x	11.3x	8.7x	7.1x	\$1,533	20%	10.2x	16.1x	11.2x	8.6x	7.0x
Barrick Gold Corporation	GOLD US	US\$	\$3,792	20%	8.5x	13.0x	9.2x	7.2x	5.9x	\$3,733	20%	8.6x	13.2x	9.4x	7.3x	5.9x
Kinross Gold Corporation	KGC US	US\$	\$1,519	23%	4.5x	7.6x	5.0x	3.8x	3.0x	\$1,624	21%	4.2x	6.9x	4.7x	3.5x	2.8x
Newmont Goldcorp Corporation	NEM US	US\$	\$4,748	21%	7.6x	12.2x	8.3x	6.3x	5.1x	\$4,847	21%	7.4x	11.9x	8.1x	6.2x	5.0x
Average				21%	7.8x	12.4x	8.6x	6.6x	5.3x		21%	7.7x	12.2x	8.5x	6.5x	5.2x
Intermediate Producers																
Alamos Gold Inc.	AGI US	US\$	\$301	22%	6.7x	11.2x	7.5x	5.6x	4.5x	\$369	20%	5.5x	8.6x	6.0x	4.6x	3.8x
B2Gold Corp.	BTG US	US\$	\$780	12%	5.1x	6.9x	5.5x	4.6x	3.9x	\$622	18%	6.4x	9.1x	7.0x	5.5x	4.5x
Eldorado Gold Corporation	EGO US	US\$	\$387	19%	4.2x	6.3x	4.5x	3.5x	2.9x	\$305	21%	5.3x	8.5x	5.8x	4.4x	3.6x
IAMGOLD Corporation	IAG US	US\$	\$451	25%	3.2x	5.8x	3.6x	2.6x	2.1x	\$323	32%	4.5x	10.3x	5.3x	3.5x	2.6x
New Gold Inc.	NGD US	US\$	\$245	9%	4.6x	5.9x	4.8x	4.3x	3.8x	\$311	17%	3.6x	5.2x	3.9x	3.1x	2.6x
Yamana Gold Inc.	AUY US	US\$	\$715	20%	6.2x	9.6x	6.7x	5.2x	4.2x	\$700	20%	6.3x	9.9x	6.9x	5.3x	4.3x
Average				18%	5.1x	7.6x	5.5x	4.4x	3.6x		21%	5.6x	8.7x	6.1x	4.7x	3.8x
Total average				17%	8.9x	13.6x	9.7x	7.6x	6.2x		19%	8.9x	13.7x	9.8x	7.6x	6.2x

(1) Averages calculated on an enterprise value weighted basis

(2) Current enterprise value assumed. EV not adjusted for future changes in capital structure

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: CFPS forecast sensitivity to gold and silver price

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	Reporting Currency	2020E		P/CF 2020E (CY) (2) (3)					2021E		P/CF 2021E (CY) (2) (3)				
			CFPS at Spot (CY)	CFPS Sens +10% Change in Spot (CY) (1)	Spot	\$1,200 and \$13.96	\$1,400 and \$16.29	\$1,600 and \$18.61	\$1,800 and \$20.94	CFPS at Spot (CY)	CFPS Sens +10% Change in Spot (CY) (1)	Spot	\$1,200 and \$13.96	\$1,400 and \$16.29	\$1,600 and \$18.61	\$1,800 and \$20.94
Royalty Companies																
Franco-Nevada Corporation	FNV US	US\$	\$3.87	10%	25.4x	31.0x	26.5x	23.3x	20.7x	\$4.16	10%	23.6x	28.8x	24.7x	21.7x	19.3x
Royal Gold, Inc.	RGLD US	US\$	\$5.29	10%	22.2x	26.8x	23.1x	20.3x	18.1x	\$5.53	10%	21.2x	25.8x	22.2x	19.4x	17.2x
Wheaton Precious Metals Corp.	WPM US	US\$	\$1.35	14%	20.4x	27.5x	21.8x	18.0x	15.4x	\$1.37	14%	20.2x	26.8x	21.5x	17.9x	15.4x
Average				11%	22.9x	28.8x	24.1x	20.7x	18.1x		11%	21.8x	27.4x	23.0x	19.8x	17.4x
Large Producers																
Agnico Eagle Mines Limited	AEM US	US\$	\$5.35	13%	11.1x	16.0x	12.0x	9.9x	8.5x	\$5.00	18%	11.9x	16.4x	12.6x	10.2x	8.5x
Barrick Gold Corporation	GOLD US	US\$	\$1.94	17%	8.7x	12.2x	9.3x	7.5x	6.3x	\$1.86	17%	9.0x	12.5x	9.7x	7.8x	6.5x
Kinross Gold Corporation	KGC US	US\$	\$1.00	22%	4.3x	7.4x	4.8x	3.6x	2.9x	\$1.05	22%	4.1x	6.8x	4.5x	3.4x	2.8x
Newmont Goldcorp Corporation	NEM US	US\$	\$4.69	19%	8.2x	12.6x	8.9x	6.9x	5.7x	\$4.81	18%	8.0x	12.0x	8.7x	6.8x	5.6x
Average				18%	8.2x	12.3x	8.9x	7.1x	5.8x		19%	8.3x	12.1x	9.0x	7.1x	5.8x
Intermediate Producers																
Alamos Gold Inc.	AGI US	US\$	\$0.75	20%	7.6x	11.8x	8.3x	6.4x	5.2x	\$0.94	18%	6.1x	9.1x	6.6x	5.2x	4.5x
B2Gold Corp.	BTG US	US\$	\$0.65	15%	5.6x	7.7x	6.0x	4.9x	4.2x	\$0.60	16%	6.1x	8.6x	6.5x	5.3x	4.4x
Eldorado Gold Corporation	EGO US	US\$	\$1.89	18%	4.1x	6.2x	4.5x	3.5x	2.9x	\$1.35	21%	5.8x	9.5x	6.4x	4.9x	3.9x
IAMGOLD Corporation	IAG US	US\$	\$0.93	21%	3.9x	6.4x	4.3x	3.3x	2.7x	\$0.69	27%	5.2x	10.6x	5.9x	4.2x	3.3x
New Gold Inc.	NGD US	US\$	\$0.30	8%	2.8x	3.7x	2.9x	2.6x	2.4x	\$0.40	18%	2.1x	3.2x	2.3x	1.8x	1.5x
Yamana Gold Inc.	AUY US	US\$	\$0.62	17%	5.7x	8.7x	6.2x	4.9x	4.1x	\$0.63	13%	5.7x	8.9x	6.2x	5.1x	4.5x
Average				16%	5.2x	7.6x	5.6x	4.5x	3.7x		19%	5.3x	8.3x	5.8x	4.6x	3.8x
Total average				16%	9.4x	13.8x	10.2x	8.2x	6.8x		17%	9.5x	13.7x	10.2x	8.2x	6.8x

(1) Averages calculated on an equal weighted basis

(2) Averages calculated on a market cap weighted basis

(3) Ratios equal to or less than 0 or greater than 100 are marked '-'

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: EPS forecast sensitivity to gold and silver price

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	Reporting Currency	2020E EPS at Spot (CY)	2020E EPS Sens +10% Change in Spot (CY)	Spot	P/E 2020E (CY) (2) (3)				2021E EPS at Spot (CY)	2021E EPS Sens +10% Change in Spot (CY)	Spot	P/E 2021E (CY) (2) (3)			
						\$1,200 and \$13.96	\$1,400 and \$16.29	\$1,600 and \$18.61	\$1,800 and \$20.94				\$1,200 and \$13.96	\$1,400 and \$16.29	\$1,600 and \$18.61	\$1,800 and \$20.94
Royalty Companies																
Franco-Nevada Corporation	FNV US	US\$	\$2.22	16%	44.3x	62.9x	47.7x	38.5x	32.2x	\$2.50	16%	39.4x	55.1x	42.3x	34.3x	28.9x
Royal Gold, Inc.	RGLD US	US\$	\$2.91	17%	40.2x	57.5x	43.4x	34.8x	29.0x	\$3.05	17%	38.4x	55.4x	41.5x	33.2x	27.5x
Wheaton Precious Metals Corp.	WPM US	US\$	\$0.74	26%	37.3x	70.7x	42.1x	30.0x	23.4x	\$0.78	24%	35.3x	61.4x	39.3x	28.9x	22.9x
Average				20%	NM	44.8x	34.5x	28.1x	NM		19%	92.5x	40.9x	32.0x	26.3x	NM
Large Producers																
Agnico Eagle Mines Limited	AEM US	US\$	\$2.02	37%	29.5x	88.2x	35.2x	22.0x	16.0x	\$2.02	40%	29.6x	-	35.8x	21.6x	15.5x
Barrick Gold Corporation	GOLD US	US\$	\$0.51	49%	33.1x	-	41.4x	22.7x	15.7x	\$0.50	49%	33.3x	-	42.4x	22.8x	15.6x
Kinross Gold Corporation	KGC US	US\$	\$0.37	50%	11.7x	-	15.0x	7.9x	5.4x	\$0.39	49%	11.1x	-	14.2x	7.6x	5.2x
Newmont Goldcorp Corporation	NEM US	US\$	\$1.71	43%	22.4x	99.8x	27.6x	16.0x	11.3x	\$1.70	46%	22.6x	-	28.2x	15.8x	11.0x
Average				45%	NM	30.8x	17.5x	12.3x	41.5x		46%	NM	31.0x	17.3x	12.0x	41.0x
Intermediate Producers																
Alamos Gold Inc.	AGI US	US\$	\$0.23	49%	25.1x	-	32.0x	17.3x	11.8x	\$0.35	38%	16.2x	52.9x	19.4x	11.9x	8.6x
B2Gold Corp.	BTG US	US\$	\$0.35	25%	10.5x	18.9x	11.8x	8.6x	6.7x	\$0.24	19%	15.2x	26.3x	17.5x	12.9x	9.7x
Eldorado Gold Corporation	EGO US	US\$	\$0.56	51%	13.9x	-	17.9x	9.5x	6.4x	\$0.42	54%	18.8x	-	24.6x	12.5x	8.3x
IAMGOLD Corporation	IAG US	US\$	\$0.23	68%	15.9x	-	22.7x	9.7x	6.2x	\$0.07	209%	51.7x	-	-	17.6x	8.9x
New Gold Inc.	NGD US	US\$	-\$0.05	85%	-	-	-	-	21.0x	\$0.03	193%	25.4x	-	-	9.1x	4.7x
Yamana Gold Inc.	AUY US	US\$	\$0.14	71%	25.0x	-	43.4x	15.1x	9.5x	\$0.12	83%	28.7x	-	45.0x	16.2x	9.9x
Average				58%	NM	22.9x	11.8x	8.1x	6.2x		100%	NM	27.4x	13.4x	8.7x	3.7x
Total average				45%	NM	32.6x	19.4x	13.8x	31.5x		64%	NM	32.9x	19.3x	13.7x	23.5x

(1) Averages calculated on an equal weighted basis

(2) Averages calculated on a market cap weighted basis

(3) Ratios equal to or less than 0 or greater than 100 are marked '-'

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: Financial liquidity and credit statistics

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	Last Reported	Reporting Currency	Current Cash (1)	Available Credit (1)	Total Liquidity (1)	Total Debt (1)	Net Debt (1)	Assumed Debt Additions	Assumed Equity Additions	Current Net Debt / Market Cap (1) (2)	Current Net Debt / EBITDA (1) (2)	2020E Net Debt / EBITDA (CY) (2)		2021E Net Debt / EBITDA (CY) (2)	
				(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	(\$m)	Spot	\$1,200/oz	Spot	\$1,200/oz
Royalty Companies																
Franco-Nevada Corporation	FNV US	Sep-19	US\$	\$92	\$858	\$949	\$242	\$151	-	-	1%	0.6x	NM	NM	NM	NM
Royal Gold, Inc.	RGLD US	Sep-19	US\$	\$122	\$830	\$952	\$170	\$48	-	-	1%	0.1x	NM	NM	NM	NM
Wheaton Precious Metals Corp.	WPM US	Sep-19	US\$	\$152	-	\$152	\$1,014	\$862	\$350	-	7%	1.7x	0.5x	1.0x	NM	0.2x
Average											3%	0.8x	NM	0.1x	NM	NM
Large Producers																
Agnico Eagle Mines Limited	AEM US	Sep-19	US\$	\$258	\$1,500	\$1,758	\$1,735	\$1,477	-	-	10%	1.6x	0.6x	1.4x	0.3x	1.3x
Barrick Gold Corporation	GOLD US	Sep-19	US\$	\$3,155	\$3,000	\$6,155	\$5,468	\$2,313	-	-	8%	0.4x	0.3x	1.0x	0.1x	1.0x
Kinross Gold Corporation	KGC US	Sep-19	US\$	\$383	\$1,452	\$1,835	\$1,850	\$1,467	-	\$170	27%	1.3x	0.8x	2.0x	0.4x	1.8x
Newmont Goldcorp Corporation	NEM US	Sep-19	US\$	\$3,347	\$2,929	\$6,276	\$7,776	\$4,429	-	-	14%	1.7x	0.6x	1.5x	0.3x	1.4x
Average											15%	1.2x	0.6x	1.5x	0.3x	1.4x
Intermediate Producers																
Alamos Gold Inc.	AGI US	Sep-19	US\$	\$186	\$400	\$586	-	(\$186)	-	-	-8%	NM	NM	NM	NM	NM
B2Gold Corp.	BTG US	Sep-19	US\$	\$146	\$300	\$446	\$366	\$220	-	-	6%	0.4x	NM	NM	NM	NM
Eldorado Gold Corporation	EGO US	Sep-19	US\$	\$130	\$179	\$309	\$500	\$370	\$550	\$200	30%	2.8x	0.6x	1.5x	0.4x	1.8x
IAMGOLD Corporation	IAG US	Sep-19	US\$	\$650	\$500	\$1,150	\$421	(\$229)	\$150	-	-14%	NM	NM	NM	NM	0.2x
New Gold Inc.	NGD US	Sep-19	US\$	\$179	\$286	\$465	\$744	\$566	\$200	-	101%	2.0x	2.6x	3.7x	1.8x	3.2x
Yamana Gold Inc.	AUY US	Sep-19	US\$	\$100	\$1,000	\$1,100	\$1,102	\$1,002	-	-	29%	1.4x	1.1x	2.2x	0.7x	2.2x
Average											24%	0.8x	0.3x	0.9x	NM	1.1x
Total average											16%	0.9x	0.3x	0.9x	NM	0.8x

(1) Financial items reflect last reported quarter, plus potential adjustments for post-quarter reported events

(2) Averages calculated on an equal weighted basis

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: Operating forecasts

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	Equity Gold and Silver Production (CY) (koz) (6)				Reported All-In Sustaining Costs (By-Prod) (CY) (1) (2) (3) (\$/oz)				% Non Gold & Silver Revenues (CY) (3) (4)				Fully Loaded Costs (Co-Prod) (CY) (1) (3) (5) (US\$/oz)			
		2017	2018	2019E	2020E	2017	2018	2019E	2020E	2017	2018	2019E	2020E	2017	2018	2019E	2020E
Royalty Companies																	
Franco-Nevada Corporation	FNV US	436	406	439	508	-	-	-	-	16%	21%	26%	23%	348	353	356	364
Royal Gold, Inc.	RGLD US	313	287	295	294	-	-	-	-	10%	15%	13%	16%	538	492	485	452
Wheaton Precious Metals Corp.	WPM US	624	602	608	602	-	-	-	-	-	1%	4%	5%	443	505	546	509
Average						-	-	-	-	9%	12%	14%	15%	435	454	470	445
Large Producers																	
Agnico Eagle Mines Limited	AEM US	1,714	1,627	1,781	2,011	804	877	882	805	2%	2%	2%	2%	1,107	1,324	1,247	1,161
Barrick Gold Corporation	GOLD US	5,323	4,527	5,490	5,360	752	806	891	945	15%	16%	13%	15%	1,052	1,121	1,169	1,230
Kinross Gold Corporation	KGC US	2,622	2,415	2,455	2,398	954	965	967	1,000	-	-	0%	0%	1,279	1,245	1,362	1,365
Newmont Goldcorp Corporation	NEM US	5,266	5,101	6,247	6,753	924	937	967	969	5%	5%	6%	7%	1,087	1,219	1,218	1,255
Average						854	892	931	946	5%	6%	5%	6%	1,111	1,204	1,226	1,251
Intermediate Producers																	
Alamos Gold Inc.	AGI US	430	505	489	465	932	990	963	980	-	-	-	-	1,156	1,239	1,237	1,279
B2Gold Corp.	BTG US	609	936	851	889	918	758	793	718	-	-	-	-	1,041	1,033	1,035	1,024
Eldorado Gold Corporation	EGO US	292	344	395	509	822	1,017	816	880	14%	14%	11%	10%	1,420	1,376	1,147	1,200
IAMGOLD Corporation	IAG US	882	882	770	810	1,002	1,059	1,109	1,137	-	-	-	-	1,177	1,296	1,364	1,396
New Gold Inc.	NGD US	422	419	328	330	730	938	1,297	1,038	32%	32%	31%	30%	941	1,129	1,421	1,425
Yamana Gold Inc.	AUY US	1,129	1,080	896	878	949	874	881	926	20%	21%	11%	1%	1,150	1,147	1,264	1,206
Average						920	919	948	932	11%	11%	9%	7%	1,137	1,181	1,230	1,230
Total average						867	898	934	943	9%	10%	9%	8%	1,069	1,148	1,179	1,196

(1) Average weighted according to ounces of production

(2) Total cash costs expressed on a co-product basis

(3) Calculated at RBC price deck forecasts

(4) Average calculated on an equal weighted basis

(5) Fully Loaded costs calculated as co-product costs of consolidated sales, plus proportional G&A, exploration expense, interest expense, cash taxes, and operating mine site capital

(6) Royalty group reflects GEO production for equal comparability

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: Reserve and per ounce statistics

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	EV	Reserves P&P	Resources M&I+I Incl.	Assumed Reserves in NAV	Incorp. Resource Upside (1)	Recov. Production LOM (5)	EV/oz Reserve (2)	EV/oz Resource (2)	EV/oz LOM Production (2)	Reserves per \$1000 Invested (1)	Adj EV/oz (2) (3)	Total Acquisition Cost (1) (4)
		(US\$MM)	(MMoz)	(MMoz)	(MMoz)	(%)	(MMoz)	(US\$/oz)	(US\$/oz)	(US\$/oz)	(oz)	(US\$/oz)	(US\$/oz)
Royalty Companies													
Franco-Nevada Corporation	FNV US	\$18,692	12.8	12.8	13.3	4%	8.9	\$1,460	\$1,460	\$2,098	0.7	\$1,834	\$2,160
Royal Gold, Inc.	RGLD US	\$7,732	6.0	6.0	7.7	27%	5.7	\$1,280	\$1,280	\$1,358	0.8	\$1,294	\$1,572
Wheaton Precious Metals Corp.	WPM US	\$13,168	20.8	48.0	22.7	9%	13.5	\$634	\$274	\$974	1.7	\$997	\$1,356
Average						13%		\$999	\$592	\$1,408	1.1	\$1,322	\$1,655
Large Producers													
Agnico Eagle Mines Limited	AEM US	\$15,652	22.0	50.2	33.7	53%	30.4	\$710	\$312	\$515	1.6	\$712	\$1,352
Barrick Gold Corporation	GOLD US	\$32,180	75.1	197.5	107.1	43%	80.6	\$429	\$163	\$399	2.5	\$658	\$1,286
Kinross Gold Corporation	KGC US	\$6,894	25.5	59.8	38.5	51%	29.2	\$270	\$115	\$236	4.7	\$485	\$1,173
Newmont Goldcorp Corporation	NEM US	\$35,903	65.4	120.4	89.1	36%	89.6	\$549	\$298	\$401	2.1	\$560	\$1,346
Average						46%		\$482	\$212	\$394	2.7	\$605	\$1,304
Intermediate Producers													
Alamos Gold Inc.	AGI US	\$2,032	9.7	22.4	13.4	38%	11.2	\$209	\$91	\$182	4.4	\$494	\$1,148
B2Gold Corp.	BTG US	\$3,996	5.8	28.6	9.0	54%	6.1	\$687	\$140	\$651	1.5	\$801	\$1,520
Eldorado Gold Corporation	EGO US	\$1,612	16.0	16.0	15.7	-2%	8.0	\$101	\$101	\$203	12.9	\$579	\$1,289
IAMGOLD Corporation	IAG US	\$1,465	17.9	36.5	19.2	7%	10.6	\$82	\$40	\$138	10.5	\$358	\$1,193
New Gold Inc.	NGD US	\$1,128	13.4	19.0	12.8	-5%	3.7	\$84	\$59	\$304	23.9	\$618	\$1,383
Yamana Gold Inc.	AUY US	\$4,405	12.5	30.5	17.3	39%	10.3	\$352	\$144	\$427	3.7	\$642	\$1,359
Average						22%		\$194	\$96	\$293	9.5	\$556	\$1,287
Total average						27%		\$478	\$224	\$471	5.5	\$663	\$1,333

(1) Equal weighted average

(2) Average weighted by ounces

(3) Adjusted EV per ounce = (EV + Life of mine capex - Other assets) / (Life of mine gold production)

(4) Total Acquisition Cost = Breakeven cost of acquisition per oz = (EV + LOM capital spending - Other Assets)/(LOM production) + LOM co-product total cash costs

(5) Royalty group reflects LOM GEO production for equal comparability

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Comparable tables: Source and use of cash at spot gold and silver

Spot gold priced at US\$1,464/oz and spot silver at US\$17.03/oz, as of November 29, 2019.

Company	Ticker	Report Currency	2019E Cash Source/Use (CY) (\$MM)							2019E Dividend / FCF at Spot (4)	2020E Cash Source/Use (CY) (\$MM)						2020E Dividend / FCF at Spot (4)	2020E Dividend / FCF at \$1,200/oz
			OCF at Spot (1)	Capex (2)	Debt Payment	Dividends (3)	Debt Proceeds	Equity Proceeds	OCF at Spot (1)		Capex (2)	Debt Payment	Dividends (3)	Debt Proceeds	Equity Proceeds			
			Royalty Companies															
Franco-Nevada Corporation	FNV US	US\$	620	(489)	(485)	(137)	435	119	105%	732	(56)	(160)	(138)	-	-	20%	25%	
Royal Gold, Inc.	RGLD US	US\$	312	(73)	(440)	(35)	220	-	15%	347	(128)	(150)	(73)	-	-	33%	46%	
Wheaton Precious Metals Corp.	WPM US	US\$	527	(2)	(331)	(130)	-	33	25%	604	(3)	(360)	(149)	-	-	25%	34%	
Average																		
Large Producers																		
Agnico Eagle Mines Limited	AEM US	US\$	877	(803)	(231)	(107)	220	120	144%	1,275	(695)	(360)	(142)	-	-	24%	75%	
Barrick Gold Corporation	GOLD US	US\$	2,961	(1,655)	(299)	(550)	-	-	42%	3,452	(2,260)	(18)	(356)	-	-	30%	187%	
Kinross Gold Corporation	KGC US	US\$	1,094	(1,064)	(200)	-	300	-	-	1,260	(948)	-	-	-	85	-	-	
Newmont Goldcorp Corporation	NEM US	US\$	3,063	(1,491)	(2,474)	(890)	700	-	57%	3,846	(1,862)	(95)	(459)	-	-	23%	72%	
Average																		
Intermediate Producers																		
Alamos Gold Inc.	AGI US	US\$	287	(256)	-	(16)	-	15	50%	293	(235)	-	(16)	-	-	27%	(33%)	
B2Gold Corp.	BTG US	US\$	471	(225)	(231)	(10)	3	64	4%	671	(242)	(220)	(41)	-	-	10%	16%	
Eldorado Gold Corporation	EGO US	US\$	157	(211)	(604)	-	500	0	-	300	(209)	(67)	-	-	-	-	-	
IAMGOLD Corporation	IAG US	US\$	395	(273)	(4)	-	23	-	-	433	(375)	(8)	-	-	-	-	-	
New Gold Inc.	NGD US	US\$	183	(247)	(56)	-	-	107	-	200	(213)	-	-	-	-	-	-	
Yamana Gold Inc.	AUY US	US\$	487	(394)	(843)	(24)	120	-	26%	592	(336)	(101)	(38)	-	-	15%	70%	
Average																		

(1) Operating Cash Flow before working capital

(2) Capex reflects figures reported on the cash flow statement

(3) Dividends reflect cash-related outflows and are net of DRIP proceeds, if applicable

(4) Free cash flow = operating cash flow after working capital changes, less capital spending

Source: Bloomberg, Company reports, RBC Capital Markets estimates

Company reports

Agnico Eagle Mines Limited
Alamos Gold Inc.
B2 Gold Corp.
Barrick Gold Corporation
Eldorado Gold Corporation
Franco-Nevada Corporation
IAMGOLD Corporation
Kinross Gold Corporation
Newmont Goldcorp Corporation
New Gold Inc.
Royal Gold Inc.
Wheaton Precious Metals Corp.
Yamana Gold Inc



**Capital
Markets**

Agnico Eagle Mines Limited

Everlasting consistency within a sector in flux

Our view: AEM has successfully achieved its long-awaited FCF inflection point, although in our view ongoing exploration and development spending could reduce the magnitude of this shift. Short-term, upcoming Amaruq and Malartic UG opportunities are key upside factors. Longer-term, go-forward growth rates are expected to decelerate as the company matures, potentially representing valuation contraction risk. We are assuming coverage of AEM with a Sector Perform rating and US\$61 PT.

Key points:

Transitioning to a self-sustaining business model. The completion of AEM's Meadowbank and Amaruq mines in 2019 yields both improved production and lower capital requirements. We expect AEM to deliver FCF going forward that should allow the company to achieve a stated goal of being self sustaining. On a 5-year basis, we calculate AEM has the capacity to generate average annual net FCF of US\$700m at spot gold, equivalent to an FCF/EV of 4.5% (group average: 5.8%). Consistent with this maturation, lower production growth is also anticipated. Over the last 5 years, we estimate AEM has delivered production growth of >60%, while 5 years going forward, we forecast growth of 20%, of which more than half is delivered in 2020 (Meliadine ramp-up, Amaruq ramp-up, Kittila shaft completion). While lower than its past, AEM's growth profile remains more attractive than the senior producer 5-year average of -4%.

Anticipating balanced capital allocation outlook. Consistent with AEM's growth focus, historical capital allocation has overwhelmingly focused upon project expenditure by increasing financial leverage. Going forward, we expect AEM to maintain a more balanced strategy, emphasizing deleveraging (net debt: US\$1.5b) and return of capital to shareholders (current dividend: US\$167m). More uncertain, in our view, is the company's project development outlook, where capital requirements could remain elevated over the coming years. AEM has outlined total potential ongoing capital spending of >US\$700m, above our average 3-year US\$616m estimate, pending upcoming decisions on Meliadine's Phase 2 throughput expansion, Amaruq UG, Goldex upside, and Malartic UG development targets. Short-term, we see the potential for updates at Amaruq UG and Malartic UG to be constructive.

Commitment to execution and credibility expected to continue. Since AEM's 2012 renewed execution focus, the company has consistently outperformed its production guidance and has met or exceeded cost guidance, establishing itself as a highly credible operator. Combined with the company's low geopolitical risk exposure, we believe AEM is well-positioned to deliver upon expectations and execute a consistent strategy. In line with these positive attributes, AEM maintains a premium P/NAV at spot gold of 2.1x (peer average: 1.5x).

Sector: Precious Minerals & Diamonds - large cap

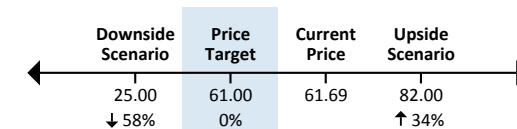
Sector Perform

NYSE: AEM; USD 61.69; TSX: AEM

Price Target USD 61.00

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input checked="" type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	237.8	Market Cap (MM):	14,553
Dividend:	0.70	Yield:	1.1%
NAVPS:	24.47	P/NAVPS:	2.52x
BVPS:	20.10	P/BVPS:	3.07x
ROE:	10.0%	Tr. 12 ROE:	(5.40)%
Float (MM):	235.6	Avg. Daily Volume:	1,285,841
Debt to Cap:	27%		

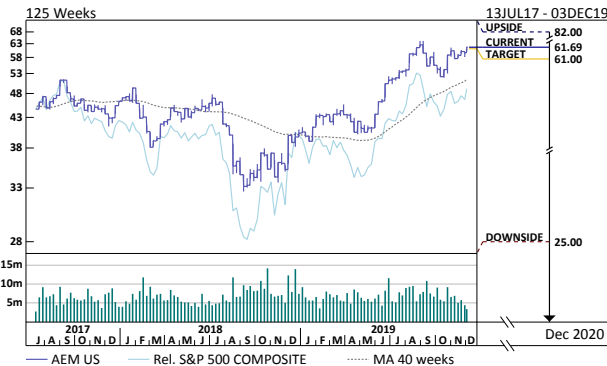
RBC Estimates

FY Dec	2018A	2019E	2020E	2021E
EPS, Adj Basic	0.31	1.03	2.19	1.89
P/AEPS	NM	59.9x	28.2x	32.6x
CFPS, Adj Basic	2.77	3.71	5.56	4.87
P/ACFPS	22.3x	16.6x	11.1x	12.7x
FCFPS	(2.07)	0.41	2.65	2.24
Production	1,626.7	1,781.3	2,011.4	2,107.6
EPS, Adj Basic	Q1	Q2	Q3	Q4
2018	0.15A	0.01A	0.01A	0.14A
2019	0.14A	0.10A	0.37A	0.43E
2020	0.53E	0.55E	0.56E	0.56E
CFPS, Adj Basic				
2018	0.78A	0.69A	0.66A	0.64A
2019	0.73A	0.67A	1.16A	1.15E
2020	1.44E	1.34E	1.46E	1.31E

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: Agnico Eagle Mines Limited



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our AEM price target of US\$61 is based upon 2.2x our risk-adjusted NAV at a long-term gold price of US\$1,400/oz and 30x our 2020-2021 SFCF estimate, which would be equivalent to 12x EBITDA. These multiples are above the average for the large producer group, supported by the company's historical guidance and exploration achievements, its below-average political risk exposure, and its stable long-term operating and capital reinvestment outlook. Our Sector Perform rating is supported by AEM's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Upside scenario

Our upside value of US\$82 is based upon higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside value of US\$25 is based upon lower long-term gold prices of US\$1,200/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Investment summary

Agnico Eagle is a senior gold producer with a portfolio of 9 operating mines in Canada (Quebec and Nunavut), Mexico, and Finland. 2019 guidance outlines production of 1.77-1.78 moz at AISC of US\$875-925/oz, and forecasts production growth to 2.05 moz by 2022 through the ramp-up of its Meliadine and Amaruq projects in Nunavut. Agnico has outlined a strategy to build a long-term, sustainable, self-funding business focused upon low-political risk jurisdictions.

Investment outlook:

- With the completion of AEM's Meliadine and Amaruq projects in 2019, we forecast the company to deliver improved free cash flow in 2020 and beyond.
- Going forward, we expect management to allocate capital towards debt reduction, dividend growth, and project investment. This balanced approach should allow the company to return capital to shareholders, while ensuring business stability via a stable, long-term reserve base.
- AEM maintains a suite of development projects that have the potential to contribute to growth in upcoming years with manageable mine site capital requirements (i.e. Kittila shaft expansion, Amaruq UG, Meliadine Phase 2, Malartic regional UG development, Goldex additional zones).
- Our Sector Perform rating is predicated on our view that AEM's exploration and development opportunities remain robust, but are also expected to reduce interim FCF. We anticipate upcoming Amaruq and Malartic updates as key upside factors. Longer-term, we expect go-forward growth rates to decelerate as the company matures, potentially representing valuation contraction risk.

Upcoming catalysts and milestones

- Year-end resources and reserves, in particular Malartic regional underground targets, Amaruq underground, and Santa Gertrudis (1Q20)
- Amaruq open pit ramp-up and underground project economics update (1Q20)
- Malartic Barnat high-grade production sequence (4Q19+)
- Meliadine production ramp up (2019+), Phase 2 project acceleration decision (1Q20) and potential accelerated development (2020-21)

Key Risks

In addition to general operating and financial risks for AEM related to commodities (gold, silver, zinc) and FX (USD, CAD, EUR, MXP), we highlight:

- Achievement of Amaruq open pit ramp-up targets as well as underground permitting and development milestones
- Potential multiple compression should AEM fail to achieve outlined corporate targets

Exhibit 2: Agnico Eagle Mines – Catalysts, opportunities and risks

Catalysts and milestones

- Amaruq and Meliadine reserve/resource upside (1Q20)
- Odyssey and East Gouldie resource upside at Canadian Malartic (1Q20)
- Upper Canada resource upside at Kirkland Lake projects in Ontario (1Q20)
- Kittila shaft tie in (2H20)
- Exploration results from Santa Gertrudis project in Mexico (2020)
- Amaruq Phase II permitting (late-2020)
- Goldex Akasaba West initial production contribution (2020)
- Ramp-up of initial Whale Tail open pit mining (4Q19) and V Zone pit mining (2020) at Amaruq
- Malartic production from high-grade Barnat resource (late 2019)
- Potential for further dividend increases (2020)

Opportunities

- Production upside at Meliadine from advancement of the Phase 2 expansion and exploration success
- Potential upside from Amaruq exploration and potential underground mining
- Potential development upside from Malartic underground targets, including Odyssey and East Gouldie zones
- Advancement of the early-stage Kirkland Lake projects
- Extension of Kittila mine life from the Sisar and Rimpi zones
- Extension of Creston Mascota mine life at Pinos Altos
- Continued positive grade reconciliation upside at LaRonde and increased flexibility with deeper, higher-grade mining
- Continued Goldex Deep 1 positive grade reconciliation
- Potential Goldex mine life extension from Deep 2 and South zones

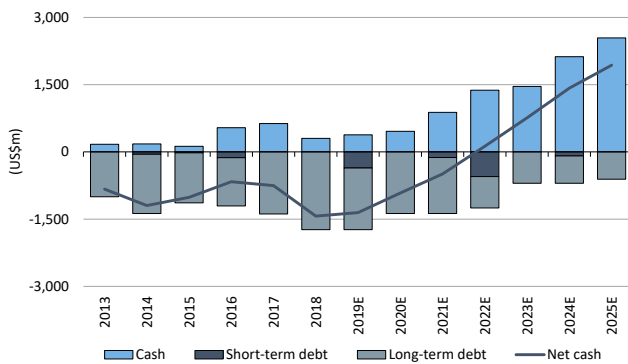
Risks and uncertainties

- Achievement of ramp-up and expansion projects at Meliadine and Amaruq
- Potential multiple compression in the event targets are not achieved
- Potential dilution from M&A activity
- Commodity price risk (most notably gold and silver prices), technical/operating risk and financing risk

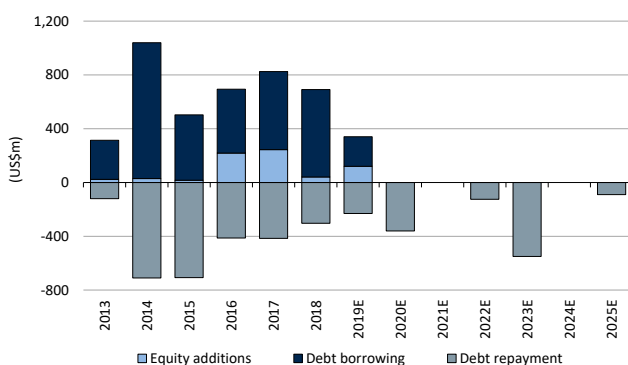
Source: Company reports, RBC Capital Markets estimates

Exhibit 3: Agnico Eagle Mines – Financial forecasts at spot gold

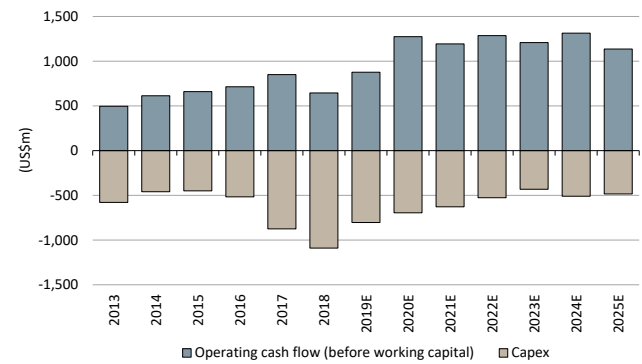
Cash and debt



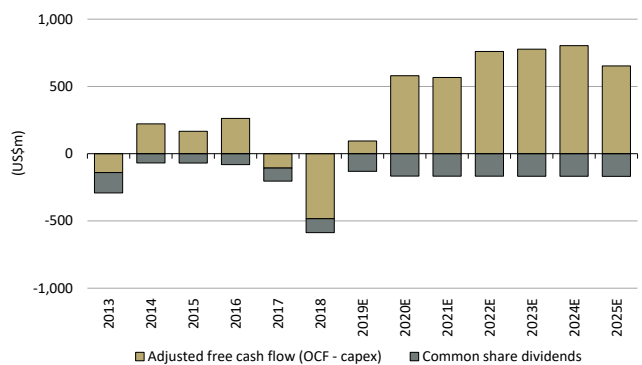
Changes in debt and equity



Operating cash flow and capital spending



Free cash flow and common share dividends



Source: Company reports, RBC Capital Markets estimates (Priced as of market close on November 29, 2019 ET)

Exhibit 4: Agnico Eagle Mines – Net asset valuation at spot gold

Agnico Eagle Mines Limited									
Net asset valuation at spot gold (US\$)									
Shares (FD, FF, ITM) (m)	242,591								
Market capitalization (US\$m)	14,458								
	Risk-weighted NAV			NAV at various discount rates					
	Discount rate	(\$m)	(/sh) (\$)	5%		7%		10%	
				(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)
Gold assets									
LaRonde (100.0%), Canada (QC)	5%	1,711	7.05	1,711	7.05	1,552	6.40	1,353	5.58
Goldex (100.0%), Canada (QC)	5%	429	1.77	429	1.77	390	1.61	343	1.41
Kittila (100.0%), Finland	5%	1,152	4.75	1,152	4.75	985	4.06	791	3.26
Amaruq (100.0%), Canada (NU)	5%	1,408	5.80	1,408	5.80	1,252	5.16	1,059	4.36
Lapa/LaRonde Zone 5 (100.0%), Canada (QC)	5%	131	0.54	131	0.54	112	0.46	91	0.38
Meadowbank (100.0%), Canada (NU)	5%	2	0.01	2	0.01	2	0.01	2	0.01
Meliadine (100.0%), Canada (NU)	5%	1,796	7.40	1,796	7.40	1,606	6.62	1,377	5.68
Pinos Altos (100.0%), Mexico	5%	305	1.26	305	1.26	289	1.19	267	1.10
Malartic OP (50.0%), Canada (QC)	5%	1,223	5.04	1,223	5.04	1,139	4.69	1,029	4.24
Malartic UG (50.0%), Canada (QC)	5%	413	1.70	413	1.70	289	1.19	164	0.67
La India (100.0%), Mexico	5%	261	1.08	261	1.08	250	1.03	235	0.97
Kirkland Lake (100.0%), Canada (ON)	5%	209	0.86	209	0.86	124	0.51	43	0.18
Santa Gertrudis (100.0%), Mexico	5%	106	0.44	106	0.44	80	0.33	50	0.21
Gold exploration properties		56	0.23	56	0.23	56	0.23	56	0.23
Gold hedge book		0	0.00	0	0.00	0	0.00	0	0.00
Total gold assets		9,203	37.94	9,203	37.94	8,126	33.50	6,860	28.28
Base metals and other assets									
Other exploration		0	0.00	0	0.00	0	0.00	0	0.00
LaRonde (100.0%), Canada (QC)	8%	141	0.58	141	0.58	141	0.58	129	0.53
Investments		63	0.26	63	0.26	63	0.26	63	0.26
Total other assets		204	0.84	204	0.84	204	0.84	192	0.79
Balance sheet and expenses									
Basic working capital		337	1.39	337	1.39	337	1.39	337	1.39
Value of ITM instruments		113	0.47	113	0.47	113	0.47	113	0.47
Estimated working capital additions		0	0.00	0	0.00	0	0.00	0	0.00
Long-term debt		-1,375	-5.67	-1,375	-5.67	-1,375	-5.67	-1,375	-5.67
Estimated debt additions		0	0.00	0	0.00	0	0.00	0	0.00
Discounted G&A expense	5%	-966	-3.98	-966	-3.98	-815	-3.36	-654	-2.70
Discounted exploration expense	5%	-314	-1.29	-314	-1.29	-300	-1.24	-281	-1.16
Interest tax shield	5%	163	0.67	163	0.67	151	0.62	135	0.56
Reclamation & closure liability		-416	-1.72	-416	-1.72	-416	-1.72	-416	-1.72
Net financial assets		-2,457	-10.13	-2,457	-10.13	-2,306	-9.50	-2,141	-8.83
Net asset value (US\$)		6,950	28.65	6,950	28.65	6,024	24.83	4,911	20.24
Share price (US\$)			59.60		59.60		59.60		59.60
NAV multiple (P/NAV) (x)			2.08		2.08		2.40		2.94
Input assumptions		2019E	2020E	2021E	Long term				
Gold price (US\$/oz)		1,387	1,464	1,464	1,464				
Silver price (US\$/oz)		16.11	17.03	17.03	17.03				
Zinc price (US\$/lb)		1.15	1.03	1.03	1.02				
C\$/US\$ exchange rate		0.75	0.75	0.75	0.75				

Note: Base metals cash flow discounted at a minimum 8% discount rate.

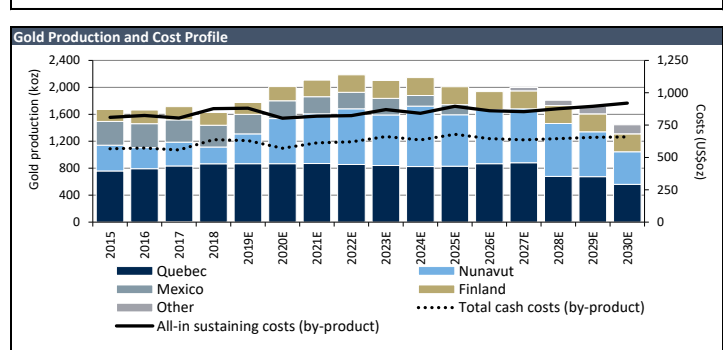
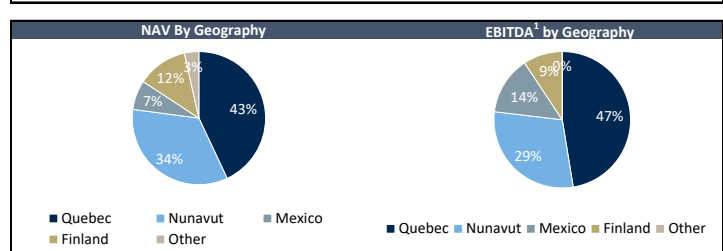
Source: Company reports, RBC Capital Markets estimates (Priced as of market close on November 29, 2019 ET)

Agnico Eagle Mines Limited (AEM US, AEM CN): Forecasts at spot gold						
Rating	Sector Perform			Basic shares (m)	237.8	RBC Capital Markets
Risk	NA			Diluted shares (ITM/FD) (m)	242.6/242.6	Josh Wolfson, CFA
Target price at RBC price deck	US\$61.00			Basic market cap (US\$m)	14,175	(416) 842-9893
Share price	US\$59.60			Enterprise value (US\$m)	15,652	josh.wolfson@rbccm.com

All US\$m unless noted	Year Ended December 31					All US\$m unless noted	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E		2018	2019E	2020E	2021E	2022E
Operating Statistics											
Equity gold production (koz)	1,627	1,781	2,011	2,108	2,185	Key commodities					
LaRonde	344	337	344	344	355	Gold (US\$/oz)	1,269	1,387	1,464	1,464	1,464
Goldex	121	140	123	125	127	Silver (US\$/oz)	15.71	16.11	17.03	17.03	17.03
Kittila	189	181	211	247	259	Oil (US\$/bbl)	65	57	58	58	59
Amaruq	0	93	267	344	445	Key currencies					
Meadowbank	249	107	0	0	0	US\$/C\$	0.77	0.75	0.75	0.75	0.75
La India	101	85	86	91	97	US\$/EUR	1.18	1.12	1.10	1.10	1.10
Malartic OP	349	334	352	352	324	MXN/US\$	19.22	19.26	19.14	18.98	18.82
Pinos Altos	221	206	177	163	149	Valuation					
Meliadine	0	241	403	393	380	P/E (x)	193.6	58.3	29.5	29.6	25.4
Other	53	57	48	49	49	P/CF (x)	21.5	16.1	11.1	11.9	11.1
Equity silver production (moz)	4.5	4.3	4.2	4.1	3.7	EV/EBITDA (x)	20.4	14.7	10.3	10.2	9.8
Equity copper production (mlbs)	9.2	7.9	9.4	9.4	9.0	FCF/EV yield*	-3.1%	0.6%	3.7%	3.6%	4.9%
Equity zinc production (mlbs)	17.3	30.7	18.8	18.8	27.2	Income Statement					
Total cash costs (co-product) (US\$/oz)	709	700	614	652	661	Total revenue	2,191	2,492	3,049	3,187	3,295
Total cash costs (by-product) (US\$/oz)	637	630	571	612	620	% gold	94%	95%	96%	96%	97%
Reported AISC (by-product) (US\$/oz)	877	881	803	819	823	% silver	3%	3%	2%	2%	2%
Fully loaded costs (co-product) (US\$/oz)	1,324	1,245	1,149	1,170	1,105	% copper	1%	1%	1%	1%	1%
						% other	1%	1%	1%	1%	1%

Net Asset Value	NAV (\$m) /sh (\$)				
	NAV (\$m)	/sh (\$)	% NAV	% Reserve	%EBITDA†
LaRonde (100.0%), Canada (QC)	1,852	7.63	20%	13%	21%
Goldex (100.0%), Canada (QC)	429	1.77	5%	5%	6%
Kittila (100.0%), Finland	1,152	4.75	12%	20%	9%
Amaruq (100.0%), Canada (NU)	1,408	5.80	15%	13%	9%
Meliadine (100.0%), Canada (NU)	1,796	7.40	19%	17%	20%
Pinos Altos (100.0%), Mexico	305	1.26	3%	5%	9%
Malartic OP (50.0%), Canada (QC)	1,223	5.04	13%	12%	19%
Malartic UG (50.0%), Canada (QC)	413	1.70	4%	0%	0%
La India (100.0%), Mexico	261	1.08	3%	2%	5%
Other	568	2.34	6%	13%	3%
Total mining and investment assets	9,407	38.78	100%	100%	100%
Balance sheet items/expenditures	-2,457	-10.13			
Total NAV	6,950	28.65			
P/NAV at spot gold (x)		2.08			

Gold Reserves and Resources	2014 2015 2016 2017 2018				
	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	258.7	250.6	268.4	256.7	253.8
Grade (g/t)	2.4	2.4	2.3	2.5	2.7
Oz (m)	20.0	19.1	19.9	20.6	22.0
Assumed reserve additions (moz)					11.7
LOM production (moz)					30.4
Measured, indicated & inferred (exclusive of reserves)					
Oz (m)	28.5	27.5	26.4	26.8	28.1
Reserve and resource statistics					
Reserves/sh (x1,000)	92.4	85.6	86.6	88.1	93.1
Reserves & resources/sh (x1,000)	224.2	209.0	201.1	202.8	211.9
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	712				312
Total acquisition cost (US\$/oz)	1,326				710



All US\$m unless noted	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Income Statement					
Total revenue	2,191	2,492	3,049	3,187	3,295
% gold	94%	95%	96%	96%	97%
% silver	3%	3%	2%	2%	2%
% copper	1%	1%	1%	1%	1%
% other	1%	1%	1%	1%	1%
Operating costs	1,160	1,206	1,297	1,429	1,477
G&A	125	116	115	115	110
Exploration	138	109	123	110	110
Depreciation	554	547	631	672	696
Other	0	0	0	0	0
Adjusted EBITDA	768	1,062	1,514	1,533	1,597
Adjusted EBIT	214	515	883	861	902
Net interest expense	97	104	81	60	40
Unusual/other items	-570	-200	-162	-119	-80
EBT	-259	418	802	801	862
Taxes	68	176	321	320	302
Minority interest	0	0	0	0	0
Other	0	0	0	0	0
Net income (reported)	-327	242	481	481	560
Net income (adjusted)	72	243	481	481	560
EPS (reported) (\$/sh)	-1.39	1.02	2.02	2.02	2.34
EPS (adjusted) (\$/sh)	0.31	1.02	2.02	2.02	2.34
Average shares (m)	233	237	238	239	239

All US\$m unless noted	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Cash Flow Statement					
Net income (reported)	-327	242	481	481	560
Depreciation	554	547	631	672	696
Other	418	88	163	41	30
Operating cash flow	646	877	1,275	1,194	1,286
Operating cash flow (\$/sh)	2.77	3.70	5.35	5.00	5.38
Working capital changes	-40	21	0	0	0
Cash from operations	606	898	1,275	1,194	1,286
Capital expenditure	-1,089	-803	-695	-628	-526
Net investments	-115	-20	0	0	0
Investing cash flow	-1,204	-823	-695	-628	-526
Common share dividends	103	131	167	167	167
Debt additions	650	220	0	0	0
Debt repayments	-303	-231	-360	0	-125
Equity financing	41	120	0	0	0
Other net financing	-113	-107	-142	-142	-142
Financing cash flow	274	3	-502	-142	-267
Foreign exchange	-7	0	0	0	0
Change in cash	-331	78	78	425	493
Free cash flow*	-483	95	580	566	760
Free cash flow* (\$/sh)	-2.07	0.40	2.44	2.37	3.18

All US\$m unless noted	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Balance Sheet					
Assets					
Cash	302	380	459	883	1,376
Short-term investments	6	7	7	7	7
Other current assets	765	889	889	889	889
Current assets	1,072	1,276	1,354	1,778	2,271
Non-current assets	6,794	7,147	7,210	7,166	6,996
Total assets	7,867	8,422	8,564	8,944	9,268
Liabilities					
Short-term debt	0	360	0	125	550
Current liabilities	361	799	439	564	989
Long-term debt	1,735	1,375	1,375	1,250	700
Other non-current liabilities	1,220	1,389	1,511	1,512	1,504
Total liabilities	3,316	3,563	3,324	3,327	3,194
Total shareholder equity	4,551	4,859	5,240	5,617	6,074
Net debt	1,427	1,348	910	485	-133
Net debt / EBITDA (x)	1.9	1.3	0.6	0.3	-0.1
ROE (Net income/Equity)	-6.9%	5.2%	9.5%	8.9%	9.6%
ROA (Net income/Total assets)	-4.1%	3.0%	5.7%	5.5%	6.2%
ROIC (NOPAT/Assets + Net debt)	2.5%	5.6%	9.1%	8.8%	10.0%
CROIC (FCF/Equity + Total debt)*	-7.7%	1.5%	8.8%	8.3%	10.6%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
Priced as of market close November 29, 2019 ET. Source: RBC Capital Markets estimates, company reports, Bloomberg

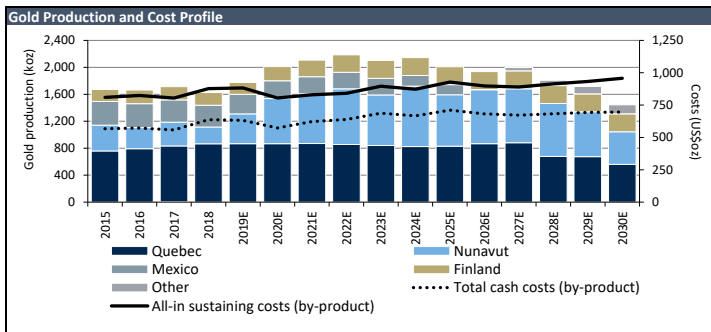
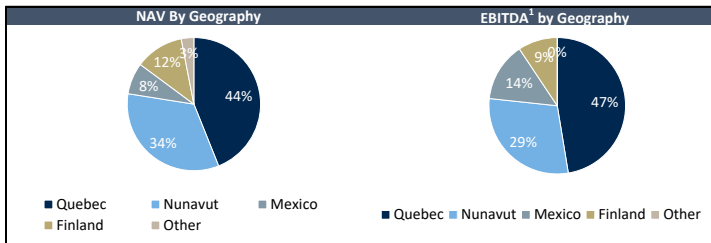
Agnico Eagle Mines Limited (AEM US, AEM CN): Forecasts at RBC price deck

Rating	Sector Perform	Basic shares (m)	237.8	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	242.6/242.6	Josh Wolfson, CFA
Target price at RBC price deck	US\$61.00	Basic market cap (US\$m)	14,175	(416) 842-9893
Share price	US\$59.60	Enterprise value (US\$m)	15,652	josh.wolfson@rbccm.com

All US\$m unless noted						All US\$m unless noted					
Operating Statistics						Input Prices					
	2018	2019E	2020E	2021E	2022E		2018	2019E	2020E	2021E	2022E
Equity gold production (koz)						Key commodities					
LaRonde	344	337	344	344	355	Gold (US\$/oz)	1,269	1,390	1,500	1,450	1,450
Goldex	121	140	123	125	127	Silver (US\$/oz)	15.71	16.23	17.50	17.50	17.50
Kittila	189	181	211	247	259	Oil (US\$/bbl)	65	57	58	58	59
Amaruq	0	93	267	344	445	Key currencies					
Meadowbank	249	107	0	0	0	US\$/C\$	0.77	0.76	0.76	0.77	0.78
La India	101	85	86	91	97	US\$/EUR	1.18	1.11	1.10	1.11	1.13
Malartic OP	349	334	352	352	324	MXN/US\$	19.22	19.26	19.14	18.98	18.82
Pinos Altos	221	206	177	163	149	Valuation					
Meliadine	0	241	403	393	380	P/E (x)	193.6	58.0	27.2	31.6	27.7
Other	53	57	48	49	49	P/CF (x)	21.5	16.1	10.7	12.2	11.5
Equity silver production (moz)						EV/EBITDA (x)					
Equity copper production (mlbs)						FCF/EV yield*					
Equity zinc production (mlbs)						20.4					
Total cash costs (co-product) (US\$/oz)						-3.1%					
Total cash costs (by-product) (US\$/oz)						0.6%					
Reported AISC (by-product) (US\$/oz)						4.0%					
Fully loaded costs (co-product) (US\$/oz)						10.6%					
						4.6%					

Net Asset Value	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
LaRonde (100.0%), Canada (QC)	1,729	7.13	21%	13%	21%
Goldex (100.0%), Canada (QC)	380	1.57	5%	5%	6%
Kittila (100.0%), Finland	990	4.08	12%	20%	9%
Amaruq (100.0%), Canada (NU)	1,206	4.97	14%	13%	9%
Meliadine (100.0%), Canada (NU)	1,609	6.63	19%	17%	20%
Pinos Altos (100.0%), Mexico	297	1.22	4%	5%	9%
Malartic OP (50.0%), Canada (QC)	1,156	4.77	14%	12%	19%
Malartic UG (50.0%), Canada (QC)	309	1.27	4%	0%	0%
La India (100.0%), Mexico	259	1.07	3%	2%	5%
Other	459	1.89	5%	13%	3%
Total mining and investment assets	8,393	34.60	100%	100%	100%
Balance sheet items/expenditures	-2,457	-10.13			
Total NAV	5,935	24.47			
P/NAV at RBC price deck (x)		2.44			

Gold Reserves and Resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	258.7	250.6	268.4	256.7	253.8
Grade (g/t)	2.4	2.4	2.3	2.5	2.7
Oz (m)	20.0	19.1	19.9	20.6	22.0
Assumed reserve additions (moz)					11.7
LOM production (moz)					30.4
Measured, indicated & inferred (exclusive of reserves)					
Oz (m)	28.5	27.5	26.4	26.8	28.1
Reserve and resource statistics					
Reserves/sh (x1,000)	92.4	85.6	86.6	88.1	93.1
Reserves & resources/sh (x1,000)	224.2	209.0	201.1	202.8	211.9
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	712				312
Total acquisition cost (US\$/oz)	1,352				710



* FCF = operating cash flow - capex; † 2019-2021 average EBITDA

Priced as of market close November 29, 2019 ET. Source: RBC Capital Markets estimates, company reports, Bloomberg

All US\$m unless noted						All US\$m unless noted					
Income Statement						Cash Flow Statement					
	2018	2019E	2020E	2021E	2022E		2018	2019E	2020E	2021E	2022E
Total revenue	2,191	2,499	3,126	3,159	3,265	Net income (reported)	-327	244	522	450	515
% gold	94%	95%	96%	96%	96%	Net income (adjusted)	72	244	522	450	515
% silver	3%	3%	2%	2%	2%	Net income (reported) (\$/sh)	-1.39	1.02	2.19	1.89	2.16
% copper	1%	1%	1%	1%	1%	EPS (adjusted) (\$/sh)	0.31	1.03	2.19	1.89	2.16
% other	1%	1%	1%	1%	1%	Average shares (m)	233	237	238	239	239
Operating costs	1,160	1,210	1,307	1,453	1,518	Cash Flow Statement					
G&A	125	116	115	115	110	Net income (reported)	-327	244	522	450	515
Exploration	138	109	123	110	110	Depreciation	554	547	631	672	696
Depreciation	554	547	631	672	696	Other	418	88	172	39	30
Other	0	0	0	0	0	Operating cash flow	646	879	1,325	1,162	1,241
Adjusted EBITDA	768	1,064	1,582	1,482	1,528	Operating cash flow (\$/sh)	2.77	3.71	5.56	4.87	5.19
Adjusted EBIT	214	517	951	809	832	Working capital changes	-40	21	0	0	0
Net interest expense	97	104	81	59	40	Cash from operations	606	900	1,325	1,162	1,241
Unusual/other items	-570	-200	-162	-117	-80	Capital expenditure	-1,089	-803	-695	-628	-526
EBT	-259	420	870	751	792	Net investments	-115	-20	0	0	0
Taxes	68	177	348	300	277	Investing cash flow	-1,204	-823	-695	-628	-526
Minority interest	0	0	0	0	0	Common share dividends	103	131	167	167	167
Other	0	0	0	0	0	Debt additions	650	220	0	0	0
Net income (reported)	-327	244	522	450	515	Debt repayments	-303	-231	-360	0	-125
Net income (adjusted)	72	244	522	450	515	Equity financing	41	120	0	0	0
Net income (reported) (\$/sh)	-1.39	1.02	2.19	1.89	2.16	Other net financing	-113	-107	-142	-142	-142
EPS (adjusted) (\$/sh)	0.31	1.03	2.19	1.89	2.16	Financing cash flow	274	3	-502	-142	-267
Average shares (m)	233	237	238	239	239	Foreign exchange	-7	0	0	0	0

Balance Sheet					
	2018	2019E	2020E	2021E	2022E
Assets					
Cash	302	382	510	903	1,350
Short-term investments	6	7	7	7	7
Other current assets	765	889	889	889	889
Current assets	1,072	1,277	1,406	1,799	2,246
Non-current assets	6,794	7,146	7,210	7,165	6,996
Total assets	7,867	8,424	8,616	8,963	9,242
Liabilities					
Short-term debt	0	360	0	125	550
Current liabilities	361	799	439	564	989
Long-term debt	1,735	1,375	1,375	1,250	700
Other non-current liabilities	1,220	1,389	1,521	1,520	1,511
Total liabilities	3,317	3,563	3,335	3,334	3,201
Total shareholder equity	4,550	4,860	5,281	5,629	6,041
Net debt	1,427	1,346	858	466	-107
Net debt / EBITDA (x)	1.9	1.3	0.5	0.3	-0.1
ROE (Net income/Equity)	-6.9%	5.2%	10.3%	8.3%	8.8%
ROA (Net income/Total assets)	-4.1%	3.0%	6.1%	5.1%	5.7%
ROIC (NOPAT/Assets + Net debt)	2.5%	5.6%	9.8%	8.3%	9.2%
CROIC (FCF/Equity + Total debt)*	-7.7%	1.5%	9.5%	7.8%	10.0%

Valuation

Our AEM price target of US\$61 is based upon 2.2x our risk-adjusted NAV at a long-term gold price of US\$1,400/oz and 30x our 2020-2021 SFCF estimate, which would be equivalent to 12x EBITDA. These multiples are above the average for the large producer group, supported by the company's historical guidance and exploration achievements, its below-average political risk exposure, and its stable long-term operating and capital reinvestment outlook. Our Sector Perform rating is supported by AEM's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Risks to rating and price target

In addition to general operating and financial risks for AEM related to commodities (gold, silver, zinc) and FX (USD, CAD, EUR, MXP), we highlight:

- Achievement of Amaruq open pit ramp-up targets as well as underground permitting and development milestones
- Potential multiple compression should AEM fail to achieve outlined corporate targets

Company description

Agnico Eagle is a senior gold producer with a portfolio of 9 operating mines in Canada (Quebec and Nunavut), Mexico, and Finland. 2019 guidance outlines production of 1.77-1.78 moz at AISC of US\$875-925/oz, and forecasts production growth to 2.05 moz by 2022 through the ramp-up of its Meliadine and Amaruq projects in Nunavut. Agnico has outlined a strategy to build a long-term, sustainable, self-funding business focused upon low-political risk jurisdictions.

Alamos Gold Inc.

Seeking an optimal balance of growth and spending

Our view: Upcoming changes within AGI's operating portfolio outline increased capital and operating cost uncertainties in 2020, and upcoming guidance is viewed as a risk. Thereafter in 2021 we see FCF growth potential being robust, although muted by a lengthy list of outlined development opportunities. We are assuming coverage of AGI with a Sector Perform rating and US\$6.50 PT.

Key points:

Interim operating transition, long-term growth transition. We forecast 2020 could be a continuation of a transition period for AGI as the company experiences higher costs and capital spending across its portfolio. This reflects the completion of AGI's Young-Davidson lower-mine tie-in during 1H, ore type changes at Mulatos, and development of the La Yaqui Phase II project at Mulatos. Alamos has guided to 2H20 FCF generation, consistent with our forecasts, although we note corporate capital spending could remain elevated for years into the future due to an aggressive corporate growth outlook, thereby limiting the materiality of net AGI corporate FCF. Our forecasts are predicated upon management's constructive outlook for the eventual re-commencement of Kirazli development, Island Gold Phase III, Lynn Lake, and potential long-term construction at Agi Dag/Camyurt and Esperanza. At current gold prices, we believe Alamos is well-positioned to fund these opportunities from its existing liquidity sources (US\$186m cash and US\$400m in available credit).

Island continues to be an important value driver. Looking back at AGI's Island acquisition announced in 2017, the mine has become a cornerstone asset alongside Young-Davidson. Our forecasts for the asset include meaningful reserve additions (+2moz), construction of the Phase III shaft project (\$150m, increasing long-term production to ~175koz/a), and operating/capital cost inflation that has been realized but masked by higher-than-expected grades processed. Exploration upside at Island has far exceeded our original expectations and we calculate the total transaction has the potential to generate an above-average IRR of 8%, despite high up-front acquisition costs and equity distributed.

Uncertainty around Turkish assets. We believe it is reasonable to expect the eventual resumption of construction at Kirazli, although timelines are highly uncertain. Our forecasts currently incorporate Kirazli project advancement in 2022, with production beginning in late 2023. We have significantly delayed the potential development of Agi Dag and Camyurt, reflecting more realistic permitting timelines and the complexities associated with multi-asset regional permitting and development. Despite the uncertainties associated with the Turkish assets, AGI produces 450-500koz from its existing asset base, with ~70% of current EBITDA generated from Canadian assets, and 30% from Mexico.

Sector: Precious Minerals & Diamonds - small/mid cap

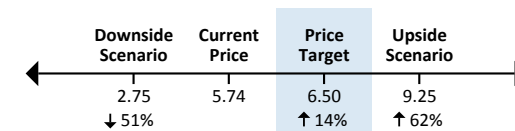
Sector Perform

NYSE: AGI; USD 5.74; TSX: AGI

Price Target USD 6.50

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input checked="" type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	391.2	Market Cap (MM):	2,238
Dividend:	0.04	Yield:	0.7%
NAVPS:	5.89	P/NAVPS:	0.97x
Float (MM):	389.1	Avg. Daily Volume:	2,460,836

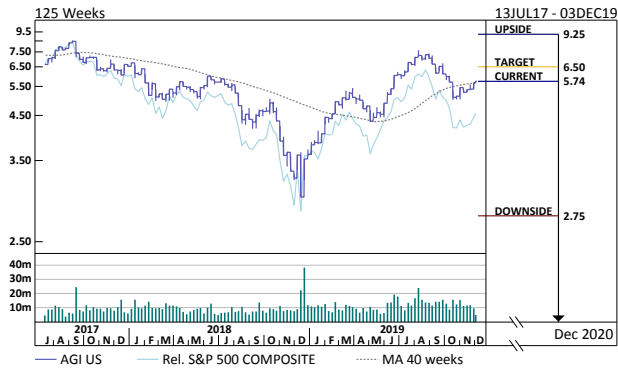
RBC Estimates

FY Dec	2018A	2019E	2020E	2021E	
EPS, Adj Basic	0.05	0.19	0.25	0.33	
P/AEPS	NM	30.2x	23.0x	17.4x	
CFPS, Adj Basic	0.54	0.73	0.78	0.91	
P/ACFPS	10.6x	7.9x	7.4x	6.3x	
FCFPS	(0.02)	0.01	0.18	0.38	
P/FCF	nm	nm	31.9x	15.1x	
Production	505.0	489.0	464.7	511.1	
EPS, Adj Basic		Q1	Q2	Q3	Q4
2018	0.03A	0.01A	0.00A	0.01A	0.01A
2019	0.03A	0.05A	0.06A	0.06E	0.06E
2020	0.06E	0.06E	0.06E	0.06E	0.07E
CFPS, Adj Basic		Q1	Q2	Q3	Q4
2018	0.16A	0.14A	0.11A	0.14A	0.14A
2019	0.16A	0.18A	0.20A	0.19E	0.19E
2020	0.18E	0.17E	0.20E	0.23E	0.23E

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: Alamos Gold Inc.



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our price target of US\$6.50 is based upon 1.0x our risk adjusted NAV at a long-term gold price of US\$1,400/oz and 19x our 2020-2021 SFCF estimate, which would be equivalent to 8x EBITDA. These multiples are relatively in line with the average for the intermediate producer group, reflecting the company's favourable financial positioning and North American operating focus, but mixed historical execution and long-term strategic uncertainties. Our Sector Perform rating is supported by AGI's implied return to our price target relative to its peers, while accounting for its company specific risks.

Upside scenario

Our upside value of US\$9.25 is based upon higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside value of US\$2.75 is based upon lower long-term gold prices of US\$1,200/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Investment summary

Alamos Gold is an intermediate gold producer with four producing assets across Canada (Ontario) and Mexico, and a suite of development-stage projects in Turkey, Mexico and Canada (Manitoba). 2019 guidance outlines production of 480-520 Koz at AISC of US\$920-960/oz, with ~70% of current EBITDA generated from Canadian assets and 30% from Mexico.

Investment outlook:

- Alamos has a solid balance sheet, with no long-term debt beyond modest capital leases.
- We forecast Alamos will produce modest free cash flow in the near-term, consistent with management guidance.
- Ongoing drilling at Island Gold is expected to remain a key source of news flow for Alamos as the company extends high-grade mineralization at depth. Continued exploration success could also support a Phase III expansion beyond 1,200 tpd.
- Our Sector Perform rating is predicated upon our view that AGI's relative valuation reflects its interim higher capital and cost uncertainties relative to peers, in conjunction with underlying changes at AGI's operating portfolio. Thereafter in 2021 we see FCF growth potential being robust, although muted by a lengthy list of outlined development opportunities.

Upcoming catalysts and milestones

- Mulatos' Cerro Pelon first production (YE19)
- Island Gold Phase II underground mining ramp-up to 1,200 tpd (2020) and Phase III expansion study (1H20)
- Young-Davidson lower mine tie-in (1H20) and ramp up to 7,500 tpd (YE20)
- Kirazli potential operating permit receipt and construction commencement (2020+)
- Mulatos' La Yaqui phase II construction (2020-22)

Key risks

In addition to general operating and financial risks for AGI related to commodities (gold) and FX (USD, CAD), we highlight:

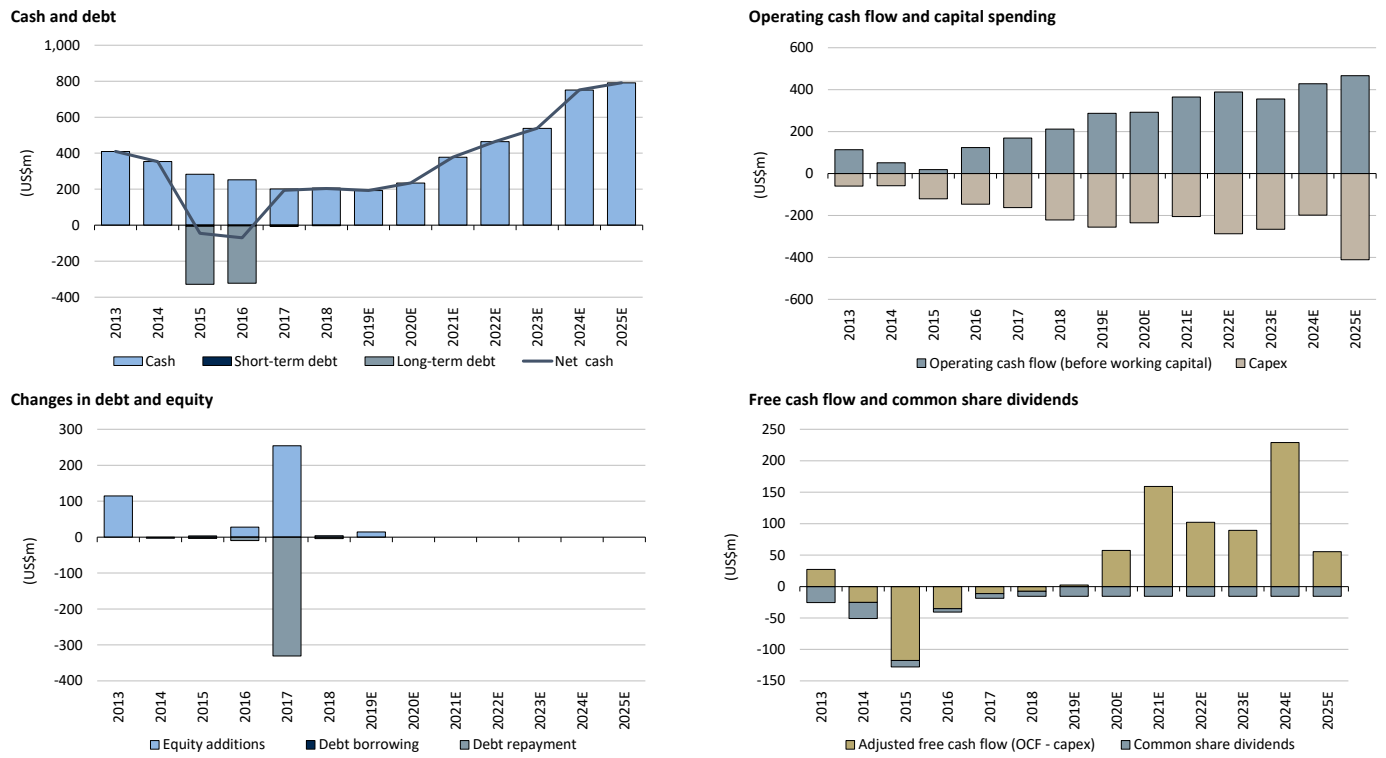
- Transition to higher-grade but more metallurgically complex Mulatos ore in 2020
- Ongoing permitting uncertainties and the political risk outlook in Turkey
- Achievement of ramp-up and production targets at Young-Davidson, La Yaqui and Island Gold
- Achievement of permitting and construction projections at Turkish portfolio, Lynn Lake, and Esperanza
- M&A risk given growth oriented nature of business model

Exhibit 2: Alamos Gold – Catalysts, opportunities and risks

Catalysts and milestones	<ul style="list-style-type: none"> • Mulatos’ Cerro Pelon first production (YE19) • Island Gold Phase II underground mining ramp-up to 1,200 tpd (2020) and Phase III expansion study (1H20) • Young-Davidson lower mine tie-in (1H20) and ramp-up to 7,500 tpd (YE20) • Kirazli potential operating permit receipt and construction recommencement (2020+) • Mulatos’ La Yaqui phase II construction (2020-22) • Lynn Lake permitting and potential construction decision (2021)
Opportunities	<ul style="list-style-type: none"> • Upside to La Yaqui resources from drilling additional zones and upside to outlined heap leach stacking rates • Further resource upside and throughput expansion potential at Island Gold • Declining capital expenditure over time at Young-Davidson as underground infrastructure is completed • Permitting advancement of Turkey project portfolio • Depreciating lira while constructing and operating projects in Turkey
Risks and uncertainties	<ul style="list-style-type: none"> • Transition to higher-grade but more metallurgically complex Mulatos ore in 2020 • Ongoing permitting uncertainties, delays, and political risk uncertainty in Turkey • Potential expiration of tax incentives in Turkey • Achievement of ramp-up and production targets at Young-Davidson, La Yaqui and Island Gold • Achievement of permitting and construction projections at Turkish portfolio, Lynn Lake, and Esperanza • Commodity price risk (most notably gold prices), technical/operating risk and financing risk • M&A risk given growth oriented nature of business model • Exploration risk should results achieved be below market expectations, in particular at Island Gold

Source: Company reports, RBC Capital Markets estimates

Exhibit 3: Alamos Gold – Financial forecasts at spot gold



Source: Company reports, RBC Capital Markets estimates (Priced as of market close on November 29, 2019 ET)

Exhibit 4: Alamos Gold – Net asset valuation at spot gold

Alamos Gold Inc.									
Net asset valuation at spot gold (US\$)									
Shares (FD, FF, ITM) (m)	394.633								
Market capitalization (US\$m)	2,238								
	Risk-weighted NAV			NAV at various discount rates					
	Discount rate	(\$m)	(/sh) (\$)	5%		7%		10%	
				(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)
Gold assets									
Young-Davidson (100.0%), Canada (ON)	5%	928	2.35	928	2.35	815	2.06	679	1.72
Island Gold (100.0%), Canada (ON)	5%	900	2.28	900	2.28	770	1.95	622	1.58
Mulatos (100.0%), Mexico	5%	271	0.69	271	0.69	248	0.63	218	0.55
Lynn Lake (100.0%), Canada (MB)	5%	174	0.44	174	0.44	111	0.28	46	0.12
Kirazlı (100.0%), Turkey	5%	201	0.51	201	0.51	167	0.42	126	0.32
Ağrı Dağı (100.0%), Turkey	8%	139	0.35	220	0.56	163	0.41	101	0.26
Çamyurt (100.0%), Turkey	8%	65	0.16	110	0.28	77	0.20	45	0.11
Esperanza (100.0%), Mexico	8%	32	0.08	65	0.16	41	0.10	18	0.05
Gold exploration properties		5	0.01	5	0.01	5	0.01	5	0.01
Gold hedge book		-1	0.00	-1	0.00	-1	0.00	-1	0.00
Total gold assets		2,715	6.88	2,874	7.28	2,395	6.07	1,859	4.71
Other assets									
Other exploration		0	0.00	0	0.00	0	0.00	0	0.00
Other hedge book	5%	0	0.00	0	0.00	0	0.00	0	0.00
Equity investments		8	0.02	8	0.02	8	0.02	8	0.02
Total other assets		8	0.02	8	0.02	8	0.02	8	0.02
Balance sheet and expenses									
Basic working capital		254	0.64	254	0.64	254	0.64	254	0.64
Value of ITM instruments		11	0.03	11	0.03	11	0.03	11	0.03
Estimated working capital additions		0	0.00	0	0.00	0	0.00	0	0.00
Long-term debt		0	0.00	0	0.00	0	0.00	0	0.00
Estimated debt additions		0	0.00	0	0.00	0	0.00	0	0.00
General & administrative expense	5%	-252	-0.64	-252	-0.64	-215	-0.55	-174	-0.44
Exploration expense	5%	-27	-0.07	-27	-0.07	-25	-0.06	-24	-0.06
Interest tax shield	5%	1	0.00	1	0.00	1	0.00	1	0.00
Reclamation & closure liability		-46	-0.12	-46	-0.12	-46	-0.12	-46	-0.12
Net financial assets		-59	-0.15	-59	-0.15	-21	-0.05	22	0.05
Net asset value (US\$)		2,664	6.75	2,823	7.15	2,382	6.04	1,889	4.79
Share price (US\$)			5.67		5.67		5.67		5.67
NAV multiple (P/NAV) (x)			0.84		0.79		0.94		1.18
Input assumptions		2019E	2020E	2021E	Long term				
Gold price (US\$/oz)		1,387	1,464	1,464	1,464				
Silver price (US\$/oz)		16.11	17.03	17.03	17.03				

Source: RBC Capital Markets, company reports

Source: Company reports, RBC Capital Markets estimates (Priced as of market close on November 29, 2019 ET)

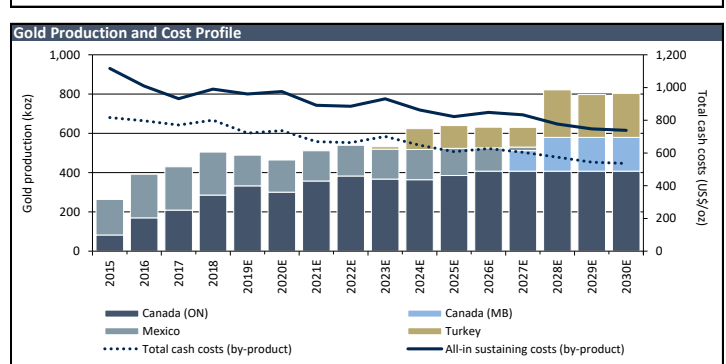
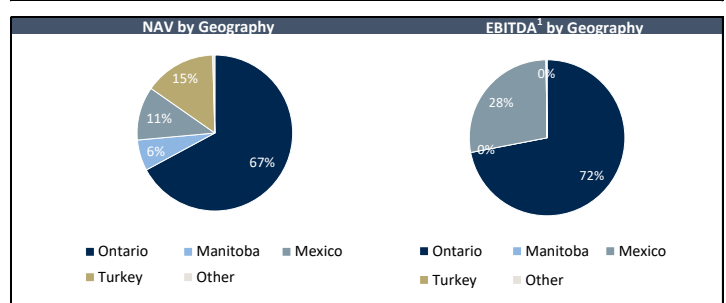
Alamos Gold Inc. (AGI US, AGI CN): Forecasts at spot gold					
Rating	Sector Perform		Basic shares (m)		391.2
Risk	NA		Diluted shares (ITM/FD) (m)		394.6/402.7
Target price at RBC price deck	US\$6.50		Basic mkt cap (US\$m)		2,218
Share price	US\$5.67		Enterprise value (US\$m)		2,032
			RBC Capital Markets Josh Wolfson, CFA (416) 842-9893 josh.wolfson@rbccm.com		

All US\$m unless noted					
Operating statistics					
	2018	2019E	2020E	2021E	2022E
Equity gold production (koz)	505	489	465	511	540
Mulatos	176	141	154	153	156
Young-Davidson	180	185	151	208	227
Island Gold	106	147	150	149	157
Kirazlı	0	0	0	0	0
Other	44	15	10	0	0
Total cash costs (co-product) (US\$/oz)	802	722	736	669	663
Mulatos	786	787	782	760	780
Young-Davidson	821	809	896	728	712
Island Gold	591	494	487	494	476
Kirazlı	0	0	0	0	0
Reported AISC (co-product) (US\$/oz)	990	961	975	891	886
Fully loaded costs (co-product) (US\$/oz)	1,239	1,234	1,270	1,108	1,120

All US\$m unless noted					
Valuation					
	2018	2019E	2020E	2021E	2022E
P/E (x)	112.6	30.2	25.1	16.2	14.5
P/CF (x)	10.4	7.7	7.6	6.1	5.7
EV/EBITDA (x)	9.8	7.2	6.7	5.5	5.1
FCF/EV yield*	-0.4%	0.1%	2.9%	7.9%	5.1%

Net Asset Value					
	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
Young-Davidson (100.0%), Canada (ON)	928	2.35	34%	32%	32%
Island Gold (100.0%), Canada (ON)	900	2.28	33%	10%	40%
Mulatos (100.0%), Mexico	271	0.69	10%	17%	28%
Lynn Lake (100.0%), Canada (MB)	174	0.44	6%	18%	0%
Kirazlı (100.0%), Turkey	201	0.51	7%	7%	0%
Aği Dağı (100.0%), Turkey	139	0.35	5%	11%	0%
Camyurt (100.0%), Turkey	65	0.16	2%	5%	0%
Gold exploration properties	5	0.01	0%	0%	0%
Equity investments	8	0.02	0%	0%	0%
Other	31	0.08	1%	0%	0%
Total mining and investment assets	2,723	6.90	100%	100%	100%
Balance sheet items and expenditures	-59	-0.15			
Total	2,664	6.75			
P/NAV at spot gold (x)		0.84			

Gold reserves and resources					
Proven and probable					
	2014	2015	2016	2017	2018
Tonnes (m)	46.6	109.7	184.5	203.4	199.4
Grade (g/t)	1.2	1.7	1.3	1.5	1.5
Oz (m)	1.7	5.9	7.7	9.8	9.7
Assumed reserve additions (moz)					3.7
LOM production (moz)					11.2
Measured, indicated & inferred (excl)					
Oz (m)	10.4	15.4	13.6	12.1	12.7
Reserve and resource statistics					
Reserves/sh (x1,000)	9.0	22.1	25.2	25.2	24.8
Reserves & resources/sh (x1,000)	63.6	80.2	69.8	56.4	57.2
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	494				91
Total acquisition cost (US\$/oz)	1,128				209



* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
Source: RBC Capital Markets estimates, company reports, Bloomberg

(Priced as of market close on November 29, 2019 ET)

All US\$m unless noted					
Input Prices					
	2018	2019E	2020E	2021E	2022E
Key commodities					
Gold (US\$/oz)	1,269	1,387	1,464	1,464	1,464
Silver (US\$/oz)	15.71	16.11	17.03	17.03	17.03
Oil (US\$/bbl)	65	57	58	58	59
Key currencies					
US\$/C\$	0.77	0.75	0.75	0.75	0.75
US\$/EUR	1.18	1.12	1.10	1.10	1.10
TRY/US\$	4.71	5.66	5.75	5.75	5.75
MXN/US\$	19.22	19.32	19.55	19.55	19.55

Income Statement					
	2018	2019E	2020E	2021E	2022E
Total revenue	652	670	680	748	790
% gold	100%	100%	100%	100%	100%
% silver	0%	0%	0%	0%	0%
% copper	0%	0%	0%	0%	0%
% other	0%	0%	0%	0%	0%
Operating costs	409	351	342	342	358
G&A	24	29	28	28	28
Exploration	11	7	9	9	8
Depreciation	167	164	164	179	190
Other	0	0	0	0	0

Adjusted EBITDA					
	2018	2019E	2020E	2021E	2022E
Adjusted EBITDA	208	282	301	369	396
Adjusted EBIT	41	119	138	190	206
Net interest expense	2	3	2	-6	-13
Unusual/other items	-81	-2	-4	12	26
EBT	-38	119	136	196	219
Taxes	34	39	48	59	66
Minority interest	0	0	0	0	0
Other	0	0	0	0	0
Net income (reported)	-73	80	88	137	153
Net income (adjusted)	20	73	88	137	153
EPS (reported) (US\$/sh)	-0.19	0.20	0.23	0.35	0.39
EPS (adjusted) (US\$/sh)	0.05	0.19	0.23	0.35	0.39
Average shares (m)	390	391	391	391	391

Cash Flow Statement					
	2018	2019E	2020E	2021E	2022E
Net income (reported)	-73	80	88	137	153
Depreciation	167	164	164	179	190
Other	118	44	42	50	48
Operating cash flow	212	287	293	366	391
Operating cash flow (US\$/sh)	0.54	0.73	0.75	0.94	1.00
Working capital changes	2	-29	0	0	0
Cash from operations	214	259	293	366	391
Capital expenditure	-222	-256	-235	-206	-287
Net investments	25	-2	0	0	0
Investing cash flow	-197	-258	-235	-206	-287
Common share dividends	8	16	16	16	16
Debt additions	0	0	0	0	0
Debt repayments	-4	0	0	0	0
Equity financing	4	15	0	0	0
Other net financing	-9	-30	-16	-16	-16
Financing cash flow	-9	-15	-16	-16	-16
Foreign exchange	-3	1	0	0	0
Change in cash	5	-13	43	145	88
Free cash flow*	-8	3	59	161	104
Free cash flow* (\$/sh)	-0.02	0.01	0.15	0.41	0.27

Balance Sheet					
	2018	2019E	2020E	2021E	2022E
Assets					
Cash	206	193	235	380	468
Short-term investments	8	17	17	17	17
Other current assets	174	192	192	192	192
Current assets	388	384	427	572	660
Non-current assets	2,888	2,976	3,047	3,074	3,171
Total assets	3,268	3,360	3,475	3,646	3,831
Liabilities					
Short-term debt	3	0	0	0	0
Current liabilities	128	124	124	124	124
Long-term debt	0	0	0	0	0
Other non-current liabilities	538	559	593	634	673
Total liabilities	666	683	716	758	797
Total shareholder equity	2,602	2,677	2,758	2,888	3,034
Net debt	-211	-209	-252	-397	-485
Net debt / EBITDA (x)	-1.0	-0.7	-0.8	-1.1	-1.2
ROE (Net income/Equity)	-2.7%	3.0%	3.2%	4.9%	5.2%
ROA (Net income/Total assets)	-2.2%	2.4%	2.6%	3.9%	4.1%
ROIC (NOPAT/Assets + Net debt)	0.3%	3.3%	3.6%	5.3%	5.6%
CROIC (FCF/Equity + Total debt)*	-0.3%	0.1%	2.2%	5.7%	3.5%

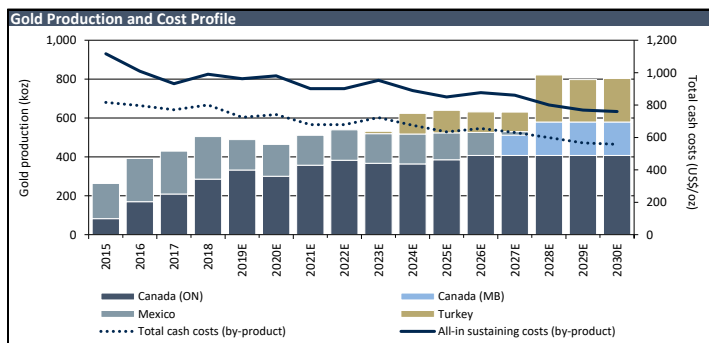
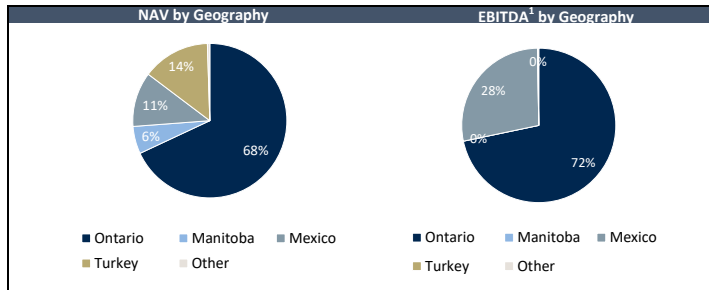
Alamos Gold Inc. (AGI US, AGI CN): Forecasts at RBC price deck

Rating	Sector Perform	Basic shares (m)	391.2	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	394.6/402.7	Josh Wolfson, CFA
Target price at RBC price deck	US\$6.50	Basic mkt cap (US\$m)	2,218	(416) 842-9893
Share price	US\$5.67	Enterprise value (US\$m)	2,032	josh.wolfson@rbccm.com

	Year Ended December 31						Year Ended December 31				
	2018	2019E	2020E	2021E	2022E		2018	2019E	2020E	2021E	2022E
Operating statistics						Input Prices					
Equity gold production (koz)	505	489	465	511	540	Key commodities					
Mulatos	176	141	154	153	156	Gold (US\$/oz)	1,269	1,390	1,500	1,450	1,450
Young-Davidson	180	185	151	208	227	Silver (US\$/oz)	15.71	16.23	17.50	17.50	17.50
Island Gold	106	147	150	149	157	Oil (US\$/bbl)	65	57	58	58	59
Kirazli	0	0	0	0	0	Key currencies					
Other	44	15	10	0	0	US\$/C\$	0.77	0.76	0.76	0.77	0.78
Total cash costs (co-product) (US\$/oz)	802	725	742	679	679	US\$/EUR	1.18	1.11	1.10	1.11	1.13
Mulatos	786	787	784	763	786	TRY/US\$	4.71	5.69	6.27	5.96	5.64
Young-Davidson	821	814	905	744	736	MXN/US\$	19.22	19.26	19.14	18.98	18.82
Island Gold	591	496	493	503	491						
Kirazli	0	0	0	0	0						
Reported AISC (co-product) (US\$/oz)	990	963	980	902	902	Valuation					
Fully loaded costs (co-product) (US\$/oz)	1,239	1,237	1,279	1,117	1,134	P/E (x)	112.6	30.2	22.7	17.2	15.7
						P/CF (x)	10.4	7.7	7.3	6.2	5.9
						EV/EBITDA (x)	9.8	7.2	6.4	5.7	5.4
						FCF/EV yield*	-0.4%	0.1%	3.5%	7.3%	4.4%

Net Asset Value	NAV (\$m)	/sh (\$)	% NAV	% Reserve	%EBITDA†
Young-Davidson (100.0%), Canada (ON)	804	2.04	34%	32%	32%
Island Gold (100.0%), Canada (ON)	817	2.07	34%	10%	40%
Mulatos (100.0%), Mexico	249	0.63	10%	17%	28%
Lynn Lake (100.0%), Canada (MB)	137	0.35	6%	18%	0%
Kirazli (100.0%), Turkey	169	0.43	7%	7%	0%
Aği Dağı (100.0%), Turkey	111	0.28	5%	11%	0%
Çamyurt (100.0%), Turkey	59	0.15	2%	5%	0%
Gold exploration properties	5	0.01	0%	0%	0%
Equity investments	8	0.02	0%	0%	0%
Other	22	0.06	1%	0%	0%
Total mining and investment assets	2,382	6.03	100%	100%	100%
Balance sheet items and expenditures	-59	-0.15			
Total	2,322	5.89			
P/NAV at RBC price deck (x)		0.96			

Gold reserves and resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	46.6	109.7	184.5	203.4	199.4
Grade (g/t)	1.2	1.7	1.3	1.5	1.5
Oz (m)	1.7	5.9	7.7	9.8	9.7
Assumed reserve additions (moz)					3.7
LOM production (moz)					11.2
Measured, indicated & inferred (excl)					
Oz (m)	10.4	15.4	13.6	12.1	12.7
Reserve and resource statistics					
Reserves/sh (x1,000)	9.0	22.1	25.2	25.2	24.8
Reserves & resources/sh (x1,000)	63.6	80.2	69.8	56.4	57.2
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	494		EV/resource (US\$/oz)		91
Total acquisition cost (US\$/oz)	1,148		EV/reserve (US\$/oz)		209



Income Statement	2018	2019E	2020E	2021E	2022E
Total revenue	652	671	697	741	782
% gold	100%	100%	100%	100%	100%
% silver	0%	0%	0%	0%	0%
% copper	0%	0%	0%	0%	0%
% other	0%	0%	0%	0%	0%
Operating costs	409	352	345	347	366
G&A	24	29	28	28	28
Exploration	11	7	9	9	8
Depreciation	167	164	164	179	190
Other	0	0	0	0	0
Adjusted EBITDA	208	282	315	357	380
Adjusted EBIT	41	119	152	178	190
Net interest expense	2	3	2	-6	-13
Unusual/other items	-81	-2	-4	12	25
EBT	-38	119	150	184	202
Taxes	34	39	53	55	61
Minority interest	0	0	0	0	0
Other	0	0	0	0	0
Net income (reported)	-73	80	98	129	142
Net income (adjusted)	20	73	98	129	142
EPS (reported) (US\$/sh)	-0.19	0.20	0.25	0.33	0.36
EPS (adjusted) (US\$/sh)	0.05	0.19	0.25	0.33	0.36
Average shares (m)	390	391	391	391	391
Cash Flow Statement					
Net income (reported)	-73	80	98	129	142
Depreciation	167	164	164	179	190
Other	118	44	45	47	44
Operating cash flow	212	287	306	355	376
Operating cash flow (US\$/sh)	0.54	0.73	0.78	0.91	0.96
Working capital changes	2	-29	0	0	0
Cash from operations	214	259	306	355	376
Capital expenditure	-222	-256	-235	-206	-287
Net investments	25	-2	0	0	0
Investing cash flow	-197	-258	-235	-206	-287
Common share dividends	8	16	16	16	16
Debt additions	0	0	0	0	0
Debt repayments	-4	0	0	0	0
Equity financing	4	15	0	0	0
Other net financing	-9	-30	-16	-16	-16
Financing cash flow	-9	-15	-16	-16	-16
Foreign exchange	-3	1	0	0	0
Change in cash	5	-13	55	134	73
Free cash flow*	-8	3	71	149	88
Free cash flow* (\$/sh)	-0.02	0.01	0.18	0.38	0.23
Balance Sheet					
Assets					
Cash	206	193	248	381	454
Short-term investments	8	17	17	17	17
Other current assets	174	192	192	192	192
Current assets	380	384	440	573	646
Non-current assets	2,888	2,976	3,047	3,074	3,171
Total assets	3,268	3,360	3,487	3,647	3,817
Liabilities					
Short-term debt	3	0	0	0	0
Current liabilities	128	124	124	124	124
Long-term debt	0	0	0	0	0
Other non-current liabilities	538	559	595	634	670
Total liabilities	666	683	719	758	793
Total shareholder equity	2,602	2,678	2,768	2,889	3,024
Net debt	-211	-209	-265	-398	-471
Net debt / EBITDA (x)	-1.0	-0.7	-0.8	-1.1	-1.2
ROE (Net income/Equity)	-2.7%	3.0%	3.6%	4.6%	4.8%
ROA (Net income/Total assets)	-2.2%	2.4%	2.8%	3.6%	3.8%
ROIC (NOPAT/Assets + Net debt)	0.3%	3.3%	4.0%	4.9%	5.1%
CROIC (FCF/Equity + Total debt)*	-0.3%	0.1%	2.6%	5.3%	3.0%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
 Source: RBC Capital Markets estimates, company reports, Bloomberg

(Priced as of market close on November 29, 2019 ET)

Valuation

Our price target of US\$6.50 is based upon 1.0x our risk adjusted NAV at a long-term gold price of US\$1,400/oz and 19x our 2020-2021 SFCF estimate, which would be equivalent to 8x EBITDA. These multiples are relatively in line with the average for the intermediate producer group, reflecting the company's favourable financial positioning and North American operating focus, but mixed historical execution and long-term strategic uncertainties. Our Sector Perform rating is supported by AGI's implied return to our price target relative to its peers, while accounting for its company specific risks.

Risks to rating and price target

In addition to general operating and financial risks for AGI related to commodities (gold) and FX (USD, CAD), we highlight:

- Transition to higher-grade but more metallurgically complex Mulatos ore in 2020
- Ongoing permitting uncertainties, delays, and political risk uncertainty in Turkey
- Potential expiration of tax incentives in Turkey
- Achievement of ramp-up and production targets at Young-Davidson, La Yaqui and Island Gold
- Achievement of permitting and construction projections at Turkish portfolio, Lynn Lake, and Esperanza
- M&A risk given growth oriented nature of business model

Company description

Alamos Gold is an intermediate gold producer with four producing assets across Canada (Ontario) and Mexico, and a suite of development-stage projects in Turkey, Mexico and Canada (Manitoba). 2019 guidance outlines production of 480-520 Koz at AISC of US\$920-960/oz, with ~70% of current EBITDA generated from Canadian assets and 30% from Mexico.

B2Gold Corp.

Harvest season is here

Our view: Interim 2020-22 FCF for BTG is forecast to be amongst the highest under coverage. While portfolio duration risk is elevated, necessitating productive capital allocation, the company has generated historical upside via development success and maintains incremental opportunities at its Fekola and Otjikoto mines to partially mitigate our forecast production declines ahead. We are assuming coverage of BTG with an Outperform rating and US\$4.50 PT.

Key points:

Exceptional FCF starting now. In 2020/21, we forecast BTG will generate an FCF/EV yield at spot gold of 10.7%/9.4% (group average: 5.9%/4.8%), positioning the company in the first quartile amongst our North American coverage. As a result, we forecast BTG transitioning to being in a net cash position by 1H20 (3Q19: \$228m net debt), and thereafter cash balances will continue to sharply grow. Over a 3-year period at spot gold, we calculate BTG could generate an impressive US\$1.2b in free cash flow, representing a total 33% of the company's current EV. On this basis, capital allocation will be of utmost importance for company management. On a longer-term basis, BTG shares are valued at a fair premium, representing a P/NAV at spot gold of 1.70x (peer group: 1.09x).

Sharp production declines forecast require planning. Production forecasts for BTG's existing operating portfolio and reserves outline severe declines in ~2025, stemming from the completion of a high grade Fekola sequence, low grade stockpile processing at Masbate, and reserve depletion at Otjikoto. In our view, project development is expected to remain a core focus and strategy of the company. Today, BTG has discussed two incremental potential opportunities within its portfolio, Otjikoto underground (4Q19 update) and Fekola underground (no timelines), while larger opportunities outlined include Fekola's Mamba/Anaconda project, where economics are unclear. The Gramalote project in Colombia (50/50 B2-Anglogold), where 2017 economics outline high initial capital requirements and low returns, is expected to be the focus of an optimization effort (4Q20 feasibility study update). In our view, current Gramalote details outline low financial returns, and project advancement on a similar basis has the potential to impact our outlook for the company.

Above-average concentration and geopolitical risk factors. In addition to capital allocation uncertainties, BTG is exposed to elevated geopolitical risk exposure, given the company's operating activity in Mali, Philippines, and Namibia, and its development projects in Colombia and Burkina Faso. The company also generates the vast majority of its value from its Fekola mine (62% of NAV), which naturally exposes it to higher concentration risk factors.

Sector: Precious Minerals & Diamonds - small/mid cap

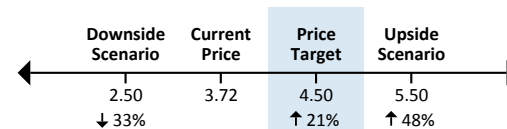
Outperform

NYSE: BTG; USD 3.72; NYSE American: BTG

Price Target USD 4.50

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input checked="" type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	1,026.0	Market Cap (MM):	3,757
Dividend:	0.00	Yield:	0.0%
NAVPS:	2.03	P/NAVPS:	1.83x
		Avg. Daily Volume:	5,517,649

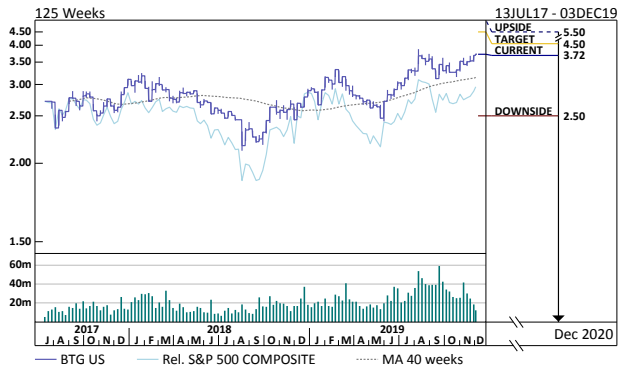
RBC Estimates

FY Dec	2018A	2019E	2020E	2021E	
EPS, Adj Basic	0.10	0.25	0.37	0.21	
P/AEPS	37.2x	14.9x	10.1x	17.7x	
CFPS, Adj Basic	0.41	0.47	0.68	0.60	
P/ACFPS	9.1x	7.9x	5.5x	6.2x	
FCFPS	0.14	0.20	0.44	0.36	
P/FCF	26.6x	18.6x	8.5x	10.3x	
Production	935.5	851.3	888.6	818.0	
EPS, Adj Basic		Q1	Q2	Q3	Q4
2018		0.06A	0.02A	0.01A	0.01A
2019		0.03A	0.05A	0.09A	0.07E
2020		0.09E	0.09E	0.09E	0.10E
CFPS, Adj Basic					
2018		0.13A	0.08A	0.14A	0.07A
2019		0.08A	0.10A	0.14A	0.14E
2020		0.16E	0.16E	0.17E	0.19E

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: B2Gold Corp.



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our price target of US\$4.50 is based upon 1.5x our risk adjusted NAV at a long-term gold price of US\$1,400/oz and 15x our 2020-2021 SFCF estimate, which would be equivalent to 9x EBITDA. These multiples are above the average for the intermediate producer group, supported by the company's historical guidance and exploration achievements and its favourable execution. Our Outperform rating is supported by BTG's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Upside scenario

Our upside value of US\$5.50 is based upon higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside value of US\$2.50 is based upon lower long-term gold prices of US\$1,200/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Investment summary

B2Gold is an intermediate gold producer with a portfolio of three operating mines across Mali, the Philippines, and Namibia, and development projects in Colombia and Burkina Faso. 2019 guidance outlines production of 935-975 Koz at AISC of US\$835-875/oz. The company has outlined a development-focused growth strategy, through exploration and accretive acquisitions.

Investment outlook:

- B2Gold is well positioned to deliver strong free cash flow in upcoming years as it benefits from high Fekola mine output in Mali. The increase in free cash flow should deleverage BTG's balance sheet by year-end 2020.
- Management has outlined a preference towards developing internal opportunities, with a focus on near-mine opportunities such as Otjikoto UG and Fekola regional upside, or Gramalote development. We expect mine site exploration will also be a key focus for the company across its portfolio.
- Our Outperform rating is predicated on BTG's strong interim 2020-22 FCF forecast, which is expected to be amongst the highest under coverage. While portfolio duration risk is elevated, necessitating capital allocation productivity, the company has generated historical upside via development success and maintains incremental opportunities at its Fekola and Otjikoto mines to partially mitigate declines ahead.

Upcoming catalysts and milestones

- Fekola resource update (4Q19), revised mine plan (1Q20), and expansion completion (4Q20)
- Restart of infill drilling at Gramalote (4Q19) and FS update (4Q20)
- Otjikoto exploration results and Wolfshag underground study (4Q19)

Key risks

In addition to general operating and financial risks for BTG related to commodities (gold and oil) and FX (USD, CAD, CFA and NAD), we highlight:

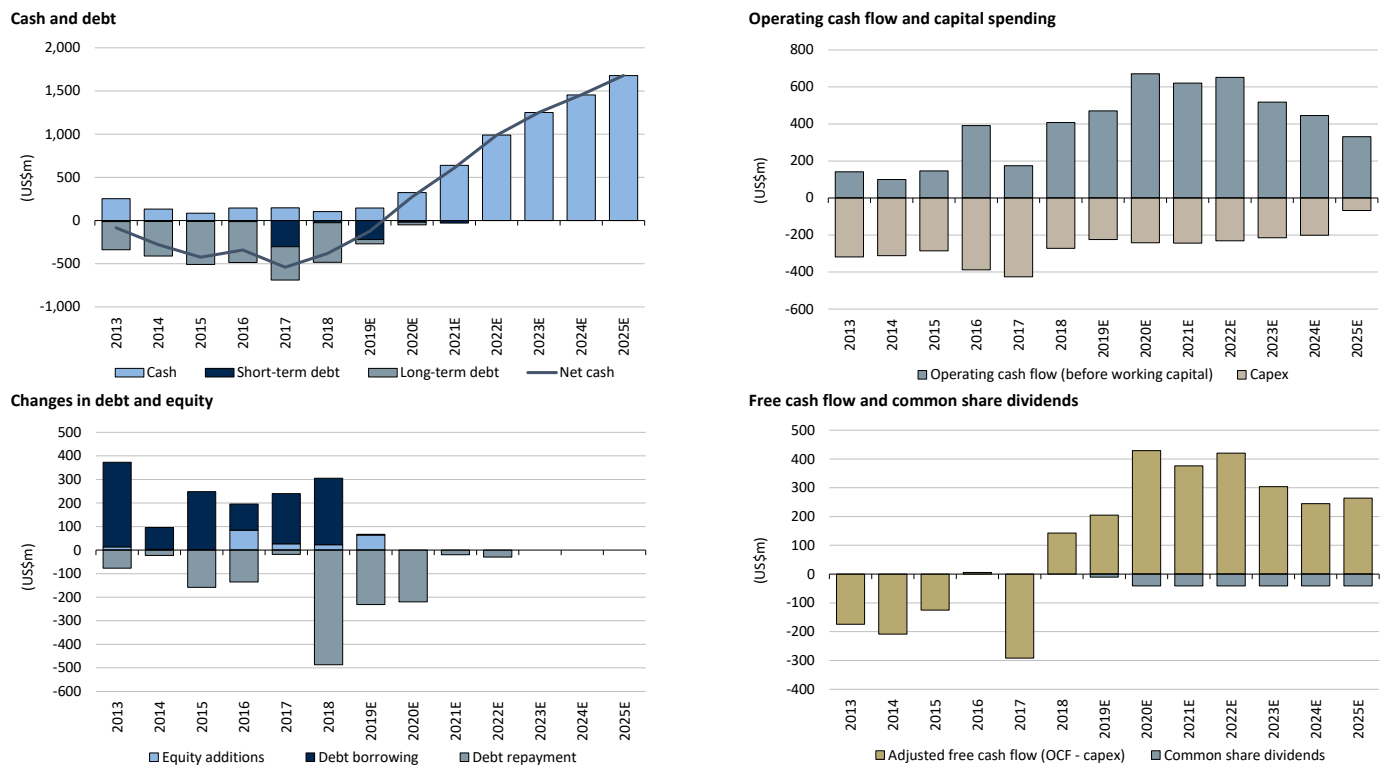
- Heightened mid-2020 duration risk as Fekola grade declines, Masbate stockpile processing begins, and Otjikoto depleted
- Increasing capital allocation uncertainties over time as FCF is generated
- Elevated geopolitical risk exposure, including Mali, Philippines, and Namibia

Exhibit 2: B2Gold – Catalysts, opportunities and risks

Catalysts and milestones	<ul style="list-style-type: none"> Analyst and investor day (Dec 9) Fekola resource update (4Q19), revised mine plan (1Q20), and Fekola mill expansion completion to 7.5 Mtpa (3Q20) Otijkoto exploration results and Wolfshag underground study (4Q19) Gramalote feasibility study update (4Q20)
Opportunities	<ul style="list-style-type: none"> Increasing return of capital to shareholders with deleveraging Positive operational and exploration updates from Fekola Potential development of regional Fekola opportunities, including Mamba and Anaconda discoveries Potential Otijkoto mine life extension and Wolfshag underground development Advancement of the Gramalote development project (50% BTG, 50% AU)
Risks and uncertainties	<ul style="list-style-type: none"> Commodity risk related to movements in gold and oil prices Currency risk related to movements in the CFA (linked to EUR) and NAD (linked to ZAR) Heightened mid-2020 duration risk as Fekola grade declines (starting ~1Q23), Masbate stockpile processing begins, and Otijkoto depleted Increasing capital allocation uncertainties over time as FCF is generated Elevated geopolitical risk exposure, including Mali, Philippines, and Namibia, Potential BEE changes in Namibia Jurisdictional risk related to potential changes in financial and environmental policies in countries of operation Potential M&A risk given growth oriented nature of business model

Source: Company reports, RBC Capital Markets estimates

Exhibit 3: B2Gold – Financial forecasts at spot gold



Source: Company reports, RBC Capital Markets estimates (Priced as of market close November 29, 2019)

Exhibit 4: B2Gold – Net asset valuation at spot gold

B2Gold Corp.									
Net asset valuation at spot gold (US\$)									
Shares (FD, FF, ITM) (m)	1,035.845								
Market capitalization (US\$m)	3,812								
	Risk-weighted NAV			NAV at various discount rates					
	Discount rate	(\$m)	(/sh) (\$)	5%		7%		10%	
				(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)
Gold assets									
Fekola (80.0%), Mali	5%	\$1,598	1.54	\$1,598	1.54	\$1,481	1.43	\$1,332	1.29
Masbate (100.0%), Philippines	5%	\$469	0.45	\$469	0.45	\$437	0.42	\$396	0.38
Otjikoto (90.0%), Namibia	5%	\$394	0.38	\$394	0.38	\$373	0.36	\$345	0.33
Fekola Regional - NOT LINKED (80.0%), Mali	5%	\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00
Kiaka (81.0%), Burkina Faso	5%	\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00
Gramalote (49.0%), Colombia	5%	\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00
Gold exploration properties		\$111	0.11	\$111	0.11	\$111	0.11	\$111	0.11
Gold hedge book		\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00
Total gold assets		\$2,573	2.48	\$2,573	2.48	\$2,403	2.32	\$2,185	2.11
Other assets									
Other exploration		\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00
Other hedge book		\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00
Investments		\$63	0.06	\$63	0.06	\$63	0.06	\$63	0.06
Total other assets		\$63	0.06	\$63	0.06	\$63	0.06	\$63	0.06
Balance sheet and expenses									
Basic working capital		\$327	0.32	\$327	0.32	\$327	0.32	\$327	0.32
Value of ITM instruments		\$8	0.01	\$8	0.01	\$8	0.01	\$8	0.01
Estimated working capital additions		\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00
Long-term debt		(\$340)	-0.33	(\$340)	-0.33	(\$340)	-0.33	(\$340)	-0.33
Estimated debt additions		\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00
General & administrative expense	5%	(\$303)	-0.29	(\$303)	-0.29	(\$280)	-0.27	(\$251)	-0.24
Exploration expense	5%	\$0	0.00	\$0	0.00	\$0	0.00	\$0	0.00
Community and other expense	5%	(\$18)	-0.02	(\$18)	-0.02	(\$16)	-0.02	(\$15)	-0.01
Interest tax shield	5%	\$8	0.01	\$8	0.01	\$8	0.01	\$8	0.01
Reclamation & closure liability		(\$76)	-0.07	(\$76)	-0.07	(\$76)	-0.07	(\$76)	-0.07
Net financial assets		(\$394)	-0.38	(\$394)	-0.38	(\$370)	-0.36	(\$339)	-0.33 #
Net asset value (US\$)		\$2,241	2.16	\$2,241	2.16	\$2,095	2.02	\$1,908	1.84
Share price (US\$)		3.68	3.68	3.68	3.68	3.68	3.68	3.68	3.68
NAV multiple (P/NAV) (x)		1.70	1.70	1.70	1.70	1.82	1.82	2.00	2.00
Input assumptions		2019E	2020E	2021E	Long term				
Gold price (US\$/oz)		1,387	1,464	1,464	1,464				
Silver price (US\$/oz)		16.11	17.03	17.03	17.03				
Copper price (US\$/oz)		2.73	2.71	2.73	2.81				

* Norte Abierto, Donlin, Alturas, Massawa accounted for as exploration properties
 Note: Base metals cash flow discounted at a minimum 5% discount rate
 Source: Company reports, RBC Capital Markets estimates (Priced as of market close November 29, 2019)

B2Gold Corp. (BTG US, BTO CN): Forecasts at spot gold

Rating	Outperform	Basic shares (m)	1,026.0	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	1,035.8/1,083.4	Josh Wolfson, CFA
Target price at RBC price deck	US\$4.50	Basic mkt cap (US\$m)	3,776	(416) 842-9893
Share price	US\$3.68	Enterprise value (US\$m)	3,996	josh.wolfson@rbccm.com

All US\$m unless noted		Year Ended December 31				
Operating statistics		2018	2019E	2020E	2021E	2022E
Consolidated gold production (koz)		954	868	969	952	959
Equity gold production (koz)		936	851	919	818	822
Fekola		439	450	563	472	485
Masbate		216	218	204	204	195
Otjikoto		151	153	152	142	142
Other		129	30	0	0	0
Total cash costs (co-product) (US\$/oz)		577	567	536	615	621
Fekola		442	487	417	522	516
Masbate		629	660	757	750	793
Otjikoto		553	546	682	733	741
Total cash costs (by-product) (US\$/oz)		577	568	536	615	621
Reported AISC (by-product) (US\$/oz)		758	793	712	865	873
Fully loaded costs (co-product) (US\$/oz)		1,033	1,034	997	1,078	1,047

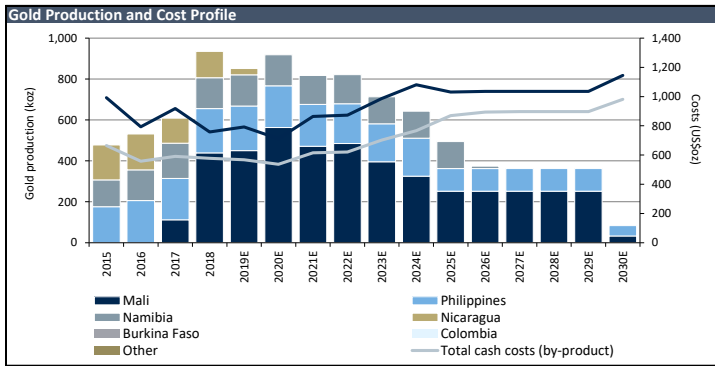
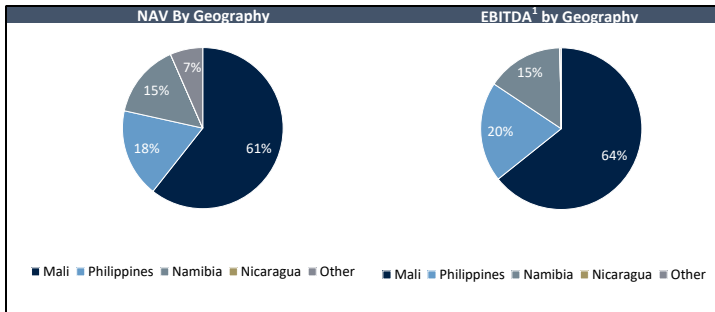
All US\$m unless noted		Year Ended December 31				
Input prices		2018	2019E	2020E	2021E	2022E
Key commodities						
Gold (US\$/oz)		1,269	1,387	1,464	1,464	1,464
Silver (US\$/oz)		15.71	16.11	17.03	17.03	17.03
Oil (US\$/bbl)		65	57	58	58	59
Key currencies						
US\$/C\$		0.77	0.75	0.75	0.75	0.75
US\$/EUR		1.18	1.11	1.10	1.10	1.10
ZAR/US\$		13.17	14.49	14.65	14.65	14.65

All US\$m unless noted		Year Ended December 31				
Valuation data		2018	2019E	2020E	2021E	2022E
P/E (x)		35.5	15.0	10.5	15.2	16.3
P/CF (x)		8.9	7.9	5.6	6.1	5.8
EV/EBITDA (x)		7.0	6.4	5.1	6.4	6.4
FCF/EV yield*		3.6%	5.1%	10.7%	9.4%	10.5%

Net asset value (US\$)	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
Fekola (80.0%), Mali	1,598	1.54	61%	46%	64%
Masbate (100.0%), Philippines	469	0.45	18%	38%	20%
Otjikoto (90.0%), Namibia	394	0.38	15%	16%	15%
Investments	63	0.06	2%	0%	0%
Other	111	0.11	4%	0%	0%
Total mining and investment assets	2,635	2.54	100%	100%	100%
Balance sheet items and expenditures	-394	-0.38			
Total	2,241	2.16			
P/NAV at spot gold (x)		1.70			

Gold Reserves and Resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	137.5	168.4	165.3	149.0	135.4
Grade (g/t)	1.1	1.3	1.3	1.4	1.3
Oz (m)	4.8	7.5	7.3	6.5	5.8
Assumed reserve additions (moz)					3.2
LOM production (moz)					6.2
Measured, indicated & inferred (excl)					
Oz (m)	16.1	12.1	12.2	20.8	22.7
Reserve and resource statistics					
Reserves/sh (x1,000)	5.3	8.0	7.5	6.7	5.8
Reserves & resources/sh (x1,000)	22.8	21.1	20.2	27.9	28.4
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	797				140
Total acquisition cost (US\$/oz)	1,517				687

Income statement	2018	2019E	2020E	2021E	2022E
Total revenue	1,225	1,195	1,419	1,393	1,403
% gold	100%	100%	100%	100%	100%
% silver	0%	0%	0%	0%	0%
% copper	0%	0%	0%	0%	0%
% other	0%	0%	0%	0%	0%
Operating costs	554	487	518	576	584
G&A	78	69	68	68	68
Exploration	0	0	0	0	0
Depreciation	306	254	276	269	297
Other	27	25	68	163	173
Adjusted EBITDA	574	621	780	622	621
Adjusted EBIT	260	360	489	317	280
Net interest expense	32	27	10	-4	-22
Unusual/other items	-99	-35	44	167	213
EBT	193	351	543	480	472
Taxes	148	155	185	163	160
Minority interest	16	17	0	68	80
Other	0	12	0	0	0
Net income (reported)	29	191	359	249	231
Adjusted EBIT	102	249	359	249	231
EPS (reported) (\$/sh)	0.03	0.19	0.35	0.24	0.23
EPS (adjusted) (\$/sh)	0.10	0.24	0.35	0.24	0.23
Average shares (m)	985.6	1,013.7	1,026.0	1,026.0	1,026.0



* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
Source: RBC Capital Markets estimates, company reports, Bloomberg

Cash flow statement	2018	2019E	2020E	2021E	2022E
Net income (reported)	29	191	359	249	231
Depreciation	306	254	276	269	297
Other	72	27	37	102	123
Operating cash flow	408	471	671	620	652
Operating cash flow (\$/sh)	0.41	0.46	0.65	0.60	0.64
Working capital changes	6	-42	0	0	0
Cash from operations	414	430	671	620	652
Capital expenditure	-272	-225	-242	-244	-231
Net investments	-2	34	10	0	0
Investing cash flow	-273	-191	-232	-244	-231
Common share dividends	0	10	41	41	41
Debt additions	282	3	0	0	0
Debt repayments	-487	-231	-220	-20	-29
Equity financing	23	64	0	0	0
Other net financing	-2	-12	-41	-41	-41
Financing cash flow	-184	-176	-261	-61	-71
Foreign exchange	-2	-30	0	0	0
Change in cash	-45	33	178	315	350
Free cash flow*	142	205	429	376	420
Free cash flow* (\$/sh)	0.14	0.20	0.42	0.37	0.41

Balance sheet	2018	2019E	2020E	2021E	2022E
Assets					
Cash	103	146	324	639	989
Other current assets	260	414	414	414	414
Current assets	363	560	738	1,053	1,403
Non-current assets	2,189	2,052	2,008	1,983	1,917
Total assets	2,552	2,611	2,746	3,036	3,320
Liabilities					
Current liabilities	207	428	228	238	208
Long-term debt	459	49	29	0	0
Other non-current liabilities	275	257	277	362	468
Total liabilities	941	734	534	599	676
Total shareholder equity	1,611	1,877	2,212	2,437	2,644
Net debt	381	124	-274	-609	-989
Net debt / EBITDA (x)	0.7	0.2	-0.4	-1.0	-1.6
ROE (Net income/Equity)	1.8%	10.9%	17.5%	10.7%	9.1%
ROA (Net income/Total assets)	1.1%	7.4%	13.4%	8.6%	7.3%
ROIC (NOPAT/Assets + Net debt)	5.5%	10.3%	15.5%	8.2%	6.9%
CROIC (FCF/Equity + Total debt)*	6.6%	9.6%	19.5%	15.9%	16.5%

(Priced as of market close November 29, 2019)

B2Gold Corp. (BTG US, BTO CN): Forecasts at RBC price deck					
Rating	Outperform	Basic shares (m)	1,026.0	RBC Capital Markets	
Risk	NA	Diluted shares (ITM/FD) (m)	1,035.8/1,083.4	Josh Wolfson, CFA	
Target price at RBC price deck	US\$4.50	Basic mkt cap (US\$m)	3,776	(416) 842-9893	
Share price	US\$3.68	Enterprise value (US\$m)	3,996	josh.wolfson@rbccm.com	

Operating statistics	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Consolidated gold production (koz)	954	868	969	952	959
Equity gold production (koz)	936	851	889	818	822
Fekola	439	450	533	472	485
Masbate	216	218	204	204	195
Otjikoto	151	153	152	142	142
Other	129	30	0	0	0
Total cash costs (co-product) (US\$/oz)	577	567	543	614	620
Fekola	442	487	419	521	515
Masbate	629	660	759	749	792
Otjikoto	553	546	684	732	740
Total cash costs (by-product) (US\$/oz)	577	568	543	614	620
Reported AISC (by-product) (US\$/oz)	758	793	718	864	872
Fully loaded costs (co-product) (US\$/oz)	1,033	1,035	1,024	1,073	1,042

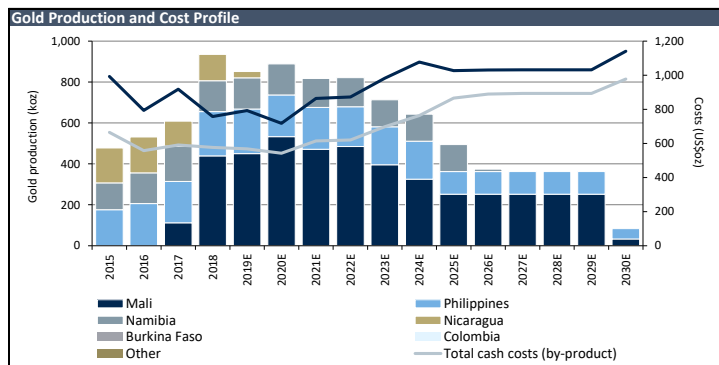
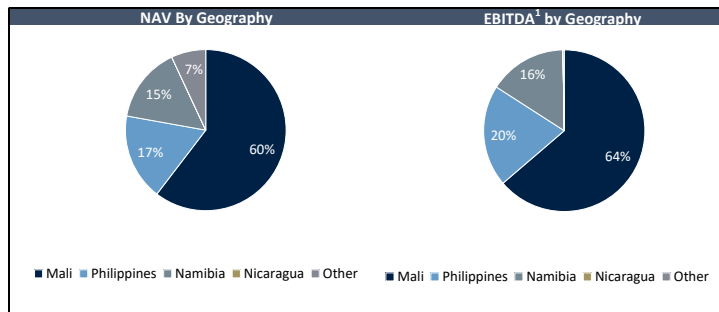
Input prices	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Key commodities					
Gold (US\$/oz)	1,269	1,390	1,500	1,450	1,450
Silver (US\$/oz)	15.71	16.23	17.50	17.50	17.50
Oil (US\$/bbl)	65	57	58	58	59
Key currencies					
US\$/CS	0.77	0.76	0.76	0.77	0.78
US\$/EUR	1.18	1.11	1.10	1.11	1.13
ZAR/US\$	13.17	14.51	15.50	15.00	14.50
Valuation data					
P/E (x)	35.5	15.0	9.9	17.5	16.8
P/CF (x)	8.9	7.9	5.4	6.2	5.9
EV/EBITDA (x)	7.0	6.4	5.1	6.5	6.5
FCF/EV yield*	3.6%	5.2%	11.3%	9.2%	10.3%

Net asset value (US\$)	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
Fekola (80.0%), Mali	1,506	1.45	60%	46%	64%
Masbate (100.0%), Philippines	434	0.42	17%	38%	20%
Otjikoto (90.0%), Namibia	380	0.37	15%	16%	16%
Investments	63	0.06	3%	0%	0%
Other	111	0.11	4%	0%	0%
Total mining and investment assets	2,493	2.41	100%	100%	100%
Balance sheet items and expenditures	-394	-0.38			
Total	2,099	2.03			
P/NAV at RBC price deck (x)		1.82			

Income statement	2018	2019E	2020E	2021E	2022E
Total revenue	1,225	1,197	1,454	1,380	1,390
% gold	100%	100%	100%	100%	100%
% silver	0%	0%	0%	0%	0%
% copper	0%	0%	0%	0%	0%
% other	0%	0%	0%	0%	0%
Operating costs	554	488	520	575	583
G&A	78	69	68	68	68
Exploration	0	0	0	0	0
Depreciation	306	254	276	269	297
Other	27	25	110	161	171
Adjusted EBITDA	574	623	779	612	610
Adjusted EBIT	260	362	480	306	270
Net interest expense	32	27	9	-5	-23
Unusual/other items	-99	-35	87	167	213
EBT	193	353	576	468	460
Taxes	148	156	196	159	156
Minority interest	16	17	0	93	79
Other	0	12	0	0	0
Net income (reported)	29	192	380	216	225
Net income (adjusted)	102	250	380	216	225
EPS (reported) (\$/sh)	0.03	0.19	0.37	0.21	0.22
EPS (adjusted) (\$/sh)	0.10	0.25	0.37	0.21	0.22
Average shares (m)	985.6	1,013.7	1,026.0	1,026.0	1,026.0

Gold Reserves and Resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	137.5	168.4	165.3	149.0	135.4
Grade (g/t)	1.1	1.3	1.3	1.4	1.3
Oz (m)	4.8	7.5	7.3	6.5	5.8
Assumed reserve additions (moz)					3.2
LOM production (moz)					6.1
Measured, indicated & inferred (excl)					
Oz (m)	16.1	12.1	12.2	20.8	22.7
Reserve and resource statistics					
Reserves/sh (x1,000)	5.3	8.0	7.5	6.7	5.8
Reserves & resources/sh (x1,000)	22.8	21.1	20.2	27.9	28.4
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	801		EV/resource (US\$/oz)	140	
Total acquisition cost (US\$/oz)	1,520		EV/reserve (US\$/oz)	687	

Cash flow statement	2018	2019E	2020E	2021E	2022E
Net income (reported)	29	192	380	216	225
Depreciation	306	254	276	269	297
Other	72	27	39	127	121
Operating cash flow	408	473	695	612	643
Operating cash flow (\$/sh)	0.41	0.47	0.68	0.60	0.63
Working capital changes	6	-42	0	0	0
Cash from operations	414	431	695	612	643
Capital expenditure	-272	-225	-242	-244	-231
Net investments	-2	34	10	0	0
Investing cash flow	-273	-191	-232	-244	-231
Common share dividends	0	10	41	41	41
Debt additions	282	3	0	0	0
Debt repayments	-487	-231	-220	-20	-29
Equity financing	23	64	0	0	0
Other net financing	-2	-12	-41	-41	-41
Financing cash flow	-184	-176	-261	-61	-71
Foreign exchange	-2	-30	0	0	0
Change in cash	-45	34	202	307	341
Free cash flow*	142	206	453	368	412
Free cash flow* (\$/sh)	0.14	0.20	0.44	0.36	0.40



Balance sheet	2018	2019E	2020E	2021E	2022E
Assets					
Cash	103	147	350	656	997
Other current assets	260	414	414	414	414
Current assets	363	562	764	1,070	1,412
Non-current assets	2,189	2,052	2,008	1,983	1,917
Total assets	2,552	2,613	2,772	3,053	3,328
Liabilities					
Current liabilities	207	428	228	238	208
Long-term debt	459	49	29	0	0
Other non-current liabilities	275	257	280	389	493
Total liabilities	941	735	537	627	701
Total shareholder equity	1,611	1,878	2,235	2,427	2,627
Net debt	381	122	-300	-627	-997
Net debt / EBITDA (x)	0.7	0.2	-0.4	-1.0	-1.6
ROE (Net income/Equity)	1.8%	11.0%	18.5%	9.3%	8.9%
ROA (Net income/Total assets)	1.1%	7.4%	14.1%	7.4%	7.0%
ROIC (NOPAT/Assets + Net debt)	5.5%	10.3%	14.4%	7.9%	6.6%
CROIC (FCF/Equity + Total debt)*	6.6%	9.7%	20.5%	15.5%	16.2%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
Source: RBC Capital Markets estimates, company reports, Bloomberg

(Priced as of market close November 29, 2019)

Valuation

Our price target of US\$4.50 is based upon 1.5x our risk adjusted NAV at a long-term gold price of US\$1,400/oz and 15x our 2020-2021 SFCF estimate, which would be equivalent to 9x EBITDA. These multiples are above the average for the intermediate producer group, supported by the company's historical guidance and exploration achievements and its favourable execution. Our Outperform rating is supported by BTG's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Risks to rating and price target

In addition to general operating and financial risks for BTG related to commodities (gold and oil) and FX (USD, CAD, CFA and NAD), we highlight:

- Heightened mid-2020 duration risk as Fekola grade declines, Masbate stockpile processing begins, and Otjikoto depleted
- Increasing capital allocation uncertainties over time as FCF is generated
- Elevated geopolitical risk exposure, including Mali, Philippines, and Namibia

Company description

B2Gold is an intermediate gold producer with a portfolio of five operating mines across Mali, the Philippines, Namibia, and Nicaragua and development projects in Burkina Faso. 2019 guidance outlines production of 935-975 Koz at AISC of US\$835-875/oz. The company has outlined a strategy to continue growing through exploration and accretive acquisitions of development-stage precious metal properties, and successfully financing and building mines.

Barrick Gold Corporation

Exploring all avenues with a new perspective

Our view: We believe GOLD's relative premium valuation appropriately reflects the company's positive upcoming catalysts and encouraging expected year-end resource update. Nevada JV resource definition and ongoing exploration success at Fourmile have the potential to be key value drivers for the company in upcoming years. We are assuming coverage of GOLD with an Outperform rating and US\$20 PT.

Key points:

2019 outlook slightly weaker, upcoming positive catalysts. In 3Q19, GOLD issued 5-year guidance, defining interim elevated capital spending. Going forward, we see upcoming catalysts as more constructive, in particular, year-end resources/reserves (1Q20), Pueblo Viejo's plant expansion pre-feasibility results (1Q20), Goldrush/Fourmile exploration (2020), and a 10-year guidance outlook (2Q20), the first such transparent disclosure amongst the large producer group. Should these updates outline positive results relative to our expectations, we see the potential for GOLD's positive momentum to re-establish itself. Our capital spending forecasts are in line with guidance, although we anticipate a deferral of Massawa spending, exclude Kalgoorlie, and smoother Tanzania spending.

Year-end resource statement to be a key update. Barrick's new team has historically emphasized exploration as a core focus, and in our view the company's upcoming resource/reserve update has potential to be an important element to define its future upside. The company has already guided to a base case replacement of reserves and meaningful resource additions at year-end. Thus far, key opportunities outline indications of an initial prospective Fourmile inferred resource, Turquoise Ridge/Twin Creeks upside, Lumwana mine life extension, and Veladero pit expansion upside. While GOLD has quickly outlined aggressive Nevada Gold Mines target resource potential upside, the definition of these resources may require additional time. Nonetheless, the long-term outlook from this complex would appear encouraging.

Favourable outlook supports our positive investment thesis. Our GOLD forecasts reflect the company's updated 5-year guidance, including GOLD's various project opportunities (PV, Veladero, Cortez, Goldrush) and the assumption of ongoing success at Fourmile, in line with achieved results. Our Fourmile NPV currently yields a \$0.9b initial value to Barrick, and \$0b to NEM, given the buy-in terms requiring NEM to purchase its interest at a premium. In our view, our overall constructive outlook for GOLD supports its premium valuation relative to the group at a P/NAV at spot gold of 1.7x (peer average: 1.5x) and 2020E/21E FCF/EV of 3.7%/4.5% (peer average: 4.4%/5.2%). Non-core asset sales, cost reduction, M&A, and execution beyond guidance have the potential to improve our forecasts for the company.

Sector: Precious Minerals & Diamonds - large cap

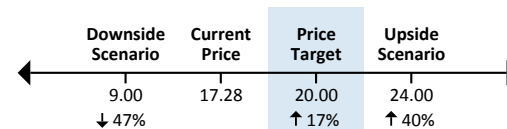
Outperform

NYSE: GOLD; USD 17.28; TSX: ABX

Price Target USD 20.00

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input checked="" type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	1,777.8	Market Cap (MM):	30,719
Dividend:	0.20	Yield:	1.2%
NAVPS:	9.21	P/NAVPS:	1.88x
ROE:	5.2%	Avg. Daily Volume:	10,982,028
Float (MM):	1,747.4		
Debt to Cap:	22%		

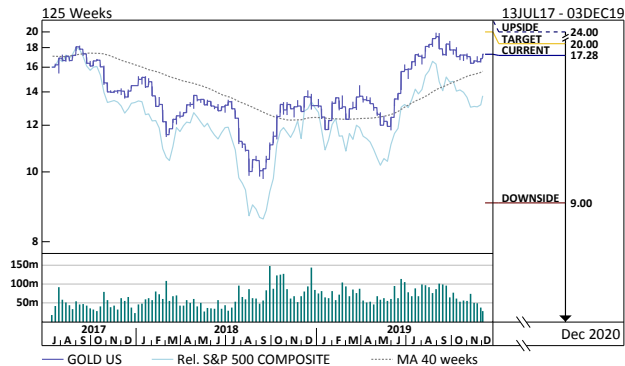
RBC Estimates

FY Dec	2018A	2019E	2020E	2021E
EPS, Adj Basic	0.33	0.47	0.61	0.46
CFPS, Adj Basic	1.59	1.68	2.07	1.82
FCFPS	0.24	0.60	0.80	0.77
P/FCF	72.0x	28.8x	21.6x	22.4x
Production	4,527.0	5,377.2	5,304.6	5,210.5
EPS, Adj Basic	Q1	Q2	Q3	Q4
2018	0.15A	0.07A	0.06A	0.06A
2019	0.11A	0.09A	0.15A	0.12E
2020	0.15E	0.16E	0.15E	0.15E
CFPS, Adj Basic				
2018	0.57A	0.24A	0.47A	0.31A
2019	0.44A	0.29A	0.52A	0.44E
2020	0.53E	0.51E	0.55E	0.48E

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: Barrick Gold Corporation



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our GOLD target price of US\$20 is based upon 1.8x our NAV5% at a long-term gold prices of US\$1,400/oz and 23x our 2020-2021 SFCF estimate, which would be equivalent to 11x EBITDA. These multiples are slightly above the average multiples we use to value the large gold producer peers. Our Outperform rating is supported by GOLD's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Upside scenario

Our upside value of US\$24 is based upon higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside value of US\$9 is based upon lower long-term gold prices of US\$1,200/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Investment summary

Barrick Gold is a senior gold producer with a globally diversified portfolio of gold and copper assets. Company guidance outlines a stable 5-year production and cost profile prior to planned non-core asset sales, including 2019 production of 5.1-5.6 moz at AISC of \$870-920/oz and 5.1-5.6 moz at AISC of \$850-950/oz from 2020-2024. Barrick is focused on integration and portfolio optimization post its recent M&A transactions including the 1Q19 merger with Randgold, 3Q19 Nevada Gold Mines JV with Newmont, and 3Q19 buy-out of Acacia.

Investment outlook

- We view progress toward stated M&A synergy/optimization goals as a key driver for Barrick's shares. The company targets annual synergies of \$450-500m from the Nevada Gold Mines JV.
- Barrick targets \$1.5b+ of non-core asset sales post the Randgold merger and recently announced the \$750m sale of its 50% share of KCGM.
- We expect capital allocation priorities to include advancement of the growth project pipeline and returns of capital through dividends.
- Barrick's recent tax/fiscal settlement agreement for Acacia with the Government of Tanzania removed a key overhang.
- Our Outperform rating is predicated upon our view that GOLD's valuation provides greater upside potential relative to peers given the company's positive upcoming catalysts and encouraging expected year-end resource update.

Upcoming milestones and catalysts

- Demonstration of guided Nevada JV synergies and updates on planned non-core asset sales (4Q19+)
- Corporate ten-year guidance and resource update (1Q20)
- Acacia resumption of concentrate shipments (late 2019) and updated mine plans (2020)
- Updates on and successful advancement of core growth projects including the Pueblo Viejo plant expansion, Goldrush, Fourmile, Cortez Deep South (2019+)

Key risks

In addition to general operating and financial risks for Barrick related to commodities (gold, silver and copper) and FX (CAD, AUD, EUR, CLP), we highlight:

- Increasing capital requirements to sustain existing output and fund new development projects
- Achievement of synergy/optimization targets post the recent M&A transactions
- Political risk exposure to Tanzania, DRC, Mali, the Dominican Republic, Argentina, Chile and Papua New Guinea

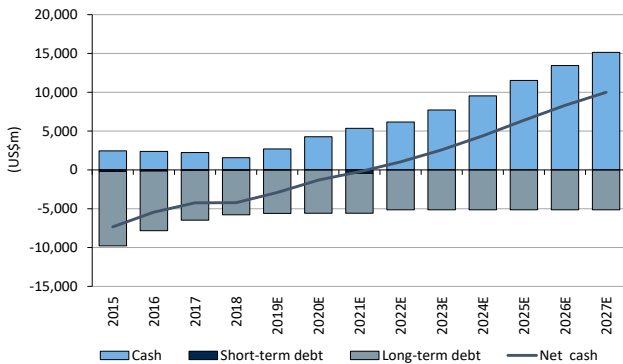
Exhibit 2: Barrick Gold – Catalysts, opportunities and risks

<p>Catalysts and milestones</p>	<ul style="list-style-type: none"> • Corporate ten-year guidance (1Q20) and resource update, in particular at Fourmile, Nevada Gold Mines, Veladero (1Q20) • Acacia resumption of concentrate shipments estimated (late 2019) and updated mine plans (2020) • Pueblo Viejo plant expansion pre-feasibility study results (Q120) • Massawa permitting (2020), and potential construction advancement or divestiture (2020+) • Cortez Hills Deep South initial production (2020) and full production (2022–31) • Goldrush updated decline completion schedule (1Q20), feasibility study (1Q21), and initial/sustained production (2022/24) • Fourmile exploration (ongoing), and expected economic study / Nevada Gold Mines incorporation (~2022-2024 estimated) • Porgera license extension (2020) • Turquoise Ridge shaft project commissioning (4Q19), initial production (2022) and sustained production (2023) • Potential updated economic studies, optimization, and partnerships at Pascua Lama, Alturas and Donlin Gold (2020+)
<p>Opportunities</p>	<ul style="list-style-type: none"> • Nevada optimization and realization of synergies, plus potential for upside beyond original US\$450-500m guidance • Partnership opportunities, including Pascua-Lama, Alturas, and Acacia • Pueblo Viejo potential expansion and reserve upside with tailings expansion • Achievement of \$1.5b asset sale target (incl potential for Norte Abierto, Lagunas Norte, Massawa, Tongon, Lumwana) • Reko Diq arbitration decision upside (2020+)
<p>Risks and uncertainties</p>	<ul style="list-style-type: none"> • Increasing capital requirements to sustain existing output and fund new development projects • Achievement of Barrick-Randgold and Nevada Gold Mines JV M&A targets post the M&A transactions, and potential culture and staffing challenges/differences • Long-term tax uncertainties in the Dominican Republic, DRC fiscal term uncertainties and Mali VAT arbitration • Argentina potential currency restrictions/fiscal term revisions and Chilean tax litigation from Zaldivar sale (reported \$1b) • Declining grade profile at Goldstrike and Pueblo Viejo • Achievement of permitting and construction projections, in particular at Goldrush, Cortez Hills underground and Alturas • Permitting and economic viability of Pascua-Lama • Political risk uncertainty, including exposure to Tanzania, DRC, Mali, the Dominican Republic, Argentina, Chile and PNG • Commodity price risk (most notably gold and copper prices), technical/operating risk and financing risk

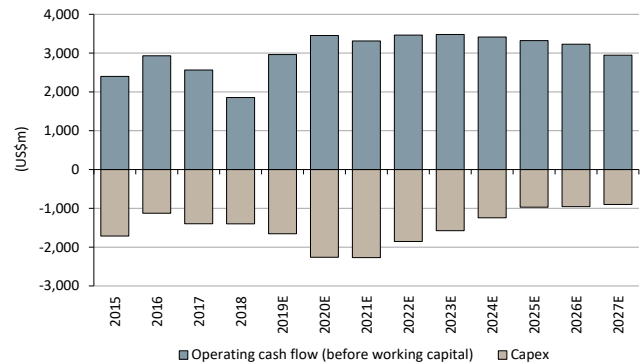
Source: Company reports, RBC Capital Markets estimates

Exhibit 3: Barrick Gold – Financial forecasts at spot gold

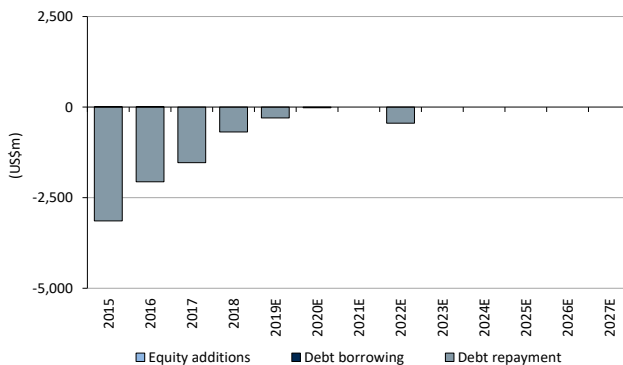
Cash and debt



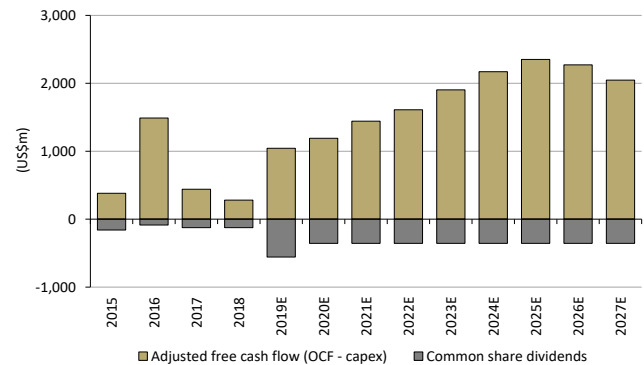
Operating cash flow and capital spending



Changes in debt and equity



Free cash flow and common share dividends



Priced as of market close, November 29, 2019 ET. Source: Company reports, RBC Capital Markets estimates

Exhibit 4: Barrick Gold – Net asset valuation at spot gold

Barrick Gold Corporation									
Net asset valuation at spot gold (US\$)									
Shares (FD, FF, ITM) (m)	1,787								
Market capitalization (US\$m)	30,024								
	Risk-weighted NAV			NAV at various discount rates					
	Discount rate	(\$m)	(/sh) (\$)	5%		7%		10%	
				(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)
Gold assets									
Cortez (61.5%), US (NV)	5%	1,734	0.97	1,734	0.97	1,576	0.88	1,380	0.77
Goldstrike (61.5%), US (NV)	5%	1,823	1.02	1,823	1.02	1,684	0.94	1,506	0.84
Carlin (61.5%), US (NV)	5%	1,125	0.63	1,125	0.63	1,026	0.57	907	0.51
Turquoise Ridge (46.1%), US (NV)	5%	1,796	1.00	1,796	1.00	1,530	0.86	1,239	0.69
Twin Creeks (61.5%), US (NV)	5%	1,416	0.79	1,416	0.79	1,261	0.71	1,075	0.60
Goldrush (61.5%), US (NV)	5%	820	0.46	820	0.46	523	0.29	233	0.13
Fourmile (61.5%), US (NV)	5%	886	0.50	886	0.50	717	0.40	534	0.30
Long Canyon (61.5%), US (NV)	5%	313	0.17	313	0.17	299	0.17	281	0.16
Phoenix (61.5%), US (NV)	5%	690	0.39	690	0.39	632	0.35	559	0.31
Hemlo (100.0%), Canada (ON)	5%	777	0.43	777	0.43	706	0.39	616	0.34
Porgera (47.5%), Papua New Guinea	5%	686	0.38	686	0.38	640	0.36	580	0.32
Lagunas Norte (100.0%), Peru	5%	-33	-0.02	-33	-0.02	-32	-0.02	-31	-0.02
Pueblo Viejo (60.0%), Dominican Republic	5%	2,684	1.50	2,684	1.50	2,152	1.20	1,598	0.89
Veladero (50.0%), Argentina	5%	1,334	0.75	1,334	0.75	1,201	0.67	1,035	0.58
Pascua-Lama (100.0%), Argentina & Chile	8%	336	0.19	1,612	0.90	648	0.36	-68	-0.04
Acacia (63.9%), Tanzania	5%	901	0.50	901	0.50	841	0.47	763	0.43
Kibali (45.0%), DRC	5%	1,371	0.77	1,371	0.77	1,233	0.69	1,069	0.60
Loulo-Gounkoto Complex (80.0%), Mali	5%	1,808	1.01	1,808	1.01	1,650	0.92	1,453	0.81
Tongon (89.0%), Cote d'Ivoire	5%	289	0.16	289	0.16	282	0.16	272	0.15
Gold exploration properties*		1,175	0.66	1,175	0.66	1,175	0.66	1,175	0.66
Total gold assets		21,930	12.27	23,206	12.99	19,744	11.05	16,175	9.05
Other assets									
Zaldivar (50.0%), Chile	8%	740	0.41	740	0.41	740	0.41	671	0.38
Lumwana (100.0%), Zambia	8%	1,155	0.65	1,155	0.65	1,155	0.65	1,021	0.57
Jabal Sayid (50.0%), Saudi Arabia	8%	403	0.23	403	0.23	403	0.23	368	0.21
Other exploration		0	0.00	0	0.00	0	0.00	0	0.00
Other hedge book	5%	0	0.00	0	0.00	0	0.00	0	0.00
Investments		154	0.09	154	0.09	154	0.09	154	0.09
Total other assets		2,452	1.37	2,452	1.37	2,452	1.37	2,214	1.24
Balance sheet and expenses									
Basic working capital		2,011	1.13	2,011	1.13	2,011	1.13	2,011	1.13
Value of ITM instruments		126	0.07	126	0.07	126	0.07	126	0.07
Estimated working capital additions		0	0.00	0	0.00	0	0.00	0	0.00
Long-term debt		-5,402	-3.02	-5,402	-3.02	-5,402	-3.02	-5,402	-3.02
Estimated debt additions		0	0.00	0	0.00	0	0.00	0	0.00
General & administrative expense	5%	-2,010	-1.12	-2,010	-1.12	-1,626	-0.91	-1,241	-0.69
Other expense net of other revenues	5%	595	0.33	595	0.33	517	0.29	431	0.24
Exploration expense	5%	-839	-0.47	-839	-0.47	-800	-0.45	-748	-0.42
Interest tax shield	5%	2,242	1.25	2,242	1.25	1,908	1.07	1,548	0.87
Reclamation & closure liability		-3,179	-1.78	-3,179	-1.78	-3,179	-1.78	-3,179	-1.78
Net financial assets		-6,456	-3.61	-6,456	-3.61	-6,446	-3.61	-6,455	-3.61
Net asset value (US\$)		17,927	10.03	19,203	10.75	15,750	8.81	11,934	6.68
Share price (US\$)			16.80		16.80		16.80		16.80
NAV multiple (P/NAV) (x)			1.67		1.56		1.91		2.52
Input assumptions									
		2019E	2020E	2021E	Long term				
Gold price (US\$/oz)		1,387	1,464	1,464	1,464				
Silver price (US\$/oz)		16.11	17.03	17.03	17.03				
Copper price (US\$/lb)		2.73	2.71	2.73	2.81				

* Norte Abierto, Donlin, Alturas, Massawa accounted for as exploration properties

Note: Base metals cash flow discounted at a minimum 8% discount rate

Priced as of market close, November 29, 2019 ET. Source: Company reports, RBC Capital Markets estimates

Barrick Gold Corporation (GOLD US, ABX CN): Forecasts at spot gold

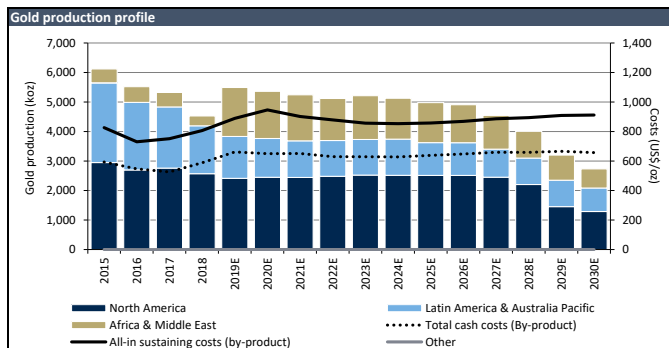
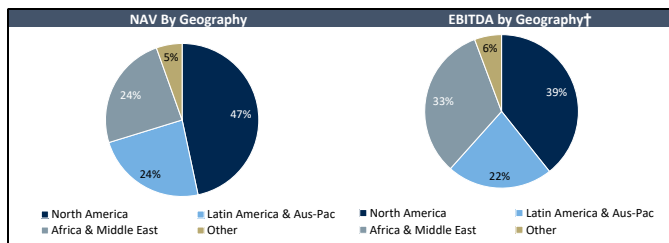
Rating	Outperform	Basic shares (m)	1,777.8	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	1,787.1/1,787.9	Josh Wolfson, CFA
Target price at RBC price deck	US\$20.00	Basic mkt cap (US\$m)	29,867	(416) 842-9893
Share price	US\$16.80	Enterprise value (US\$m)	32,180	josh.wolfson@rbccm.com

Operating Statistics	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Attributable gold production (koz)	4,527	5,377	5,305	5,210	5,085
Cortez	1,290	795	550	502	502
Goldstrike	810	701	581	579	529
Carlin	0	262	500	507	469
Twin Creeks & Turquoise Ridge	268	325	414	425	522
Pueblo Viejo	581	553	556	542	528
Kibali	363	367	323	299	301
Loulo-Gounkoto Complex	518	569	526	510	518
Other	696	1,806	1,854	1,848	1,717
Total cash costs (co-product) (US\$/oz)	607	683	679	672	655
Total cash costs (by-product) (US\$/oz)	588	661	650	651	629
Reported AISC (by-product) (US\$/oz)	806	889	946	902	878
Fully loaded costs (co-product) (US\$/oz)	1,121	1,167	1,219	1,206	1,178
Equity copper production (mlbs)	383	421	451	450	508
Copper costs—C1 (US\$/lb)	1.97	1.59	1.46	1.45	1.32
Copper costs—AISC (US\$/lb)	2.82	2.42	2.25	2.16	1.83
Equity capital spending (US\$b)	1.4	1.5	2.1	2.1	1.7

Input Prices	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Key commodities					
Gold (US\$/oz)	1,269	1,387	1,464	1,464	1,464
Silver (US\$/oz)	15.71	16.11	17.03	17.03	17.03
Copper (US\$/lb)	2.95	2.73	2.71	2.73	2.75
Oil (US\$/bbl)	65	57	58	58	59
Key currencies					
US\$/C\$	0.77	0.75	0.75	0.75	0.75
US\$/EUR	1.18	1.12	1.10	1.10	1.10
CLP/US\$	640	713	809	809	809
ARS/US\$	26	47	60	60	60

Gold Reserves and Resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	2,114	2,160	2,007	1,295	1,344
Grade (g/t)	1.4	1.3	1.2	1.4	1.7
Oz (m)	93.0	91.9	86.0	64.4	75.1
Assumed reserve additions (moz)					32.1
LOM production (moz)					80.6
Measured, indicated & inferred (excl)					
Oz (m)	102.8	77.2	106.0	119.4	122.4
Reserve and resource statistics					
Reserves/sh (x1,000)	79.8	78.8	73.7	55.2	42.6
Reserves & resources/sh (x1,000)	168.1	145.1	164.6	157.6	112.1
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	663		EV/resource (US\$/oz)		163
Total acquisition cost (US\$/oz)	1,274		EV/reserve (US\$/oz)		429

Net Asset Value	NAV (\$m)	/sh (\$)	% NAV	% Reserve	%EBITDA†
Cortez (61.5%), US (NV)	1,734	0.97	7%	13%	10%
Goldstrike (61.5%), US (NV)	1,823	1.02	7%	12%	10%
Carlin (61.5%), US (NV)	1,125	0.63	5%	10%	6%
Turquoise Ridge (46.1%), US (NV)	1,796	1.00	7%	10%	4%
Twin Creeks (61.5%), US (NV)	1,416	0.79	6%	5%	3%
Goldrush (61.5%), US (NV)	820	0.46	3%	3%	0%
Loulo-Gounkoto Complex (80.0%), Mali	1,808	1.01	7%	9%	9%
Pueblo Viejo (60.0%), Dominican Republic	2,684	1.50	11%	9%	10%
Kibali (45.0%), DRC	1,371	0.77	6%	5%	7%
Veladero (50.0%), Argentina	1,334	0.75	5%	4%	4%
Gold exploration properties*	1,175	0.66	5%	0%	0%
Other	7,297	4.08	30%	21%	36%
Total mining and investment assets	24,383	13.64	100%	100%	100%
Balance sheet items and expenditures	-6,456	-3.61			
Total	17,927	10.03			
P/NAV at spot gold (x)		1.67			



Valuation	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
P/E (x)	50.9	36.1	33.1	33.3	29.5
P/CF (x)	10.6	10.0	8.7	9.0	8.6
EV/EBITDA (x)	13.7	8.8	8.5	8.6	8.5
FCF/EV yield**	0.9%	3.2%	3.7%	4.5%	5.0%

Income Statement	2018	2019E	2020E	2021E	2022E
Total revenue	7,243	9,042	8,954	8,866	8,739
% gold	83%	86%	86%	85%	83%
% silver	0%	0%	0%	0%	0%
% copper	16%	13%	14%	15%	17%
% other	0%	0%	0%	0%	0%
Operating costs	3,763	4,505	4,306	4,292	4,130
G&A	265	234	210	200	200
Exploration	383	336	310	310	310
Depreciation	1,457	1,979	1,978	2,011	1,960
Other	90	82	95	90	90
Adjusted EBITDA	2,342	3,650	3,792	3,733	3,804
Adjusted EBIT	963	1,690	1,814	1,722	1,844
Net interest expense	545	498	516	465	419
Unusual/other items	-1,791	1,854	-783	-682	-625
EBT	-283	4,042	1,546	1,506	1,638
Taxes	1,198	1,143	619	602	622
Minority interest	110	274	244	227	225
Other	46	176	222	226	227
Net income (reported)	-1,545	2,801	906	902	1,018
Net income (adjusted)	385	820	901	897	1,013
EPS (reported) (US\$/sh)	-1.32	1.59	0.51	0.51	0.57
EPS (adjusted) (US\$/sh)	0.33	0.47	0.51	0.50	0.57
Average shares (m)	1,167	1,761	1,778	1,778	1,778

Cash Flow Statement	2018	2019E	2020E	2021E	2022E
Net income (reported)	-1,545	2,801	906	902	1,018
Depreciation	1,457	1,979	1,978	2,011	1,960
Other	1,942	-1,818	567	400	485
Operating cash flow	1,854	2,961	3,452	3,313	3,463
Operating cash flow (US\$/sh)	1.59	1.68	1.94	1.86	1.95
Working capital changes	-173	-263	0	0	0
Cash from operations	1,681	2,698	3,452	3,313	3,463
Capital expenditure	-1,400	-1,655	-2,260	-2,270	-1,852
Net investments	-94	948	755	400	0
Investing cash flow	-1,494	-707	-1,505	-1,870	-1,852
Common share dividends	125	557	356	356	356
Debt additions	0	0	0	0	0
Debt repayments	-687	-299	-18	0	-445
Equity financing	0	0	0	0	0
Other net financing	-154	-564	-356	-356	-356
Financing cash flow	-841	-863	-374	-356	-801
Foreign exchange	-9	-1	0	0	0
Change in cash	-663	1,128	1,573	1,088	810
Free cash flow**	281	1,044	1,192	1,443	1,611
Free cash flow** (\$/sh)	0.24	0.59	0.67	0.81	0.91

Balance Sheet	2018	2019E	2020E	2021E	2022E
Assets					
Cash	1,571	2,699	4,272	5,359	6,169
Short-term investments	0	0	0	0	0
Other current assets	2,407	3,105	3,105	3,105	3,105
Current assets	3,978	5,804	7,377	8,464	9,274
Non-current assets	18,701	38,192	38,075	38,074	37,659
Total assets	22,679	43,996	45,452	46,539	46,933
Liabilities					
Short-term debt	43	18	0	445	0
Current liabilities	1,668	1,796	1,778	2,223	1,778
Long-term debt	5,743	5,585	5,585	5,140	5,140
Other non-current liabilities	7,675	16,326	17,209	17,705	17,838
Total liabilities	15,069	23,707	24,572	25,068	24,756
Total shareholder equity	7,593	20,289	20,879	21,471	22,177
Net debt	4,215	4,215	4,215	4,215	4,215
Net debt / EBITDA (x)	1.8	0.8	0.3	0.1	-0.3
ROE (Net income/Equity)	-18.3%	20.1%	4.4%	4.3%	4.7%
ROA (Net income/Total assets)	-6.4%	8.4%	2.0%	2.0%	2.2%
ROIC (NOPAT/Assets + Net debt)	-1.9%	3.1%	5.3%	5.1%	5.7%
CROIC (FCF/Equity + Total debt)**	1.9%	5.3%	4.6%	5.4%	5.9%

* Norte Abierto, Donlin, Alturas, Massawa accounted for as exploration properties; ** FCF = operating cash flow - capex; † 2019-2021 average EBITDA

Barrick Gold Corporation (GOLD US, ABX CN): Forecasts at RBC price deck

Rating	Outperform	Basic shares (m)	1,777.8	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	1,787.1/1,787.9	Josh Wolfson, CFA
Target price at RBC price deck	US\$20.00	Basic mkt cap (US\$m)	29,867	(416) 842-9893
Share price	US\$16.80	Enterprise value (US\$m)	32,180	josh.wolfson@rbccm.com

Operating Statistics	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Attributable gold production (koz)	4,527	5,377	5,305	5,210	5,085
Cortez	1,290	795	550	502	502
Goldstrike	810	701	581	579	529
Carlin	0	262	500	507	469
Twin Creeks & Turquoise Ridge	268	325	414	425	522
Pueblo Viejo	581	553	556	542	528
Kibali	363	367	323	299	301
Loulo-Gounkoto Complex	518	569	526	510	518
Other	696	1,806	1,854	1,848	1,717
Total cash costs (co-product) (US\$/oz)	607	683	681	678	666
Total cash costs (by-product) (US\$/oz)	588	662	649	658	642
Reported AISC (by-product) (US\$/oz)	806	891	945	908	891
Fully loaded costs (co-product) (US\$/oz)	1,121	1,169	1,230	1,205	1,181
Equity copper production (mlbs)	383	421	451	450	508
Copper costs—C1 (US\$/lb)	1.97	1.60	1.50	1.51	1.39
Copper costs—AISC (US\$/lb)	2.82	2.43	2.32	2.21	1.89
Equity capital spending (US\$b)	1.4	1.5	2.1	2.1	1.7

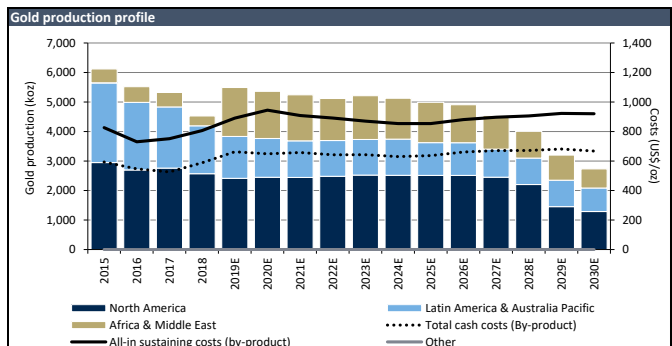
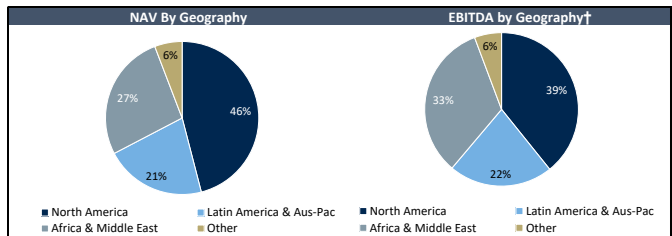
Input Prices	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Key commodities					
Gold (US\$/oz)	1,269	1,390	1,500	1,450	1,450
Silver (US\$/oz)	15.71	16.23	17.50	17.50	17.50
Copper (US\$/lb)	2.95	2.72	3.00	2.75	2.75
Oil (US\$/bbl)	65	57	58	58	59
Key currencies					
US\$/C\$	0.77	0.76	0.76	0.77	0.78
US\$/EUR	1.18	1.11	1.10	1.11	1.13
CLP/US\$	640	702	740	713	685
ARS/US\$	26	47	52	49	45

Gold Reserves and Resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	2,114	2,160	2,007	1,295	1,344
Grade (g/t)	1.4	1.3	1.2	1.4	1.7
Oz (m)	93.0	91.9	86.0	64.4	75.1
Assumed reserve additions (moz)					32.1
LOM production (moz)					80.6
Measured, indicated & inferred (excl)					
Oz (m)	102.8	77.2	106.0	119.4	122.4
Reserve and resource statistics					
Reserves/sh (x1,000)	79.8	78.8	73.7	55.2	42.6
Reserves & resources/sh (x1,000)	168.1	145.1	164.6	157.6	112.1
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	658		EV/resource (US\$/oz)		163
Total acquisition cost (US\$/oz)	1,286		EV/reserve (US\$/oz)		429

Income Statement	2018	2019E	2020E	2021E	2022E
Total revenue	7,243	9,054	9,242	8,796	8,664
% gold	83%	87%	85%	85%	83%
% silver	0%	0%	0%	0%	0%
% copper	16%	13%	15%	15%	17%
% other	0%	0%	0%	0%	0%
Operating costs	3,763	4,507	4,334	4,324	4,185
G&A	265	234	210	200	200
Exploration	383	336	310	310	310
Depreciation	1,457	1,979	1,978	2,011	1,960
Other	90	82	95	90	90
Adjusted EBITDA	2,342	3,660	4,040	3,635	3,677
Adjusted EBIT	963	1,701	2,062	1,624	1,717
Net interest expense	545	498	515	463	417
Unusual/other items	-1,791	1,855	-770	-680	-625
EBT	-283	4,053	1,807	1,407	1,509
Taxes	1,198	1,148	723	563	574
Minority interest	110	275	259	222	220
Other	46	173	255	208	199
Net income (reported)	-1,545	2,803	1,081	830	915
Net income (adjusted)	385	822	1,076	825	910
EPS (reported) (US\$/sh)	-1.32	1.59	0.61	0.47	0.51
EPS (adjusted) (US\$/sh)	0.33	0.47	0.61	0.46	0.51
Average shares (m)	1,167	1,761	1,778	1,778	1,778

Net Asset Value	NAV (\$m)	/sh (\$)	% NAV	% Reserve	%EBITDA†
Cortez (61.5%), US (NV)	1,632	0.91	7%	13%	10%
Goldstrike (61.5%), US (NV)	1,730	0.97	8%	12%	10%
Carlin (61.5%), US (NV)	956	0.53	4%	10%	6%
Turquoise Ridge (46.1%), US (NV)	1,671	0.93	7%	10%	4%
Twin Creeks (61.5%), US (NV)	1,340	0.75	6%	5%	3%
Goldrush (61.5%), US (NV)	695	0.39	3%	3%	0%
Loulo-Gounkoto Complex (80.0%), Mali	1,695	0.95	7%	9%	9%
Pueblo Viejo (60.0%), Dominican Republic	2,500	1.40	11%	9%	10%
Kibali (45.0%), DRC	1,305	0.73	6%	5%	7%
Veladero (50.0%), Argentina	1,033	0.58	5%	4%	4%
Gold exploration properties*	1,175	0.66	5%	0%	0%
Other	7,173	4.01	31%	21%	37%
Total mining and investment assets	22,904	12.82	100%	100%	100%
Balance sheet items and expenditures	-6,437	-3.60			
Total	16,467	9.21			
P/NAV at RBC price deck (x)		1.82			

Cash Flow Statement	2018	2019E	2020E	2021E	2022E
Net income (reported)	-1,545	2,803	1,081	830	915
Depreciation	1,457	1,979	1,978	2,011	1,960
Other	1,942	-1,815	614	396	482
Operating cash flow	1,854	2,967	3,674	3,237	3,358
Operating cash flow (US\$/sh)	1.59	1.68	2.07	1.82	1.89
Working capital changes	-173	-263	0	0	0
Cash from operations	1,681	2,704	3,674	3,237	3,358
Capital expenditure	-1,400	-1,655	-2,260	-2,270	-1,852
Net investments	-94	948	755	400	0
Investing cash flow	-1,494	-707	-1,505	-1,870	-1,852
Common share dividends	125	557	356	356	356
Debt additions	0	0	0	0	0
Debt repayments	-687	-299	-18	0	-445
Equity financing	0	0	0	0	0
Other net financing	-154	-564	-356	-356	-356
Financing cash flow	-841	-863	-374	-356	-801
Foreign exchange	-9	-1	0	0	0
Change in cash	-663	1,133	1,795	1,012	705
Free cash flow**	281	1,049	1,414	1,367	1,505
Free cash flow** (\$/sh)	0.24	0.60	0.80	0.77	0.85



Balance Sheet	2018	2019E	2020E	2021E	2022E
Assets					
Cash	1,571	2,704	4,499	5,511	6,215
Short-term investments	0	0	0	0	0
Other current assets	2,407	3,105	3,105	3,105	3,105
Current assets	3,978	5,809	7,604	8,616	9,320
Non-current assets	18,701	38,190	38,079	38,072	37,647
Total assets	22,679	43,999	45,683	46,688	46,968
Liabilities					
Short-term debt	43	18	0	445	0
Current liabilities	1,668	1,796	1,778	2,223	1,778
Long-term debt	5,743	5,585	5,585	5,140	5,140
Other non-current liabilities	7,675	16,327	17,264	17,749	17,869
Total liabilities	15,069	23,708	24,627	25,112	24,787
Total shareholder equity	7,593	20,291	21,056	21,576	22,181
Net debt	4,215	4,215	4,215	4,215	4,215
Net debt / EBITDA (x)	1.8	0.8	0.3	0.0	-0.3
ROE (Net income/Equity)	-18.3%	20.1%	5.2%	3.9%	4.2%
ROA (Net income/Total assets)	-6.4%	8.4%	2.4%	1.8%	2.0%
ROIC (NOPAT/Assets + Net debt)	-1.9%	3.2%	5.9%	4.8%	5.3%
CROIC (FCF/Equity + Total debt)**	1.9%	5.3%	5.4%	5.1%	5.5%

* Norte Abierto, Donlin, Alturas, Massawa accounted for as exploration properties; ** FCF = operating cash flow - capex; † 2019-2021 average EBITDA

Priced as of market close, November 29, 2019 ET. Source: RBC Capital Markets estimates, company reports, Bloomberg

Valuation

Our GOLD target price of US\$20 is based upon 1.8x our NAV5% at a long-term gold prices of US\$1,400/oz and 23x our 2020-2021 SFCF estimate, which would be equivalent to 11x EBITDA. These multiples are slightly above the average multiples we use to value the large gold producer peers. Our Outperform rating is supported by GOLD's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Risks to rating and price target

In addition to general operating and financial risks for Barrick related to commodities (gold, silver and copper) and FX (CAD, AUD, EUR, CLP), we highlight:

- Increasing capital requirements to sustain existing output and fund new development projects
- Achievement of synergy/optimization targets post the recent M&A transactions
- Political risk, including exposure to Tanzania, DRC, Mali, the Dominican Republic, Argentina, Chile and Papua New Guinea

Company description

Barrick Gold is a senior gold producer with a globally diversified portfolio of gold and copper assets. Company guidance outlines a stable 5-year production and cost profile prior to planned non-core asset sales, including 2019 production of 5.1-5.6 moz at AISC of \$870-920/oz and 5.1-5.6 moz at AISC of \$850-950/oz from 2020-2024. Barrick is focused on integration and portfolio optimization post its recent M&A transactions including the 1Q19 merger with Randgold, 3Q19 Nevada Gold Mines JV with Newmont, and 3Q19 buy-out of Acacia.

Eldorado Gold Corporation

The long road ahead to achieve growth success

Our view: EGO 2020 guidance outlines a material volume improvement YoY and we expect upcoming catalysts to be constructive. However, following positive share price performance in 2019, we believe EGO's 2020 positive attributes are discounted in its stock price today and a weaker long-term risk-reward outlook exists for investors. Post-2020, we forecast ongoing elevated capital consumption to advance EGO's portfolio. We are initiating coverage of EGO with an Underperform rating and US\$6.50 PT.

Key points:

Regaining balance after a troublesome fall. In 2019, EGO received positive Greek permitting indications (following Skouries development suspension in 2017), the reintroduction of a portion of Kisladag reserves (following compromised heap leach economics in 2017), and the successful completion of a US\$300m senior notes issue (prior elevated financial liquidity risks). We forecast 2020 could be another good year for EGO, featuring peak Kisladag production from prior high-grade material stacked, full production from the Lamaque mine, and the potential for development advancement of the company's Skouries project in Greece (pending permits and government assurances). Overall, we forecast these items will result in EGO generating excellent short-term free cash flow in 2020, and positive corporate free cash flow was last achieved in 2011.

Weaker risk-reward outlook today following 2019 appreciation. Beyond 2020, we see positive FCF and the value realization within EGO's portfolio as a very long-term endeavor, requiring successful resolution of simultaneous financing uncertainties, development/technical risk, and permitting/geographic ambiguities. If resolved, our forecasts outline the potential for net positive free cash flow beyond 2025 (see: Exhibit 3). Prior to this, we forecast ongoing high capital consumption for the foreseeable future. Following EGO's relative share price outperformance in 2019 (year-to-date +172% vs. GDX +28%), we believe investors are no longer compensated for this very long-dated risk-reward outlook.

Upcoming catalysts positive and forecast. Beyond EGO's expected financial improvement, upcoming events could surface value from heap-leach production at Kisladag beyond 2021 (update scheduled in 1Q20), a Lamaque expansion (4Q19 PEA), an Olympias expansion (permits received), and the long-term potential advancement of Perama Hill. Our forecasts outline a reasonably optimistic outlook for EGO, incorporating all of these opportunities, despite uncertainties existing. Should EGO successfully gain a sizable equity partner for its Greek portfolio, this event could represent a positive catalyst, thereby providing project funding and reducing attributable project spending requirements.

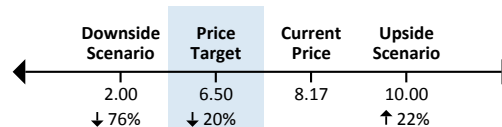
Sector: Precious Minerals & Diamonds - large cap

Underperform

NYSE: EGO; USD 8.17; TSX: ELD

Price Target USD 6.50

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	158.5	Market Cap (MM):	1,297
Dividend:	0.00	Yield:	0.0%
NAVPS:	10.71	P/NAVPS:	0.76x
ROE:	2.6%	Avg. Daily Volume:	2,091,417
Float (MM):	716.6		

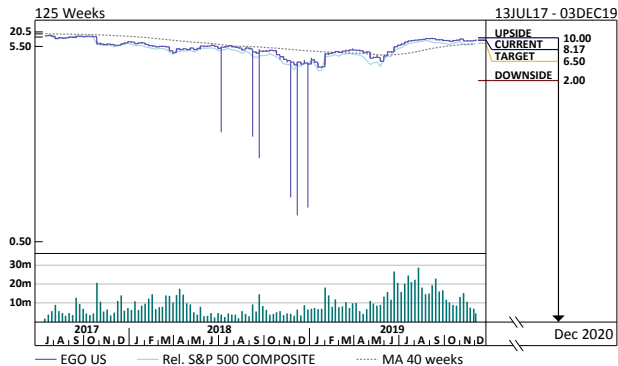
RBC Estimates

FY Dec	2018A	2019E	2020E	2021E
EPS, Adj Basic	(0.11)	0.08	0.64	0.39
P/AEPS	NM	NM	12.8x	20.9x
CFPS, Adj Basic	0.39	1.00	1.99	1.31
P/ACFPS	20.9x	8.2x	4.1x	6.2x
FCFPS	(1.31)	(0.24)	0.67	(0.45)
P/FCF	nm	nm	12.2x	nm
Production	344.1	395.4	508.5	443.7
EPS, Adj Basic	Q1	Q2	Q3	Q4
2018	0.09A	(0.01)A	(0.14)A	(0.05)A
2019	(0.11)A	(0.01)A	0.05A	0.15E
2020	0.15E	0.16E	0.17E	0.17E
CFPS, Adj Basic				
2018	0.24A	0.15A	(0.03)A	0.03A
2019	(0.06)A	0.24A	0.40A	0.43E
2020	0.52E	0.45E	0.56E	0.47E

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: Eldorado Gold Corporation



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our price target of US\$6.50 is based upon 0.7x our risk adjusted NAV at a long-term gold price of US\$1,400/oz and 17x our 2019-2021 SFCF estimate, which would be equivalent to 4x EBITDA. These multiples are below the average for the intermediate producer group, supported by the company's above-average financial leverage, above-average political risk exposure, and its long-term capital reinvestment outlook requirements. Our Underperform rating is supported by EGO's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Upside scenario

Our upside value of US\$10 is based upon higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside value of US\$2 is based upon lower long-term gold prices of US\$1,200/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Investment summary

Eldorado Gold is an intermediate gold producer with a portfolio of five producing assets in Turkey, Greece and Canada (Quebec), and development projects in Greece, Romania and Brazil. 2019 consolidated guidance is for production of 390-420 Koz at AISC of US\$900-1,000/oz. The company has outlined a strategy of discovering, acquiring, and developing assets in prospective regions.

Investment outlook:

- EGO has outlined that an update at Kisladag is expected to outline an extension of production beyond 2021.
- Final permitting and development commencement of the Skouries project is an upcoming deliverable in 2020. Thereafter, funding will become a key focus.
- Lamaque's ramp-up has thus far been successful, and additional exploration as well as throughput upside has the potential to be defined at the mine.
- EGO's debt profile has improved following an extension of its debt maturity, now due 2024. The potential for a Greek partnership or divestiture of non-core assets could improve the company's financial positioning.
- Our Underperform rating is predicated upon our view that while EGO's 2020 guidance outlines a material improvement YoY and we expect upcoming catalysts to be constructive, we believe these positive attributes are priced in and a weaker long-term risk-reward outlook exists for investors. Post-2020, we forecast ongoing elevated capital consumption to advance EGO's portfolio.

Upcoming catalysts and milestones

- Kisladag updated long-term mine plan guidance, following additional heap leaching testwork (1Q20)
- Lamaque expansion PEA to 170koz from 130koz (4Q19), throughput upside permitting (1H20), expansion PFS (2H20), and resource updates (C4/C5 mid- 2020; C6/C7 YE20)
- Skouries potential revised permitting and resolution of necessary investor framework (2020), and funding resolution and/or partnership announcement (2020+)

Key risks

In addition to general operating and financial risks for EGO related to commodities (gold, silver, copper, lead and zinc) and FX (USD, CAD, EUR), we highlight:

- Olympias operating performance, metallurgical complexities, and smelter offtake terms
- Skouries permitting, funding, and construction
- High political risk exposure (Greece, Turkey, Romania, Brazil)
- Technical/operating risk and financing risk

Key questions

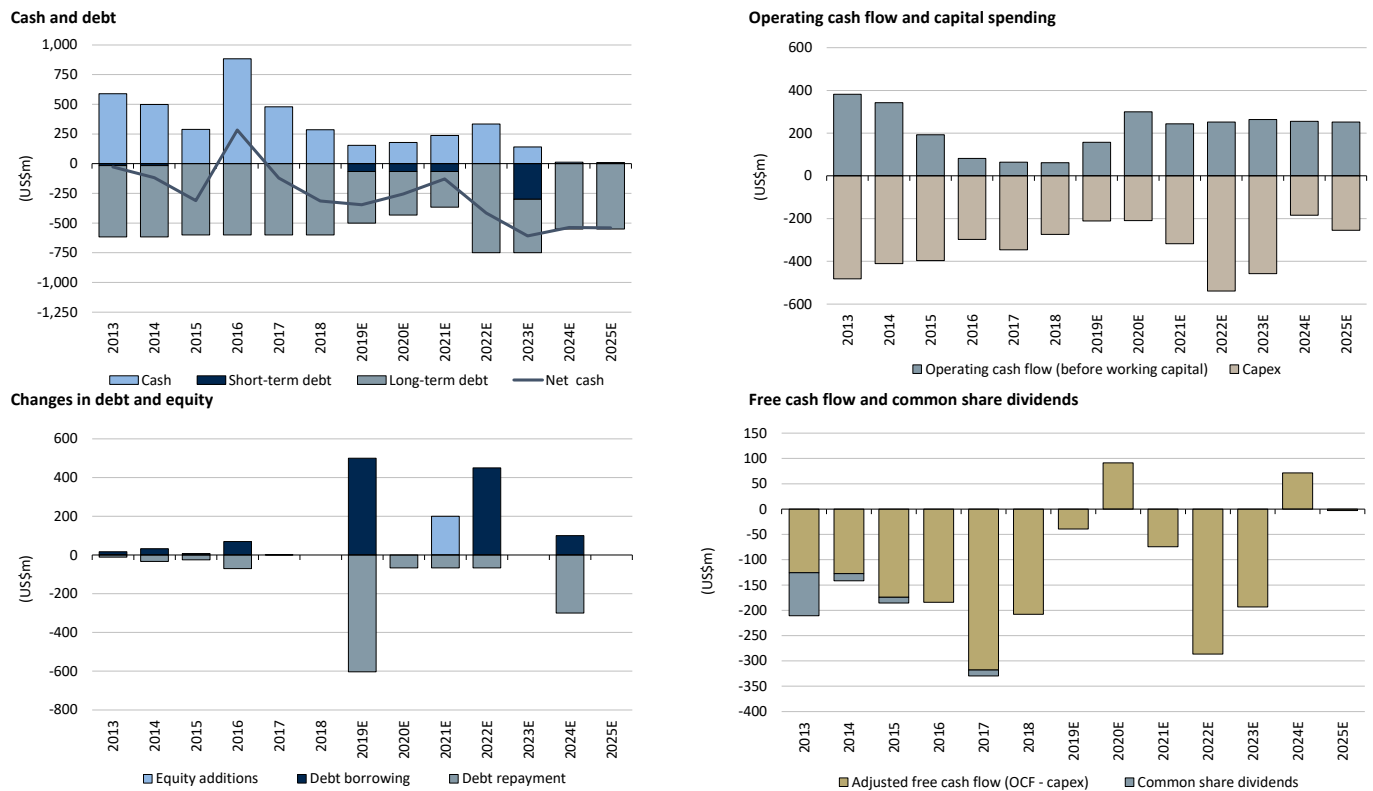
- Our view**
- EGO has communicated it would seek to advance Skouries development (US\$690m as of January 2018) in conjunction with a non-controlling partnership sale of its 95% interest in Cassandra Mines, which includes the Skouries project as well as the Olympias and Stratoni mines. This development could be a key positive catalyst for EGO.
- EGO's January 2018 technical report for Skouries outlined an NPV of US\$925m and IRR of 21%, assuming US\$1,300/oz gold and US\$2.75/lb copper. We calculate a lower NPV at Skouries today of ~US\$750m, which represents ~80% of the value of Cassandra. On this basis, we calculate EGO would be required to divest a sizable ~40% interest in Cassandra to fund its remaining 60% attributable capital spending at Skouries. Assessing which partners would be comfortable with an investment of this quantum and this jurisdiction, absent a controlling interest or a negotiated discount to fair value, is important. Lower partnership sale stakes may require EGO to assume additional financial leverage to fund its attributable spending requirements.
- In the event EGO is successfully capable of resolving permitting and project development terms with the Greek government, but is unable to successfully secure a partnership to fund development, it is unclear how the company would proceed or how much timing flexibility the government of Greece would be expected to provide to EGO.
- 1. How would a partnership allow EGO to fund Skouries spending?**
- In addition to EGO's development of Skouries, potential upside opportunities outlined by EGO include an expansion at Lamaque (phased ~US\$150m spending), throughput expansion at Olympias (~US\$50m), Kisladag heap leach upside (estimated ~US\$50m stripping, contingent on mineable reserves), and development of Perama Hill (~US\$250m). The ability for EGO to advance these opportunities requires material ongoing capital spending as well as careful financial risk management for execution. In our view, the ability for EGO to simultaneously advance these opportunities is low, and a sequencing would prolong EGO's investment and cash consumption timeline.
- Currently, EGO maintains US\$133m in cash and short-term investments and US\$500m in debt. The company also maintains a US\$250m revolving credit facility and a US\$125m at-the-market equity program. EGO has outlined the potential to divest its interests in Tocantinzinho and Certej assets, although the time frame and ability to achieve this milestone is unclear.
- 2. How will EGO fund the development of its growth portfolio?**
- In October 2017, EGO outlined that lower expected recoveries would severely reduce the ability of the company to heap leach existing reserves at the mine. Subsequently, in 2019, the company successfully outlined the ability to extend production until 2021 and that additional upside would be disclosed in 1Q20. Despite the mine's negative performance vs. expectations, Kisladag represents ~40% of EGO EBITDA and extension would be an important cash flow driver for the company that could enable greater project funding flexibility.
- EGO has guided to 2020 production of 240-260koz and 2021 production of 75-95koz. Our forecasts incorporate ~400koz of production beyond EGO's guidance, equivalent to reserve upside of ~800koz at a 50% assumed recovery rate. Mining additional Kisladag reserves will require additional stripping, where we estimate ~US\$50m (guidance has not been provided).
- 3. What is the potential opportunity to extend Kisladag mine life?**

Exhibit 2: Eldorado Gold – Catalysts, opportunities and risks

<p>Catalysts and milestones</p>	<ul style="list-style-type: none"> • Kisladağ updated long-term mine plan guidance, following additional heap leaching testwork (1Q20) • Lamaque expansion PEA to 170koz from 130koz (4Q19) and expansion PFS (2H20) • Lamaque interim C4/C5 resource update (mid-2020) and C6/C7 resource update (YE20) • Lamaque Triangle throughput expansion permit (1H20) • Skouries revised permitting and resolution of necessary framework and investor protection conditions (2020) • Skouries potential funding resolution and/or partnership announcement (2020+) • Perama Hill updated technical study, and recommencement EIA
<p>Opportunities</p>	<ul style="list-style-type: none"> • Kışladağ processing uncertainty resolution, and potential heap leaching of additional metallurgically complicated ore • Resource exploration success and production upside over time at Lamaque • Potential funding opportunities in Greece (Skouries) via equity, debt, or base metals streaming • Potential divestiture of non-core assets, including Certej, Tocantinzinho • Potential advancement of Perama Hill project
<p>Risks and uncertainties</p>	<ul style="list-style-type: none"> • Olympias metallurgical complexities and smelter offtake terms • Successful permitting, funding, construction and restart of Skouries as well as Perama Hill • High political risk exposure (Greece, Turkey, Romania, Brazil) • Commodity price risk (gold, silver, copper, lead and zinc prices), technical/operating risk and financing risk

Source: Company reports, RBC Capital Markets estimates

Exhibit 3: Eldorado Gold – Financial forecasts at spot gold



Source: Company reports, RBC Capital Markets estimates (Priced as of market close November 29, 2019)

Exhibit 4: Eldorado Gold – Net asset valuation at spot gold

Eldorado Gold Corporation									
Net asset valuation at spot gold (US\$)									
Shares (FD, FF, ITM) (m)	183.46								
Market capitalization (US\$m)	1,438								
	Risk-weighted NAV			NAV at various discount rates					
	Discount rate	(\$m)	(/sh) (\$)	5%		7%		10%	
				(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)
Gold assets									
Kişladağ (100.0%), Turkey	5%	262	1.43	262	1.43	254	1.38	243	1.32
Efeçukuru (100.0%), Turkey	5%	243	1.32	243	1.32	226	1.23	204	1.11
Lamaque (100.0%), Canada (QC)	5%	756	4.12	756	4.12	680	3.70	584	3.18
Skouries (95.0%), Greece	5%	513	2.80	513	2.80	379	2.07	242	1.32
Olympias (95.0%), Greece	5%	169	0.92	169	0.92	136	0.74	100	0.55
Perama Hill (100.0%), Greece	8%	208	1.13	289	1.58	232	1.26	167	0.91
Gold exploration properties		132	0.72	132	0.72	132	0.72	132	0.72
Gold hedge book		0	0.00	0	0.00	0	0.00	0	0.00
Total gold assets		2,283	12.45	2,365	12.89	2,039	11.12	1,672	9.12
Base metals and other assets									
Stratoni (95.0%), Greece	8%	-51	-0.28	-51	-0.28	-51	-0.28	-48	-0.26
Skouries (95.0%), Greece	8%	239	1.30	239	1.30	239	1.30	163	0.89
Olympias (95.0%), Greece	8%	79	0.43	79	0.43	79	0.43	64	0.35
Other exploration		0	0.00	0	0.00	0	0.00	0	0.00
Investments		0	0.00	0	0.00	0	0.00	0	0.00
Total other assets		266	1.45	266	1.45	266	1.45	179	0.98
Balance sheet and expenses									
Basic working capital		212	1.15	212	1.15	212	1.15	212	1.15
Value of ITM instruments		0	0.00	0	0.00	0	0.00	0	0.00
Estimated working capital additions		750	4.09	750	4.09	750	4.09	750	4.09
Long-term debt		-467	-2.54	-467	-2.54	-467	-2.54	-467	-2.54
Estimated debt additions		-550	-3.00	-550	-3.00	-550	-3.00	-550	-3.00
General & administrative expense	5%	-279	-1.52	-279	-1.52	-244	-1.33	-205	-1.12
Exploration expense	5%	-54	-0.29	-54	-0.29	-51	-0.28	-48	-0.26
Interest tax shield	5%	111	0.61	111	0.61	104	0.56	93	0.51
Reclamation & closure liability		-89	-0.48	-89	-0.48	-89	-0.48	-89	-0.48
Net financial assets		-364	-1.99	-364	-1.99	-335	-1.83	-303	-1.65
Net asset value (US\$)		2,185	11.91	2,267	12.36	1,971	10.74	1,549	8.44
Share price (US\$)		7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
NAV multiple (P/NAV) (x)		0.66	0.66	0.63	0.63	0.73	0.73	0.93	0.93
Input assumptions		2019E	2020E	2021E	Long term				
Gold price (US\$/oz)		1,387	1,464	1,464	1,464				
Silver price (US\$/oz)		16.11	17.03	17.03	17.03				
Copper price (US\$/oz)		2.73	2.71	2.73	2.69				
Gold exploration properties include Perama Hill, Sapes, Certej, Tocantinzinho and Piavitsa									

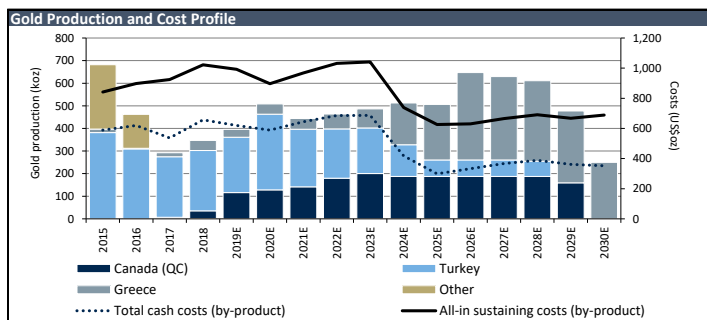
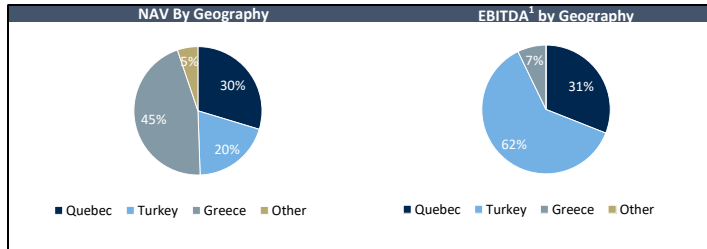
Source: Company reports, RBC Capital Markets estimates (Priced as of market close November 29, 2019)

Eldorado Gold Corporation (EGO US, ELD CN): Forecasts at spot gold				
Rating	Underperform	Basic shares (m)	158.5	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	158.5/161.4	Josh Wolfson, CFA
Target price at RBC price deck	US\$6.50	Basic mkt cap (US\$m)	1,242	(416) 842-9893
Share price	US\$7.84	Enterprise value (US\$m)	1,612	josh.wolfson@rbccm.com

All US\$m unless noted						All US\$m unless noted					
Operating statistics						Input prices					
	2018	2019E	2020E	2021E	2022E		2018	2019E	2020E	2021E	2022E
Consolidated gold production (koz)	346	397	511	446	467	Key commodities					
Equity gold production (koz)	344	395	509	444	464	Gold (US\$/oz)	1,269	1,387	1,464	1,464	1,464
Kiçladağ	172	144	242	161	129	Silver (US\$/oz)	15.71	16.11	17.03	17.03	17.03
Efemçukuru	95	101	94	94	90	Copper (US\$/lb)	2.95	2.73	2.71	2.73	2.75
Olympias	44	34	45	47	65	Zinc (US\$/lb)	1.33	1.15	1.03	1.03	1.02
Lamaque	35	116	128	142	180	Lead (US\$/lb)	1.02	0.91	1.00	1.00	1.00
Skouries	0	0	0	0	0	Oil (US\$/bbl)	65	57	58	58	59
Other	-3	0	0	0	0	Key currencies					
Total cash costs (co-product) (US\$/oz)	689	574	620	679	737	US\$/CS	0.77	0.75	0.75	0.75	0.75
Kiçladağ	687	503	590	734	948	US\$/EUR	1.18	1.12	1.10	1.10	1.10
Efemçukuru	547	630	638	655	689	TRY/US\$	4.71	5.66	5.75	5.75	5.75
Olympias	981	1,207	1,052	1,077	1,061						
Lamaque	0	426	512	500	492	Valuation data					
Skouries	0	0	0	0	0	P/E (x)	-73.4	112.1	13.9	18.8	25.5
Cash operating costs (by-product) (US\$/oz)	632	586	562	618	661	P/CF (x)	20.3	7.9	4.1	5.8	5.7
Total cash costs (by-product) (US\$/oz)	656	620	588	644	686	EV/EBITDA (x)	19.0	7.2	4.2	5.3	5.1
Reported AISC (by-product) (US\$/oz)	1,022	992	897	968	1,031	FCF/EV yield*	-12.9%	-2.4%	5.7%	-4.6%	-17.8%
Fully loaded costs (co-product) (US\$/oz)	1,376	1,146	1,192	1,311	1,372						

Net Asset Value	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
Kiçladağ (100.0%), Turkey	262	1.43	10%	20%	41%
Efemçukuru (100.0%), Turkey	243	1.32	10%	5%	21%
Lamaque (100.0%), Canada (QC)	756	4.12	30%	0%	31%
Skouries (95.0%), Greece	752	4.10	29%	25%	0%
Olympias (95.0%), Greece	248	1.35	10%	19%	7%
Tocantinzinho (100.0%), Brazil	50	0.27	2%	12%	0%
Perama Hill (100.0%), Greece	208	1.13	8%	7%	0%
Certej (80.5%), Romania	25	0.14	1%	13%	0%
Other	6	0.03	0%	0%	0%
Total mining and investment assets	2,550	13.90	100%	100%	100%
Balance sheet items and expenditures	-364	-1.99			
Total	2,185	11.91			
P/NAV at spot gold (x)		0.66			

Gold reserves and resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	661.5	624.2	466.3	374.9	369.6
Grade (g/t)	1.2	1.2	1.2	1.4	1.3
Oz (m)	26.0	24.9	18.4	16.5	16.0
Assumed reserve additions (moz)					-0.3
LOM production (moz)					8.0
Measured, indicated & inferred (excl)					
Oz (m)	20.8	64.9	17.2	24.7	0.0
Reserve and resource statistics					
Reserves/sh (x1,000)	181.1	173.6	123.7	103.9	101.0
Reserves & resources/sh (x1,000)	326.1	626.3	239.5	259.3	101.0
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	580		EV/reserve (US\$/oz)	101	
Total acquisition cost (US\$/oz)	1,284		EV/reserve (US\$/oz)	101	



	2018	2019E	2020E	2021E	2022E
Income statement					
Total revenue	459	629	856	763	828
% gold	82%	86%	87%	85%	82%
% silver	4%	3%	3%	3%	3%
% copper	0%	0%	0%	0%	0%
% other	14%	11%	10%	12%	14%
Operating costs	268	331	398	387	450
G&A	54	41	40	40	40
Exploration	34	15	18	18	18
Depreciation	106	149	211	159	190
Other	17	17	11	11	0
Adjusted EBITDA	85	225	387	305	318
Adjusted EBIT	-20	79	177	148	130
Net interest expense	4	45	43	36	49
Unusual/other items	-450	-75	-87	-72	-97
EBT	-466	49	134	112	82
Taxes	-86	43	51	42	31
Minority interest	-18	-6	-6	-6	-6
Other	0	0	0	0	0
Net income (reported)	-362	12	89	75	56
Net income (adjusted)	-17	11	89	75	56
EPS (reported) (US\$/sh)	-2.28	0.08	0.56	0.42	0.31
EPS (adjusted) (US\$/sh)	-0.11	0.07	0.56	0.42	0.31
Average shares (m)	159	158	158	180	183

	2018	2019E	2020E	2021E	2022E
Cash flow statement					
Net income (reported)	-362	12	89	75	56
Depreciation	106	149	211	159	190
Other	317	-3	0	9	6
Operating cash flow	61	157	300	243	252
Operating cash flow (US\$/sh)	0.39	0.99	1.89	1.35	1.38
Working capital changes	5	14	0	0	0
Cash from operations	66	171	300	243	252
Capital expenditure	-274	-211	-209	-318	-539
Net investments	17	33	0	0	0
Investing cash flow	-257	-178	-209	-318	-539
Common share dividends	0	0	0	0	0
Debt additions	0	500	0	0	450
Debt repayments	0	-604	-67	-67	-67
Equity financing	0	0	0	200	0
Other net financing	-2	-22	0	0	0
Financing cash flow	-2	-126	-67	133	383
Foreign exchange	0	0	0	0	0
Change in cash	-193	-133	25	59	97
Cash balance	286	154	179	238	334
Free cash flow*	-208	-39	91	-75	-287
Free cash flow* (\$/sh)	-1.31	-0.25	0.58	-0.41	-1.56

	2018	2019E	2020E	2021E	2022E
Balance sheet					
Assets					
Cash	286	154	179	238	334
Other current assets	228	250	250	250	250
Current assets	515	404	429	487	584
Non-current assets	4,118	4,135	4,129	4,284	4,636
Total assets	4,633	4,539	4,558	4,771	5,220
Liabilities					
Current liabilities	142	201	201	201	135
Long-term debt	600	433	367	300	750
Other non-current liabilities	608	601	592	592	596
Total liabilities	1,349	1,236	1,160	1,093	1,481
Total shareholder equity	3,284	3,304	3,398	3,678	3,739
Net debt	311	342	251	126	412
Net debt / EBITDA (x)	3.7	1.5	0.6	0.4	1.3
ROE (Net income/Equity)	-10.4%	0.4%	2.7%	2.1%	1.5%
ROA (Net income/Total assets)	-7.4%	0.3%	2.0%	1.6%	1.1%
ROIC (NOPAT/Assets + Net debt)	1.8%	1.0%	3.5%	2.8%	2.5%
CROIC (FCF/Equity + Total debt)*	-5.1%	-1.0%	2.4%	-1.9%	-6.7%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
Source: RBC Capital Markets estimates, company reports, Bloomberg

(Priced as of market close November 29, 2019)

Eldorado Gold Corporation (EGO US, ELD CN): Forecasts at RBC price deck

Rating	Underperform	Basic shares (m)	158.5	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	158.5/161.4	Josh Wolfson, CFA
Target price at RBC price deck	US\$6.50	Basic mkt cap (US\$m)	1,242	(416) 842-9893
Share price	US\$7.84	Enterprise value (US\$m)	1,612	josh.wolfson@rbccm.com

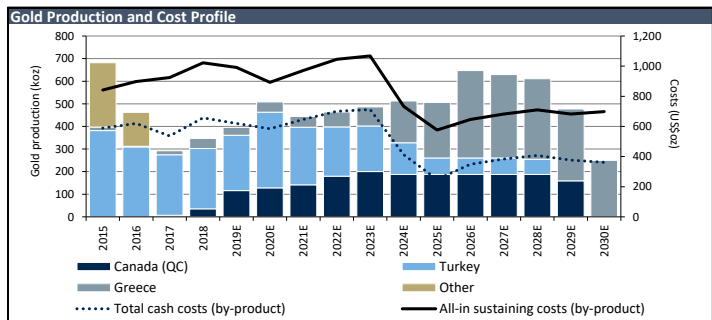
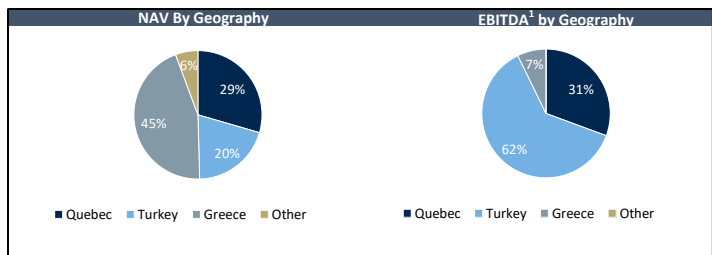
All US\$m unless noted						All US\$m unless noted					
Operating statistics						Key commodities					
	2018	2019E	2020E	2021E	2022E		2018	2019E	2020E	2021E	2022E
Consolidated gold production (koz)	346	397	511	446	467	Gold (US\$/oz)	1,269	1,390	1,500	1,450	1,450
Equity gold production (koz)	344	395	509	444	464	Silver (US\$/oz)	15.71	16.23	17.50	17.50	17.50
Kışladağ	172	144	242	161	129	Copper (US\$/lb)	2.95	2.72	3.00	2.75	2.75
Efemçukuru	95	101	94	94	90	Zinc (US\$/lb)	1.33	1.16	1.05	1.00	1.00
Olympias	44	34	45	47	65	Lead (US\$/lb)	1.02	0.91	1.00	1.00	1.00
Lamaque	35	116	128	142	180	Oil (US\$/bbl)	65	57	58	58	59
Skouries	0	0	0	0	0	Key currencies					
Other	-3	0	0	0	0	US\$/CS	0.77	0.76	0.76	0.77	0.78
Total cash costs (co-product) (US\$/oz)	689	574	618	680	749	US\$/EUR	1.18	1.11	1.10	1.11	1.13
Kışladağ	687	503	583	729	950	TRY/US\$	4.71	5.69	6.27	5.96	5.64
Efemçukuru	547	630	635	651	701	Valuation data					
Olympias	981	1,199	1,057	1,082	1,074	P/E (x)	-73.4	100.3	12.2	20.1	30.3
Lamaque	0	429	518	511	509	P/CF (x)	20.3	7.8	3.9	6.0	6.0
Skouries	0	0	0	0	0	EV/EBITDA (x)	19.0	7.1	4.0	5.4	5.3
Cash operating costs (by-product) (US\$/oz)	632	586	557	621	675	FCF/EV yield*	-12.9%	-2.3%	6.6%	-5.0%	-18.5%
Total cash costs (by-product) (US\$/oz)	656	619	584	647	700						
Reported AISC (by-product) (US\$/oz)	1,022	991	892	971	1,046						
Fully loaded costs (co-product) (US\$/oz)	1,376	1,147	1,200	1,310	1,378						

	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
Net Asset Value					
Kışladağ (100.0%), Turkey	259	1.41	11%	20%	42%
Efemçukuru (100.0%), Turkey	210	1.14	9%	5%	21%
Lamaque (100.0%), Canada (QC)	687	3.74	29%	0%	31%
Skouries (95.0%), Greece	750	4.09	32%	25%	0%
Olympias (95.0%), Greece	164	0.90	7%	19%	7%
Tocantinzinho (100.0%), Brazil	50	0.27	2%	12%	0%
Perama Hill (100.0%), Greece	185	1.01	8%	7%	0%
Certej (80.5%), Romania	25	0.14	1%	13%	0%
Other	0	0.00	0%	0%	0%
Total mining and investment assets	2,330	12.70	100%	100%	100%
Balance sheet items and expenditures	-364	-1.99			
Total	1,965	10.71			
P/NAV at RBC price deck (x)		0.73			

	2014	2015	2016	2017	2018
Gold reserves and resources					
Proven and probable					
Tonnes (m)	661.5	624.2	466.3	374.9	369.6
Grade (g/t)	1.2	1.2	1.2	1.4	1.3
Oz (m)	26.0	24.9	18.4	16.5	16.0
Assumed reserve additions (moz)					-0.3
LOM production (moz)					8.0
Measured, indicated & inferred (excl)					
Oz (m)	20.8	64.9	17.2	24.7	0.0
Reserve and resource statistics					
Reserves/sh (x1,000)	181.1	173.6	123.7	103.9	101.0
Reserves & resources/sh (x1,000)	326.1	626.3	239.5	259.3	101.0
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	579				101
Total acquisition cost (US\$/oz)	1,289				101

	2018	2019E	2020E	2021E	2022E
Income statement					
Total revenue	459	631	876	756	821
% gold	82%	86%	87%	85%	82%
% silver	4%	3%	3%	3%	4%
% copper	0%	0%	0%	0%	0%
% other	14%	11%	10%	12%	14%
Operating costs	268	330	397	389	457
G&A	54	41	40	40	40
Exploration	34	15	18	18	18
Depreciation	106	149	211	159	190
Other	17	17	11	11	0
Adjusted EBITDA	85	227	408	296	303
Adjusted EBIT	-20	81	198	139	116
Net interest expense	4	45	43	35	49
Unusual/other items	-450	-75	-86	-71	-97
EBT	-466	51	155	104	67
Taxes	-86	44	59	39	26
Minority interest	-18	-6	-6	-6	-6
Other	0	0	0	0	0
Net income (reported)	-362	13	102	70	47
Net income (adjusted)	-17	12	102	70	47
EPS (reported) (US\$/sh)	-2.28	0.08	0.64	0.39	0.26
EPS (adjusted) (US\$/sh)	-0.11	0.08	0.64	0.39	0.26
Average shares (m)	159	158	158	180	183

	2018	2019E	2020E	2021E	2022E
Cash flow statement					
Net income (reported)	-362	13	102	70	47
Depreciation	106	149	211	159	190
Other	317	-3	2	7	3
Operating cash flow	61	159	316	237	240
Operating cash flow (US\$/sh)	0.39	1.00	1.99	1.31	1.31
Working capital changes	5	14	0	0	0
Cash from operations	66	173	316	237	240
Capital expenditure	-274	-211	-209	-318	-539
Net investments	17	33	0	0	0
Investing cash flow	-257	-178	-209	-318	-539
Common share dividends	0	0	0	0	0
Debt additions	0	500	0	0	450
Debt repayments	0	-604	-67	-67	-67
Equity financing	0	0	0	200	0
Other net financing	-2	-22	0	0	0
Financing cash flow	-2	-126	-67	133	383
Foreign exchange	0	0	0	0	0
Change in cash	-193	-131	40	52	85
Cash balance	286	156	196	248	332
Free cash flow*	-208	-38	107	-81	-298
Free cash flow* (\$/sh)	-1.31	-0.24	0.67	-0.45	-1.63



	2018	2019E	2020E	2021E	2022E
Balance sheet					
Assets					
Cash	286	156	196	248	332
Other current assets	228	250	250	250	250
Current assets	515	406	446	498	582
Non-current assets	4,118	4,135	4,129	4,284	4,636
Total assets	4,633	4,541	4,574	4,781	5,219
Liabilities					
Current liabilities	142	201	201	201	135
Long-term debt	600	433	367	300	750
Other non-current liabilities	608	601	594	593	594
Total liabilities	1,349	1,236	1,163	1,094	1,479
Total shareholder equity	3,284	3,305	3,412	3,687	3,740
Net debt	311	341	234	116	414
Net debt / EBITDA (x)	3.7	1.5	0.6	0.4	1.4
ROE (Net income/Equity)	-10.4%	0.4%	3.0%	2.0%	1.3%
ROA (Net income/Total assets)	-7.4%	0.3%	2.2%	1.5%	0.9%
ROIC (NOPAT/Assets + Net debt)	1.8%	1.0%	3.8%	2.7%	2.3%
CROIC (FCF/Equity + Total debt)*	-5.1%	-1.0%	2.8%	-2.1%	-7.0%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
Source: RBC Capital Markets estimates, company reports, Bloomberg

(Priced as of market close November 29, 2019)

Valuation

Our price target of US\$6.50 is based upon 0.7x our risk adjusted NAV at a long-term gold price of US\$1,400/oz and 17x our 2019-2021 SFCF estimate, which would be equivalent to 4x EBITDA. These multiples are below the average for the intermediate producer group, supported by the company's above-average financial leverage, above-average political risk exposure, and its long-term capital reinvestment outlook requirements. Our Underperform rating is supported by EGO's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Risks to rating and price target

In addition to general operating and financial risks for EGO related to commodities (gold, silver, copper, lead and zinc) and FX (USD, CAD, EUR), we highlight:

- Olympias metallurgical complexities and smelter offtake terms
- High political risk exposure (Greece, Turkey, Romania, Brazil)
- Technical/operating risk and financing risk

Upside risks include:

1. Successful permitting, funding, construction and restart of Skouries
2. Should EGO successfully gain a sizable equity partner for its Greek portfolio, this event could represent a materially positive catalyst in our view, thereby providing project funding and reducing attributable project spending requirements

Franco-Nevada Corporation

A kinder, gentler gold exposure investment

Our view: FNV maintains an attractive portfolio of royalties and streams and has established a credible track record with investors over time. We believe these positive attributes are appropriately reflected in the company's valuation relative to both its royalty peers and the large producer group. Short-term, favourable growth should be realized from FNV's Cobre Panama stream. We are assuming coverage of FNV with a Sector Perform rating and US\$106 PT.

Key points:

Insulated exposure to gold production. Over time, FNV has established itself as the lower-risk precious metals investment exposure. Through the company's extensive asset base, including 53 operating mines and extensive oil and gas assets, FNV offers investors the most highly diversified exposure to gold production, absent outsized asset-specific risks or any material exposure to the underlying asset capital or operating costs. Notwithstanding its diversification, several core assets still represent exposure risk for the company, where Cobre Panama, Candelaria, and Antapaccay combined represent 39% of our NAV estimate and 34% of 2020E-21E EBITDA.

Upcoming guidance to outline stable output. FNV will issue one- and three-year guidance in March, representing 2020 and 2024 output. We forecast 2020 growth YoY could remain highly encouraging for FNV, although 2024 YoY volumes will stabilize. Key to this change is FNV's cornerstone Cobre Panama asset, where operator First Quantum has guided peak output in 2023 (from an estimated 40 kGEO in 2019 to FNV, vs. >160 kGEO in 2023), but thereafter will decline. On this basis, we forecast FNV's existing 2023 guidance for 570-610 kGEO will be stable in 2024 and additional portfolio upside or investments will be required to maintain the current production base. Upcoming growth is attractive for FNV, but in our view is accurately represented in FNV's valuation today (2020E/21E FCF/EV of 3.6%/3.9% and 2024E 4.8% vs. group average of ~4.6% today, excluding capital). After 2024, we forecast GEO declines due to grade and production changes at various core assets.

Careful planning and capital allocation provides comfort. Through the investment cycle, FNV has demonstrated a thoughtful approach to business planning and capital allocation that, in our view, reaffirms the expertise and experience of its team. This is evident from the company's well-executed recent succession plan, and the returns generated from its portfolio transactions over time. As the business grows and transitions to becoming more self-sustaining and funded internally, we anticipate FNV will gain the ability to more generously return capital to shareholders. FNV's energy portfolio currently accounts for 16% of revenues, while in our view greater questions could surface should this reach above the company's stated 20% maximum goal.

Sector: Precious Minerals & Diamonds - large cap

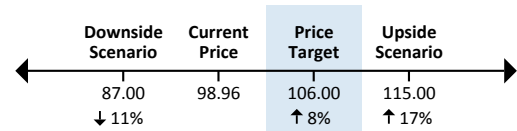
Sector Perform

NYSE: FNV; USD 98.96

Price Target USD 106.00

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input checked="" type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	188.6	Market Cap (MM):	18,525
Dividend:	1.00	Yield:	1.0%
NAVPS:	39.66	P/NAVPS:	2.50x
ROE:	5.1%	Avg. Daily Volume:	523,371
Float (MM):	183.6		
Debt to Cap:	0%		

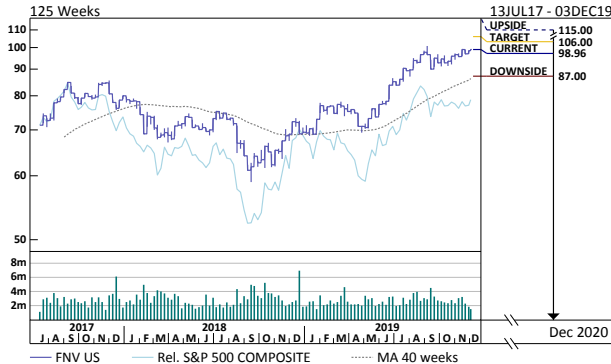
RBC Estimates

FY Dec	2018A	2019E	2020E	2021E
EPS, Adj Basic	1.17	1.76	2.33	2.50
P/AEPS	NM	56.2x	42.5x	39.6x
CFPS, Adj Basic	2.53	3.31	4.00	4.18
P/ACFPS	39.1x	29.9x	24.7x	23.7x
FCFPS	(2.77)	0.64	3.70	3.89
P/FCF	nm	nm	26.7x	25.4x
Production	447.9	501.7	571.4	599.2
EPS, Adj Basic	Q1	Q2	Q3	Q4
2018	0.34A	0.29A	0.29A	0.24A
2019	0.35A	0.34A	0.54A	0.52E
2020	0.57E	0.56E	0.60E	0.61E
CFPS, Adj Basic				
2018	0.72A	0.62A	0.61A	0.59A
2019	0.72A	0.65A	1.00A	0.94E
2020	0.99E	0.98E	1.01E	1.02E

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: Franco-Nevada Corporation



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our price target of US\$106 is based upon 2.5x our risk adjusted NAV at a long-term gold price of US\$1,400/oz and 28x our 2019-2021 SFCF estimate, which would be equivalent to 26x EBITDA. These multiples are above the average for the royalty group, reflecting FNV's execution track record and its diversified asset base, but are in line with FNV's historical relative trading ranges. Our Sector Perform rating is supported by FNV's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Upside scenario

Our upside value of US\$115 is based upon higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside value of US\$87 is based upon lower long-term gold prices of US\$1,200/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Investment summary

Franco-Nevada Corporation is a diversified resource royalty and metal streaming company with ongoing revenues from 53 producing gold, PGM, and base metal royalties/streams, and 56 producing oil & gas royalties from mainly across the United States, Canada, Peru and Chile. 2019 guidance outlines GEO production of 490-500K and O&G revenue of \$100-115M at \$55/bbl WTI and \$2.40/mcf HH. 2023 guidance outlines GEO production of 570-610K and O&G revenue of \$140-160M at \$55/bbl WTI. Franco-Nevada continues to actively pursue opportunities that provide exposure to long-life assets in low geopolitical risk regions and assets undergoing active exploration programs, with upside potential.

Investment outlook:

- FNV's Cobre Panama (First Quantum) asset is expected to contribute to significant GEO output growth of >20% by 2023. In addition, FNV's more recent US oil and gas acquisitions are expected to increase revenues and cash flow in upcoming years.
- FNV is well positioned for further acquisitions given its strong liquidity position, with ~\$1.4B in available capital. More recent acquisitions by FNV in oil & gas have increased its exposure to energy; the company has outlined a 20% contribution as its upper threshold for energy revenues.
- The CRA is currently auditing FNV for its domestic and international taxation. Based on company commentary, management views the risk of international audit becoming material for FNV as low.
- Our Sector Perform rating is predicated upon FNV's attractive portfolio, track record of execution, and upcoming growth being appropriately reflected in the company's valuation relative to both its royalty peers and the large producer group.

Upcoming catalysts and milestones

- Cobre Panama/First Quantum ramp-up (2019-23)
- Tasiast/Kinross Phase II expansion (2020)
- Permian, Midlands, SCOOP-STACK and Delaware ramp-up (today to ~2025)
- Stillwater/Sibanye-Stillwater Blitz ramp-up (2021-22)

Key risks

In addition to general operating and financial risks for FNV related to commodities (gold, silver, and oil) we highlight: Achievement of ramp-up and production targets at Cobre Panama/First Quantum, and resolution of outstanding license uncertainties; Achievement of expected development/drilling rates across oil & gas portfolio (Permian, Midlands, SCOOP-STACK and Delaware); and Tax treatment of offshore streaming income

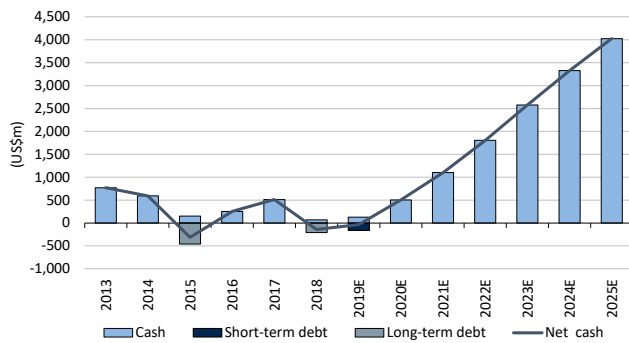
Exhibit 2: Franco-Nevada – Catalysts, opportunities and risks

Catalysts and milestones	<ul style="list-style-type: none"> • Cobre Panama/First Quantum ramp-up (2020-23) and throughput expansion to 100mta (after 2022) • Tasiast/Kinross Phase II expansion commercial production (3Q20) • Midlands, STACK and Delaware ramp-up (today to ~2025) • Stillwater/Sibanye-Stillwater Blitz ramp-up (2021–22) • Antapaccay/Glencore development decision at Coroccohuayco (2020) • Subika/Newmont ramp-up (4Q19)
Opportunities	<ul style="list-style-type: none"> • Potential permitting and construction at long-dated potential projects, including Valentine Lake/Marathon, Salares/Goldfields, Hardrock/Premier & Centerra, and Stibnite/Midas. • Potential permitting and construction at higher-uncertainty, permitting-constrained projects, including Ring of Fire/Noront, Rosemont/Hudbay and Taca Taca/First Quantum • Improvement in energy prices and increasing drilling activity on royalty ground • Further acquisition potential with ~\$1.4B in available capital, including M&A or new project development
Risks and uncertainties	<ul style="list-style-type: none"> • Cobre Panama mining concession Supreme Court dispute • Achievement of ramp-up and production targets at Cobre Panama/First Quantum • Potential energy sector capital outlook changes from oil prices, capital availability, or US legislative revisions • Achievement of expected development/drilling rates across oil & gas portfolio (Permian, Midlands, SCOOP-STACK and Delaware) • CRA audit for domestic and offshore streaming income taxation • Commodity price risk (most notably gold, silver and oil prices), technical/permitting/operating risk and financing risk

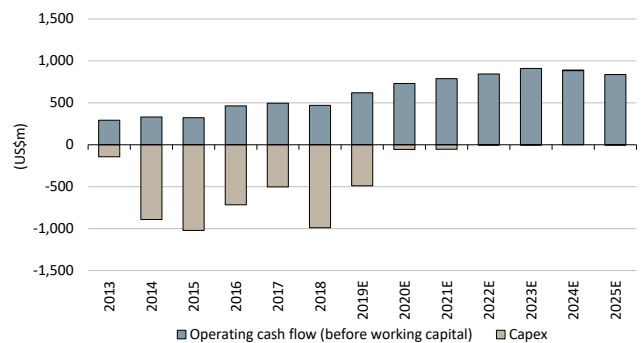
Source: Company reports, RBC Capital Markets estimates

Exhibit 3: Franco-Nevada – Financial forecasts at spot gold

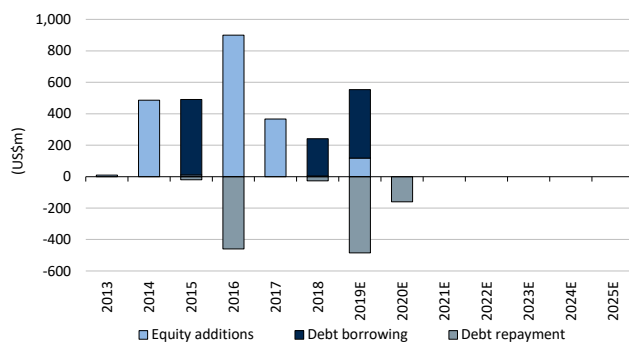
Cash and debt



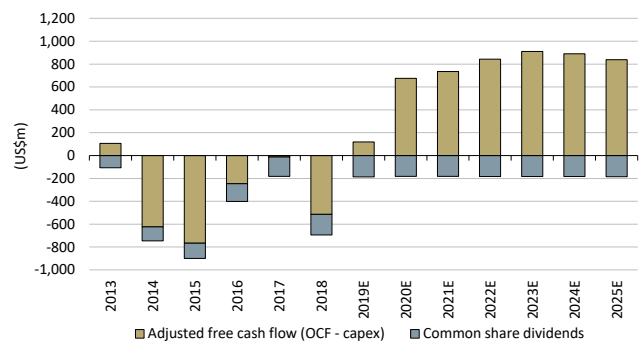
Operating cash flow and capital spending



Changes in debt and equity



Free cash flow and common share dividends



Source: Company reports, RBC Capital Markets estimates (Priced as of market close November 29, 2019)

Exhibit 4: Franco-Nevada – Net asset valuation at spot gold

Franco-Nevada Corporation									
Net asset valuation at spot gold (US\$)									
Shares (FD, FF, ITM) (m)	189,532								
Market capitalization (US\$m)	18,635								
	Risk-weighted NAV			NAV at various discount rates					
	Discount rate	(\$m)	(\$/sh)	5% (\$m)	5% (\$/sh)	7% (\$m)	7% (\$/sh)	10% (\$m)	10% (\$/sh)
Gold and silver assets									
Agi Dağ/Alamos (NSR), Turkey	5%	13	0.07	13	0.07	10	0.05	8	0.04
Antamina/Teck (SS), Peru	5%	518	2.73	518	2.73	447	2.36	369	1.94
Antapaccay/Glencore (100.0%), Peru	5%	511	2.70	511	2.70	475	2.50	427	2.25
Aphrodite/Aphrodite (GR), Australia (WA)	5%	2	0.01	2	0.01	2	0.01	1	0.01
Bald Mountain/Kinross (NSR/GR), US (NV)	5%	20	0.11	20	0.11	19	0.10	18	0.09
Brucejack/Pretium (NSR), Canada (BC)	5%	57	0.30	57	0.30	52	0.28	46	0.24
Candelaria/Lundin (GSS), Chile	5%	726	3.83	726	3.83	635	3.35	535	2.82
Castle Mountain/Castle Mountain (NSR), US (CA)	10%	39	0.21	58	0.30	49	0.26	39	0.21
Cerro Moro/Yamana (NSR), Argentina (SC)	5%	33	0.17	33	0.17	31	0.16	28	0.15
Cerro San Pedro/New Gold (GR), Mexico	5%	0	0.00	0	0.00	0	0.00	0	0.00
Cobre Panama I/First Quantum (GSS), Panama	5%	1,415	7.46	1,415	7.46	1,171	6.18	923	4.87
Cobre Panama II/First Quantum (GSS), Panama	5%	436	2.30	436	2.30	357	1.88	277	1.46
Dee/Barrick & Premier (NSR), US (NV)	5%	28	0.15	28	0.15	26	0.14	24	0.13
Duketon/Regis (100.0%), Australia (WA)	5%	22	0.11	22	0.11	21	0.11	19	0.10
Eagle Gold/Victoria Gold (NSR), Canada (YK)	5%	24	0.12	24	0.12	21	0.11	19	0.10
Edikan/Perseus (NSR), Ghana	5%	19	0.10	19	0.10	18	0.10	17	0.09
Fire Creek & Midas/Hecla (FGD/NSR), US (NV)	5%	10	0.05	10	0.05	9	0.05	9	0.05
Gold Quarry/Newmont (NSR), US (NV)	5%	75	0.39	75	0.39	71	0.37	65	0.34
Goldstrike/Barrick (NSR/NPI), US (NV)	5%	224	1.18	224	1.18	208	1.10	187	0.98
Hardrock/Premier & Centerra (NSR), Canada (ON)	10%	54	0.29	84	0.45	70	0.37	54	0.29
Hemlo/Barrick (NSR/NPI), Canada (ON)	5%	56	0.29	56	0.29	51	0.27	45	0.24
Hollister/Hecla (NSR), US (NV)	5%	10	0.05	10	0.05	10	0.05	9	0.05
Ity/Endeavour (NSR), Cote D'Ivoire	5%	22	0.12	22	0.12	20	0.11	18	0.09
Karma/Endeavour (FGD/NSR), Burkina Faso	5%	53	0.28	53	0.28	50	0.27	46	0.24
Malartic/Agnico & Yamana (GR), Canada (QC)	5%	7	0.04	7	0.04	7	0.04	6	0.03
Marigold/Silver Standard (NSR/GR), US (NV)	5%	37	0.20	37	0.20	35	0.19	33	0.17
Mesquite/New Gold (NSR), US (CA)	5%	8	0.04	8	0.04	8	0.04	8	0.04
Musselwhite/Goldcorp (NPI), Canada (ON)	5%	49	0.26	49	0.26	44	0.23	38	0.20
Mine Waste Solutions/AngloGold (GS), South Africa	5%	114	0.60	114	0.60	109	0.57	102	0.54
Other gold assets/various (NSR), multiple locations	5%	30	0.16	30	0.16	26	0.14	23	0.12
Palmarajo/Coer (GS), Mexico	5%	73	0.39	73	0.39	69	0.37	64	0.34
Phoenix/Rubicon (NSR), Canada (ON)	5%	11	0.06	11	0.06	10	0.05	9	0.05
Red October/Matsa (NSR), Australia (WA)	5%	2	0.01	2	0.01	2	0.01	2	0.01
Sabodala/Teranga (FGD/NSR), Senegal	5%	92	0.48	92	0.48	85	0.45	76	0.40
Salares Norte/Gold Fields (NSR), Chile	5%	40	0.21	40	0.21	35	0.19	30	0.16
SKO/Westgold Resources (NSR), Australia (WA)	5%	1	0.01	1	0.01	1	0.01	1	0.01
Stibnite Gold/Midas (NSR), US (ID)	10%	60	0.31	80	0.42	70	0.37	60	0.31
Subika/Newmont (NSR), Ghana	5%	84	0.44	84	0.44	74	0.39	62	0.33
Sudbury/KGHM (GS), Canada (ON)	5%	13	0.07	13	0.07	13	0.07	12	0.06
Tasiast/Kinross (NSR), Mauritania	5%	113	0.60	113	0.60	100	0.53	85	0.45
Timmins West/Lake Shore (NSR), Canada (ON)	5%	1	0.01	1	0.01	1	0.01	1	0.01
Valentine Lake/Marathon (NSR), Canada (NL)	5%	42	0.22	42	0.22	36	0.19	30	0.16
Gold exploration properties		32	0.17	32	0.17	32	0.17	32	0.17
Gold hedge book		0	0.00	0	0.00	0	0.00	0	0.00
Total gold and silver assets		5,504	29.04	5,573	29.40	4,868	25.68	4,092	21.59
Other assets									
Eagle Picher/EP Minerals (NSR), US (NV)	8%	3	0.01	4	0.02	3	0.02	2	0.01
Edson/CNRL (ORR), Canada (SK)	8%	10	0.05	13	0.07	11	0.06	9	0.05
Marcellus/Range Resources (GORR), US (PA & OH)	8%	278	1.47	364	1.92	303	1.60	238	1.26
Midale/Apache (ORR/WI), Canada (SK)	8%	11	0.06	15	0.08	12	0.07	10	0.05
Midland-Delaware/various (MT), US (TX)	8%	261	1.37	335	1.77	282	1.49	224	1.18
Mt Keith/BHP (NSR/NPI), Australia (WA)	8%	31	0.16	42	0.22	34	0.18	26	0.13
Osborne/Shanxi Donghui (NSR), Australia (QLD)	8%	0	0.00	0	0.00	0	0.00	0	0.00
Other oil and gas/various (ORR/FH), Canada	8%	13	0.07	14	0.07	13	0.07	12	0.06
Orion Thermal/Osum (GORR), Canada (AB)	8%	106	0.56	143	0.76	116	0.61	89	0.47
Pandora/Lonmin (NPI), South Africa	5%	2	0.01	2	0.01	2	0.01	1	0.01
Peculiar Knob/Arrium (FR), Australia (SA)	8%	15	0.08	16	0.08	15	0.08	15	0.08
Ring of Fire/Noront (loan/NSR), Canada (ON)	10%	33	0.17	34	0.18	33	0.18	33	0.17
Robinson/KGHM (NSR/other), US (NV)	8%	1	0.00	1	0.00	1	0.00	1	0.00
Rosemont/Hudbay (NSR), US (AZ)	8%	63	0.33	88	0.46	70	0.37	51	0.27
STACK-SCOOP I/various (GORR), US (OK)	8%	147	0.78	173	0.91	155	0.82	133	0.70
STACK-SCOOP II/Continental (MIR), US (OK)	8%	405	2.14	599	3.16	460	2.43	315	1.66
Stillwater-East Boulder/Sibanye Stillwater (NSR), US (MT)	5%	369	1.95	369	1.95	329	1.74	282	1.49
Sudbury/KGHM (GS), Canada (ON)	5%	53	0.28	53	0.28	51	0.27	48	0.25
Taca Taca/First Quantum (NSR), Argentina (SAL)	10%	104	0.55	233	1.23	164	0.87	104	0.55
Weyburn/Whitecap (NRI/ORR/WI), Canada (SK)	8%	216	1.14	275	1.45	233	1.23	189	1.00
Other exploration		40	0.21	40	0.21	40	0.21	40	0.21
Investments		160	0.84	160	0.84	160	0.84	160	0.84
Total other assets		2,322	12.25	2,971	15.68	2,489	13.13	1,983	10.46
Balance sheet and expenses									
Basic working capital		220	1.16	220	1.16	220	1.16	220	1.16
Value of ITM instruments		46	0.24	46	0.24	46	0.24	46	0.24
Estimated working capital additions		0	0.00	0	0.00	0	0.00	0	0.00
Long-term debt		-242	-1.28	-242	-1.28	-242	-1.28	-242	-1.28
Estimated debt additions		0	0.00	0	0.00	0	0.00	0	0.00
General & administrative expense	5%	-337	-1.78	-337	-1.78	-272	-1.44	-208	-1.10
Exploration expense	5%	0	0.00	0	0.00	0	0.00	0	0.00
Interest tax shield	5%	2	0.01	2	0.01	2	0.01	2	0.01
Reclamation & closure liability		0	0.00	0	0.00	0	0.00	0	0.00
Net financial assets		-311	-1.64	-311	-1.64	-246	-1.30	-182	-0.96
Net asset value (US\$)		7,515	39.65	8,233	43.44	7,111	37.52	5,893	31.09
Share price (US\$)		98.32		98.32		98.32		98.32	
NAV multiple (P/NAV) (x)		2.48		2.26		2.62		3.16	
Input assumptions									
Gold price (US\$/oz)		2019E	2020E	2021E	Long term				
Silver price (US\$/oz)		1,387	1,464	1,464	1,464				
Copper price (US\$/lb)		16.11	17.03	17.03	17.03				
		2.73	2.71	2.73	2.81				

Source: Company reports, RBC Capital Markets estimates (Priced as of market close November 29, 2019)

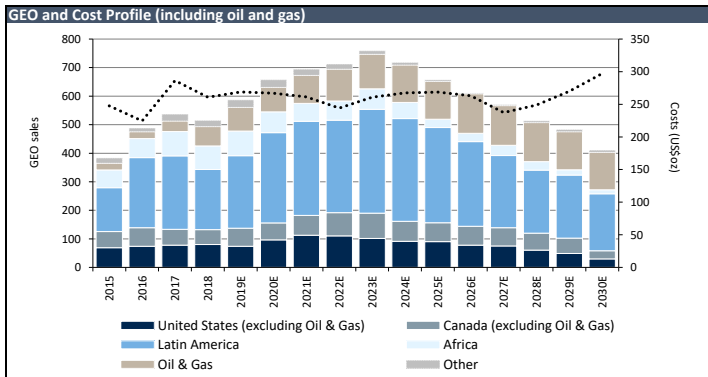
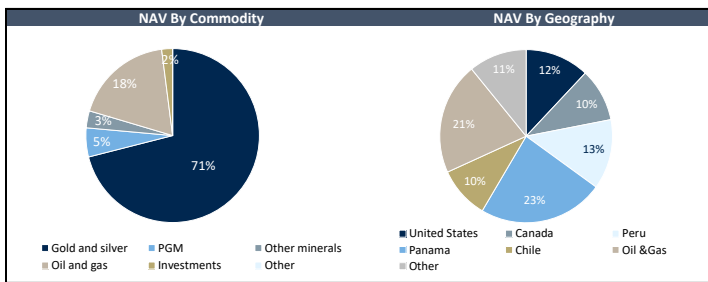
Franco-Nevada Corporation (FNV US, FNV CN): Forecasts at spot gold				
Rating	Sector Perform	Basic shares (m)	188.6	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	189.5/189.5	Josh Wolfson, CFA
Target price at RBC price deck	US\$106.00	Basic mkt cap (US\$m)	18,541	(416) 842-9893
Share price	US\$98.32	Enterprise value (US\$m)	18,692	josh.wolfson@rbccm.com

All US\$m unless noted					
Operating statistics					
	2018	2019E	2020E	2021E	2022E
Equity GEO production (koz)	448	501	572	596	601
Gold and silver GEO	406	434	505	531	536
PGM GEO	31	50	52	55	54
Other mineral GEO	11	17	15	10	10
Key operations GEO production (koz)					
Candelaria	56	73	73	79	78
Antapaccay	77	70	72	74	63
Antamina	40	34	38	31	31
Palmarajo	35	31	27	27	15
Mine Waste Solutions	26	25	27	27	27
Sabodala	22	23	12	8	11
Goldstrike	15	18	29	28	25
Cobre Panama I & II	0	42	104	115	135
Other	176	184	190	207	217
Oil and gas revenue (US\$m)	86	116	126	143	163
Total cash costs (co-product) (US\$/oz)	261	269	267	261	244

All US\$m unless noted					
Valuation data					
	2018	2019E	2020E	2021E	2022E
P/E (x)	84.3	56.3	44.3	39.4	36.2
P/CF (x)	38.9	29.8	25.4	23.6	22.1
EV/EBITDA (x)	36.5	28.4	23.9	22.4	21.3
FCF/EV yield*	-2.8%	0.6%	3.6%	3.9%	4.5%

All US\$m unless noted					
Income statement					
	2018	2019E	2020E	2021E	2022E
Total revenue	653	819	963	1,017	1,043
% gold	67%	63%	66%	66%	65%
% silver	12%	11%	11%	10%	10%
% copper	0%	0%	0%	0%	0%
% other	21%	26%	23%	24%	25%
Operating costs	118	136	155	158	142
G&A	23	24	25	25	25
Exploration	0	0	0	0	0
Depreciation	248	263	296	305	322
Other	0	0	0	0	0
Adjusted EBITDA	512	658	783	835	877
Adjusted EBIT	265	395	487	530	556
Net interest expense	2	8	0	-14	-38
Unusual/other items	-77	-13	0	29	75
EBT	189	389	488	544	593
Taxes	50	62	68	71	77
Minority interest	0	0	0	0	0
Other	0	0	0	0	0
Net income (reported)	139	328	419	473	516
Net income (adjusted)	217	328	419	473	516
EPS (reported) (\$/sh)	0.75	1.75	2.22	2.50	2.72
EPS (adjusted) (\$/sh)	1.17	1.75	2.22	2.50	2.72
Average shares (m)	186	188	189	190	190

All US\$m unless noted					
Net Asset Value					
	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
Gold and silver	5,651	29.81	71%	93%	77%
PGM	371	1.96	5%	7%	6%
Other minerals	249	1.31	3%	0%	1%
Oil and gas	1,448	7.64	18%	0%	16%
Investments	160	0.84	2%	0%	0%
Other	0	0.00	0%	0%	0%
Total mining and investment assets	7,879	41.57	100%	100%	100%
Balance sheet items and expenditures	-364	-1.92			
Total NAV	7,515	39.65			
P/NAV at spot gold (x)		2.48			



All US\$m unless noted					
Cash flow statement					
	2018	2019E	2020E	2021E	2022E
Net income (reported)	139	328	419	473	516
Depreciation	248	263	296	305	322
Other	84	29	17	10	7
Operating cash flow	470	620	732	788	845
Operating cash flow (US\$/sh)	2.53	3.30	3.87	4.16	4.44
Working capital changes	4	-12	0	0	0
Cash from operations	475	608	732	788	845
Capital expenditure	-990	-489	-56	-54	-1
Net investments	1	7	0	0	0
Investing cash flow	-989	-482	-56	-54	-1
Common share dividends	180	187	182	182	183
Debt additions	237	435	0	0	0
Debt repayments	-27	-485	-160	0	0
Equity financing	4	119	0	0	0
Other net financing	-137	-138	-138	-138	-139
Financing cash flow	78	-70	-298	-138	-139
Foreign exchange	-5	0	0	0	0
Change in cash	-441	56	378	596	705
Free cash flow*	-515	119	676	734	844
Free cash flow* (\$/sh)	-2.77	0.63	3.58	3.88	4.44

All US\$m unless noted					
Balance sheet					
	2018	2019E	2020E	2021E	2022E
Assets					
Cash	70	126	504	1,100	1,805
Other current assets	109	169	169	169	169
Current assets	179	295	673	1,269	1,974
Non-current assets	4,756	5,150	4,912	4,660	4,340
Total assets	4,934	5,446	5,585	5,930	6,314
Liabilities					
Current liabilities	25	201	41	41	41
Long-term debt	210	0	0	0	0
Other non-current liabilities	67	275	288	293	295
Total liabilities	302	476	329	334	336
Total shareholder equity	4,632	4,969	5,256	5,596	5,978
Net debt	140	34	-504	-1,100	-1,805
Net debt / EBITDA (x)	0.1	0.0	-0.2	-0.4	-0.6
ROE (Net income/Equity)	2.9%	6.3%	7.6%	8.2%	8.4%
ROA (Net income/Total assets)	2.9%	6.3%	7.6%	8.2%	8.4%
ROIC (NOPAT/Assets + Net debt)	4.8%	6.8%	8.6%	9.9%	11.0%
CRIC (FCF/Equity + Total debt)*	-10.8%	2.4%	13.0%	13.5%	14.6%

All US\$m unless noted					
Input prices					
	2018	2019E	2020E	2021E	2022E
Key commodities					
Gold (US\$/oz)	1,269	1,387	1,464	1,464	1,464
Silver (US\$/oz)	15.71	16.11	17.03	17.03	17.03
Copper (US\$/lb)	2.95	2.73	2.71	2.73	2.75
Zinc (US\$/lb)	1.33	1.15	1.03	1.03	1.02
Oil (US\$/bbl)	65	57	55	55	55
Key currencies					
US\$/C\$	0.77	0.75	0.75	0.75	0.75
US\$/EUR	1.18	1.11	1.10	1.10	1.10

* FCF = operating cash flow - capex; † 2020-2022 average EBITDA
Source: RBC Capital Markets estimates, company reports, Bloomberg

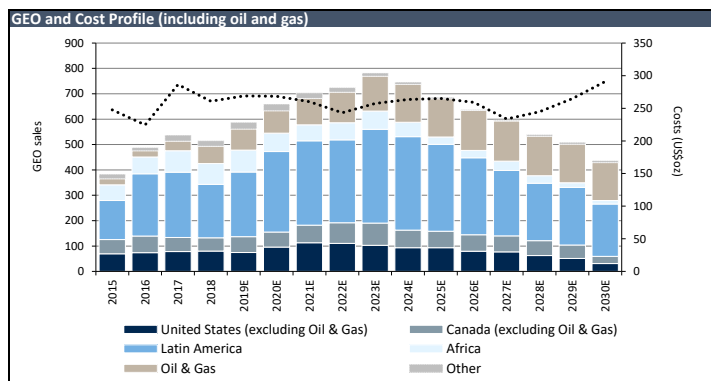
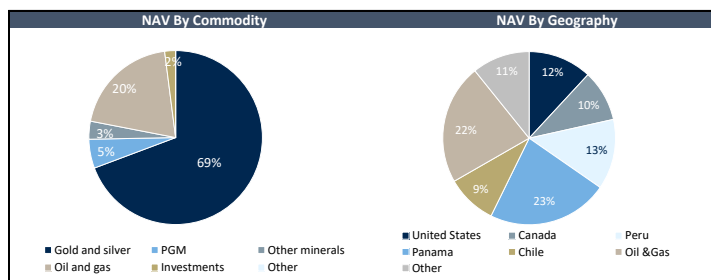
(Priced as of market close November 29, 2019)

Franco-Nevada Corporation (FNV US, FNV CN): Forecasts at RBC price deck				
Rating	Sector Perform	Basic shares (m)	188.6	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	189.5/189.5	Josh Wolfson, CFA
Target price at RBC price deck	US\$106.00	Basic mkt cap (US\$m)	18,541	(416) 842-9893
Share price	US\$98.32	Enterprise value (US\$m)	18,692	josh.wolfson@rbccm.com

All US\$m unless noted						Year Ended December 31					
Operating statistics						2018	2019E	2020E	2021E	2022E	
Equity GEO production (koz)						448	502	571	599	604	
Gold and silver GEO						406	435	507	533	539	
PGM GEO						31	50	50	56	55	
Other mineral GEO						11	17	15	11	11	
Key operations GEO production (koz)											
Candelaria						56	73	73	80	78	
Antapaccay						77	70	72	74	63	
Antamina						40	35	38	33	33	
Palmarejo						35	31	27	27	15	
Mine Waste Solutions						26	25	27	27	27	
Sabodala						22	23	12	8	11	
Goldstrike						15	18	29	28	25	
Cobre Panama I & II						0	42	104	116	135	
Other						176	184	190	207	217	
Oil and gas revenue (US\$m)						86	117	132	151	174	
Total cash costs (co-product) (US\$/oz)						261	269	268	260	243	

Net Asset Value					
	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
Gold and silver	5,515	29.10	69%	93%	76%
PGM	372	1.96	5%	7%	6%
Other minerals	263	1.39	3%	0%	1%
Oil and gas	1,571	8.29	20%	0%	17%
Investments	160	0.84	2%	0%	0%
Other	0	0.00	0%	0%	0%
Total mining and investment assets	7,881	41.58	100%	100%	100%
Balance sheet items and expenditures	-364	-1.92			
Total NAV	7,517	39.66			
P/NAV at RBC price deck (x)		2.48			

Precious metals REU reserves and resources					
	2014	2015	2016	2017	2018
Proven and probable					
Oz (m)	7.2	7.6	8.4	10.3	12.8
Assumed reserve additions (moz)					0.5
LOM production (moz)					6.8
Measured, indicated & inferred (excl)					
Oz (m)	6.9	5.9			
Reserve and resource statistics					
Reserves/sh (x1,000)	45.7	48.3			
Reserves & resources/sh (x1,000)	90.1	85.7			
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	1,834		EV/resource (US\$/oz)		1,460
Total acquisition cost (US\$/oz)	2,160		EV/reserve (US\$/oz)		1,460



* FCF = operating cash flow - capex; † 2020-2022 average EBITDA
Source: RBC Capital Markets estimates, company reports, Bloomberg

(Priced as of market close November 29, 2019)

All US\$m unless noted						Year Ended December 31					
Valuation data						2018	2019E	2020E	2021E	2022E	
P/E (x)						84.3	56.0	42.2	39.3	36.0	
P/CF (x)						38.9	29.7	24.6	23.5	21.9	
EV/EBITDA (x)						36.5	28.3	23.1	22.3	21.1	
FCF/EV yield*						-2.8%	0.6%	3.7%	3.9%	4.6%	

Income statement					
	2018	2019E	2020E	2021E	2022E
Total revenue	653	822	990	1,020	1,051
% gold	67%	63%	66%	65%	64%
% silver	12%	11%	11%	10%	10%
% copper	0%	0%	0%	0%	0%
% other	21%	26%	23%	24%	26%
Operating costs	118	136	156	158	142
G&A	23	24	25	25	25
Exploration	0	0	0	0	0
Depreciation	248	264	298	309	327
Other	0	0	0	0	0
Adjusted EBITDA	512	661	809	838	884
Adjusted EBIT	265	397	512	529	558
Net interest expense	2	8	0	-15	-39
Unusual/other items	-77	-13	1	30	77
EBT	189	392	512	544	596
Taxes	50	62	72	71	78
Minority interest	0	0	0	0	0
Other	0	0	0	0	0
Net income (reported)	139	330	441	474	519
Net income (adjusted)	217	330	441	474	519
EPS (reported) (\$/sh)	0.75	1.76	2.33	2.50	2.73
EPS (adjusted) (\$/sh)	1.17	1.76	2.33	2.50	2.73
Average shares (m)	186	188	189	190	190

Cash flow statement					
	2018	2019E	2020E	2021E	2022E
Net income (reported)	139	330	441	474	519
Depreciation	248	264	298	309	327
Other	84	29	17	9	7
Operating cash flow	470	622	756	792	852
Operating cash flow (US\$/sh)	2.53	3.32	4.00	4.18	4.48
Working capital changes	4	-12	0	0	0
Cash from operations	475	610	756	792	852
Capital expenditure	-990	-489	-56	-54	-1
Net investments	1	7	0	0	0
Investing cash flow	-989	-482	-56	-54	-1
Common share dividends	180	187	182	182	183
Debt additions	237	435	0	0	0
Debt repayments	-27	-485	-160	0	0
Equity financing	4	119	0	0	0
Other net financing	-137	-138	-138	-138	-139
Financing cash flow	78	-70	-298	-138	-139
Foreign exchange	-5	0	0	0	0
Change in cash	-441	59	401	600	712
Free cash flow*	-515	121	699	738	851
Free cash flow* (\$/sh)	-2.77	0.65	3.70	3.89	4.47

Balance sheet					
	2018	2019E	2020E	2021E	2022E
Assets					
Cash	70	128	530	1,129	1,841
Other current assets	109	169	169	169	169
Current assets	179	298	699	1,299	2,011
Non-current assets	4,756	5,150	4,909	4,654	4,329
Total assets	4,934	5,448	5,608	5,953	6,340
Liabilities					
Current liabilities	25	201	41	41	41
Long-term debt	210	0	0	0	0
Other non-current liabilities	67	275	289	293	295
Total liabilities	302	476	330	334	336
Total shareholder equity	4,632	4,971	5,279	5,619	6,004
Net debt	140	32	-530	-1,129	-1,841
Net debt / EBITDA (x)	0.1	0.0	-0.2	-0.4	-0.6
ROE (Net income/Equity)	2.9%	6.4%	8.0%	8.2%	8.4%
ROA (Net income/Total assets)	2.9%	6.4%	8.0%	8.2%	8.4%
ROIC (NOPAT/Assets + Net debt)	4.8%	6.9%	9.0%	9.9%	11.1%
CROIC (FCF/Equity + Total debt)*	-10.8%	2.4%	13.4%	13.5%	14.6%

Input prices					
Key commodities					
	2018	2019E	2020E	2021E	2022E
Gold (US\$/oz)	1,269	1,390	1,500	1,450	1,450
Silver (US\$/oz)	15.71	16.23	17.50	17.50	17.50
Copper (US\$/lb)	2.95	2.72	3.00	2.75	2.75
Zinc (US\$/lb)	1.33	1.16	1.05	1.00	1.00
Oil (US\$/bbl)	65	57	58	58	59
Key currencies					
US\$/C\$	0.77	0.76	0.76	0.77	0.78
US\$/EUR	1.18	1.11	1.10	1.11	1.13

Valuation

Our price target of US\$106 is based upon 2.5x our risk adjusted NAV at a long-term gold price of US\$1,400/oz and 28x our 2019-2021 SFCF estimate, which would be equivalent to 26x EBITDA. These multiples are above the average for the royalty group, reflecting FNV's execution track record and its diversified asset base, but are in line with FNV's historical relative trading ranges. Our Sector Perform rating is supported by FNV's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Risks to rating and price target

In addition to general operating and financial risks for FNV related to commodities (gold, silver, and oil) and FX (USD, CAD, EUR), we highlight:

- Achievement of ramp-up and production targets at Cobre Panama/First Quantum
- Achievement of expected development/drilling rates across oil & gas portfolio (Midlands, STACK and Delaware/various)
- Tax treatment of offshore streaming income

Company description

Franco-Nevada Corporation is a diversified resource royalty and metal streaming company with ongoing revenues from 53 producing gold, PGM, and base metal royalties/streams, and 56 producing oil & gas royalties from mainly across the United States, Canada, Peru and Chile. 2019 guidance outlines GEO production of 490-500K and O&G revenue of \$100-115M at \$55/bbl WTI and \$2.40/mcf HH. 2023 guidance outlines GEO production of 570-610K and O&G revenue of \$140-160M at \$55/bbl WTI. Franco-Nevada continues to actively pursue opportunities that provide exposure to long-life assets in low geopolitical risk regions and assets undergoing active exploration programs, with upside potential.

IAMGOLD Corporation

All cashed up and anywhere to go

Our view: We forecast IAG will begin entering a longer transition period in 2020, underscored by mixed upcoming financial results and an unclear use of proceeds for its US\$820m cash position. Heightened geopolitical risk uncertainty is expected to remain a factor in 2020, given upcoming presidential elections in Burkina Faso and Suriname. We are assuming coverage of IAG with a Sector Perform rating and US\$3.75 PT.

Key points:

Upcoming transition period forecast. We see IAMGOLD as undergoing a transition period in 2020-2022, marked by the company's ongoing ramp-up of its Westwood mine, the ramp-up of its Saramacca satellite project with elevated stripping/lower grade production in early years, the depletion of its Sadiola JV mine, the repayment of its gold prepayment facility in 2022, and upcoming spending to advance IAG's Boto project in Senegal (7% of operating NAV). As a result, we expect mixed financial performance over this period (cumulative FCF generation from 2020E-23E of a below average 13%, excluding its gold forward sale), but the potential for upside longer-term, underscored by IAMGOLD's discounted spot P/NAV of 0.74x (peer group: 1.09x).

Important capital allocation questions outstanding. Following the deferral of IAMGOLD's Cote Gold project in 2019, the company maintains a sizable US\$650m cash and short-term investment portfolio, plus an upcoming US\$170m gold prepayment facility inflow due 4Q19, with no clear use of proceeds. In our view, IAMGOLD's favourable liquidity position presents both an opportunity and a risk for investors, contingent upon upcoming capital allocation decisions. Complicating the outlook is IAMGOLD's signaled openness to various options, including acquisitions, asset divestitures (Sadiola, Cote Gold), mergers with merit, or a potential outright company sale. While the advancement of Boto represents one potential productive use of capital (2018 feasibility study: US\$254m capital and 23% IRR at US\$1,250/oz), a substantial buffer remains outstanding. Absent a use of proceeds for these funds, cash on hand has the potential to insulate the company from risks and uncertainties at lower gold prices, or repurchasing of the company's shares at its current discounted valuation.

Geopolitical uncertainty an upcoming key factor. IAG maintains above-average political risk exposure given the company's asset base in Burkina Faso (37% of NAV), Suriname (29% of NAV), and Senegal (7% of NAV). Beyond 2019's events of concerning regional violence in Burkina Faso and labour disruptions in Suriname, presidential elections are expected in both countries in 2020, introducing additional short-term uncertainty for the company.

Sector: Precious Minerals & Diamonds - small/mid cap

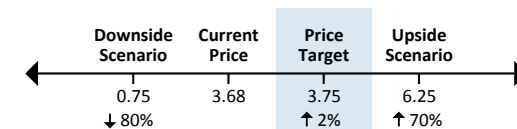
Sector Perform

NYSE: IAG; USD 3.68; TSX: IMG

Price Target USD 3.75

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input checked="" type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	468.0	Market Cap (MM):	1,722
Dividend:	0.00	Yield:	0.0%
NAVPS:	4.19	P/NAVPS:	0.88x
		Avg. Daily Volume:	3,943,537

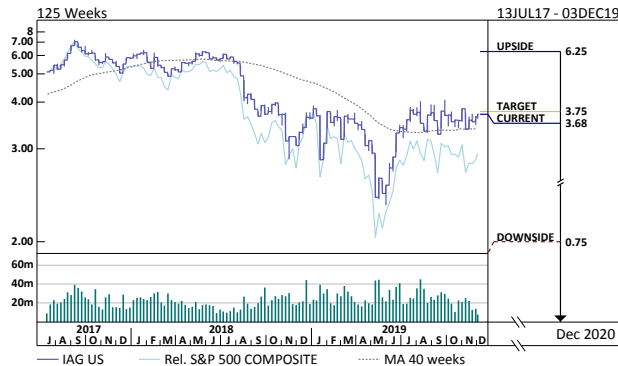
RBC Estimates

FY Dec	2018A	2019E	2020E	2021E	
EPS, Adj Basic	0.07	(0.02)	0.26	0.05	
P/AEPS	52.6x	NM	14.2x	73.6x	
CFPS, Adj Basic	0.62	0.84	0.96	0.67	
P/ACFPS	5.9x	4.4x	3.8x	5.5x	
FCFPS	(0.31)	(0.19)	0.16	(0.29)	
P/FCF	nm	nm	23.0x	nm	
Production	882.0	770.3	810.3	742.6	
EPS, Adj Basic		Q1	Q2	Q3	Q4
2018	0.09A	0.03A	(0.01)A	(0.03)A	
2019	(0.03)A	(0.03)A	(0.01)A	0.04E	
2020	0.07E	0.06E	0.06E	0.07E	
CFPS, Adj Basic		Q1	Q2	Q3	Q4
2018	0.26A	0.16A	0.08A	0.12A	
2019	0.07A	0.08A	0.14A	0.55E	
2020	0.25E	0.23E	0.25E	0.23E	

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: IAMGOLD Corporation



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our price target of US\$3.75 is based upon 0.8x our risk adjusted NAV at a long-term gold price of US\$1,400/oz and 19x our 2020-2021 SFCF estimate, which would be equivalent to 5x EBITDA. These multiples are relatively in line with the average for the intermediate producer group, reflecting the company's higher cost production and above-average political risk exposure, but favourable financial positioning. Our Sector Perform rating is supported by IAG's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Upside scenario

Our upside value of US\$6.25 is based upon higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside value of US\$0.75 is based upon lower long-term gold prices of US\$1,200/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Investment summary

IAMGOLD is an intermediate gold producer, operating three mines across Canada (Quebec), Suriname, and Burkina Faso, while holding a 41% ownership stake in the Sadiola mine in Mali. 2019 guidance outlines production of 765-810 Koz at AISC of US\$1,090-1,130/oz across all operations. The company is focused on optimizing mine plans, driving productivity gains, reducing costs, and advancing higher margin projects.

Investment outlook:

- There remains uncertainty surrounding near-term free cash flow as concerns linger around operations at Westwood following seismic issues underground.
- Rosebel's production and cost outlook are expected to improve with the ramp-up of Saramacca in 2020, but lower grades and higher stripping is expected short-term.
- IAG's balance sheet remains strong with considerable excess cash on hand, which provides the ability to deploy capital towards accretive growth opportunities and/or debt reduction.
- Development of the Cote Gold project in Ontario has been deferred by management. The open-pit operation carries the potential to materially increase overall company production should development advance, but at low forecast returns and elevated risk
- Our Sector Perform rating is predicated upon our view that IAG's valuation relative to peers fairly reflects an upcoming transition period, which we expect to be underscored by mixed financial results, no clear use of IAG's cash proceeds, and interim heightened geopolitical uncertainty.

Upcoming catalysts and milestones

- Boto mining permit (1Q20) and development decision (2020)
- Westwood life-of-mine plan update (4Q19)
- Saramacca full production and underground evaluation (2020)
- Nelligan, Yorbeau, and Karita resource delineation (2020)
- Suriname and Burkina Faso presidential elections (2020)

Key risks

In addition to general operating and financial risks for IAG related to commodities (gold) and FX (USD, CAD, CFA), we highlight:

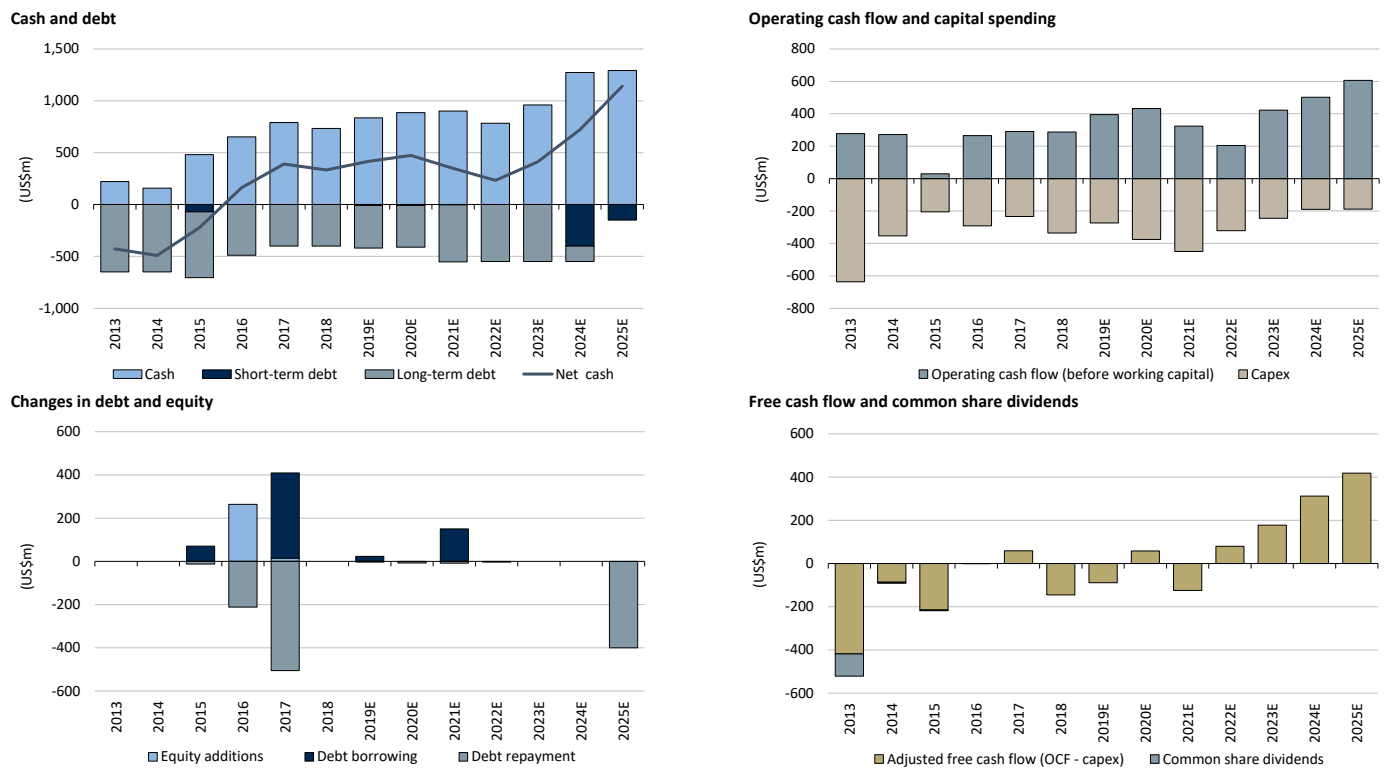
- Elevated geopolitical risk exposure in Burkina Faso and Suriname
- Unclear use of high corporate cash position
- Labour disruption uncertainties in Suriname
- Strategic outlook uncertainties at Cote Gold project

Exhibit 2: IAMGOLD – Catalysts, opportunities and risks

<p>Catalysts and milestones</p>	<ul style="list-style-type: none"> • Boto mining permit receipt (1Q20) and potential construction decision (2020) • Westwood updated preliminary life-of-mine plan (4Q19) and 43-101 (1H20) • Saramacca production ramp-up (2020) and underground study (1H20) • Elections in Suriname (May 2020) and Burkina Faso (November 2020) • Essakane commissioning of new CIL debottlenecking upgrades (3Q20) • Nelligan, Yorbeau, and Karita resource delineation (2020) • Cote Gold potential re-evaluation and development (2021+ estimated)
<p>Opportunities</p>	<ul style="list-style-type: none"> • Potential negotiated increase in ownership at Saramacca project • Potential advancement of Boto Gold project • Potential monetization of additional interest in Cote Gold or divestiture of Sadiola Sulphides project • Potential advancement of exploration stage assets (Nelligan Monster Lake, Karita) • Further exploration upside at Saramacca and other satellite pits near Rosebel • Favourable liquidity position (~\$1.2B)
<p>Risks and uncertainties</p>	<ul style="list-style-type: none"> • Potential care and maintenance of Sadiola mine, resulting in retrenchment costs • Cote Gold strategic outlook opacity, following indicative advancement and subsequent deferral • Elevated geopolitical risk exposure in Burkina Faso and Suriname • Achievement of steady-state Westwood throughput, cost and dilution forecasts, and uncertainties related to ground stability • Commodity price risk (most notably gold prices), technical/operating risk and financing risk

Source: Company reports, RBC Capital Markets estimates

Exhibit 3: IAMGOLD – Financial forecasts at spot gold



Source: Company reports, RBC Capital Markets estimates (Priced as of market close on November 29, 2019 ET)

Exhibit 4: IAMGOLD – Net asset valuation at spot gold

IAMGOLD Corporation									
Net asset valuation at spot gold (US\$)									
Shares (FD, FF, ITM) (m)	468.000								
Market capitalization (US\$m)	1,694								
	Risk-weighted NAV			NAV at various discount rates					
	Discount Rate	(\$m)	(/sh) (\$)	5% (\$m)	5% (/sh) (\$)	7% (\$m)	7% (/sh) (\$)	10% (\$m)	10% (/sh) (\$)
Gold assets									
Rosebel (95.0%), Suriname	5%	551	1.18	551	1.18	473	1.01	382	0.82
Saramacca (66.5%), Suriname	5%	200	0.43	200	0.43	169	0.36	133	0.28
Essakane (90.0%), Burkina Faso	5%	969	2.07	969	2.07	889	1.90	787	1.68
Westwood (100.0%), Canada (QC)	5%	464	0.99	464	0.99	401	0.86	326	0.70
Boto Gold (90.0%), Senegal	5%	193	0.41	193	0.41	135	0.29	69	0.15
Sadiola (41.0%), Mali	5%	7	0.02	7	0.02	7	0.02	7	0.02
Gold exploration properties		228	0.49	228	0.49	228	0.49	228	0.49
Gold hedge book	5%	-2	0.00	-2	0.00	7	0.01	18	0.04
Total gold assets		2,609	5.57	2,584	5.52	2,284	4.88	1,927	4.12
Base metals and other assets									
Other exploration		0	0.00	0	0.00	0	0.00	0	0.00
Other hedge book	5%	2	0.00	2	0.00	2	0.00	2	0.00
Investments		13	0.03	13	0.03	13	0.03	13	0.03
Total other assets		15	0.03	15	0.03	15	0.03	15	0.03
Balance sheet and expenses									
Basic working capital		749	1.60	749	1.60	749	1.60	749	1.60
Value of ITM instruments		0	0.00	0	0.00	0	0.00	0	0.00
Estimated working capital additions		150	0.32	150	0.32	150	0.32	150	0.32
Long-term debt		-421	-0.90	-421	-0.90	-421	-0.90	-421	-0.90
Estimated debt additions		-150	-0.32	-150	-0.32	-150	-0.32	-150	-0.32
General & administrative expense	5%	-284	-0.61	-284	-0.61	-250	-0.53	-209	-0.45
Exploration expense	5%	-103	-0.22	-103	-0.22	-98	-0.21	-92	-0.20
Interest tax shield	5%	52	0.11	52	0.11	49	0.11	45	0.10
Reclamation & closure liability		-340	-0.73	-340	-0.73	-340	-0.73	-340	-0.73
Net financial assets		-348	-1	-348	-0.74	-312	-0.67	-269	-0.57
Net asset value (US\$)		2,276	4.86	2,251	4.81	1,987	4.25	1,673	3.57
Share price (US\$)			3.62		3.62		3.62		3.62
NAV multiple (P/NAV) (x)			0.74		0.75		0.85		1.01
Input assumptions		2019E	2020E	2021E	Long term				
Gold price (US\$/oz)		1,387	1,464	1,464	1,464				
US\$/C\$ FX rate		0.75	0.75	0.75	0.75				

Source: Company reports, RBC Capital Markets estimates (Priced as of market close on November 29, 2019 ET)

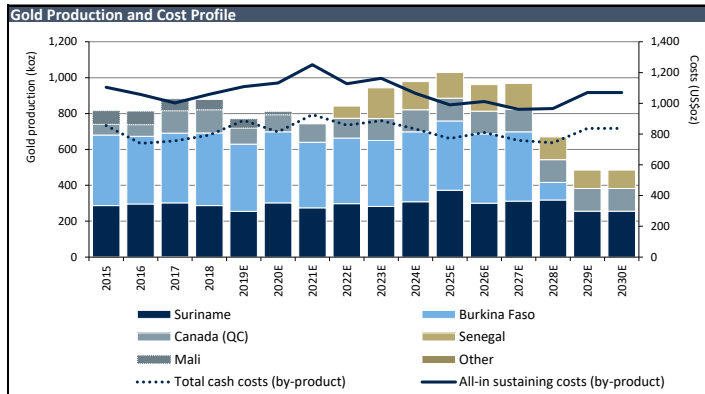
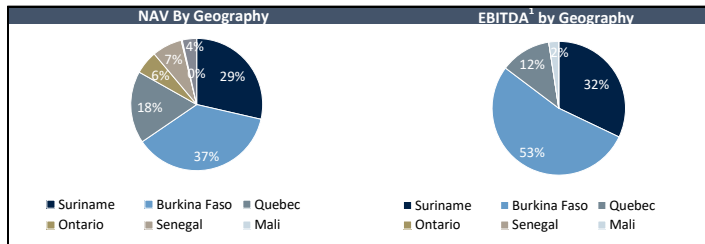
IAMGOLD Corporation (IAG US, IMG CN): Forecasts at spot gold

Rating	Sector Perform	Basic shares (m)	468.0	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	468.0/476.4	Josh Wolfson, CFA
Target price at RBC price deck	US\$3.75	Basic mkt cap (US\$m)	1,694	(416) 842-9893
Share price	US\$3.62	Enterprise value (US\$m)	1,465	josh.wolfson@rbccm.com

All US\$m unless noted						All US\$m unless noted					
Year Ended December 31						Year Ended December 31					
Operating statistics	2018	2019E	2020E	2021E	2022E	Input prices	2018	2019E	2020E	2021E	2022E
Equity gold production (koz)	882	770	810	743	841	Key commodities					
Rosebel	287	255	259	251	235	Gold (US\$/oz)	1,269	1,387	1,464	1,464	1,464
Saramacca	0	0	43	24	63	Silver (US\$/oz)	15.71	16.11	17.03	17.03	17.03
Essakane & Essakane HL	405	375	396	366	366	Oil (US\$/bbl)	65	57	58	58	59
Sadiola	60	51	17	0	0	Key currencies					
Westwood	129	90	95	102	110	US\$/C\$	0.77	0.75	0.75	0.75	0.75
Boto Gold	0	0	0	0	67	US\$/EUR	1.18	1.12	1.10	1.10	1.10
Côte Gold	0	0	0	0	0	Valuation data					
Other	1	0	0	0	0	P/E (x)	54.1	-154.7	15.9	51.7	18.9
Total cash costs (co-product) (US\$/oz)	793	889	813	927	858	P/CF (x)	5.9	4.3	3.9	5.2	8.3
Reported AISC (co-product) (US\$/oz)	1,059	1,108	1,132	1,251	1,128	EV/EBITDA (x)	5.1	6.1	3.2	4.5	3.4
Fully loaded costs (co-product) (US\$/oz)	1,296	1,363	1,382	1,448	1,319	FCF/EV yield*	-9.9%	-6.1%	4.0%	-8.5%	5.4%

Gold reserves and resources						Income statement					
Year Ended December 31						Year Ended December 31					
Proven and probable	2014	2015	2016	2017	2018	Total revenue	2018	2019E	2020E	2021E	2022E
Tonnes (m)	212.8	184.6	175.3	372.9	488.9	% gold	1,111	1,069	1,246	1,166	1,309
Grade (g/t)	1.3	1.3	1.4	1.2	1.1	% silver	100%	100%	100%	100%	100%
Oz (m)	8.6	7.7	7.8	14.5	17.9	% copper	0%	0%	0%	0%	0%
Assumed reserve additions (moz)					1.3	% other	0%	0%	0%	0%	0%
LOM production (moz)					10.6	Operating costs	708	716	688	737	767
Measured, indicated & inferred (excl)					18.7	G&A	42	41	40	40	40
Oz (m)	17.7	19.5	18.7	16.9	18.7	Exploration	39	36	36	36	36
Reserve and resource statistics						Depreciation	266	274	302	289	304
Reserves/sh (x1,000)	22.1	18.3	16.8	31.1	38.2	Other	22	33	0	0	0
Reserves & resources/sh (x1,000)	67.5	64.8	57.2	67.2	78.0	Adjusted EBITDA	289	240	451	323	434
Current per-ounce statistics						Adjusted EBIT	40	-16	169	53	149
Adjusted EV/LOM production (US\$/oz)	358		EV/resource (US\$/oz)	40		Net interest expense	-4	2	3	1	10
Total acquisition cost (US\$/oz)	1,185		EV/reserve (US\$/oz)	82		Unusual/other items	-31	-13	5	8	-6

Net Asset Value						Cash flow statement					
NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†		2018	2019E	2020E	2021E	2022E	
Rosebel (95.0%), Suriname	551	1.18	21%	20%	28%	Net income (reported)	-28	-38	106	33	89
Saramacca (66.5%), Suriname	200	0.43	8%	6%	4%	Net income (adjusted)	31	-11	106	33	89
Essakane (90.0%), Burkina Faso	969	2.07	37%	18%	53%	EPS (reported) (US\$/sh)	-0.06	-0.08	0.23	0.07	0.19
Westwood (100.0%), Canada (QC)	464	0.99	18%	7%	12%	EPS (adjusted) (US\$/sh)	0.07	-0.02	0.23	0.07	0.19
Sadiola (41.0%), Mali	7	0.02	0%	9%	2%	Average shares (m)	466.5	467.9	468.0	468.0	468.0
Côte Gold (64.8%), Canada (ON)	150	0.32	6%	28%	0%	Net income (reported)	288	395	433	324	205
Boto Gold (90.0%), Senegal	193	0.41	7%	10%	0%	Operating cash flow (US\$/sh)	0.62	0.84	0.93	0.69	0.44
Other	92	0.20	4%	3%	0%	Working capital changes	-97.3	-40.8	0.0	0.0	0.0
Total mining and investment assets	2,625	5.61	100%	100%	100%	Cash from operations	190	354	433	324	205
Balance sheet items and expenditures	-349	-0.75				Capital expenditure	-336	-273	-375	-449	-321
Total	2,276	4.86				Net investments	111	114	16	0	0
P/NAV at spot gold (x)		0.74				Investing cash flow	-225	-160	-359	-449	-321



* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
Source: Company reports, Bloomberg, RBC Capital Markets estimates

Balance sheet					
Assets					
	2018	2019E	2020E	2021E	2022E
Cash	615	819	885	902	783
Other current assets	472	359	342	342	342
Current assets	1,087	1,178	1,228	1,245	1,126
Non-current assets	2,876	2,797	2,871	3,031	3,243
Total assets	3,963	3,975	4,098	4,275	4,369
Liabilities					
Current liabilities	227	244	246	243	240
Long-term debt	400	411	403	550	550
Other non-current liabilities	603	615	630	624	623
Total liabilities	1,230	1,270	1,279	1,416	1,413
Total shareholder equity	2,733	2,705	2,819	2,859	2,956
Net debt	-334	-416	-474	-349	-233
Net debt / EBITDA (x)	-1.2	-1.7	-1.1	-1.1	-0.5
ROE (Net income/Equity)	-1.0%	-1.4%	3.9%	1.2%	3.1%
ROA (Net income/Total assets)	-0.7%	-1.0%	2.6%	2.6%	2.1%
ROIC (NOPAT/Assets + Net debt)	0.1%	-1.7%	4.6%	1.3%	3.7%
CROIC (FCF/Equity + Total debt)*	-4.6%	-2.9%	1.8%	-3.8%	2.3%

(Priced as of market close on November 29, 2019 ET)

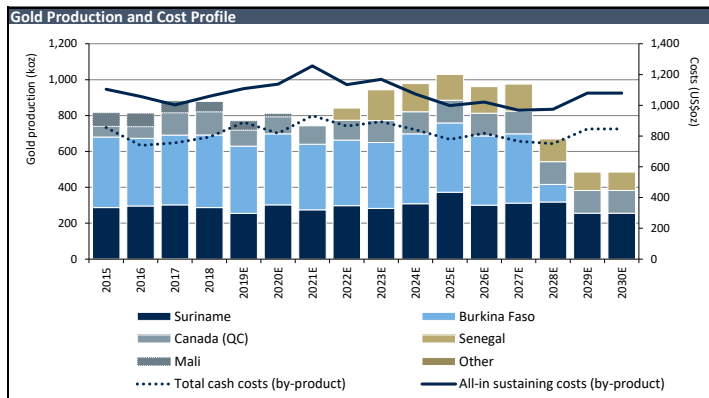
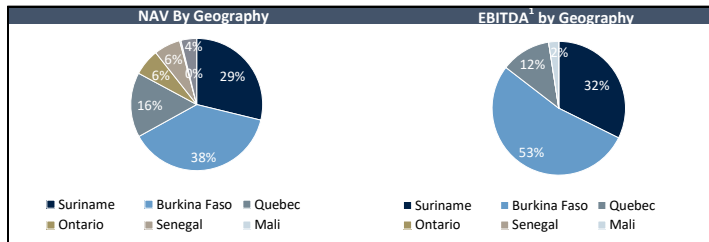
IAMGOLD Corporation (IAG US, IMG CN): Forecasts at RBC price deck

Rating	Sector Perform	Basic shares (m)	468.0	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	468.0/476.4	Josh Wolfson, CFA
Target price at RBC price deck	US\$3.75	Basic mkt cap (US\$m)	1,694	(416) 842-9893
Share price	US\$3.62	Enterprise value (US\$m)	1,465	josh.wolfson@rbccm.com

All US\$m unless noted						All US\$m unless noted					
Operating statistics	2018	2019E	2020E	2021E	2022E	Input prices	2018	2019E	2020E	2021E	2022E
Equity gold production (koz)	882	770	810	743	841	Key commodities					
Rosebel	287	255	259	251	235	Gold (US\$/oz)	1,269	1,390	1,500	1,450	1,450
Saramacca	0	0	43	24	63	Silver (US\$/oz)	15.71	16.23	17.50	17.50	17.50
Essakane & Essakane HL	405	375	396	366	366	Oil (US\$/bbl)	65	57	58	58	59
Sadiola	60	51	17	0	0	Key currencies					
Westwood	129	90	95	102	110	US\$/C\$	0.77	0.76	0.76	0.77	0.78
Boto Gold	0	0	0	0	67	US\$/EUR	1.18	1.11	1.10	1.11	1.13
Côte Gold	0	0	0	0	0	Valuation data					
Other	1	0	0	0	0	P/E (x)	54.1	-159.9	14.0	71.6	21.8
Total cash costs (co-product) (US\$/oz)	793	890	819	932	865	P/CF (x)	5.9	4.3	3.8	5.4	8.9
Reported AISC (co-product) (US\$/oz)	1,059	1,109	1,137	1,256	1,135	EV/EBITDA (x)	5.1	6.1	3.1	4.7	3.5
Fully loaded costs (co-product) (US\$/oz)	1,296	1,364	1,396	1,449	1,322	FCF/EV yield*	-9.9%	-6.1%	5.2%	-9.3%	4.4%

Gold reserves and resources	2014	2015	2016	2017	2018	Income statement	2018	2019E	2020E	2021E	2022E
Proven and probable						Total revenue	1,111	1,071	1,277	1,155	1,297
Tonnes (m)	212.8	184.6	175.3	372.9	488.9	% gold	100%	100%	100%	100%	100%
Grade (g/t)	1.3	1.3	1.4	1.2	1.1	% silver	0%	0%	0%	0%	0%
Oz (m)	8.6	7.7	7.8	14.5	17.9	% copper	0%	0%	0%	0%	0%
Assumed reserve additions (moz)					1.3	% other	0%	0%	0%	0%	0%
LOM production (moz)					10.6	Operating costs	708	717	695	742	774
Measured, indicated & inferred (excl)						G&A	42	41	40	40	40
Oz (m)	17.7	19.5	18.7	16.9	18.7	Exploration	39	36	36	36	36
Reserve and resource statistics						Depreciation	266	274	302	289	304
Reserves/sh (x1,000)	22.1	18.3	16.8	31.1	38.2	Other	22	33	0	0	0
Reserves & resources/sh (x1,000)	67.5	64.8	57.2	67.2	78.0	Adjusted EBITDA	289	240	474	309	416
Current per-ounce statistics						Adjusted EBIT	40	-16	192	39	131
Adjusted EV/LOM production (US\$/oz)	358		EV/resource (US\$/oz)	40		Net interest expense	-4	2	3	1	10
Total acquisition cost (US\$/oz)	1,193		EV/reserve (US\$/oz)	82		Unusual/other items	-31	-13	7	8	-7

Net Asset Value	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†	EBT	2018	2019E	2020E	2021E	2022E
Rosebel (95.0%), Suriname	484	1.03	21%	20%	28%	Taxes	38	25	70	17	47
Saramacca (66.5%), Suriname	181	0.39	8%	6%	4%	Minority interest	9	5	15	7	9
Essakane (90.0%), Burkina Faso	882	1.88	38%	18%	53%	Other	13	18	5	0	0
Westwood (100.0%), Canada (QC)	366	0.78	16%	7%	12%	Net income (reported)	-28	-38	121	24	78
Sadiola (41.0%), Mali	8	0.02	0%	9%	2%	Net income (adjusted)	31	-11	121	24	78
Côte Gold (64.8%), Canada (ON)	150	0.32	6%	28%	0%	EPS (reported) (US\$/sh)	-0.06	-0.08	0.26	0.05	0.17
Boto Gold (90.0%), Senegal	150	0.32	6%	10%	0%	EPS (adjusted) (US\$/sh)	0.07	-0.02	0.26	0.05	0.17
Other	89	0.19	4%	3%	0%	Average shares (m)	466.5	467.9	468.0	468.0	468.0
Total mining and investment assets	2,309	4.93	100%	100%	100%	Cash flow statement					
Balance sheet items and expenditures	-349	-0.75				Net income (reported)	-28	-38	121	24	78
Total	1,959	4.19				Depreciation	266	274	302	289	304
P/NAV at RBC price deck (x)		0.86				Other	50	159	28	0	-192



Valuation data	2018	2019E	2020E	2021E	2022E	Income statement	2018	2019E	2020E	2021E	2022E
P/E (x)	54.1	-159.9	14.0	71.6	21.8	Total revenue	1,111	1,071	1,277	1,155	1,297
P/CF (x)	5.9	4.3	3.8	5.4	8.9	% gold	100%	100%	100%	100%	100%
EV/EBITDA (x)	5.1	6.1	3.1	4.7	3.5	% silver	0%	0%	0%	0%	0%
FCF/EV yield*	-9.9%	-6.1%	5.2%	-9.3%	4.4%	% copper	0%	0%	0%	0%	0%

Cash flow statement	2018	2019E	2020E	2021E	2022E
Net income (reported)	-28	-38	121	24	78
Depreciation	266	274	302	289	304
Other	50	159	28	0	-192
Operating cash flow	288	395	451	312	190
Operating cash flow (US\$/sh)	0.62	0.84	0.96	0.67	0.41
Working capital changes	-97.3	-40.8	0.0	0.0	0.0
Cash from operations	190	354	451	312	190
Capital expenditure	-336	-273	-375	-449	-321
Net investments	111	114	16	0	0
Investing cash flow	-225	-160	-359	-449	-321
Common share dividends	0	0	0	0	0
Debt additions	0	23	0	150	0
Debt repayments	0	-4	-8	-8	-3
Equity financing	0	0	0	0	0
Other net financing	-10	-8	0	0	0
Financing cash flow	-10	11	-8	142	-3
Foreign exchange	-5	-3	0	0	0
Change in cash	-49	203	84	5	-134
Cash balance	615	819	903	908	774
Free cash flow*	-146	-89	76	-137	64
Free cash flow* (\$/sh)	-0.31	-0.19	0.16	-0.29	0.14

Balance sheet	2018	2019E	2020E	2021E	2022E
Assets					
Cash	615	819	903	908	774
Other current assets	472	359	342	342	342
Current assets	1,087	1,178	1,245	1,250	1,116
Non-current assets	2,876	2,797	2,871	3,031	3,243
Total assets	3,963	3,975	4,116	4,281	4,359
Liabilities					
Current liabilities	227	244	246	243	240
Long-term debt	400	411	403	550	550
Other non-current liabilities	603	614	633	624	620
Total liabilities	1,230	1,269	1,282	1,416	1,410
Total shareholder equity	2,733	2,706	2,834	2,865	2,949
Net debt	-334	-416	-492	-355	-224
Net debt / EBITDA (x)	-1.2	-1.7	-1.0	-1.2	-0.5
ROE (Net income/Equity)	-1.0%	-1.4%	4.4%	0.8%	2.7%
ROA (Net income/Total assets)	-0.7%	-1.0%	3.0%	3.0%	1.8%
ROIC (NOPAT/Assets + Net debt)	0.1%	-1.7%	5.2%	0.9%	3.2%
CROIC (FCF/Equity + Total debt)*	-4.6%	-2.8%	2.4%	-4.1%	1.9%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
Source: Company reports, Bloomberg, RBC Capital Markets estimates

(Priced as of market close on November 29, 2019 ET)

Valuation

Our price target of US\$3.75 is based upon 0.8x our risk adjusted NAV at a long-term gold price of US\$1,400/oz and 19x our 2020-2021 SFCF estimate, which would be equivalent to 5x EBITDA. These multiples are relatively in line with the average for the intermediate producer group, reflecting the company's higher cost production and above-average political risk exposure, but favourable financial positioning. Our Sector Perform rating is supported by IAG's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Risks to rating and price target

In addition to general operating and financial risks for IAG related to commodities (gold) and FX (USD, CAD, CFA), we highlight:

- Potential care and maintenance of Sadiola mine, resulting in retrenchment cost
- Potential divestment of Cote Gold 70% stake
- Potential divestment of other exploration stage assets (such as Nelligan and Monster Lake)
- Elevated geopolitical risk exposure in Burkina Faso and Suriname

Company description

IAMGOLD is an intermediate gold producer, operating three mines across Canada (Quebec), Suriname, and Burkina Faso, while holding a 41% ownership stake in the Sadiola mine in Mali. 2019 guidance outlines production of 765-810 Koz at AISC of US\$1,090-1,130/oz across all operations. The company is focused on optimizing mine plans, driving productivity gains, reducing costs, and advancing higher margin projects.

Kinross Gold Corporation

Fast forwarding to the not-too-distant future

Our view: KGC has lagged peers due to ongoing elevated capital spending and a lack of FCF. We forecast this capital consumption trend to taper sharply after 2020, even assuming KGC's full project portfolio is developed, and see potential for peer-leading financial results that could enable greater capital allocation flexibility. We assume coverage of KGC with a Sector Perform rating and US\$5.00 PT.

Key points:

Concentrating organically. In recent years, the North American senior producer group has undergone major strategic changes as a result of transformational M&A and sizable project investment. In contrast, Kinross has largely opted to execute organically, focusing upon operating targets, leveraging brownfield project opportunities, and completing bolt-on digestible acquisitions (2017 Nevada JV acquisition, 2018 Paracatu power plant, 2019 Chulbatkan). Constructively, this internal focus has allowed the company to maximize the value of its existing asset base via exploration, an extensive list of brownfield projects (Tasiast expansion, Fort Knox Gilmore, Round Mountain Phase W, and Bald Mountain Vantage), and outlining potential future development opportunities (La Coipa restart, Lobo Marte).

Past capital consumption no longer forecast to be the future. We view Kinross as having allocated capital in a disciplined manner; however, well-above-average production depletion has necessitated elevated spending. Over a 5-year trailing period, KGC has invested US\$2.3b of growth capital in its business and \$0.6b in net acquisitions, while production and costs have remained unchanged, yielding a net ~\$0b in FCF. 2020E FCF is forecast to now be positive, but at levels largely in line with the peer group due to final project spending at Tasiast and Round Mountain. Beyond 2020, we forecast impressive FCF at spot gold (2021/22 FCF/EV 8.2%/12.7%), even with full assumed project capital incorporated for future potential development of La Coipa and Chulbatkan. KGC could generate a compelling ~\$3.2b in FCF over an upcoming 5-year period at spot gold (after both La Coipa and Chulbatkan development), positioning the company with increased flexibility, despite upcoming production decline risks. KGC has already provided a clear indication of elevated capital spending in 2020, reducing the potential for guidance surprise risk, although we note our forecasts are above consensus.

Geopolitical risk an undeniable factor. Geopolitical risk represents a key uncertainty for Kinross given its exposure to Mauritania, where the current government has communicated a motivation to increase its economic benefit from the mine, and Russia. In our view, forecast windfall cash flows that management allocates to shareholders, via either dividends or stock buybacks, could improve per share metrics over time and balance the company's above-average risk profile.

Sector: Precious Minerals & Diamonds - large cap

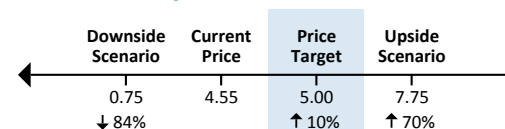
Sector Perform

NYSE: KGC; USD 4.55; TSX: K

Price Target USD 5.00

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input checked="" type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	1,253.4	Market Cap (MM):	5,699
Dividend:	0.00	Yield:	0.0%
NAVPS:	4.18	P/NAVPS:	1.09x
ROE:	9.9%	Avg. Daily Volume:	12,272,968
Float (MM):	1,248.8		
Debt to Cap:	28%		

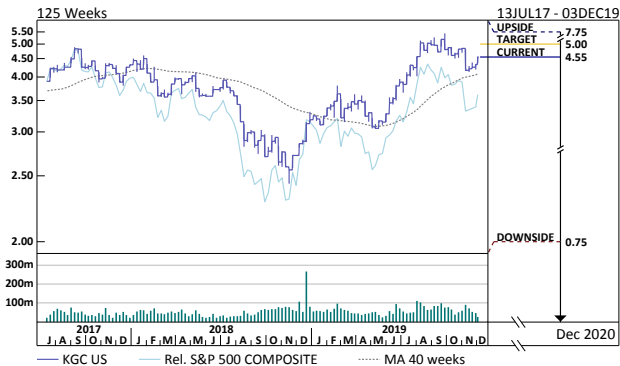
RBC Estimates

FY Dec	2018A	2019E	2020E	2021E
EPS, Adj Diluted	0.07	0.31	0.41	0.36
P/AEPS	65.0x	14.7x	11.1x	12.6x
CFPS, Adj Diluted	0.64	0.88	1.04	1.03
P/CFPS	7.1x	5.2x	4.4x	4.4x
FCFPS	(0.30)	0.03	0.26	0.40
P/FCF	nm	nm	17.5x	11.4x
Production	2,452.4	2,493.2	2,446.0	2,497.5
EPS, Adj Diluted	Q1	Q2	Q3	Q4
2018	0.10A	0.02A	(0.06)A	0.00A
2019	0.06A	0.06A	0.08A	0.11E
CFPS, Adj Diluted	Q1	Q2	Q3	Q4
2018	0.27A	0.19A	0.08A	0.11A
2019	0.16A	0.23A	0.20A	0.28E

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: Kinross Gold Corporation



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our KGC price target of US\$5.00 is based upon 1.0x our NAV5% at a long-term gold price of US\$1,400/oz and 16x our 2020-2021 SFCF estimate, or an implied 6x EBITDA. These multiples are below the average for the large producer group, supported by the company's relatively lower average reserve life and higher political risk exposure. Our Sector Perform rating is supported by KGC's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Upside scenario

Our upside value of US\$7.75 is based upon higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside value of US\$0.75 is based upon lower long-term gold prices of US\$1,200/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Investment summary

Kinross is a senior gold producer with a portfolio of operating mines and projects in the US (Nevada and Alaska), Mauritania, Brazil, Russia, Ghana, and Chile. 2019 guidance outlines production of approximately 2.5moz at AISC of \$995/oz and the company has a 7-year track record of meeting or exceeding its operational guidance.

Investment outlook

- KGC is advancing a pipeline of development projects, which have the potential to partially offset declining production from some of the company's maturing assets.
- The recent revised incremental expansion plan for the Tasiast mine in Mauritania demonstrated lower upfront capital and improved economics. Uncertainty remains regarding the Mauritanian government's 2018 request for a revised economics benefits agreement for the mine.
- Our Sector Perform rating is predicated on our view that KGC's valuation reflects the potential for positive financial results providing for greater corporate capital allocation flexibility, accounting for the company's geopolitical/operating risk profile relative to peers.

Upcoming catalysts and milestones

- Bald Mountain and Round Mountain expansion project ramp-ups (4Q19+)
- Fort Knox Gilmore initial production (4Q19)
- Tasiast revised benefits agreement with Government of Mauritania (2020+)
- Tasiast 24 Ktpd expansion initial production (2021)
- Updated Paracatu mine plan (2Q20)
- La Coipa feasibility study (1Q20) and Lobo Marte pre-feasibility study (mid-2020)
- Chulbatkan pre-feasibility study (2020+)

Key risks

In addition to general operating and financial risks for KGC related to commodities (gold and silver) and FX (USD, CAD, BRL, RUB, EUR, CLP), we highlight:

- Political risk, including exposure to Mauritania, Ghana, Russia, Brazil and Chile
- Expansion project ramp-up risks
- Reserve replacement risk given forecast of near-term declining production from Chirano, Kupol, Paracatu and Fort Knox mill

Exhibit 2: Kinross Gold – Catalysts, opportunities and risks

Catalysts and milestones

- Bald Mountain and Round Mountain ramp-up of expansion projects (4Q19+)
- Fort Knox Gilmore initial production (4Q19) and sustained production (2020)
- Tasiast 24 Ktpd expansion initial production (2021) and full ramp-up (2023)
- Tasiast \$300M project financing with IFC and EDC (4Q19)
- Tasiast revised benefits agreement with Government of Mauritania (2020+)
- Updated Paracatu mine plan, including the potential for sustained throughput life-of-mine (2Q20)
- La Coipa restart feasibility study (1Q20) and Lobo Marte pre-feasibility study (mid-2020)
- Kupol potential resource and reserve additions (1Q20)
- Chulbatkan closing (1Q20) as well as exploration results and pre-feasibility study (2020+)

Opportunities

- Exploration success at short-duration assets, such as Kupol and Chirano
- High margin production from Chulbatkan project and potential exploration success beyond outlined expectations
- Potential development of bulk tonnage underground mining at Round Mountain
- La Coipa delineation of additional resources to improve project economics for potential development
- Resolution of outstanding dispute with Mauritanian government regarding Tasiast economic benefits
- Monetization of non-core assets, including Chirano and Cerro Casale royalty
- Potential M&A that could improve geopolitical risk, asset duration, and pro-forma valuation

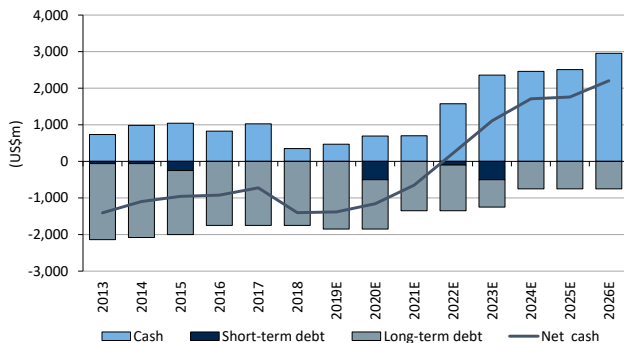
Risks and uncertainties

- Political risk uncertainty, including exposure to Mauritania, Ghana, Russia, Brazil and Chile
- Chilean unrest and its potential implications for output and fiscal term agreements
- Paracatu low-grade reserves for milling and increasing ore hardness over time, and potential for further water challenges
- Declining grade profile at Kupol
- Bald Mountain and Round Mountain expansion projects ramp-up risk
- Forecast near-term depletion of Chirano reserves and Fort Knox milling reserves due to tailings storage capacity
- Commodity price risk (most notably gold and silver prices), technical/operating risk and financing risk

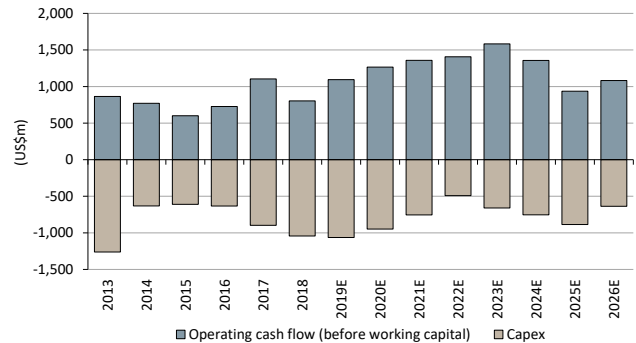
Source: Company reports, RBC Capital Markets estimates

Exhibit 3: Kinross Gold – Financial forecasts at spot gold

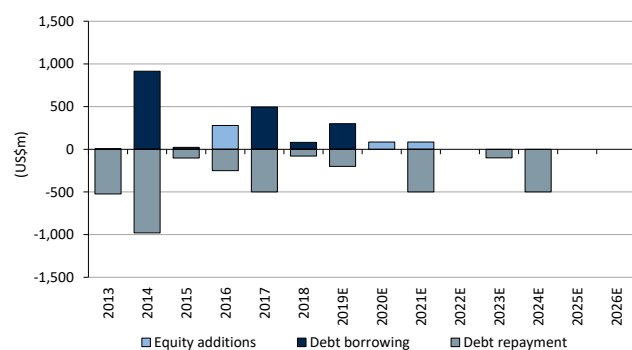
Cash and debt



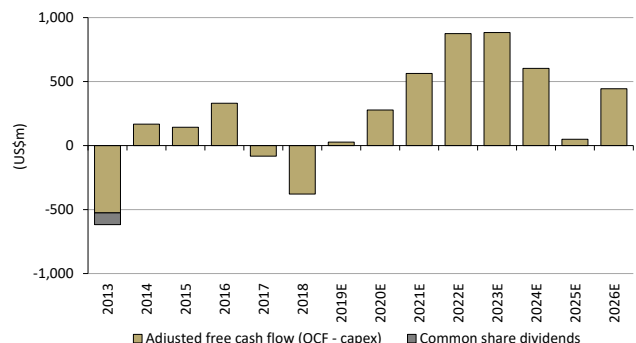
Operating cash flow and capital spending



Changes in debt and equity



Free cash flow and common share dividends



Source: Company reports, RBC Capital Markets estimates (Priced as of market close on November 29, 2019 ET)

Exhibit 4: Kinross Gold – Net asset valuation at spot gold

Kinross Gold Corporation									
Net asset valuation at spot gold (US\$)									
Shares (FD, FF, ITM) (m)	1,305.774								
Market capitalization (US\$m)	5,654								
	Risk-weighted NAV			NAV at various discount rates					
	Discount rate	(\$m)	(/sh) (\$)	5%		7%		10%	
				(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)
Gold assets									
Bald Mountain (100.0%), US (NV)	5%	511	0.39	511	0.39	483	0.37	445	0.34
Chirano (90.0%), Ghana	5%	181	0.14	181	0.14	177	0.14	172	0.13
Chulbatkan (100.0%), Russia	5%	177	0.14	177	0.14	48	0.04	-86	-0.07
Fort Knox (100.0%), US (AK)	5%	936	0.72	936	0.72	818	0.63	678	0.52
Kupol/Dvoinoye (100.0%), Russia	5%	1,105	0.85	1,105	0.85	1,058	0.81	994	0.76
La Coipa/Pompeya (100.0%), Chile	5%	171	0.13	171	0.13	144	0.11	108	0.08
Lobo-Martre (100.0%), Chile	8%	228	0.17	550	0.42	313	0.24	102	0.08
Paracatu (100.0%), Brazil	5%	1,968	1.51	1,968	1.51	1,784	1.37	1,555	1.19
Round Mountain (100.0%), US (NV)	5%	861	0.66	861	0.66	790	0.61	699	0.54
Tasiast (100.0%), Mauritania	5%	2,552	1.95	2,552	1.95	2,251	1.72	1,890	1.45
Gold exploration properties		0	0.00	0	0.00	0	0.00	0	0.00
Gold hedge book		0	0.00	0	0.00	0	0.00	0	0.00
Total gold assets		8,690	6.66	9,013	6.90	7,867	6.02	6,557	5.02
Other assets									
Other exploration		0	0.00	0	0.00	0	0.00	0	0.00
Other hedge book	5%	-6	0.00	-6	0.00	-6	0.00	-6	0.00
Investments		472	0.36	472	0.36	472	0.36	472	0.36
Total other assets		466	0.36	466	0.36	466	0.36	466	0.36
Balance sheet and expenses									
Basic working capital		1,051	0.80	1,051	0.80	1,051	0.80	1,051	0.80
Value of ITM instruments		53	0.04	53	0.04	53	0.04	53	0.04
Estimated working capital additions		170	0.13	170	0.13	170	0.13	170	0.13
Estimated debt additions		0	0.00	0	0.00	0	0.00	0	0.00
Long-term debt		-1,850	-1.42	-1,850	-1.42	-1,850	-1.42	-1,850	-1.42
General & administrative expense	5%	-952	-0.73	-952	-0.73	-841	-0.64	-713	-0.55
Other operating expenses	5%	-432	-0.33	-432	-0.33	-390	-0.30	-341	-0.26
Exploration expense	5%	-228	-0.17	-228	-0.17	-218	-0.17	-203	-0.16
Interest tax shield	5%	317	0.24	317	0.24	271	0.21	222	0.17
Reclamation & closure liability		-838	-0.64	-838	-0.64	-838	-0.64	-838	-0.64
Net financial assets		-2,709	-2.07	-2,709	-2.07	-2,593	-1.99	-2,450	-1.88
Net asset value (US\$)		6,447	4.94	6,770	5.18	5,740	4.40	4,573	3.50
Share price (US\$)		4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33
NAV multiple (P/NAV) (x)			0.88		0.84		0.98		1.24
Input assumptions		2019E	2020E	2021E	Long term				
Gold price (US\$/oz)		1,387	1,464	1,464	1,464				
Silver price (US\$/oz)		16.11	17.03	17.03	17.03				
Copper price (US\$/lb)		2.73	2.71	2.73	2.81				

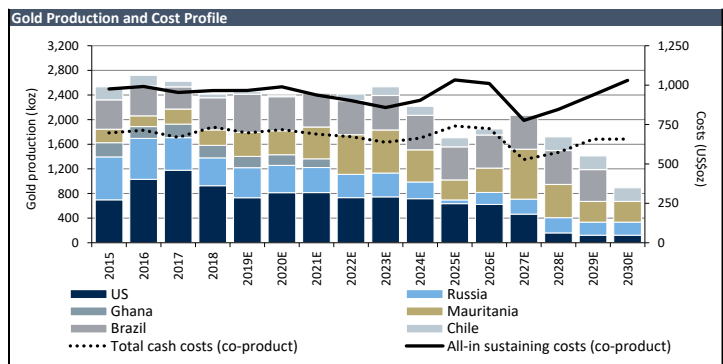
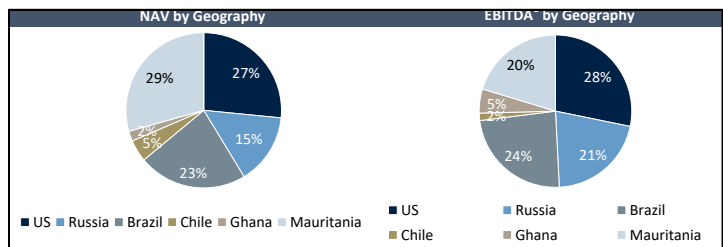
Source: Company reports, RBC Capital Markets estimates (Priced as of market close on November 29, 2019 ET)

Kinross Gold Corporation (KGC US, K CN): Forecasts at spot gold				
Rating	Sector Perform	Basic shares (m)	1,253.4	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	1,266.6/1,266.6	Josh Wolfson, CFA
Target price at RBC price deck	US\$5.00	Basic mkt cap (US\$m)	5,427	(416) 842-9893
Share price	US\$4.33	Enterprise value (US\$m)	6,894	josh.wolfson@rbccm.com

Operating Statistics	Year Ended December 31					Input prices	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E		2018	2019E	2020E	2021E	2022E
Equity GEO production (koz)	2,452	2,493	2,446	2,496	2,504	Key commodities					
Kupol/Dvoynoye	490	524	482	446	418	Gold (US\$/oz)	1,269	1,387	1,464	1,464	1,464
Tasiast	251	392	388	516	642	Silver (US\$/oz)	15.71	16.11	17.03	17.03	17.03
Paracatu	522	618	554	554	554	Oil (US\$/bbl)	65	57	58	58	59
Fort Knox	256	194	266	278	238	Key currencies					
Round Mountain	386	346	338	311	269	US\$/C\$	0.77	0.75	0.75	0.75	0.75
Bald Mountain	285	191	209	226	226	RUB/US\$	62.54	64.85	64.31	64.31	64.31
Chirano	204	182	173	142	0	BRL/US\$	3.63	3.97	4.24	4.24	4.24
Maricunga	60	42	26	15	0	CLP/US\$	640	713	809	809	809
Chulbatkan	0	0	0	0	0	Valuation					
Other	0	3	10	9	157	P/E (x)	68.0	14.1	11.7	11.1	10.0
Equity gold production (koz)	2,377	2,419	2,377	2,432	2,386	P/CF (x)	6.7	5.0	4.3	4.1	4.0
Equity silver production (moz)	4.3	4.3	4.1	4.1	7.6	EV/EBITDA (x)	7.2	5.2	4.5	4.2	4.0
Total cash costs (co-product) (US\$/oz)	734	697	717	690	673	FCF/EV yield*	-5.5%	0.4%	4.0%	8.2%	12.7%
Total cash costs (by-product) (US\$/oz)	723	682	704	677	648						
Reported AISC (co-product) (US\$/oz)	965	966	989	938	902						
Reported AISC (by-product) (US\$/oz)	959	956	975	924	880						
Fully loaded costs (co-product) (US\$/oz)	1,245	1,361	1,350	1,180	1,125						

Gold Reserves and Resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	1,490.3	1,478.5	1,364.7	1,107.7	1,187.8
Grade (g/t)	0.7	0.7	0.7	0.7	0.7
Oz (m)	34.4	34.0	31.0	25.9	25.5
Assumed reserve additions (moz)					13.0
LOM production (moz)					29.2
Measured, indicated & inferred (excl)					
Oz (m)	26.1	31.4	35.8	36.0	34.3
Reserve and resource statistics					
Reserves/sh (x1,000)	30.0	27.7	24.8	20.8	20.4
Reserves & resources/sh (x1,000)	52.8	53.2	53.5	49.5	47.8
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	485		EV/resource (US\$/oz)		115
Total acquisition cost (US\$/oz)	1,142		EV/reserve (US\$/oz)		270

Net asset value (US\$)	NAV (\$m)	/share (\$)	% NAV	% Resrv	%EBITDA†
Kupol/Dvoynoye	1,105	0.85	12%	6%	21%
Tasiast	2,552	1.95	28%	23%	20%
Paracatu	1,968	1.51	21%	24%	24%
Fort Knox	936	0.72	10%	9%	8%
Round Mountain	861	0.66	9%	8%	12%
Bald Mountain	511	0.39	6%	4%	9%
Other	1,223	0.94	13%	26%	7%
Total mining and investment assets	9,156	7.01	100%	100%	100%
Balance sheet items and expenditures	-2,709	-2.07			
Total	6,447	4.94			
P/NAV at spot gold (x)		0.88			



* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
 Priced as of market close November 29, 2019 ET. Source: RBC Capital Markets, company reports, Bloomberg

Income statement	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Total revenue	3,213	3,432	3,609	3,677	3,665
% gold	98%	98%	98%	98%	96%
% silver	2%	2%	2%	2%	4%
% copper	0%	0%	0%	0%	0%
% other	0%	0%	0%	0%	0%
Operating costs	1,861	1,728	1,761	1,728	1,681
G&A	133	140	142	140	140
Exploration	109	102	75	75	75
Depreciation	772	708	741	809	830
Other	137	117	100	100	67
Adjusted EBITDA	962	1,336	1,519	1,624	1,703
Adjusted EBIT	201	638	789	823	872
Net interest expense	90	95	106	95	61
Unusual/other items	-178	-185	-212	-190	-122
EBT	114	547	683	729	812
Taxes	139	219	212	226	252
Minority interest	-2	0	0	1	0
Other	0	0	0	0	0
Net income (reported)	-24	328	472	502	560
Net income (adjusted)	79	384	472	502	560
EPS (reported) (US\$/sh)	-0.02	0.26	0.37	0.39	0.43
EPS (adjusted) (US\$/sh)	0.06	0.31	0.37	0.39	0.43
Average shares (m)	1,250	1,252	1,271	1,290	1,293

Cash flow statement	2018	2019E	2020E	2021E	2022E
Net income (reported)	-24	328	472	502	560
Depreciation	772	708	741	809	830
Other	55	58	53	47	16
Operating cash flow	803	1,094	1,266	1,359	1,406
Operating cash flow (\$/sh)	0.64	0.87	1.00	1.05	1.09
Working capital changes	-86	19	0	0	0
Capital operations	718	1,114	1,266	1,359	1,406
Capital expenditure	-1,043	-1,064	-948	-755	-491
Net investments	-344	-22	-179	-182	-40
Investing cash flow	-1,387	-1,086	-1,127	-937	-531
Common share dividends	0	0	0	0	0
Debt additions	80	300	0	0	0
Debt repayments	-80	-200	0	-500	0
Equity financing	1	0	85	85	0
Other net financing	-2	-10	0	0	0
Financing cash flow	-2	90	85	-415	0
Foreign exchange	-6	1	0	0	0
Change in cash	-677	120	224	7	875
Free cash flow*	-379	27	278	563	875
Free cash flow* (\$/sh)	-0.30	0.02	0.22	0.44	0.68

Balance Sheet	2018	2019E	2020E	2021E	2022E
Assets					
Cash	349	469	693	700	1,575
Short-term investments	4	6	6	6	6
Other current assets	1,249	1,277	1,317	1,357	1,397
Current assets	1,598	1,745	2,009	2,056	2,971
Non-current assets	6,481	6,852	7,149	7,191	6,808
Total assets	8,079	8,598	9,158	9,248	9,779
Liabilities					
Short-term debt	0	0	500	0	100
Current liabilities	612	599	1,099	599	699
Long-term debt	1,750	1,850	1,350	1,350	1,250
Other non-current liabilities	1,210	1,248	1,238	1,226	1,183
Total liabilities	3,572	3,697	3,687	3,175	3,132
Total shareholder equity	4,507	4,901	5,471	6,073	6,647
Net debt	1,397	1,376	1,151	645	-230
Net debt / EBITDA (x)	1.5	1.0	0.8	0.4	-0.1
ROE (Net income/Equity)	-0.5%	7.0%	9.1%	8.7%	8.8%
ROA (Net income/Total assets)	-0.3%	3.9%	5.3%	5.5%	5.9%
ROIC (NOPAT/Assets + Net debt)	1.1%	6.9%	9.0%	9.0%	9.5%
CROIC (FCF/Equity + Total debt)*	-6.0%	0.4%	3.9%	7.6%	11.3%

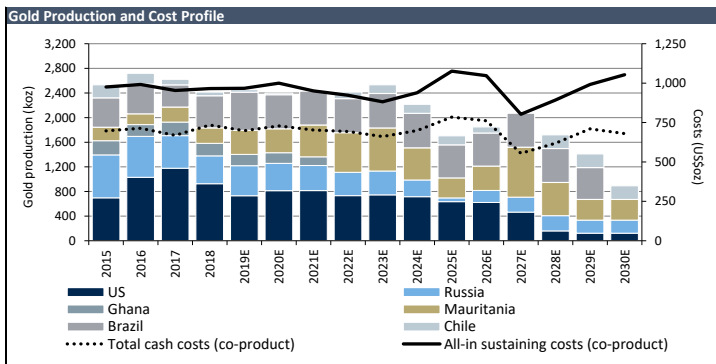
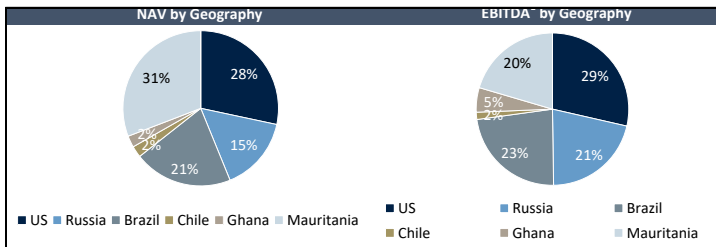
Kinross Gold Corporation (KGC US, K CN): Forecasts at RBC price deck

Rating	Sector Perform	Basic shares (m)	1,253.4	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	1,266.6/1,266.6	Josh Wolfson, CFA
Target price at RBC price deck	US\$5.00	Basic mkt cap (US\$m)	5,427	(416) 842-9893
Share price	US\$4.33	Enterprise value (US\$m)	6,894	josh.wolfson@rbccm.com

All US\$m unless noted						All US\$m unless noted					
Operating Statistics						Input prices					
	2018	2019E	2020E	2021E	2022E		2018	2019E	2020E	2021E	2022E
Equity GEO production (koz)	2,452	2,493	2,446	2,497	2,507	Key commodities					
Kupol/Dvoinoeye	490	524	482	447	420	Gold (US\$/oz)	1,269	1,390	1,500	1,450	1,450
Tasiast	251	392	388	516	642	Silver (US\$/oz)	15.71	16.23	17.50	17.50	17.50
Paracatu	522	618	554	554	554	Oil (US\$/bbl)	65	57	58	58	59
Fort Knox	256	194	266	278	238	Key currencies					
Round Mountain	386	346	338	311	269	US\$/C\$	0.77	0.76	0.76	0.77	0.78
Bald Mountain	285	191	209	226	226	RUB/US\$	62.54	64.57	62.58	61.94	61.29
Chirano	204	182	173	142	0	BRL/US\$	3.63	3.94	4.00	3.90	3.80
Maricunga	60	42	26	15	0	CLP/US\$	640	702	740	713	685
Chulbatkan	0	0	0	0	0	Valuation					
Other	0	3	10	9	158	P/E (x)	68.0	14.0	10.6	12.1	11.1
Equity gold production (koz)	2,377	2,420	2,377	2,433	2,390	P/CF (x)	6.7	4.9	4.1	4.2	4.1
Equity silver production (moz)	4.3	4.3	4.1	4.1	7.6	EV/EBITDA (x)	7.2	5.1	4.4	4.4	4.3
Total cash costs (co-product) (US\$/oz)	734	698	728	703	693	FCF/EV yield*	-5.5%	0.5%	4.8%	7.5%	11.8%
Total cash costs (by-product) (US\$/oz)	723	683	715	690	669						
Reported AISC (co-product) (US\$/oz)	965	967	1,000	951	923						
Reported AISC (by-product) (US\$/oz)	959	957	985	937	902						
Fully loaded costs (co-product) (US\$/oz)	1,245	1,362	1,365	1,187	1,136						

Gold Reserves and Resources					
	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	1,490.3	1,478.5	1,364.7	1,107.7	1,187.8
Grade (g/t)	0.7	0.7	0.7	0.7	0.7
Oz (m)	34.4	34.0	31.0	25.9	25.5
Assumed reserve additions (moz)					13.0
LOM production (moz)					29.2
Measured, indicated & inferred (excl)					
Oz (m)	26.1	31.4	35.8	36.0	34.3
Reserve and resource statistics					
Reserves/sh (x1,000)	30.0	27.7	24.8	20.8	20.4
Reserves & resources/sh (x1,000)	52.8	53.2	53.5	49.5	47.8
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	485		EV/resource (US\$/oz)		115
Total acquisition cost (US\$/oz)	1,173		EV/reserve (US\$/oz)		270

Net asset value (US\$)					
	NAV (\$m)	/share (\$)	% NAV	% Resrv	%EBITDA†
Kupol/Dvoinoeye	1,079	0.83	13%	6%	21%
Tasiast	2,361	1.83	29%	23%	20%
Paracatu	1,570	1.21	19%	24%	23%
Fort Knox	873	0.68	11%	9%	8%
Round Mountain	802	0.62	10%	8%	12%
Bald Mountain	495	0.38	6%	4%	9%
Other	943	0.73	12%	26%	7%
Total mining and investment assets	8,123	6.28	100%	100%	100%
Balance sheet items and expenditures	-2,725	-2.11			
Total	5,398	4.18			
P/NAV at RBC price deck (x)		1.04			



Income statement					
	2018	2019E	2020E	2021E	2022E
Total revenue	3,213	3,439	3,698	3,644	3,635
% gold	98%	98%	98%	98%	96%
% silver	2%	2%	2%	2%	4%
% copper	0%	0%	0%	0%	0%
% other	0%	0%	0%	0%	0%
Operating costs	1,861	1,731	1,788	1,761	1,735
G&A	133	140	142	140	140
Exploration	109	102	75	75	75
Depreciation	772	708	741	809	830
Other	137	117	100	100	69
Adjusted EBITDA	962	1,340	1,581	1,558	1,616
Adjusted EBIT	201	642	851	758	786
Net interest expense	90	95	106	94	61
Unusual/other items	-178	-185	-211	-188	-122
EBT	114	552	746	664	725
Taxes	139	221	231	206	225
Minority interest	-2	0	0	0	0
Other	0	0	0	0	0
Net income (reported)	-24	332	515	458	500
Net income (adjusted)	79	387	515	458	500
EPS (reported) (US\$/sh)	-0.02	0.27	0.41	0.36	0.39
EPS (adjusted) (US\$/sh)	0.06	0.31	0.41	0.36	0.39
Average shares (m)	1,250	1,252	1,265	1,278	1,280

Cash flow statement					
	2018	2019E	2020E	2021E	2022E
Net income (reported)	-24	332	515	458	500
Depreciation	772	708	741	809	830
Other	55	59	65	44	15
Operating cash flow	803	1,099	1,321	1,312	1,345
Operating cash flow (\$/sh)	0.64	0.88	1.04	1.03	1.05
Working capital changes	-86	19	0	0	0
Cash from operations	718	1,118	1,321	1,312	1,345
Capital expenditure	-1,043	-1,064	-948	-755	-491
Net investments	-344	-22	-179	-182	-40
Investing cash flow	-1,387	-1,086	-1,127	-937	-531
Common share dividends	0	0	0	0	0
Debt additions	80	300	0	0	0
Debt repayments	-80	-200	0	-500	0
Equity financing	1	0	85	85	0
Other net financing	-2	-10	0	0	0
Financing cash flow	-2	90	85	-415	0
Foreign exchange	-6	1	0	0	0
Change in cash	-677	124	279	-40	814
Free cash flow*	-379	32	333	516	814
Free cash flow* (\$/sh)	-0.30	0.03	0.26	0.40	0.64

Balance Sheet					
	2018	2019E	2020E	2021E	2022E
Assets					
Cash	349	473	753	712	1,526
Short-term investments	4	6	6	6	6
Other current assets	1,249	1,277	1,317	1,357	1,397
Current assets	1,598	1,750	2,069	2,069	2,923
Non-current assets	6,481	6,852	7,149	7,191	6,807
Total assets	8,079	8,602	9,218	9,260	9,730
Liabilities					
Short-term debt	0	0	500	0	100
Current liabilities	612	599	1,099	599	699
Long-term debt	1,750	1,850	1,350	1,350	1,250
Other non-current liabilities	1,210	1,249	1,252	1,237	1,193
Total liabilities	3,572	3,698	3,700	3,186	3,141
Total shareholder equity	4,507	4,904	5,518	6,075	6,589
Net debt	1,397	1,371	1,092	632	-182
Net debt / EBITDA (x)	1.5	1.0	0.7	0.4	-0.1
ROE (Net income/Equity)	-0.5%	7.1%	9.9%	7.9%	7.9%
ROA (Net income/Total assets)	-0.3%	4.0%	5.8%	5.0%	5.3%
ROIC (NOPAT/Assets + Net debt)	1.1%	6.9%	9.6%	8.3%	8.6%
CROIC (FCF/Equity + Total debt)*	-6.0%	0.5%	4.7%	7.0%	10.6%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
Priced as of market close November 29, 2019 ET. Source: RBC Capital Markets, company reports, Bloomberg

Valuation

Our KGC price target of US\$5.00 is based upon 1.0x our NAV5% at a long-term gold price of US\$1,400/oz and 16x our 2020-2021 SFCF estimate, or an implied 6x EBITDA. These multiples are below the average for the large producer group, supported by the company's relatively lower average reserve life and higher political risk exposure. Our Sector Perform rating is supported by KGC's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Risks to rating and price target

In addition to general operating and financial risks for KGC related to commodities (gold and silver) and FX (USD, CAD, BRL, RUB, EUR, CLP), we highlight:

- Political risk, including exposure to Mauritania, Ghana, Russia, Brazil and Chile
- Expansion project ramp-up risks
- Reserve replacement risk given forecast of near-term declining production from Chirano, Kupol, Paracatu and Fort Knox mill

Company description

Kinross is a senior gold producer with a portfolio of operating mines and projects in the US (Nevada and Alaska), Mauritania, Brazil, Russia, Ghana, and Chile. 2019 guidance outlines production of approximately 2.5moz at AISC of \$995/oz and the company has a 7-year track record of meeting or exceeding its operational guidance.

Newmont Goldcorp Corporation

In the ballpark of an improving outlook

Our view: NEM guidance outlines a materially improving outlook, particularly in 2022–24, but upcoming development decisions could increase capital spending and dampen free cash flow generation. With improved capital allocation clarity and favourable execution, we see potential for NEM shares to re-rate to their historical premium. We assume coverage of NEM with a Sector Perform rating and US\$45 price target. .

Key points:

Recent guidance a sigh of relief. On December 2, NEM issued its long-anticipated 5-year outlook, reflecting its transformative 2019 Goldcorp and Nevada Gold Mines JV transactions. 5-year guidance outlines stable production as well as sharply declining costs and capital spending through 2024, supported by improvements at NEM’s cornerstone Penasquito, Tanami, and Boddington assets, which have also enabled NEM to offset weaker outlooks at other less-material Goldcorp acquired assets. In our view, NEM’s upcoming reserve update may be the remaining interim uncertainty for the Goldcorp acquisition, where potential negative reinterpretations of the prior Goldcorp asset base may materialize, and NEM management has guided to Coffee and Dome Century reserves being re-categorized to resources.

Capital spending forecast to increase relative to guidance. Our NEM forecasts outline favourable FCF generation, but below volumes implied by company guidance. In addition to NEM’s advancement of the Tanami Expansion 2 (approved), capital spending guidance does not yet reflect NEM’s upcoming potential investment decisions at Ahafo North (2021 decision) and Yanacocha Sulphides (2021 decision), plus potential JV projects, including Pueblo Viejo’s expansion and Fourmile’s acquisition/development. While we forecast that NEM can generate favourable FCF in 2020E (FCF/EV of 4.8% vs. peers 3.7% at spot prices), there is a risk that capital spending could materially rise in 2021–22, thereby delaying forecast outsized cash flow generation to ~2023–24. In our view, advancement of NEM’s Yanacocha sulphide project as currently defined would represent a low-return, high-capital burden (~\$1b capex attributable) that would weaken the company’s outlook. Conversely, we view the potential divestiture or reduction of NEM’s interest in the asset as a positive catalyst.

Strategy, execution, and exploration a key investor focus. Longer-term, we view NEM’s capital allocation, execution, and exploration as key value drivers. In addition to NEM’s announced Red Lake sale (US\$375m up front) and Continental share sale (US\$260m), the company has outlined further non-core asset sales or a rationalization of its equity portfolio as monetization opportunities which would help achieve its target \$1.5b of divestitures. NEM has also outlined up to a US\$1b share repurchase, which has potential to be utilized productively should shares decline.

Sector: Precious Minerals & Diamonds - large cap

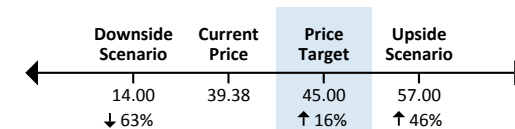
Sector Perform

NYSE: NEM; USD 39.38

Price Target USD 45.00

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input checked="" type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	819.6	Market Cap (MM):	32,288
Dividend:	0.56	Yield:	1.4%
NAVPS:	21.93	P/NAVPS:	1.80x
ROE:	7.0%	Avg. Daily Volume:	5,636,236
Float (MM):	817.1		
Debt to Cap:	27%		

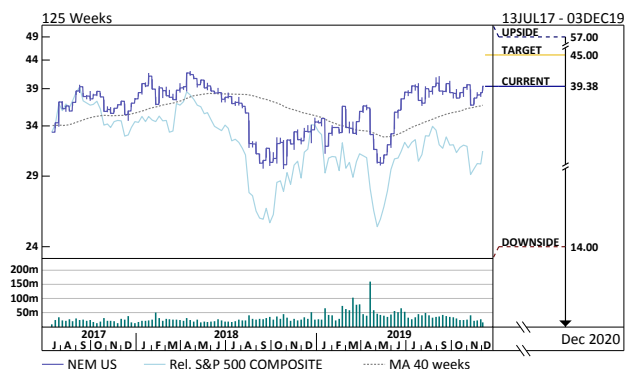
RBC Estimates

FY Dec	2018A	2019E	2020E	2021E
EPS, Adj Basic	1.40	1.28	1.89	1.56
P/AEPS	28.1x	30.8x	20.8x	25.2x
CFPS, Adj Basic	4.71	4.19	4.91	4.66
P/ACFPS	8.4x	9.4x	8.0x	8.5x
FCFPS	1.38	1.51	2.32	2.16
P/FCF	28.5x	26.1x	17.0x	18.2x
Production	5,101.0	6,247.4	6,752.8	6,776.8
EPS, Adj Basic	Q1	Q2	Q3	Q4
2018	0.33A	0.30A	0.36A	0.40A
2019	0.33A	0.12A	0.36A	0.48E
2020	0.46E	0.46E	0.48E	0.49E
CFPS, Adj Basic				
2018	1.15A	1.01A	1.07A	1.47A
2019	0.94A	0.71A	1.13A	1.35E
2020	1.24E	1.20E	1.22E	1.24E

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: Newmont Goldcorp Corporation



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our price target of US\$45 is based on 1.7x our NAV5% at a long-term gold price of US\$1,400/oz and 23x our 2019–21 SFCF estimate, which would be equivalent to 10x EBITDA. These multiples are consistent with the average multiples used to value large gold producer peers, reflecting Newmont’s relative positioning on key metrics such as asset positioning, geopolitical risk exposure, and guidance track record. Our Sector Perform rating is supported by NEM’s implied return to our price target relative to its peers, while accounting for its company-specific risks.

Upside scenario

Our upside scenario of US\$57 is based on higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside scenario of US\$14 is based on lower long-term gold prices of US\$1,200/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Investment summary

Newmont Goldcorp is a senior gold producer with a globally diversified portfolio of gold and copper assets. Company guidance outlines a stable production and declining cost and capex profile over the next five years, with production in the 6.5–7.0 moz range and AISC declining from \$975/oz to \$800–900/oz. Newmont is focused on asset integration and portfolio optimization following its 2Q19 takeover of Goldcorp and the 3Q19 Nevada Gold Mines JV with Barrick.

Investment outlook

- We view operational improvements at the Goldcorp mines and progress toward stated synergy targets post the recent M&A transactions as a key driver for NEM’s shares. The company targets annual pre-tax synergies of \$365m from the Goldcorp takeover and \$450–500m from the Nevada Gold Mines JV (operated by Barrick).
- Newmont targets \$1.0–1.5b of non-core asset sales post the Goldcorp takeover, with ~\$635m announced to-date.
- Our Sector Perform rating reflects our view that NEM’s valuation relative to peers fairly reflects the operating improvements implied by 5-year guidance, and while we see potential for the shares to re-rate to NEM’s historical premium, in our view this requires improved capital allocation clarity and favourable execution.

Upcoming milestones and catalysts

- Demonstration of guided Goldcorp and Nevada JV synergies and updates on planned non-core asset sales (2020+)
- Peñasquito production improvements following removal of the roadblock (4Q19) pyrite leach project ramp-up and access to higher-grade ore (2020)
- Corporate reserve/resource update (1Q20)
- Updates on and advancement of growth projects including Tanami 2, Pueblo Viejo plant expansion, Goldrush, Yanacocha sulfides, and Ahafo North (2020+)

Key risks

In addition to general operating and financial risks for NEM related to commodities (gold, silver, copper, lead and zinc) and FX (including CAD, AUD, MXN, ARS), we highlight:

- Increasing capital requirements to sustain existing output and fund new development projects
- Achievement of Nevada JV and Goldcorp synergy/efficiency outlined targets
- Penasquito risk of ongoing road blocks/issues with local trucking contractor
- Senior management transition risk
- Political risk uncertainty, including exposure to Dominican Republic, Argentina, Ghana, Chile, and Peru

Exhibit 2: Newmont Goldcorp – Catalysts, opportunities, and risks

Catalysts and milestones

- Ahafo mill expansion ramp-up of production (late-2019)
- Peñasquito production improvements following removal of the roadblock (4Q19) pyrite leach project ramp-up and access to higher-grade ore (2020)
- \$1b of planned share repurchases (late-2019 through 2020)
- Tanami Expansion 2 construction commencement (2H19) and production (2023–27)
- Pueblo Viejo plant expansion pre-feasibility study results (Q120)
- Cortez Hills Deep South initial production (2020) and full ramp-up (2022–31)
- Yanacocha sulphides construction decision (2021)
- Ahafo North construction decision (2021)
- Long Canyon Phase 2 potential stripping (2021+) and initial production (2024)
- Goldrush/Fourmile exploration (ongoing), initial production (2022) and sustained production (2024)
- Turquoise Ridge shaft expansion initial production (2022) and sustained production (2023)

Opportunities

- Nevada optimization and realization of synergies
- Realized Goldcorp synergies beyond original management guidance and objectives
- Goldcorp portfolio realization of projected efficiencies
- Pueblo Viejo potential expansion and reserve upside with tailings expansion
- Potential non-core asset divestitures, including Porcupine/Borden, Kalgoorlie, Eleonore, and Coffee
- Potential Long Canyon Phase 2 expansion
- Potential long-term project advancement, including Conga, Galore Creek, NuevaUnion, and Norte Abierto
- Potential monetization of strategic equity interests, including TMAC and Maverix

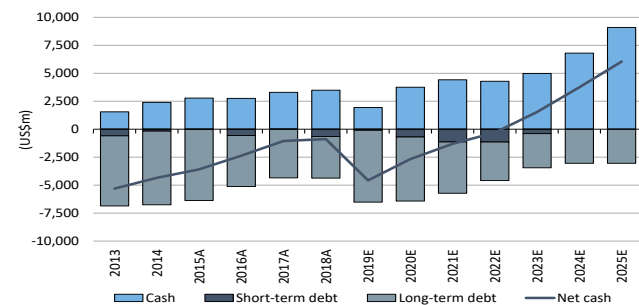
Risks and uncertainties

- Increasing capital requirements to sustain existing output and fund new development projects
- Achievement of Nevada JV and Goldcorp synergy/efficiency outlined targets
- Penasquito risk of ongoing road blocks/issues with local trucking contractor
- Long-term tax uncertainties in the Dominican Republic
- Declining grade profile at Goldstrike, Pueblo Viejo, and Cerro Negro
- Achievement of ramp-up projections, in particular at Goldrush, Cortez Hills underground, and Tanami 2
- Political risk uncertainty, including exposure to Dominican Republic, Argentina, Ghana, Chile, and Peru
- Chilean unrest and its potential implications for fiscal term agreements
- Commodity price risk (most notably gold and copper prices), technical/operating risk, and financing risk

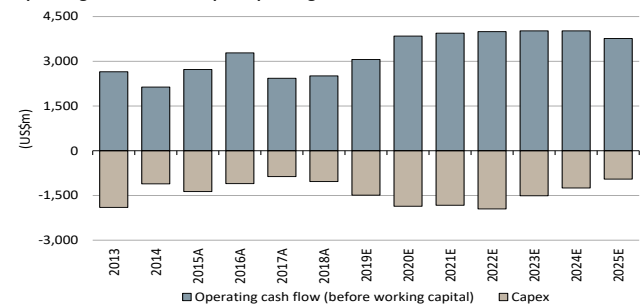
Source: Company reports, RBC Capital Markets estimates

Exhibit 3: Newmont Goldcorp – Financial forecasts at spot gold

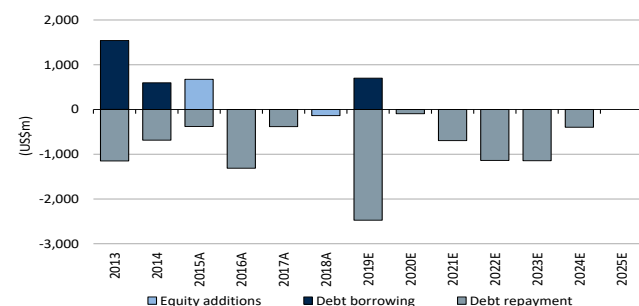
Cash and debt



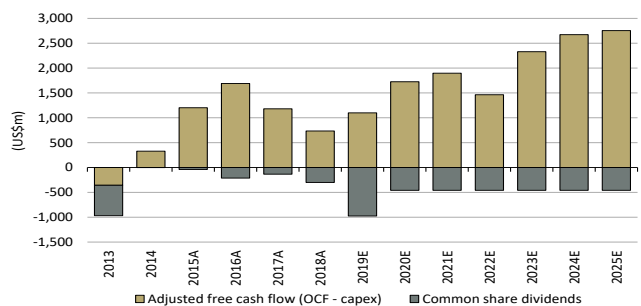
Operating cash flow and capital spending



Changes in debt and equity



Free cash flow and common share dividends



Priced as of market close, November 29, 2019 ET. Source: Company reports, RBC Capital Markets estimates

Exhibit 4: Newmont Goldcorp – Net asset valuation at spot gold

Newmont Goldcorp Corporation									
Net asset valuation at spot gold (US\$)									
Shares (FD, FF, ITM) (m)	820.0								
Market capitalization (US\$m)	31,488								
	Risk-weighted NAV			NAV at various discount rates					
	Discount rate	(\$m)	(/sh) (\$)	5%		7%		10%	
				(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)
Gold assets									
Ahafo (90.0%), Ghana	5%	758	0.92	758	0.92	707	0.86	639	0.78
Akyem (100.0%), Ghana	5%	803	0.98	803	0.98	770	0.94	725	0.88
Boddington (100.0%), Australia (WA)	5%	3,269	3.99	3,269	3.99	2,915	3.55	2,484	3.03
Borden (100.0%), Canada (ON)	5%	0	0.00	0	0.00	0	0.00	0	0.00
Carlin (38.5%), US (NV)	5%	658	0.80	658	0.80	604	0.74	539	0.66
Cerro Negro (100.0%), Argentina	5%	2,165	2.64	2,165	2.64	1,927	2.35	1,640	2.00
Coffee (100.0%), Canada (YK)	5%	385	0.47	385	0.47	262	0.32	142	0.17
Cortez (38.5%), US (NV)	5%	1,047	1.28	1,047	1.28	953	1.16	837	1.02
Cripple Creek & Victor (100.0%), US (CO)	5%	337	0.41	337	0.41	322	0.39	302	0.37
Éléonore (100.0%), Canada (QC)	5%	970	1.18	970	1.18	908	1.11	827	1.01
Fourmile (38.5%), US (NV)	5%	30	0.04	30	0.04	-43	-0.05	-114	-0.14
Goldrush (38.5%), US (NV)	5%	522	0.64	522	0.64	335	0.41	153	0.19
Goldstrike (38.5%), US (NV)	5%	1,138	1.39	1,138	1.39	1,051	1.28	939	1.14
Kalgoorlie (50.0%), Australia (WA)	5%	763	0.93	763	0.93	695	0.85	611	0.75
Long Canyon (38.5%), US (NV)	5%	181	0.22	181	0.22	174	0.21	164	0.20
Merian (75.0%), Suriname	5%	1,504	1.83	1,504	1.83	1,357	1.66	1,176	1.43
Musselwhite (100.0%), Canada (ON)	5%	712	0.87	712	0.87	617	0.75	500	0.61
Peñasquito (100.0%), Mexico	5%	4,726	5.76	4,726	5.76	4,203	5.13	3,575	4.36
Phoenix (38.5%), US (NV)	5%	317	0.39	317	0.39	290	0.35	256	0.31
Porcupine (100.0%), Canada (ON)	5%	672	0.82	672	0.82	636	0.78	587	0.72
Pueblo Viejo (40.0%), Dominican Republic	5%	2,163	2.64	2,163	2.64	1,764	2.15	1,345	1.64
Red Lake/Cochenour (100.0%), Canada (ON)	5%	16	0.02	16	0.02	16	0.02	16	0.02
Tanami (100.0%), Australia (NT)	5%	2,677	3.26	2,677	3.26	2,219	2.71	1,712	2.09
Turquoise Ridge (38.5%), US (NV)	5%	1,093	1.33	1,093	1.33	921	1.12	735	0.90
Twin Creeks (38.5%), US (NV)	5%	709	0.86	709	0.86	628	0.77	532	0.65
Yanacocha (51.4%), Peru	5%	126	0.15	126	0.15	117	0.14	107	0.13
Yanacocha Sulphides (51.4%), Peru	5%	0	0.00	0	0.00	0	0.00	0	0.00
Peñasquito silver hedge book	5%	-980	-1.19	-980	-1.19	-881	-1.07	-761	-0.93
Gold exploration properties		405	0.49	405	0.49	405	0.49	405	0.49
Gold hedge book		0	0.00	0	0.00	0	0.00	0	0.00
Total gold assets		27,169	33.13	27,169	33.13	23,874	29.11	20,074	24.48
Base metals and other assets									
Boddington (100.0%), Australia (WA)	8%	635	0.77	635	0.77	635	0.77	579	0.71
Peñasquito (100.0%), Mexico	8%	1,800	2.20	1,800	2.20	1,800	2.20	1,612	1.97
Phoenix (38.5%), US (NV)	8%	103	0.13	103	0.13	103	0.13	96	0.12
Other exploration		0	0.00	0	0.00	0	0.00	0	0.00
Other hedge book		0							
Investments		748	0.91	748	0.91	748	0.91	748	0.91
Total other assets		3,287	4.01	3,287	4.01	3,287	4.01	3,035	3.70
Balance sheet and expenses									
Basic working capital		3,722	4.54	3,722	4.54	3,722	4.54	3,722	4.54
Value of ITM instruments		9	0.01	9	0.01	9	0.01	9	0.01
Estimated working capital additions		0	0.00	0	0.00	0	0.00	0	0.00
Long-term debt		-7,018	-8.56	-7,018	-8.56	-7,018	-8.56	-7,018	-8.56
Estimated debt additions		0	0.00	0	0.00	0	0.00	0	0.00
General & administrative expense	5%	-1,779	-2.17	-1,779	-2.17	-1,562	-1.91	-1,311	-1.60
Other expense and stockpile changes	5%	-849	-1.03	-849	-1.03	-803	-0.98	-741	-0.90
Exploration expense	5%	-742	-0.90	-742	-0.90	-708	-0.86	-662	-0.81
Interest tax shield	5%	959	1.17	959	1.17	809	0.99	654	0.80
Reclamation & closure liability		-3,441	-4.20	-3,441	-4.20	-3,441	-4.20	-3,441	-4.20
Net financial assets		-9,138	-11.14	-9,138	-11.14	-8,992	-10.97	-8,788	-10.72
Net asset value (US\$)		21,317	26.00	21,317	26.00	18,168	22.16	14,321	17.46
Share price (US\$)			38.40		38.40		38.40		38.40
NAV multiple (P/NAV) (x)			1.48		1.48		1.73		2.20
Input assumptions									
		2019E	2020E	2021E	Long term				
Gold price (US\$/oz)		1,385	1,464	1,464	1,464				
Silver price (US\$/oz)		16.13	17.03	17.03	17.03				
Copper price (US\$/lb)		2.73	2.71	2.73	2.81				
Zinc price (US\$/lb)		1.15	1.03	1.03	1.02				
Lead price (US\$/lb)		0.91	1.00	1.00	0.85				

Priced as of market close, November 29, 2019 ET. Source: Company reports, RBC Capital Markets estimates

Newmont Goldcorp Corporation: Forecasts at spot gold

Rating	Sector Perform	Basic shares (m)	819.6	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	820.0/823.8	Josh Wolfson, CFA
Target price at RBC price deck	US\$45.00	Basic mkt cap (US\$m)	31,474	(416) 842-9893
Share price	US\$38.40	Enterprise value (US\$m)	35,903	josh.wolfson@rbccm.com

Operating Statistics	Year Ended December 31				
	2018A	2019E	2020E	2021E	2022E
Equity gold production (koz)	5,101	6,247	6,753	6,777	6,789
Nevada Gold Mines JV	1,697	1,537	1,412	1,398	1,423
Boddington	709	685	701	755	791
Ahafo	436	670	478	505	536
Peñasquito	0	163	598	603	478
Tanami	496	484	476	504	504
Cerro Negro	0	315	403	444	398
Akyem	414	422	364	386	386
Merian	400	389	348	282	350
Other	949	1,582	1,972	1,899	1,922
Equity non-gold GEO production (koz)	254	609	918	952	1,080
Total cash costs (co-product) (US\$/oz)	709	727	744	715	702
Reported AISC (by-product) (US\$/oz)	937	966	965	944	928
Fully loaded costs (co-product) (US\$/oz)	1,219	1,216	1,241	1,208	1,226
Equity copper production (mlbs)	109	77	55	74	81
Copper costs—C2 (US\$/lb)	1.69	1.91	2.23	1.90	2.05
Copper costs—AISC (US\$/lb)	2.02	2.33	2.66	2.34	2.48
Equity capital spending (US\$b)	0.9	1.5	1.9	1.9	2.1

Input Prices	Year Ended December 31				
	2018A	2019E	2020E	2021E	2022E
Key commodities					
Gold (US\$/oz)	1,269	1,385	1,464	1,464	1,464
Silver (US\$/oz)	15.71	16.13	17.03	17.03	17.03
Copper (US\$/lb)	2.95	2.73	2.71	2.73	2.75
Zinc (US\$/lb)	1.33	1.15	1.03	1.03	1.02
Lead (US\$/lb)	1.02	0.91	1.00	1.00	1.00
Oil (US\$/bbl)	65	57	58	58	59
Key currencies					
US\$/A\$	0.75	0.69	0.68	0.68	0.68
US\$/C\$	0.77	0.75	0.75	0.75	0.75
US\$/MXP\$	0.05	0.05	0.05	0.05	0.05

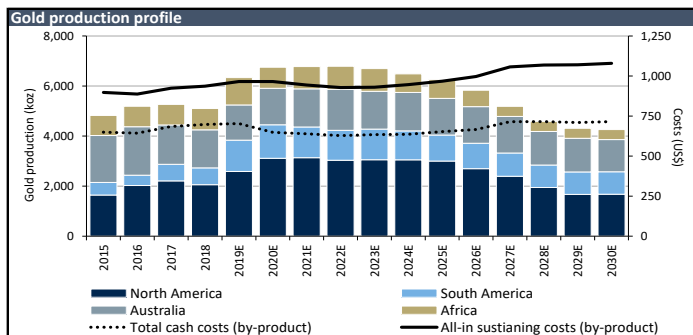
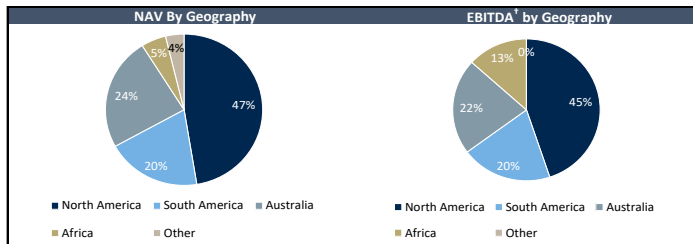
Valuation	Year Ended December 31				
	2018A	2019E	2020E	2021E	2022E
P/E (x)	27.5	30.3	22.4	22.6	22.6
P/CF (x)	8.2	9.2	8.2	8.0	7.9
EV/EBITDA (x)	15.4	10.2	7.6	7.4	7.3
FCF/EV yield*	2.0%	3.1%	4.8%	5.3%	4.1%

Gold Reserves and Resources	Year Ended December 31				
	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	2,456	2,158	1,771	1,860	1,717
Grade (g/t)	1.0	1.1	1.2	1.1	1.2
Oz (m)	82.2	73.7	68.5	68.5	65.4
Assumed reserves additions (moz)					23.6
LOM production (moz)					89.6
Measured, indicated & inferred (excl)					
Oz (m)	42.7	53.1	47.6	48.2	55.0
Reserves and resource statistics					
Reserves/sh (x1,000)	160.4	139.0	128.5	128.4	89.2
Reserves & resources/sh (x1,000)	243.8	239.1	217.9	218.8	164.1
Current per-ounce statistics					
Adj EV/LOM production (US\$/oz)	559		EV/resource (US\$/oz)	298	
Total acquisition cost (US\$/oz)	1,320		EV/reserve (US\$/oz)	549	

Income Statement	Year Ended December 31				
	2018A	2019E	2020E	2021E	2022E
Total revenue	7,253	9,655	10,888	10,856	11,003
% gold	95%	91%	88%	88%	86%
% silver	0%	4%	5%	5%	7%
% copper	5%	2%	1%	2%	2%
% other	0%	3%	6%	5%	5%
Operating costs	4,093	5,143	5,451	5,351	5,388
G&A	244	312	265	265	265
Exploration	197	290	280	280	280
Depreciation	1,215	1,935	2,186	2,393	2,502
Other	392	458	249	217	249
Adjusted EBITDA	2,327	3,525	4,748	4,847	4,925
Adjusted EBIT	1,112	1,516	2,457	2,350	2,319
Net interest expense	207	304	281	255	214
Unusual/other items	-581	1,798	-663	-643	-528
EBT	738	3,618	2,075	1,962	2,004
Taxes	386	911	830	746	762
Minority interest	39	138	99	67	75
Other	28	49	256	245	223
Net income (reported)	341	2,619	1,403	1,395	1,391
Net income (adjusted)	746	939	1,403	1,395	1,391
EPS (reported) (US\$/sh)	0.64	3.25	1.71	1.70	1.70
EPS (adjusted) (US\$/sh)	1.40	1.27	1.71	1.70	1.70
Average shares (m)	533	734	820	820	820

Net Asset Value	Year Ended December 31				
	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
Nevada Gold Mines (38.5%), US (NV)	5,798	7.07	19%	30%	20%
Peñasquito (100.0%), Mexico	5,546	6.76	18%	9%	14%
Boddington (100.0%), Australia (WA)	3,905	4.76	13%	12%	11%
Cerro Negro (100.0%), Argentina	2,165	2.64	7%	5%	7%
Tanami (100.0%), Australia (NT)	2,677	3.26	9%	4%	8%
Merian (75.0%), Suriname	1,504	1.83	5%	4%	5%
Pueblo Viejo (40.0%), Dominican Republic	2,163	2.64	7%	4%	6%
Ahafo (90.0%), Ghana	758	0.92	2%	9%	7%
Musselwhite (100.0%), Canada (ON)	712	0.87	2%	2%	1%
Akyem (100.0%), Ghana	803	0.98	3%	2%	6%
Other	4,423	5.39	15%	19%	14%
Total mining and investment assets	30,455	37.14	100%	100%	100%
Balance sheet items and expenditures	-9,138	-11.14			
Total	21,317	26.00			
P/NAV at spot gold (x)		1.48			

Cash Flow Statement	Year Ended December 31				
	2018A	2019E	2020E	2021E	2022E
Net income (reported)	341	2,619	1,403	1,395	1,391
Depreciation	1,215	1,935	2,186	2,393	2,502
Other	954	-1,491	258	156	102
Operating cash flow	2,510	3,063	3,846	3,944	3,995
Operating cash flow (US\$/sh)	4.71	4.17	4.69	4.81	4.87
Working capital changes	-743	-474	-260	-220	-180
Cash from operations	1,767	2,589	3,586	3,724	3,815
Capital expenditure	-1,032	-1,491	-1,862	-1,827	-1,952
Net investments	-145	216	635	-75	-400
Investing cash flow	-1,177	-1,275	-1,227	-1,902	-2,352
Common share dividends	301	975	459	459	459
Debt additions	0	700	0	0	0
Debt repayments	0	-2,474	-95	-695	-1,137
Equity financing	-137	0	0	0	0
Other net financing	-258	-970	-459	-459	-459
Financing cash flow	-395	-2,743	-553	-1,154	-1,596
Foreign exchange	-4	-4	0	0	0
Change in cash	191	-1,433	1,806	668	-133
Free cash flow*	735	1,098	1,724	1,897	1,463
Free cash flow* (\$/sh)	1.38	1.50	2.10	2.31	1.79



Balance Sheet	Year Ended December 31				
	2018A	2019E	2020E	2021E	2022E
Assets					
Cash	3,489	1,945	3,751	4,419	4,286
Short-term investments	48	157	157	157	157
Other current assets	1,788	2,986	2,986	2,986	2,986
Current assets	5,277	4,931	6,737	7,405	7,272
Non-current assets	15,438	35,030	34,445	34,294	34,487
Total assets	20,715	39,961	41,182	41,699	41,759
Liabilities					
Short-term debt	653	95	695	1,137	1,145
Current liabilities	2,413	1,983	2,583	3,025	3,033
Long-term debt	3,718	6,423	5,728	4,591	3,446
Other non-current liabilities	4,082	9,840	10,132	10,329	10,514
Total liabilities	10,213	18,245	18,443	17,945	16,993
Total shareholder equity	10,502	21,716	22,739	23,754	24,766
Net debt	974	4,572	2,672	1,309	305
Net debt / EBITDA (x)	0.4	1.3	0.6	0.3	0.1
ROE (Net income/Equity)	3.2%	16.3%	6.3%	6.0%	5.7%
ROA (Net income/Total assets)	1.6%	8.6%	3.5%	3.4%	3.3%
ROIC (NOPAT/Assets + Net debt)	6.3%	3.2%	6.3%	6.4%	6.2%
CROIC (FCF/Equity + Total debt)*	4.9%	5.1%	6.0%	6.5%	5.0%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
 Priced as of market close, November 29, 2019 ET. Source: RBC Capital Markets estimates, company reports, Bloomberg
 Source: RBC Capital Markets estimates, company reports, Bloomberg. Price as of market close, November 29, 2019 ET

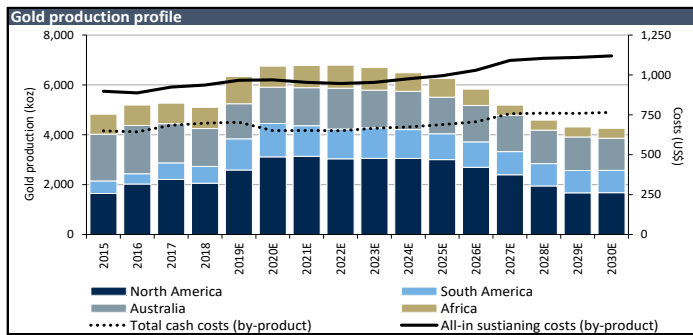
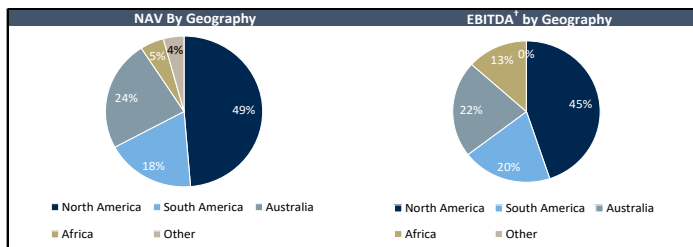
Newmont Goldcorp Corporation: Forecasts at RBC price deck

Rating	Sector Perform	Basic shares (m)	819.6	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	820.0/823.8	Josh Wolfson, CFA
Target price at RBC price deck	US\$45.00	Basic mkt cap (US\$m)	31,474	(416) 842-9893
Share price	US\$38.40	Enterprise value (US\$m)	35,903	josh.wolfson@rbccm.com

Operating Statistics	Year Ended December 31					Input Prices	Year Ended December 31				
	2018A	2019E	2020E	2021E	2022E		2018A	2019E	2020E	2021E	2022E
Equity gold production (koz)	5,101	6,247	6,753	6,777	6,789	Key commodities					
Nevada Gold Mines JV	1,697	1,537	1,412	1,398	1,423	Gold (US\$/oz)	1,269	1,390	1,500	1,450	1,450
Boddington	709	685	701	755	791	Silver (US\$/oz)	15.71	16.23	17.50	17.50	17.50
Ahafo	436	670	478	505	536	Copper (US\$/lb)	2.95	2.72	3.00	2.75	2.75
Peñasquito	0	163	598	603	478	Zinc (US\$/lb)	1.33	1.16	1.05	1.00	1.00
Tanami	496	484	476	504	504	Lead (US\$/lb)	1.02	0.91	1.00	1.00	1.00
Cerro Negro	0	315	403	444	398	Oil (US\$/bbl)	65	57	58	58	59
Akyem	414	422	364	386	386	Key currencies					
Merian	400	389	348	282	350	US\$/A\$	0.75	0.69	0.67	0.69	0.71
Other	949	1,582	1,972	1,899	1,922	US\$/C\$	0.77	0.76	0.76	0.77	0.78
Equity non-gold GEO production (koz)	254	611	923	966	1,098	US\$/MXP\$	0.05	0.05	0.05	0.05	0.05
Total cash costs (co-product) (US\$/oz)	709	728	748	725	721	Valuation					
Reported AISC (by-product) (US\$/oz)	937	967	969	953	946	P/E (x)	27.5	30.0	20.3	24.6	25.5
Fully loaded costs (co-product) (US\$/oz)	1,219	1,218	1,255	1,211	1,234	P/CF (x)	8.2	9.2	7.8	8.2	8.2
Equity copper production (mlbs)	109	77	55	74	81	EV/EBITDA (x)	15.4	10.1	7.2	7.7	7.7
Copper costs—C2 (US\$/lb)	1.69	1.91	2.20	1.93	2.13	FCF/EV yield*	2.0%	3.1%	5.3%	4.9%	3.6%
Copper costs—AISC (US\$/lb)	2.02	2.33	2.66	2.37	2.57						
Equity capital spending (US\$b)	0.9	1.5	1.9	1.9	2.1						

Gold Reserves and Resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	2,456	2,158	1,771	1,860	1,717
Grade (g/t)	1.0	1.1	1.2	1.1	1.2
Oz (m)	82.2	73.7	68.5	68.5	65.4
Assumed reserves additions (moz)					23.6
LOM production (moz)					89.6
Measured, indicated & inferred (excl)					
Oz (m)	42.7	53.1	47.6	48.2	55.0
Reserves and resource statistics					
Reserves/sh (x1,000)	160.4	139.0	128.5	128.4	89.2
Reserves & resources/sh (x1,000)	243.8	239.1	217.9	218.8	164.1
Current per-ounce statistics					
Adj EV/LOM production (US\$/oz)	560		EV/resource (US\$/oz)		298
Total acquisition cost (US\$/oz)	1,346		EV/reserve (US\$/oz)		549

Net Asset Value	NAV (\$m)	/sh (\$)	% NAV	% Reserve	%EBITDA†
Nevada Gold Mines (38.5%), US (NV)	5,324	6.49	20%	30%	20%
Peñasquito (100.0%), Mexico	5,248	6.40	19%	9%	14%
Boddington (100.0%), Australia (WA)	3,496	4.26	13%	12%	11%
Cerro Negro (100.0%), Argentina	1,441	1.76	5%	5%	7%
Tanami (100.0%), Australia (NT)	2,306	2.81	9%	4%	9%
Merian (75.0%), Suriname	1,423	1.74	5%	4%	5%
Pueblo Viejo (40.0%), Dominican Republic	2,030	2.48	7%	4%	6%
Ahafo (90.0%), Ghana	534	0.65	2%	9%	7%
Musselwhite (100.0%), Canada (ON)	567	0.69	2%	2%	1%
Akyem (100.0%), Ghana	793	0.97	3%	2%	6%
Other	3,955	4.82	15%	19%	14%
Total mining and investment assets	27,117	33.07	100%	100%	100%
Balance sheet items and expenditures	-9,138	-11.14			
Total	17,979	21.93			
P/NAV at RBC price deck (x)		1.75			



* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
 Priced as of market close, November 29, 2019 ET. Source: RBC Capital Markets estimates, company reports, Bloomberg
 Source: RBC Capital Markets estimates, company reports, Bloomberg. Price as of market close, November 29, 2019 ET

Income Statement	2018A	2019E	2020E	2021E	2022E
Total revenue	7,253	9,681	11,166	10,768	10,916
% gold	95%	91%	88%	88%	86%
% silver	0%	4%	5%	6%	7%
% copper	5%	2%	1%	2%	2%
% other	0%	3%	5%	5%	5%
Operating costs	4,093	5,152	5,485	5,442	5,555
G&A	244	312	265	265	265
Exploration	197	290	280	280	280
Depreciation	1,215	1,935	2,186	2,393	2,503
Other	392	458	246	218	251
Adjusted EBITDA	2,327	3,542	4,994	4,666	4,670
Adjusted EBIT	1,112	1,533	2,704	2,169	2,063
Net interest expense	207	304	281	254	214
Unusual/other items	-581	1,798	-665	-641	-527
EBT	738	3,635	2,319	1,782	1,750
Taxes	386	917	928	677	665
Minority interest	39	139	110	64	72
Other	28	50	270	240	219
Net income (reported)	341	2,630	1,552	1,282	1,232
Net income (adjusted)	746	950	1,552	1,282	1,232
EPS (reported) (US\$/sh)	0.64	3.26	1.89	1.56	1.50
EPS (adjusted) (US\$/sh)	1.40	1.28	1.89	1.56	1.50
Average shares (m)	533	734	820	820	820

Cash Flow Statement	2018A	2019E	2020E	2021E	2022E
Net income (reported)	341	2,630	1,552	1,282	1,232
Depreciation	1,215	1,935	2,186	2,393	2,503
Other	954	-1,490	289	143	86
Operating cash flow	2,510	3,075	4,027	3,818	3,821
Operating cash flow (US\$/sh)	4.71	4.19	4.91	4.66	4.66
Working capital changes	-743	-474	-260	-220	-180
Cash from operations	1,767	2,601	3,767	3,598	3,641
Capital expenditure	-1,032	-1,491	-1,862	-1,827	-1,952
Net investments	-145	216	635	-75	-400
Investing cash flow	-1,177	-1,275	-1,227	-1,902	-2,352
Common share dividends	301	975	459	459	459
Debt additions	0	700	0	0	0
Debt repayments	0	-2,474	-95	-695	-1,137
Equity financing	-137	0	0	0	0
Other net financing	-258	-970	-459	-459	-459
Financing cash flow	-395	-2,743	-553	-1,154	-1,596
Foreign exchange	-4	-4	0	0	0
Change in cash	191	-1,421	1,987	542	-307
Free cash flow*	735	1,110	1,905	1,771	1,289
Free cash flow* (\$/sh)	1.38	1.51	2.32	2.16	1.57

Balance Sheet	2018A	2019E	2020E	2021E	2022E
Assets					
Cash	3,489	1,957	3,944	4,486	4,179
Short-term investments	48	157	157	157	157
Other current assets	1,788	2,986	2,986	2,986	2,986
Current assets	5,277	4,943	6,930	7,472	7,165
Non-current assets	15,438	35,032	34,463	34,307	34,944
Total assets	20,715	39,974	41,393	41,779	41,659
Liabilities					
Short-term debt	653	95	695	1,137	1,145
Current liabilities	2,413	1,983	2,583	3,025	3,033
Long-term debt	3,718	6,423	5,728	4,591	3,446
Other non-current liabilities	4,082	9,842	10,183	10,362	10,526
Total liabilities	10,213	18,248	18,494	17,977	17,005
Total shareholder equity	10,502	21,727	22,899	23,801	24,654
Net debt	974	4,561	2,479	1,242	412
Net debt / EBITDA (x)	0.4	1.3	0.5	0.3	0.1
ROE (Net income/Equity)	3.2%	16.3%	7.0%	5.5%	5.3%
ROA (Net income/Total assets)	1.6%	8.7%	3.8%	3.1%	3.0%
ROIC (NOPAT/Assets + Net debt)	6.3%	3.3%	6.9%	5.9%	5.6%
CROIC (FCF/Equity + Total debt)*	4.9%	5.1%	6.6%	6.0%	4.4%

Valuation

Our price target of US\$45 is based on 1.7x our NAV5% at a long-term gold price of US\$1,400/oz and 23x our 2019–21 SFCF estimate, which would be equivalent to 10x EBITDA. These multiples are consistent with the average multiples used to value large gold producer peers, reflecting Newmont's relative positioning on key metrics such as asset positioning, geopolitical risk exposure, and guidance track record. Our Sector Perform rating is supported by NEM's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Risks to rating and price target

In addition to general operating and financial risks for NEM related to commodities (gold, silver, copper, lead and zinc) and FX (including CAD, AUD, MXN, ARS), we highlight:

- Increasing capital requirements to sustain existing output and fund new development projects
- Achievement of Nevada JV and Goldcorp synergy/efficiency outlined targets
- Penasquito risk of ongoing road blocks/issues with local trucking contractor
- Senior management transition risk
- Political risk uncertainty, including exposure to Dominican Republic, Argentina, Ghana, Chile, and Peru

Company description

Newmont Goldcorp is a senior gold producer with a globally diversified portfolio of gold and copper assets. Company guidance outlines a stable production and declining cost and capex profile. Newmont guides for 2020 production of 6.7 moz and a range of 6.5–7.0 moz for 2020–24, with AISC guided to decline from \$975/oz to \$800–900/oz over the 5-year period. Newmont is focused on asset integration and portfolio optimization following recent M&A transactions including its 2Q19 takeover of Goldcorp and the 3Q19 Nevada Gold Mines JV with Barrick.

New Gold Inc.

An aspirational balancing act

Our view: Our forecasts outline a limited ability for NGD to generate cash flow beyond debt repayment, constricting the company's overall financial flexibility long-term and presenting greater downside risk to NGD versus its peers. NGD is scheduled to report refreshed mine plans for its asset base in 1Q20 that will clarify the company's outlook. We are assuming coverage of NGD with an Underperform rating and US\$0.65 PT.

Key points:

Clearing up the outlook with two new mine plans. In recent years, the outlook for New Gold has remained opaque, a product of Rainy River's ramp-up ambiguities, long-term development uncertainties at New Afton, and sizable upcoming debt maturities in 2022 (\$444M) and 2025 (\$300M). In 1Q20, NGD is scheduled to deliver a comprehensive corporate update, including the issue of its traditional 2020 guidance and year-end reserves and resources, as well as reworked mine plans for both Rainy River mine and New Afton, including development of the C-Zone project. Overall, we expect these updates could clearly outline the future of the company.

Updates could outline a challenging dual-track objective. At Rainy River, an optimized mine plan that emphasizes cash flow and re-calibrated costing could yield a shortened mine life and reduced underground production. At New Afton, NGD is seeking to advance the C-Zone expansion, while concurrently permitting in-pit tailings due to surface subsidence that has impacted its existing tailings dam. It is uncertain whether management can successfully resolve both mines' complicated outlooks simultaneously, and in our view the ability for shareholders to benefit from these opportunities is a long-term deliverable. We have confidence in management's abilities, although we acknowledge the risks are extensive.

Balance sheet leverage limits overall flexibility. Following NGD's C\$150m equity financing in August 2019, we calculate net debt to EBITDA for NGD has declined to a more manageable 2.5x. Nonetheless, leverage for NGD is amongst the highest under coverage. Our forecasts at spot gold outline no material cash flow generation beyond debt repayment for NGD, thereby restricting the company's ability to plan long-term. We continue to view deleveraging of New Gold's balance sheet as the single-most important objective for the company, providing NGD with operating flexibility to navigate risks and uncertainties. Beyond operating achievements and cash flow generation, asset partnerships/divestitures, additional equity issuance, and gold prices are key opportunities that could benefit the company.

Sector: Precious Minerals & Diamonds - small/mid cap

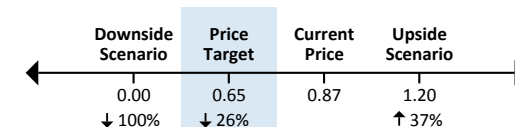
Underperform

AMEX: NGD; USD 0.87; TSX: NGD

Price Target USD 0.65

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input checked="" type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	672.9	Market Cap (MM):	588
Dividend:	0.00	Yield:	0.0%
NAVPS:	0.82	P/NAVPS:	1.07x
		Avg. Daily Volume:	2,484,008

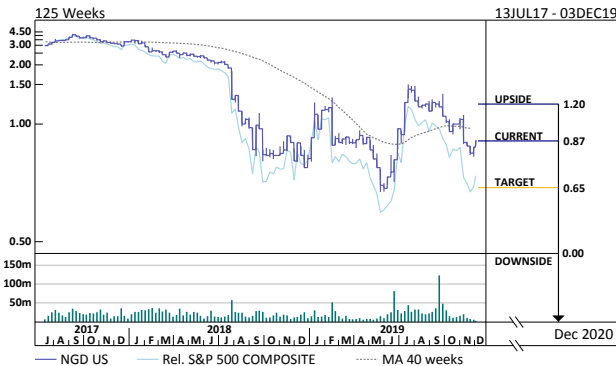
RBC Estimates

FY Dec	2018A	2019E	2020E	2021E
EPS, Adj Basic	(0.08)	(0.05)	(0.02)	0.03
P/AEPS	NM	NM	NM	29.1x
CFPS, Adj Basic	0.44	0.30	0.33	0.39
P/ACFPS	2.0x	2.9x	2.6x	2.2x
FCFPS	(0.06)	(0.06)	0.01	0.13
P/FCF	nm	nm	nm	6.7x
Production	418.6	327.9	330.1	378.5
EPS, Adj Basic	Q1	Q2	Q3	Q4
2018	(0.03)A	0.00A	(0.01)A	(0.04)A
2019	0.00A	(0.01)A	(0.02)A	(0.02)E
2020	(0.01)E	(0.01)E	0.00E	0.01E
CFPS, Adj Basic				
2018	0.13A	0.10A	0.13A	0.08A
2019	0.11A	0.05A	0.10A	0.04E
2020	0.09E	0.06E	0.10E	0.08E

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: New Gold Inc.



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our price target of US\$0.65 is based upon 1.1x our risk adjusted NAV at a long-term gold price of US\$1,400/oz and 16x our 2020-2021 SFCF estimate, which would be equivalent to 3x EBITDA. These multiples are below the average for the intermediate producer group, reflecting NGD's heightened interim operating outlook uncertainty and above-average financial leverage. Our Underperform rating is supported by NGD's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Upside scenario

Our upside value of US\$1.20 is based upon higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside value of US\$0 is based upon lower long-term gold prices of US\$1,200/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Investment summary

New Gold is an intermediate gold producer with two producing mines located in Canada, including the Rainy River mine in Ontario and the New Afton mine in British Columbia. 2019 guidance outlines production of 465-520 koz at AISC of \$1,330-1,420/oz.

Investment outlook:

- NGD has advanced Rainy River's ramp-up, although operating performance has lagged the company's outstanding technical report. Incorporating realized unit costs, and an accurate forecasting of stripping/tailings requirements, we forecast that overall mine life could be negatively impacted.
- NGD's New Afton mine is scheduled to cease production in ~2024, but could be extended with development of the C-Zone project. However, capital requirements are a guided ~US\$450m and require the receipt of an in-pit tailings permit to resolve surface subsidence that has impacted the existing tailings dam.
- Financial and operating leverage for NGD are amongst the highest under coverage. However, near-term risks have slightly improved given higher metals prices and NGD's recent C\$150M equity raise.
- Our Underperform rating is predicated upon our view of NGD's limited ability to generate cash flow beyond debt repayment, limiting the company's overall financial flexibility and presenting greater relative downside risk to NGD's shares than its peers.

Upcoming catalysts and milestones

- Updated mine plans for Rainy River and New Afton (mid-1Q20),
- New Afton C-Zone first production (2024), permitting for in-pit tailings deposition (ongoing) and tailings dam stabilization (ongoing)
- Rainy River open pit ramp-up (ongoing) and potential underground mining (2021+)
- Debt repayment of \$444M (2022) and \$300M (2025)

Key risks

In addition to general operating/technical, financing and commodity (gold and copper) risks, we highlight:

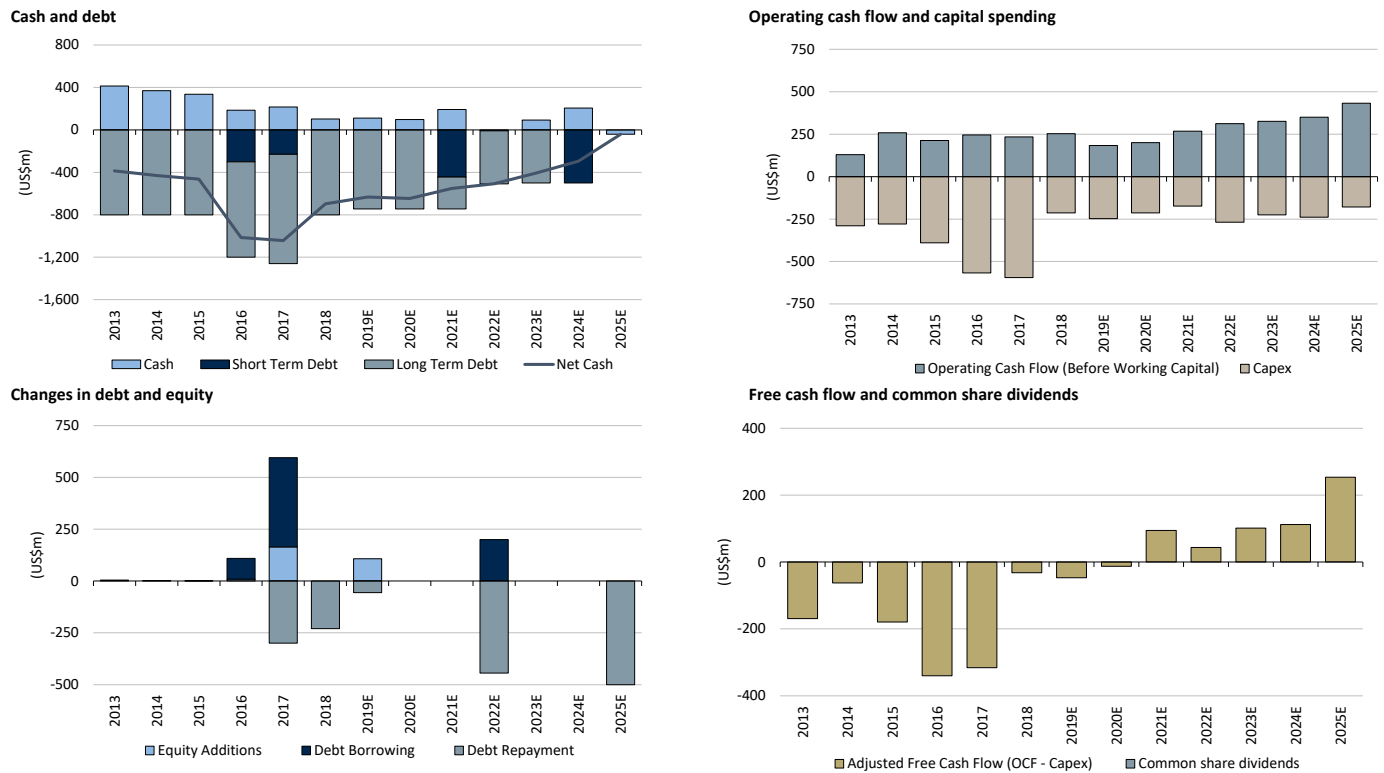
- Balance sheet risk given elevated levels of debt and below-average operating forecast certainty
- Achievement of ramp-up and production targets at Rainy River, and upcoming mine plan changes
- New Afton capital requirements for C-Zone advancement, permitting, and surface subsidence
- Changes in foreign exchange rates (notably CAD)

Exhibit 2: New Gold – Catalysts, opportunities and risks

<p>Catalysts and milestones</p>	<ul style="list-style-type: none"> • Rainy River mine plan optimization results (mid-1Q20) • New Afton mine plan optimization and C-Zone project update (mid-1Q20), and first production from C-Zone (2024) • New Afton permitting for in-pit tailings deposition (ongoing) and tailings dam stabilization (ongoing) • Rainy River open pit ramp-up (ongoing) and potential underground mining (2021+) • Debt repayment of \$444M (2022) and \$300M (2025)
<p>Opportunities</p>	<ul style="list-style-type: none"> • Rainy River and New Afton return optimization improvement • Potential smaller or staged-development approach to Blackwater or partnership opportunities • Ongoing debt reduction from free cash flow or potential divestitures (i.e. Blackwater) • Above average sensitivity to gold prices due to elevated financial leverage
<p>Risks and uncertainties</p>	<ul style="list-style-type: none"> • Achievement of ramp-up and production targets at Rainy River, and upcoming mine plan changes • Rainy River ongoing development and capital requirements over time • New Afton capital requirements for C-Zone advancement, permitting, and surface subsidence • Changes in foreign exchange rates (notably C\$/US\$) • Commodity price risk (most notably gold and copper prices), technical/operating risk and financing risk

Source: Company reports, RBC Capital Markets estimates

Exhibit 3: New Gold – Financial forecasts at spot gold



Source: Company reports, RBC Capital Markets estimates (Priced as of market close on November 29, 2019 ET)

Exhibit 4: New Gold – Net asset valuation at spot gold

New Gold Inc.										
Net asset valuation at spot gold (US\$)										
Shares (FD, FF, ITM) (m)	672.9									
Market capitalization (US\$m)	562									
	Risk-weighted NAV			NAV at various discount rates						
	Discount rate	(\$m)	(/sh) (\$)	5%		7%		10%		
				(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)	
Gold assets										
New Afton (100.0%), Canada (BC)	5%	261	0.39	261	0.39	232	0.34	196	0.29	
Rainy River (100.0%), Canada (ON)	5%	973	1.45	973	1.45	884	1.31	770	1.14	
Rainy River stream	5%	-201	-0.30	-201	-0.30	-185	-0.27	-165	-0.24	
Gold exploration properties*		125	0.19	125	0.19	125	0.19	125	0.19	
Gold hedge book	5%	-20	-0.03	-20	-0.03	-20	-0.03	-19	-0.03	
Total gold assets		1,138	1.69	1,138	1.69	1,036	1.54	906	1.35	
Base metals and other assets										
New Afton (100.0%), Canada (BC)	8%	301	0.45	301	0.45	301	0.45	272	0.40	
Base metals and other hedges	8%	0	0.00	0	0.00	0	0.00	0	0.00	
Other exploration		0	0.00	0	0.00	0	0.00	0	0.00	
Investments		0	0.00	0	0.00	0	0.00	0	0.00	
Total other assets		301	0.45	301	0.45	301	0.45	272	0.40	
Balance sheet and expenses										
Basic working capital		148	0.22	148	0.22	148	0.22	148	0.22	
Value of ITM instruments		0	0.00	0	0.00	0	0.00	0	0.00	
Long-term debt		-744	-1.11	-744	-1.11	-744	-1.11	-744	-1.11	
Estimated working capital additions		200	0.30	200	0.30	200	0.30	200	0.30	
Estimated debt additions		-200	-0.30	-200	-0.30	-200	-0.30	-200	-0.30	
General & administrative expense	5%	-113	-0.17	-113	-0.17	-104	-0.15	-91	-0.14	
Exploration expense	5%	-23	-0.03	-23	-0.03	-22	-0.03	-21	-0.03	
Interest tax shield	5%	65	0.10	65	0.10	62	0.09	59	0.09	
Reclamation & closure liability		-94	-0.14	-94	-0.14	-94	-0.14	-94	-0.14	
Net financial assets		-762	-1.13	-762	-1.13	-754	-1.12	-745	-1.11	
Net asset value (US\$)		677	1.01	677	1.01	583	0.87	434	0.65	
Share price (US\$)			0.84		0.84		0.84		0.84	
NAV multiple (P/NAV) (x)			0.83		0.83		0.96		1.30	
Input assumptions										
		2019E	2020E	2021E	Long term					
Gold price (US\$/oz)		1,387	1,464	1,464	1,464					
Silver price (US\$/oz)		16.11	17.03	17.03	17.03					
Copper price (US\$/lb)		2.73	2.71	2.73	2.81					

* Blackwater accounted for as exploration property

Note: Base metals cash flow discounted at a minimum 5% discount rate

Source: Company reports, RBC Capital Markets estimates (Priced as of market close on November 29, 2019 ET)

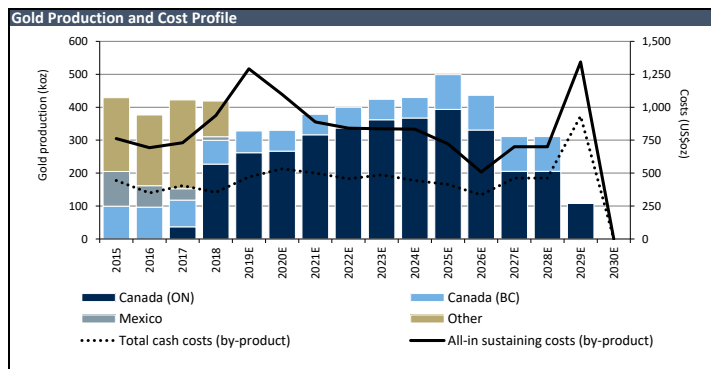
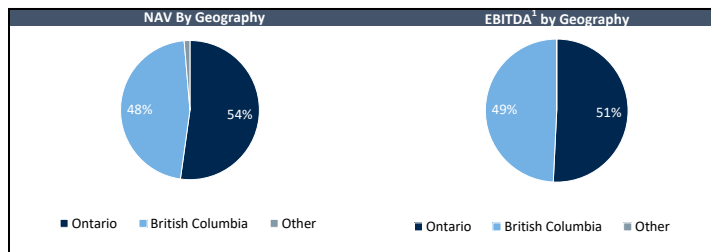
New Gold Inc. (NGD US, NGD CN): Forecasts at spot gold

Rating	Underperform	Basic shares (m)	672.9	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	672.9/680.8	Josh Wolfson, CFA
Target price at RBC price deck	US\$0.65	Basic mkt cap (US\$m)	562	(416) 842-9893
Share price	US\$0.84	Enterprise value (US\$m)	1,128	josh.wolfson@rbccm.com

All US\$m unless noted						All US\$m unless noted					
Operating Statistics						Input prices					
	2018	2019E	2020E	2021E	2022E		2018	2019E	2020E	2021E	2022E
Reported GEO production (koz)	638	500	481	524	547	Key commodities					
Reported gold production (koz)	430	331	333	382	403	Gold (US\$/oz)	1,269	1,387	1,464	1,464	1,464
Equity gold production (koz)	419	328	330	379	400	Silver (US\$/oz)	15.71	16.11	17.03	17.03	17.03
New Afton	72	66	63	62	62	Copper (US\$/lb)	2.95	2.73	2.71	2.73	2.75
Rainy River	227	262	267	316	337	Oil (US\$/bbl)	65	57	58	58	59
Other	119	0	0	0	0	Key currencies					
Total cash costs (co-product) (US\$/oz)	794	843	872	777	721	US\$/C\$	0.77	0.75	0.75	0.75	0.75
New Afton	495	605	656	687	696	Valuation data					
Rainy River	815	903	923	795	726	P/E (x)	-10.6	-15.1	-16.9	25.4	11.8
Total cash costs (by-product) (US\$/oz)	354	471	533	500	457	P/CF (x)	1.9	2.8	2.8	2.1	1.8
Reported AISC (by-product) (US\$/oz)	938	1,291	1,098	888	841	EV/EBITDA (x)	4.2	4.4	4.6	3.6	3.2
Fully loaded costs (co-product) (US\$/oz)	1,129	1,422	1,431	1,229	1,348	FCF/EV yield*	-2.8%	-4.2%	-1.1%	8.4%	3.9%
Equity silver production (moz)	1.2	0.7	0.8	0.8	0.9	Income statement					
Equity copper production (mlbs)	81.1	78.6	71.0	67.5	67.5	Total revenue	693	636	628	701	738

Net Asset Value (US\$)	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
New Afton (100.0%), Canada (BC)	562	0.84	39%	8%	49%
Rainy River (100.0%), Canada (ON)	772	1.15	54%	31%	51%
Blackwater (100.0%), Canada (BC)	125	0.19	9%	61%	0%
Other	-20	-0.03	-1%	0%	0%
Total mining and investment assets	1,439	2.14	100%	100%	100%
Balance sheet items and expenditures	-762	-1.13			
Total NAV	677	1.01			
P/NAV spot gold (x)		0.83			

Gold reserves and resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	779.6	777.1	582.6	584.1	520.8
Grade (g/t)	0.7	0.7	0.8	0.8	0.8
Oz (m)	17.6	17.6	14.7	14.8	13.4
Assumed reserve additions (moz)					-0.7
LOM production (moz)					3.7
Measured, indicated & inferred (exclusive of reserves)					
Oz (m)	11.4	7.9	7.9	6.7	5.6
Reserve and resource statistics					
Reserves/sh (x1,000)	34.7	34.5	26.3	25.6	21.7
Reserves & resources/sh (x1,000)	57.1	49.8	40.3	37.2	30.8
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	620		EV/resource (US\$/oz)	59	
Total acquisition cost (US\$/oz)	1,371		EV/reserve (US\$/oz)	84	



* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
Source: RBC Capital Markets estimates, company reports, Bloomberg

(Priced as of market close on November 29, 2019 ET)

	2018	2019E	2020E	2021E	2022E
Valuation data					
P/E (x)	-10.6	-15.1	-16.9	25.4	11.8
P/CF (x)	1.9	2.8	2.8	2.1	1.8
EV/EBITDA (x)	4.2	4.4	4.6	3.6	3.2
FCF/EV yield*	-2.8%	-4.2%	-1.1%	8.4%	3.9%

	2018	2019E	2020E	2021E	2022E
Income statement					
Total revenue	693	636	628	701	738
% gold	67%	67%	70%	74%	74%
% silver	1%	2%	2%	2%	2%
% copper	32%	31%	28%	24%	24%
% other	0%	0%	0%	0%	0%
Operating costs	382	352	355	362	357
G&A	26	20	21	21	21
Exploration	3	6	7	7	7
Depreciation	263	229	217	229	246
Other	0	0	0	0	0
Adjusted EBITDA	267	259	245	311	353
Adjusted EBIT	19	30	28	82	108
Net interest expense	67	61	56	50	39
Unusual/other items	-1,173	-173	-111	-101	-79
EBT	-1,087	-82	-27	32	68
Taxes	-27	8	6	9	20
Minority interest	0	0	0	0	0
Other	-166	0	0	0	0
Net income (reported)	-1,226	-90	-33	22	48
Adjusted EBIT	-46	-35	-33	22	48
EPS (reported) (US\$/sh)	-2.12	-0.15	-0.05	0.03	0.07
EPS (adjusted) (US\$/sh)	-0.08	-0.06	-0.05	0.03	0.07
Average shares (m)	579	618	673	673	673

	2018	2019E	2020E	2021E	2022E
Cash Flow Statement					
Net income (reported)	-1,226	-90	-33	22	48
Depreciation	263	229	217	229	246
Other	1,216	44	16	17	19
Operating cash flow	254	183	200	268	313
Operating cash flow (US\$/sh)	0.44	0.30	0.30	0.40	0.46
Working capital changes	-72	17	0	0	0
Cash from operations	182	200	200	268	313
Capital expenditure	-214	-247	-213	-173	-269
Net investments	182	14	0	0	0
Investing cash flow	-32	-233	-213	-173	-269
Common share dividends	0	0	0	0	0
Debt additions	0	0	0	0	200
Debt repayments	-230	-56	0	0	-444
Equity financing	0	107	0	0	0
Other net financing	-20	-11	0	0	0
Financing cash flow	-250	41	0	0	-244
Foreign exchange	-1	0	0	0	0
Change in cash	-100	8	-13	94	-201
Free cash flow*	-32	-47	-13	94	44
Free cash flow* (\$/sh)	-0.06	-0.08	-0.02	0.14	0.07

	2018	2019E	2020E	2021E	2022E
Balance sheet					
Assets					
Cash	104	111	98	193	-8
Short-term investments	0	0	0	0	0
Other current assets	187	154	154	154	154
Current assets	290	265	252	347	146
Non-current assets	1,879	1,961	1,957	1,901	1,924
Total assets	2,170	2,226	2,209	2,248	2,071
Liabilities					
Short-term debt	0	0	0	444	0
Current liabilities	131	185	185	629	185
Long-term debt	800	744	744	300	500
Other non-current liabilities	279	354	368	381	397
Total liabilities	1,210	1,284	1,297	1,310	1,082
Total shareholder equity	959	943	912	937	988
Net debt	696	633	646	551	508
Net debt / EBITDA (x)	2.6	2.4	2.6	1.8	1.4
ROE (Net income/Equity)	-79%	-9%	-4%	2%	5%
ROA (Net income/Total assets)	-40%	-4%	-2%	1%	2%
ROIC (NOPAT/Assets + Net debt)	2%	1%	1%	5%	6%
CROIC (FCF/Equity + Total debt)*	-1%	-3%	-1%	6%	3%

New Gold Inc. (NGD US, NGD CN): Forecasts at RBC price deck

Rating	Underperform	Basic shares (m)	672.9	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	672.9/680.8	Josh Wolfson, CFA
Target price at RBC price deck	US\$0.65	Basic mkt cap (US\$m)	562	(416) 842-9893
Share price	US\$0.84	Enterprise value (US\$m)	1,128	josh.wolfson@rbccm.com

All US\$m unless noted		Year Ended December 31				
Operating Statistics		2018	2019E	2020E	2021E	2022E
Reported GEO production (koz)		638	499	492	527	549
Reported gold production (koz)		430	331	333	382	403
Equity gold production (koz)		419	328	330	379	400
New Afton		72	66	63	62	62
Rainy River		227	262	267	316	337
Other		119	0	0	0	0
Total cash costs (co-product) (US\$/oz)		794	845	865	779	728
New Afton		495	610	630	692	712
Rainy River		815	904	921	796	731
Total cash costs (by-product) (US\$/oz)		354	475	472	504	472
Reported AISC (by-product) (US\$/oz)		938	1,297	1,038	893	859
Fully loaded costs (co-product) (US\$/oz)		1,129	1,421	1,425	1,228	1,358
Equity silver production (moz)		1.2	0.7	0.8	0.8	0.9
Equity copper production (mlbs)		81.1	78.6	71.0	67.5	67.5

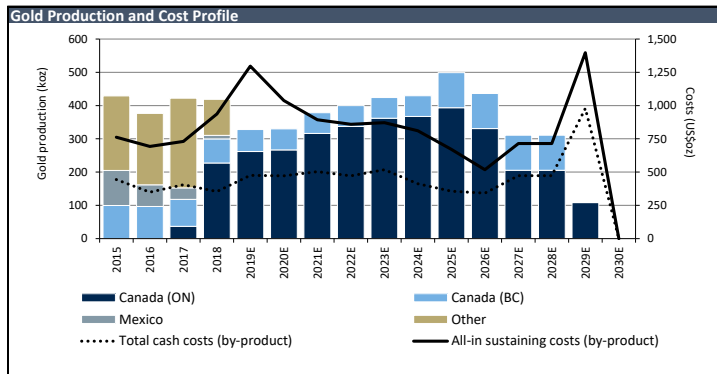
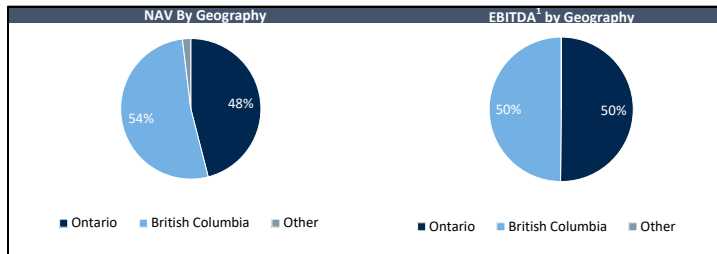
All US\$m unless noted		Year Ended December 31				
Input prices		2018	2019E	2020E	2021E	2022E
Key commodities						
Gold (US\$/oz)		1,269	1,390	1,500	1,450	1,450
Silver (US\$/oz)		15.71	16.23	17.50	17.50	17.50
Copper (US\$/lb)		2.95	2.72	3.00	2.75	2.75
Oil (US\$/bbl)		65	57	58	58	59
Key currencies						
US\$/C\$		0.77	0.76	0.76	0.77	0.78
Valuation data						
P/E (x)		-10.6	-15.6	-37.3	33.4	14.3
P/CF (x)		1.9	2.8	2.5	2.1	1.9
EV/EBITDA (x)		4.2	4.4	4.2	3.7	3.3
FCF/EV yield*		-2.8%	-4.1%	0.7%	7.9%	2.8%

Net Asset Value (US\$)	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
New Afton (100.0%), Canada (BC)	586	0.87	45%	8%	50%
Rainy River (100.0%), Canada (ON)	628	0.93	48%	31%	50%
Blackwater (100.0%), Canada (BC)	125	0.19	10%	61%	0%
Other	-26	-0.04	-2%	0%	0%
Total mining and investment assets	1,313	1.95	100%	100%	100%
Balance sheet items and expenditures	-762	-1.13			
Total NAV	551	0.82			
P/NAV RBC price deck (x)		1.02			

Income statement	2018	2019E	2020E	2021E	2022E
Total revenue	693	636	654	697	733
% gold	67%	67%	69%	73%	74%
% silver	1%	2%	2%	2%	2%
% copper	32%	31%	30%	25%	24%
% other	0%	0%	0%	0%	0%
Operating costs	382	351	356	365	363
G&A	26	20	21	21	21
Exploration	3	6	7	7	7
Depreciation	263	228	224	231	246
Other	0	0	0	0	0
Adjusted EBITDA	267	259	271	305	342
Adjusted EBIT	19	31	47	74	95
Net interest expense	67	61	56	50	39
Unusual/other items	-1,173	-173	-111	-100	-78
EBT	-1,087	-81	-9	24	56
Taxes	-27	8	6	7	17
Minority interest	0	0	0	0	0
Other	-166	0	0	0	0
Net income (reported)	-1,226	-89	-15	17	39
Net income (adjusted)	-46	-34	-15	17	39
EPS (reported) (US\$/sh)	-2.12	-0.14	-0.02	0.03	0.06
EPS (adjusted) (US\$/sh)	-0.08	-0.05	-0.02	0.03	0.06
Average shares (m)	579	618	673	673	673

Gold reserves and resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	779.6	777.1	582.6	584.1	520.8
Grade (g/t)	0.7	0.7	0.8	0.8	0.8
Oz (m)	17.6	17.6	14.7	14.8	13.4
Assumed reserve additions (moz)					-0.7
LOM production (moz)					3.7
Measured, indicated & inferred (exclusive of reserves)					
Oz (m)	11.4	7.9	7.9	6.7	5.6
Reserve and resource statistics					
Reserves/sh (x1,000)	34.7	34.5	26.3	25.6	21.7
Reserves & resources/sh (x1,000)	57.1	49.8	40.3	37.2	30.8
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	618		EV/resource (US\$/oz)	59	
Total acquisition cost (US\$/oz)	1,383		EV/reserve (US\$/oz)	84	

Cash Flow Statement	2018	2019E	2020E	2021E	2022E
Net income (reported)	-1,226	-89	-15	17	39
Depreciation	263	228	224	231	246
Other	1,216	44	12	15	17
Operating cash flow	254	184	221	263	302
Operating cash flow (US\$/sh)	0.44	0.30	0.33	0.39	0.45
Working capital changes	-72	17	0	0	0
Cash from operations	182	201	221	263	302
Capital expenditure	-214	-247	-213	-174	-271
Net investments	182	14	0	0	0
Investing cash flow	-32	-233	-213	-174	-271
Common share dividends	0	0	0	0	0
Debt additions	0	0	0	0	200
Debt repayments	-230	-56	0	0	-444
Equity financing	0	107	0	0	0
Other net financing	-20	-11	0	0	0
Financing cash flow	-250	41	0	0	-244
Foreign exchange	-1	0	0	0	0
Change in cash	-100	8	8	89	-213
Free cash flow*	-32	-47	8	89	31
Free cash flow* (\$/sh)	-0.06	-0.06	0.01	0.13	0.05



Balance sheet	2018	2019E	2020E	2021E	2022E
Assets					
Cash	104	112	120	208	-5
Short-term investments	0	0	0	0	0
Other current assets	187	154	154	154	154
Current assets	290	265	273	362	149
Non-current assets	1,879	1,962	1,951	1,895	1,919
Total assets	2,170	2,227	2,225	2,257	2,068
Liabilities					
Short-term debt	0	0	0	444	0
Current liabilities	131	185	185	629	185
Long-term debt	800	744	744	300	500
Other non-current liabilities	279	355	364	376	389
Total liabilities	1,210	1,284	1,293	1,305	1,074
Total shareholder equity	959	944	932	951	994
Net debt	696	633	625	536	505
Net debt / EBITDA (x)	2.6	2.4	2.3	1.8	1.5
ROE (Net income/Equity)	-79%	-9%	-2%	2%	4%
ROA (Net income/Total assets)	-40%	-4%	-1%	1%	2%
ROIC (NOPAT/Assets + Net debt)	2%	1%	3%	4%	5%
CROIC (FCF/Equity + Total debt)*	-1%	-3%	0%	5%	2%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
Source: RBC Capital Markets estimates, company reports, Bloomberg

(Priced as of market close on November 29, 2019 ET)

Valuation

Our price target of US\$0.65 is based upon 1.1x our risk adjusted NAV at a long-term gold price of US\$1,400/oz and 16x our 2020-2021 SFCF estimate, which would be equivalent to 3x EBITDA. These multiples are below the average for the intermediate producer group, reflecting NGD's heightened interim operating outlook uncertainty and above-average financial leverage. Our Underperform rating is supported by NGD's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Risks to rating and price target

Risks to our rating and price target include fluctuations in commodity prices, greater than expected mine operating costs and increasing energy, material and manpower costs. In a very competitive environment, New Gold, as with all mining companies, faces challenges in finding and replacing mined reserves. Given further reduction in free cash flow and lower metal prices, balance sheet risk is elevated with a potential funding shortfall through 2022 if debt cannot be refinanced. Balance sheet risk could increase further if metal prices deteriorate from current levels and if operational results fail to live up to current forecasts. In addition, operational risk at Rainy River remains high with ramp-up ongoing.

Company description

New Gold is an intermediate gold producer with two producing mines located in Canada, including the Rainy River mine in Ontario and the New Afton mine in British Columbia. 2019 guidance outlines production of 465-520 Koz at AISC of \$1,330-1,420/oz.

Royal Gold, Inc.

Abbreviating the long-term outlook

Our view: We see the potential for upcoming updates at RGLD's key underlying assets to affect its financial results (Mount Milligan, Rainy River, Andacollo) and increase risk associated with RGLD's portfolio duration. RGLD valuation is generally above that of its royalty peers, providing for a low margin of safety from these events. We are assuming coverage of RGLD with an Underperform rating and US\$115 PT.

Key points:

Key portfolio asset updates expected to impact forecasts. In late 2019, updates provided by operators of RGLD's key assets have outlined potential negative implications to the company's short- and long-term outlook. These assets include Mount Milligan (25% of NAV), where operator Centerra has outlined a shortened mine life due to updated recovery and unit cost assumptions, Rainy River (6% of NAV), where operator New Gold has outlined an upcoming optimized mine plan that will define lower LOM production but improved margin, and at Andacollo (14% of NAV), where an employee strike as of mid-October will affect RGLD over CY1H20. These issues are not expected to drastically change the company's outlook, but RGLD's relative valuation has expanded over time, providing for a limited buffer, in our view, to protect the company from these known upcoming risks.

Potential compounding issues with below-average duration. We calculate RGLD's portfolio composition currently has lower portfolio duration than that of its senior royalty peers (14 years vs. >20 years), and forecast a declining production profile should begin to materialize ahead of its peers in ~2021-22. In addition to the aforementioned upcoming portfolio challenges at Mount Milligan and Rainy River, declining future grade trends are forecast at Mount Milligan, Andacollo, and Penasquito (representing a combined 45% of current EBITDA). In part offsetting these factors is stable output from Pueblo Viejo, following Barrick's expected advancement of a throughput expansion, growth from Cortez as part of the Nevada Gold Mines JV benefits, and upcoming production from Khoemacau project development, where first production is scheduled in 2021. An additional outlook uncertainty relates to Holt (4% of EBITDA), where operator Kirkland Lake Gold has highlighted a strategic review.

Valuation at the upper end of the royalty group. We see RGLD's overall business as robust and its long-term strategy unaffected by the aforementioned upcoming risks. However, we view greater valuation contraction risks for RGLD than that of its royalty peers, given these risks and RGLD's greater forecast production declines. In our view, a contraction in RGLD's relative valuation or the stabilization of its long-term portfolio output has the potential to improve our relative perspective of the company's outlook.

Sector: Precious Minerals & Diamonds - large cap

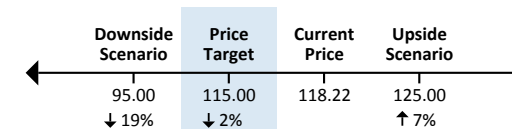
Underperform

NASDAQ: RGLD; USD 118.22

Price Target USD 115.00

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input checked="" type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	65.5	Market Cap (MM):	7,743
Dividend:	1.06	Yield:	0.9%
NAVPS:	47.78	P/NAVPS:	2.47x
BVPS:	33.13	P/BVPS:	3.57x
ROE:	7.5%	Avg. Daily Volume:	574,823
Float (MM):	65.1		
Debt to Cap:	7%		

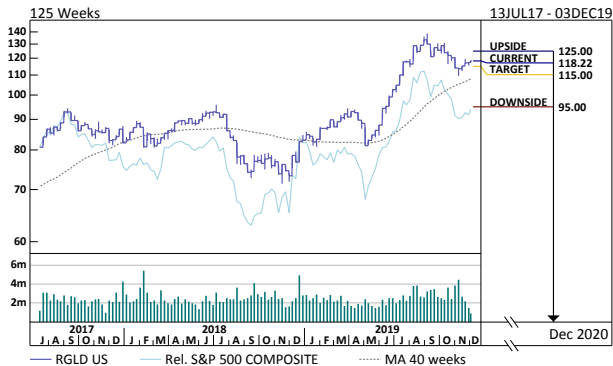
RBC Estimates

FY Jun	2019A	2020E	2021E	2022E
EPS, Adj Basic	1.42	2.77	3.09	3.02
CFPS, Adj Basic	4.27	5.21	5.54	5.58
FCFPS	3.85	3.02	4.16	5.58
Production	335.0	337.7	355.6	354.4
EPS, Adj Basic	Q1	Q2	Q3	Q4
2019	0.25A	0.31A	0.42A	0.44A
2020	0.60A	0.66E	0.75E	0.75E
CFPS, Adj Basic				
2019	0.93A	1.11A	1.02A	1.21A
2020	1.19A	1.34E	1.33E	1.34E

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: Royal Gold, Inc.



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our RGLD target price of US\$115 is based upon 2.2x our NAV5% at a long-term gold prices of US\$1,400/oz and 25x our 2019-2021 SFCF estimate, which would be equivalent to 23x EBITDA. These multiples are modestly below the average for the large cap royalty & streaming group, supported by the company's current favourable cash flow and financial positioning, but higher long-term production risks relative to peers. Our Underperform rating is supported by RGLD's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Upside scenario

Our upside value of US\$125 is based upon higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside value of US\$95 is based on our downside gold price scenario of flat \$1,200/oz.

Investment summary

Royal Gold is a senior mining royalty & streaming company with a diversified portfolio including over 40 producing and 15 development-stage precious and base metals assets, and royalties on approximately 130 early-stage exploration properties. Royal Gold's fiscal 2019 attributable gold equivalent ounce (GEO) production was 335 Koz with a revenue breakdown of approximately 85% precious metals and 15% copper. RGLD does not provide guidance.

Investment outlook

- We see interim risks associated with several of RGLD's key underlying assets, including Mt. Milligan, Rainy River, and Andacollo.
- We forecast RGLD will report peak production in ~2021-22 due to grade declines materializing thereafter at RGLD's key assets. Partially offsetting this is production ramp-up at Khoemacau and PV's throughput expansion.
- In our view, the company is well positioned to pursue acquisitions and pay an increasing dividend.
- Our Underperform rating is predicated on upcoming potential updates at RGLD's key underlying assets undergoing transition to weigh on its financial results (Mt Milligan, Rainy River, Andacollo) and increased risk associated with RGLD's portfolio duration. RGLD valuation is generally above that of its royalty peers and does not fully reflect downside risk from these expected updates, in our view.

Upcoming catalysts and milestones

- Peñasquito/Newmont production ramp-up, pyrite leach project benefits, and high grade processing sequence (2020+)
- Mount Milligan/Centerra sustained throughput at 55 Ktpd (4Q19+) updated technical report (4Q19 or 1Q20), and permitting resolution of long-term water source (2020+)
- Andacollo/Teck restart of production following resolution of strike action ongoing since Oct. 2019 (4Q19+)
- Cortez/Barrick initial increase in production from mining at Crossroads (2020+)
- Khoemacau remaining upfront capital payments (2020-21) and initial production (mid-2021)

Key risks

In addition to general operating/technical, financing, and commodity (gold, silver, copper) risks, we highlight:

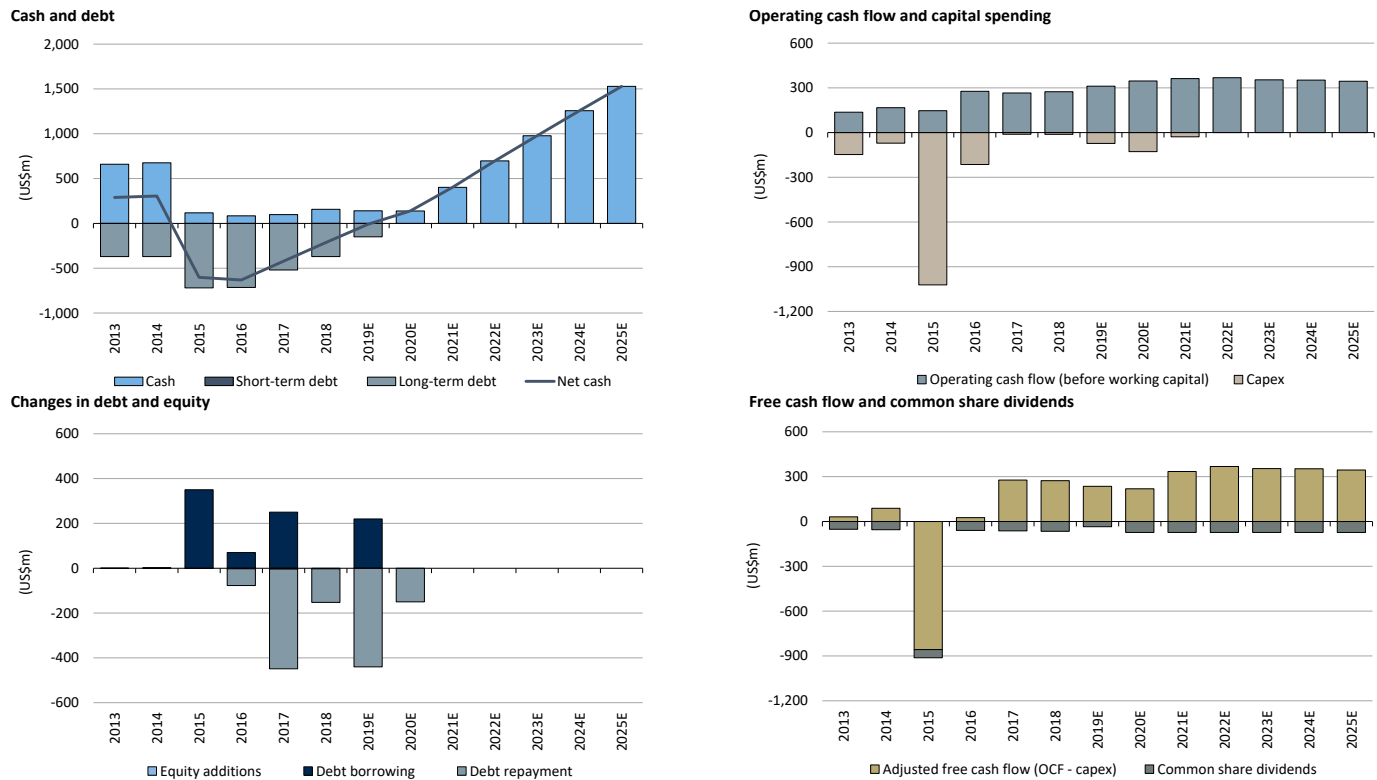
- High asset concentration risk with Mount Milligan/Centerra
- Rainy River/New Gold upcoming mine plan update (1Q20)
- Management transition uncertainties
- Reinvestment risk given Royal Gold's portfolio includes many maturing assets

Exhibit 2: Royal Gold – Catalysts, opportunities and risks

<p>Catalysts and milestones</p>	<ul style="list-style-type: none"> • Peñasquito/Newmont production ramp-up after the recent blockade, pyrite leach project benefits, and high grade processing sequence (2020+) • Mount Milligan/Centerra sustained throughput at 55 Ktpd (Q419+) and updated technical report (4Q19 or 1Q20) • Mount Milligan/Centerra permitting resolution of long-term water source (2020+) • Andacollo/Teck restart of production following resolution of strike action ongoing since October 2019 (4Q19+) • Cortez/Barrick initial increase in production from mining at Crossroads (2020+) • Khoemacau remaining upfront capital payments (2020-2021) and initial production (mid-2021)
<p>Opportunities</p>	<ul style="list-style-type: none"> • Permitting and construction at higher-uncertainty, long-dated projects, including Back River/Sabina • Advancement and production of Goldrush (Barrick/Newmont project) • Wassa/Golden Star ongoing exploration success • Pascua-Lama/Barrick potential development • Potential S&P500 inclusion, should growth in float-adjusted market capitalization be achieved • Lower taxation for streaming interests in Canada vs peers, and greater tax-related certainty for streaming business globally • Expansion of Pueblo Viejo/Barrick tailings capacity and increase to mine life
<p>Risks and uncertainties</p>	<ul style="list-style-type: none"> • Achievement of ramp-up and production targets at Mount Milligan/Centerra, in particular throughput and recoveries, and risk of reserve decrease at YE2019 • Management transition uncertainties • High asset concentration risk with Mount Milligan/Centerra • Achievement of ramp-up and production targets at Golden Star mines and Rainy River/New Gold in 2020 • Permitting and economic viability of Pascua-Lama/Barrick block caving • Chilean unrest and its potential implications on short-term output and fiscal term agreements • Commodity price risk (most notably gold, silver and copper prices), technical/operating risk and financing risk

Source: Company reports, RBC Capital Markets estimates

Exhibit 3: Royal Gold – Financial forecasts at spot gold



Priced as of market close November 29, 2019 ET. Source: Company reports, RBC Capital Markets estimates

Exhibit 4: Royal Gold – Net asset valuation at spot gold

Royal Gold, Inc.										
Net asset valuation at spot gold (US\$)										
Shares (FD, FF, ITM) (m)	69,033									
Market capitalization (US\$m)	8,096									
	Risk-weighted NAV				NAV at various discount rates					
	Discount rate	(\$m)	(/sh) (\$)		5%		7%		10%	
					(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)
Gold and silver assets										
Andacollo/Teck (GS), Chile	5%	473	6.85		473	6.85	410	5.94	339	4.90
Back River/Sabina (NSR), Canada (NU)	10%	35	0.51		50	0.72	43	0.63	35	0.51
Bald Mountain/Kinross (NSR), US (NV)	5%	1	0.01		1	0.01	1	0.01	1	0.01
Wassa/Golden Star (GS), Ghana	5%	132	1.91		132	1.91	124	1.80	114	1.65
Carosue Dam/Saracen (NSR), Australia (WA)	5%	2	0.02		2	0.02	2	0.02	2	0.02
Cortez/Barrick (GSR, NVR), US (NV)	5%	243	3.53		243	3.53	223	3.24	198	2.87
Dolores/Pan American (NSR), Mexico	5%	34	0.50		34	0.50	32	0.47	30	0.43
El Limon/B2Gold (NSR), Nicaragua	5%	8	0.11		8	0.11	8	0.11	7	0.10
Goldrush/Barrick (NVR), US (NV)	5%	4	0.06		4	0.06	3	0.04	1	0.02
Goldstrike/Barrick (NSR), US (NV)	5%	27	0.39		27	0.39	25	0.36	23	0.33
Gwalia/St. Barbara (NSR), Australia (WA)	5%	13	0.18		13	0.18	12	0.17	11	0.17
Hemlo-Williams/Barrick (NSR), Canada (ON)	5%	12	0.18		12	0.18	11	0.16	10	0.14
Khoemacau / Cupric Canyon (100.0%), Botswana	5%	19	0.27		19	0.27	-20	-0.29	-61	-0.88
King of the Hills/St. Barbara (NSR), Australia (WA)	5%	0	0.00		0	0.00	0	0.00	0	0.00
Leeville/Newmont (NSR), US (NV)	5%	6	0.08		6	0.08	5	0.07	4	0.06
Malartic/Agnico & Yamana (NSR), Canada (ON)	5%	46	0.67		46	0.67	43	0.63	39	0.57
Marigold/SSR (NSR), US (NV)	5%	25	0.36		25	0.36	23	0.33	21	0.30
Mount Milligan/Centerra (GS), Canada (BC)	5%	630	9.12		630	9.12	545	7.89	449	6.51
Pascua-Lama/Barrick (NSR), Chile	10%	74	1.07		195	2.82	131	1.89	74	1.07
Peñasquito/Goldcorp (NSR), Mexico	5%	178	2.57		178	2.57	162	2.35	143	2.07
Phoenix/Rubicon (NSR), Canada (ON)	5%	5	0.07		5	0.07	4	0.06	4	0.06
Pinson/Atna (NSR), US (NV)	5%	2	0.03		2	0.03	2	0.03	2	0.03
Pueblo Viejo/Barrick (GSS), Dominican Republic	5%	570	8.26		570	8.26	495	7.17	411	5.95
Rainy River/New Gold (GSS), Canada (ON)	5%	198	2.86		198	2.86	182	2.64	162	2.35
Round Mountain/Kinross (NSR), US (NV)	5%	6	0.08		6	0.08	5	0.07	4	0.06
Svetloye/Polymetal (NSR), Russia	5%	4	0.06		4	0.06	4	0.05	3	0.05
Taparko/Nordgold (NSR), Burkina Faso	5%	2	0.03		2	0.03	2	0.03	2	0.03
Twin Creeks/Newmont (GPR), US (NV)	5%	6	0.09		6	0.09	5	0.08	5	0.07
Wharf/Coeur Mining (NSR), US (SD)	5%	4	0.06		4	0.06	4	0.05	4	0.05
Gold exploration properties		127	1.85		127	1.85	127	1.85	127	1.85
Total gold assets		2,955	42.80		3,090	44.76	2,680	38.83	2,226	32.24
Base metals and other assets										
Allan/Potash Corp. (FR), Canada (SK)	8%	12	0.17		12	0.17	12	0.17	10	0.14
El Toqui/Nyrstar (NSR), Chile	8%	4	0.06		4	0.06	4	0.06	4	0.06
Las Cruces/First Quantum (NSR), Spain	8%	16	0.23		16	0.23	16	0.23	15	0.22
Mount Milligan/Centerra (GS), Canada (BC)	8%	214	3.10		214	3.10	214	3.10	187	2.71
Peñasquito/Goldcorp (NSR), Mexico	8%	69	1.00		69	1.00	69	1.00	63	0.92
Robinson/KGHM (NSR/other), US (NV)	8%	17	0.25		17	0.25	17	0.25	17	0.25
Voisey's Bay/Vale (NSR), Canada (NL)	10%	68	0.98		78	1.13	78	1.13	68	0.98
Investments		40	0.58		40	0.58	40	0.58	40	0.58
Total other assets		440	6.37		450	6.52	450	6.52	405	5.86
Balance sheet and expenses										
Basic working capital		132	1.91		132	1.91	132	1.91	132	1.91
Value of ITM instruments		370	5.36		370	5.36	370	5.36	370	5.36
Estimated working capital additions		0	0.00		0	0.00	0	0.00	0	0.00
Long-term debt		-170	-2.46		-170	-2.46	-170	-2.46	-170	-2.46
Estimated debt additions		0	0.00		0	0.00	0	0.00	0	0.00
General & administrative expense	5%	-381	-5.51		-381	-5.51	-318	-4.61	-252	-3.64
Exploration expense	5%	-7	-0.10		-7	-0.10	-7	-0.10	-7	-0.09
Interest tax shield	5%	1	0.02		1	0.02	1	0.02	1	0.02
Reclamation & closure liability		0	0.00		0	0.00	0	0.00	0	0.00
Net financial assets		-54	-0.79		-54	-0.79	8	0.12	75	1.09
Net asset value (US\$)		3,340	48.38		3,486	50.49	3,139	45.47	2,705	39.19
Share price (US\$)			117.27			117.27		117.27		117.27
NAV multiple (P/NAV) (x)			2.42			2.32		2.58		2.99
Input assumptions										
		2019E	2020E		2021E	Long term				
Gold price (US\$/oz)		1,387	1,464		1,464	1,464				
Silver price (US\$/oz)		16.11	17.03		17.03	17.03				
Copper price (US\$/lb)		2.73	2.71		2.73	2.81				

Note: Base metals cash flows discounted at a minimum 8% discount rate.

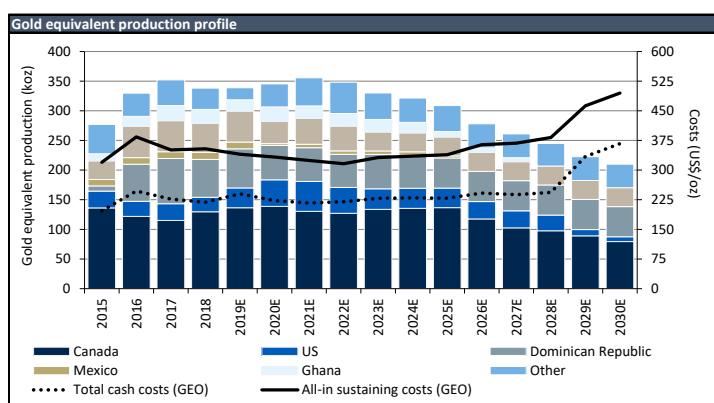
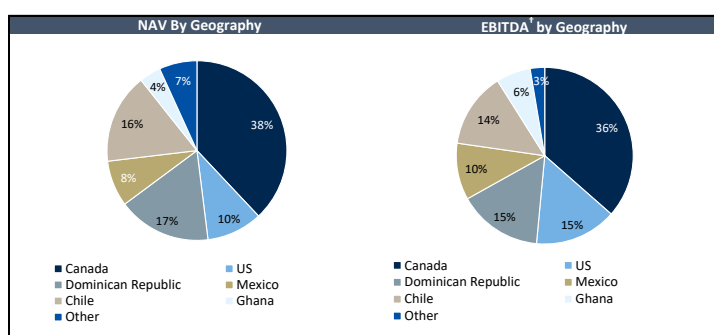
Priced as of market close November 29, 2019 ET. Source: Company reports, RBC Capital Markets estimates

Royal Gold, Inc.: Forecasts at spot gold				
Rating	Underperform	Basic shares (m)	65.5	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	65.5/65.5	Josh Wolfson, CFA
Target price at RBC price deck	US\$115.00	Basic mkt cap (US\$m)	7,683	(416) 842-9893
Share price	US\$117.27	Enterprise value (US\$m)	7,732	josh.wolfson@rbccm.com

All US\$m unless noted						All US\$m unless noted					
Operating Statistics						Input Prices					
	2018	2019E	2020E	2021E	2022E		2018	2019E	2020E	2021E	2022E
Equity gold equivalent sales (koz)	338	339	345	356	348	Key commodities					
Mount Milligan	91	91	92	78	73	Gold (US\$/oz)	1,269	1,387	1,464	1,464	1,464
Andacollo	47	50	36	42	42	Silver (US\$/oz)	15.71	16.11	17.03	17.03	17.03
Pueblo Viejo	64	66	58	57	56	Copper (US\$/lb)	2.95	2.73	2.71	2.73	2.75
Rainy River	15	19	21	25	27	Zinc (US\$/lb)	1.33	1.15	1.03	1.03	1.02
Voisey's Bay	5	6	7	7	7	Lead (US\$/lb)	1.02	0.91	1.00	1.00	1.00
Peñasquito	16	13	27	27	27	Nickel (US\$/lb)	5.96	6.36	7.00	7.00	8.00
Cortez	4	15	27	33	33	Key currencies					
Robinson	8	7	7	7	2	US\$/C\$	0.77	0.76	0.76	0.77	0.78
Malartic	6	6	6	6	6	US\$/EUR	1.18	1.11	1.10	1.11	1.13
Mulatos	9	5	0	0	0	Valuation					
Goldstrike	3	4	4	4	3	P/E (x)	80.2	55.5	40.2	38.4	39.0
Wassa	24	19	25	21	21	P/CF (x)	28.0	24.6	22.2	21.2	20.9
Khoamacau	0	0	0	10	16	EV/EBITDA (x)	25.6	22.1	20.2	19.5	19.8
Other	47	38	37	39	35	Adjusted FCF yield (1)	3.5%	3.0%	2.8%	4.3%	4.8%
Total cash costs (GEO) (US\$/oz)	219	240	223	217	220						

Gold Reserves and Resources					
Proven and probable					
	2014	2015	2016	2017	2018
Oz (m)	5.6	7.7	7.3	6.2	6.0
Assumed reserve additions (moz)					1.6
LOM production (moz)					4.0
Reserve and resource statistics					
Reserves/sh (x1,000)	85.4	123.6	111.8	95.3	92.2
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	1,324		EV/resource (US\$/oz)		1,280
Total acquisition cost (US\$/oz)	1,612		EV/reserve (US\$/oz)		1,280

Net Asset Value					
	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
Mount Milligan/Centerra (GS), Canada (BC)	844	12.22	25%	27%	23%
Andacollo/Teck (GS), Chile	473	6.85	14%	18%	13%
Rainy River/New Gold (GSS), Canada (ON)	198	2.86	6%	4%	6%
Pascua-Lama/Barrick (NSR), Chile	74	1.07	2%	2%	0%
Peñasquito/Goldcorp (NSR), Mexico	178	2.57	5%	3%	8%
Pueblo Viejo/Barrick (GSS), Dominican Republic	570	8.26	17%	27%	15%
Wassa/Golden Star (GS), Ghana	132	1.91	4%	2%	6%
Cortez/Barrick (GSR, NVR), US (NV)	243	3.53	7%	3%	9%
Investments	40	0.58	1%	0%	0%
Other	644	9.33	19%	13%	19%
Total mining and investment assets	3,394	49.17	100%	100%	100%
Balance sheet items and expenditures	-54	-0.79			
Total	3,340	48.38			
P/NAV spot gold (x)		2.42			



Income Statement					
	2018	2019E	2020E	2021E	2022E
Total revenue	430	471	507	522	510
% gold	76%	78%	77%	76%	74%
% silver	9%	9%	8%	11%	13%
% copper	11%	9%	10%	9%	8%
% other	4%	5%	5%	4%	5%
Operating costs	80	84	86	87	87
G&A	36	28	34	34	34
Exploration	10	5	4	4	0
Depreciation	163	159	147	155	158
Other	2	4	0	0	0
Adjusted EBITDA	302	349	383	396	390
Adjusted EBIT	139	190	237	242	231
Net interest expense	29	16	1	-4	-15
Unusual/other items	-302	-35	-2	9	30
EBT	-134	171	235	246	247
Taxes	-39	6	47	49	49
Minority interest	-7	-3	-3	-3	0
Other	0	0	0	0	0
Net income (reported)	-88	168	191	200	197
Net income (adjusted)	95	138	191	200	197
EPS (reported) (\$/sh)	-1.35	2.57	2.91	3.05	3.01
EPS (adjusted) (\$/sh)	1.46	2.11	2.91	3.05	3.01
Average shares (m)	65	65	66	66	66

Cash Flow Statement					
	2018	2019E	2020E	2021E	2022E
Net income (reported)	-88	168	191	200	197
Depreciation	163	159	147	155	158
Other	199	-16	9	8	13
Operating cash flow	274	312	347	362	368
Operating cash flow (US\$/sh)	4.19	4.76	5.29	5.53	5.62
Working capital changes	11	-3	0	0	0
Cash from operations	285	308	347	362	368
Capital expenditure	-12	-73	-128	-28	0
Net investments	-22	4	0	0	0
Investing cash flow	-34	-69	-128	-28	0
Common share dividends	66	35	73	73	73
Debt additions	0	220	0	0	0
Debt repayments	-150	-440	-150	0	0
Equity financing	-2	0	0	0	0
Other net financing	-40	-36	-71	-71	-73
Financing cash flow	-192	-256	-221	-71	-73
Foreign exchange	0	0	0	0	0
Change in cash	58	-17	-2	264	295
Free cash flow*	273	236	219	334	368
Free cash flow* (\$/sh)	4.18	3.60	3.34	5.10	5.62

Balance Sheet					
	2018	2019E	2020E	2021E	2022E
Assets					
Cash	157	140	138	402	697
Short-term investments	0	0	0	0	0
Other current assets	47	42	42	42	42
Current assets	204	182	181	444	739
Non-current assets	2,482	2,417	2,398	2,272	2,114
Total assets	2,686	2,600	2,579	2,716	2,853
Liabilities					
Short-term debt	0	0	0	0	0
Current liabilities	37	32	32	32	32
Long-term debt	370	150	0	0	0
Other non-current liabilities	167	165	168	170	175
Total liabilities	575	347	200	203	207
Total shareholder equity	2,112	2,252	2,379	2,513	2,646
Net debt	213	10	-138	-402	-697
Net debt / EBITDA (x)	0.7	0.0	-0.4	-1.0	-1.8
ROE (Net income/Equity)	-4.0%	7.7%	8.2%	8.2%	7.6%
ROA (Net income/Total assets)	-3.1%	6.4%	7.4%	7.5%	7.1%
ROIC (NOPAT/Assets + Net debt)	7.1%	8.0%	8.4%	8.9%	9.0%
CROIC (FCF/Equity + Total debt)*	10.4%	9.6%	9.2%	13.7%	14.3%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
 Priced as of market close November 29, 2019 ET. Source: RBC Capital Markets estimates, company reports, Bloomberg

Royal Gold, Inc.: Forecasts at RBC price deck				
Rating	Underperform	Basic shares (m)	65.5	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	65.5/65.5	Josh Wolfson, CFA
Target price at RBC price deck	US\$115.00	Basic mkt cap (US\$m)	7,683	(416) 842-9893
Share price	US\$117.27	Enterprise value (US\$m)	7,732	josh.wolfson@rbccm.com

Operating Statistics	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Equity gold equivalent sales (koz)	338	339	348	357	350
Mount Milligan	91	91	94	78	73
Andacollo	47	50	36	42	42
Pueblo Viejo	64	66	58	58	56
Rainy River	15	19	21	25	27
Voisey's Bay	5	6	6	7	8
Peñasquito	16	13	27	28	28
Cortez	4	15	27	33	33
Robinson	8	7	7	7	2
Malartic	6	6	6	6	6
Mulatos	9	5	0	0	0
Goldstrike	3	4	4	4	3
Wassa	24	19	25	21	21
Khoemacau	0	0	0	10	16
Other	47	38	37	39	35
Total cash costs (GEO) (US\$/oz)	219	240	225	215	219

Input Prices	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Key commodities					
Gold (US\$/oz)	1,269	1,390	1,500	1,450	1,450
Silver (US\$/oz)	15.71	16.23	17.50	17.50	17.50
Copper (US\$/lb)	2.95	2.72	3.00	2.75	2.75
Zinc (US\$/lb)	1.33	1.16	1.05	1.00	1.00
Lead (US\$/lb)	1.02	0.91	1.00	1.00	1.00
Nickel (US\$/lb)	5.96	6.36	7.00	7.00	8.00
Key currencies					
US\$/C\$	0.77	0.76	0.76	0.77	0.78
US\$/EUR	1.18	1.11	1.10	1.11	1.13

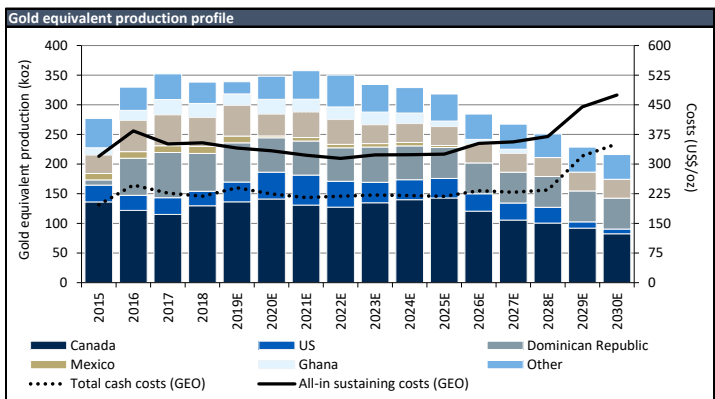
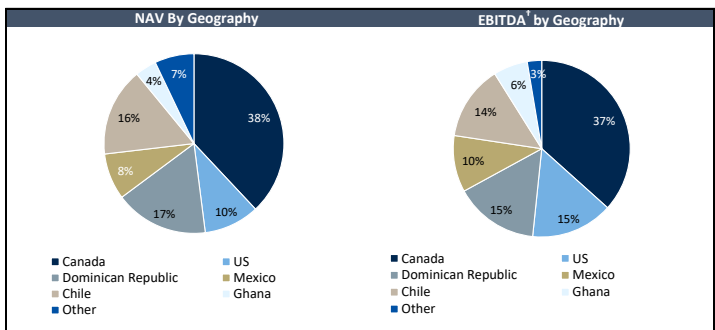
Valuation	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
P/E (x)	80.2	55.2	37.8	38.8	39.3
P/CF (x)	28.0	24.6	21.4	21.3	20.9
EV/EBITDA (x)	25.6	22.1	19.4	19.6	20.0
Adjusted FCF yield (1)	3.5%	3.1%	3.0%	4.3%	4.7%

Gold Reserves and Resources	Year Ended December 31				
	2014	2015	2016	2017	2018
Proven and probable					
Oz (m)	5.6	7.7	7.3	6.2	6.0
Assumed reserve additions (moz)					1.6
LOM production (moz)					4.0
Reserve and resource statistics					
Reserves/sh (x1,000)	85.4	123.6	111.8	95.3	92.2
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	1,294		EV/resource (US\$/oz)		1,280
Total acquisition cost (US\$/oz)	1,572		EV/reserve (US\$/oz)		1,280

Income Statement	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Total revenue	430	472	524	520	508
% gold	76%	78%	76%	75%	74%
% silver	9%	9%	8%	11%	14%
% copper	11%	9%	11%	9%	8%
% other	4%	5%	5%	4%	5%
Operating costs	80	84	88	87	87
G&A	36	28	34	34	34
Exploration	10	5	4	4	0
Depreciation	163	159	147	155	159
Other	2	4	0	0	0
Adjusted EBITDA	302	350	398	394	388
Adjusted EBIT	139	191	251	239	229
Net interest expense	29	16	1	-5	-16
Unusual/other items	-302	-35	-2	10	31
EBT	-134	172	250	244	244
Taxes	-39	6	50	49	49
Minority interest	-7	-3	-3	-3	0
Other	0	0	0	0	0
Net income (reported)	-88	169	203	198	195
Net income (adjusted)	95	139	203	198	195
EPS (reported) (\$/sh)	-1.35	2.58	3.10	3.02	2.98
EPS (adjusted) (\$/sh)	1.46	2.12	3.10	3.02	2.98
Average shares (m)	65	65	66	66	66

Net Asset Value	Year Ended December 31				
	NAV (\$m)	/sh (\$)	% NAV	% Reserve	% EBITDA†
Mount Milligan/Centerra (GS), Canada (BC)	836	12.12	25%	27%	24%
Andacollo/Teck (GS), Chile	459	6.65	14%	18%	13%
Rainy River/New Gold (GSS), Canada (ON)	195	2.82	6%	4%	6%
Pascua-Lama/Barrick (NSR), Chile	71	1.02	2%	2%	0%
Peñasquito/Goldcorp (NSR), Mexico	177	2.57	5%	3%	8%
Pueblo Viejo/Barrick (GSS), Dominican Republic	564	8.17	17%	27%	15%
Wassa/Golden Star (GS), Ghana	130	1.88	4%	2%	6%
Cortez/Barrick (GSR, NVR), US (NV)	238	3.45	7%	3%	9%
Investments	40	0.58	1%	0%	0%
Other	643	9.31	19%	13%	19%
Total mining and investment assets	3,353	48.57	100%	100%	100%
Balance sheet items and expenditures	-54	-0.79			
Total	3,298	47.78			
P/NAV RBC price deck (x)		2.45			

Cash Flow Statement	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Net income (reported)	-88	169	203	198	195
Depreciation	163	159	147	155	159
Other	199	-16	10	8	13
Operating cash flow	274	312	359	361	367
Operating cash flow (US\$/sh)	4.19	4.77	5.48	5.51	5.60
Working capital changes	11	-3	0	0	0
Cash from operations	285	309	359	361	367
Capital expenditure	-12	-73	-128	-28	0
Net investments	-22	4	0	0	0
Investing cash flow	-34	-69	-128	-28	0
Common share dividends	66	35	73	73	73
Debt additions	0	220	0	0	0
Debt repayments	-150	-440	-150	0	0
Equity financing	-2	0	0	0	0
Other net financing	-40	-36	-71	-71	-73
Financing cash flow	-192	-256	-221	-71	-73
Foreign exchange	0	0	0	0	0
Change in cash	58	-16	11	262	294
Free cash flow*	273	236	232	333	367
Free cash flow* (\$/sh)	4.18	3.61	3.54	5.08	5.60



Balance Sheet	Year Ended December 31				
	2018	2019E	2020E	2021E	2022E
Assets					
Cash	157	141	152	414	708
Short-term investments	0	0	0	0	0
Other current assets	47	42	42	42	42
Current assets	204	183	194	456	750
Non-current assets	2,482	2,417	2,398	2,271	2,112
Total assets	2,686	2,600	2,592	2,727	2,862
Liabilities					
Short-term debt	0	0	0	0	0
Current liabilities	37	32	32	32	32
Long-term debt	370	150	0	0	0
Other non-current liabilities	167	165	169	171	175
Total liabilities	575	347	201	203	208
Total shareholder equity	2,112	2,253	2,391	2,524	2,655
Net debt	213	9	-152	-414	-708
Net debt / EBITDA (x)	0.7	0.0	-0.4	-1.1	-1.8
ROE (Net income/Equity)	-4.0%	7.7%	8.7%	8.1%	7.5%
ROA (Net income/Total assets)	-3.1%	6.4%	7.8%	7.4%	7.0%
ROIC (NOPAT/Assets + Net debt)	7.1%	8.0%	8.9%	8.8%	8.9%
CROIC (FCF/Equity + Total debt)*	10.4%	9.7%	9.7%	13.5%	14.2%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
 Priced as of market close November 29, 2019 ET. Source: RBC Capital Markets estimates, company reports, Bloomberg

Valuation

Our RGLD target price of US\$115 is based upon 2.2x our NAV5% at a long-term gold prices of US\$1,400/oz and 25x our 2019-2021 SFCF estimate, which would be equivalent to 23x EBITDA. These multiples are modestly below the average for the large cap royalty & streaming group, supported by the company's current favourable cash flow and financial positioning, but higher long-term production risks relative to peers. Our Underperform rating is supported by RGLD's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Risks to rating and price target

In addition to general operating/technical, financing, and commodity (gold, silver, copper) risks, we highlight:

- High asset concentration risk with Mount Milligan
- Management transition uncertainties
- Reinvestment risk given Royal Gold's portfolio includes many maturing assets

Company description

Royal Gold is a senior mining royalty & streaming company with a diversified portfolio including over 40 producing and 15 development-stage precious and base metals assets, and royalties on approximately 130 early-stage exploration properties. The company's largest asset is its gold and copper stream from Centerra Gold's Mount Milligan mine in British Columbia. Royal Gold's fiscal 2019 attributable gold equivalent ounce (GEO) production was 335 Koz with a revenue breakdown of approximately 85% precious metals and 15% copper.

Wheaton Precious Metals Corp.

Survival of the stablest

Our view: We view WPM's low-cost, long-duration portfolio as a key differentiator, enabling the company to generate stable long-term cash flows with reinvestment risk below that of peers. In our view, the company's ~10-20% valuation discount to the senior royalty group at spot prices represents an investment opportunity. We assume coverage of WPM with an Outperform rating and US\$33 PT.

Key points:

Long-term FCF machine at a discount to peers. Despite a resolution of WPM's tax-related uncertainties in late-2018, WPM shares continue to trade at a ~10-20% discount to the senior royalty peer average (P/NAV at spot of 2.0x vs peer average 2.5x and 2020/21E FCF/EV of 4.6% vs peer average of 3.7%). We calculate WPM's portfolio ranks the company as maintaining the highest duration asset base under coverage, and the company generates the highest cash flow per share today within the royalty group, providing for a long-term stable and predictable financial outlook. Short-term, production upside is expected from Penasquito's improving grade profile, Stillwater output growth from the Blitz project, San Dimas improvements, and the company's Voisey's Bay/Vale cobalt stream ramp-up where production commences in 2021 (est. 4% IRR at RBC LT \$25/lb cobalt prices, 0% IRR at spot \$16/lb cobalt).

Salobo upside constructive, concentration risk elevated. Beyond WPM's existing operating base, we believe an upcoming expansion at Salobo represents a key opportunity for WPM to realize production upside. Incremental net attributable GEO output of between 50-60k GEO or 100-110k GEO in 2023+ is expected (range contingent upon continued low-grade stockpiling), and will require a WPM production-linked payment of ~US\$600m. We forecast this incremental investment to generate a base case low-single digit IRR at spot. We view the project as reducing potential risks associated with the potential for lower transaction availability and general capital allocation uncertainty. However, we note Salobo's elevated forecast influence, representing ~35% of EBITDA. This factor positions WPM as maintaining the highest concentration risk amongst the royalty group.

Long-term upside largely permitting driven. Beyond Salobo, longer-term portfolio upside that enables WPM to maintain its production output is largely permitting-driven, including Constancia's Pampacancha deposit (potential 2021+), Rosemont (potential 2023+), and the very long-term opportunity at Pascua Lama should Barrick's development re-evaluation studies gain momentum in the future. WPM's portfolio carries greater production outlook certainty than comparable royalty peers, but arguably retains lower optionality than FNV & RGLD, which maintain a wide array of incremental NSR opportunities.

Sector: Precious Minerals & Diamonds - large cap

Outperform

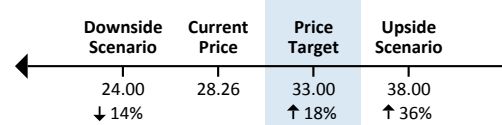
NYSE: WPM; USD 28.26; TSX: WPM

Price Target USD 33.00

WHAT'S INSIDE

<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input checked="" type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	445.2	Market Cap (MM):	12,576
Dividend:	0.38	Yield:	1.3%
NAVPS:	13.41	P/NAVPS:	2.11x
		Avg. Daily Volume:	2,073,525

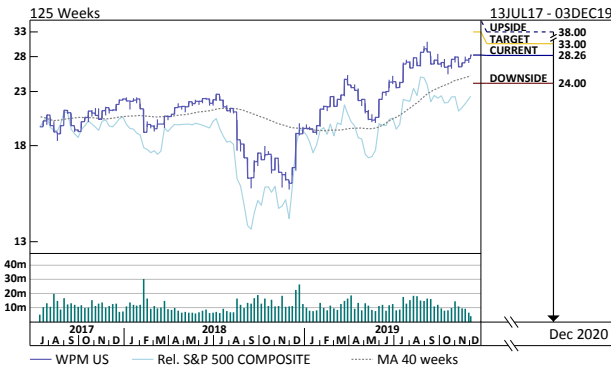
RBC Estimates

FY Dec	2018A	2019E	2020E	2021E	
EPS, Adj Basic	0.48	0.59	0.80	0.91	
P/AEPS	58.9x	47.9x	35.3x	31.1x	
CFPS, Adj Basic	1.06	1.19	1.40	1.38	
P/ACFPS	26.7x	23.7x	20.2x	20.5x	
FCFPS	(0.95)	1.19	1.40	1.38	
P/FCF	nm	23.7x	20.2x	20.5x	
Production	688.1	675.6	680.7	703.2	
EPS, Adj Basic		Q1	Q2	Q3	Q4
2018	0.16A	0.16A	0.08A	0.08A	
2019	0.13A	0.10A	0.16A	0.20E	
2020	0.20E	0.19E	0.19E	0.21E	
CFPS, Adj Basic		Q1	Q2	Q3	Q4
2018	0.29A	0.31A	0.24A	0.22A	
2019	0.28A	0.23A	0.31A	0.36E	
2020	0.36E	0.34E	0.34E	0.36E	

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: Wheaton Precious Metals Corp.



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our WPM target price of US\$33 is based upon 2.3x our risk-weighted NAV at a long-term gold prices of US\$1,400/oz and 27x our 2020-2021 SFCF estimate, which would be equivalent to 26x EBITDA. These multiples are in line with the the average for the large cap royalty & streaming peers, supported by the company's long-life, low-cost asset base and strong free cash flow outlook, balanced by the company's above-average concentration. Our Outperform rating is supported by WPM's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Upside scenario

Our upside value of US\$38 is based upon higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside value of US\$24 is based upon lower long-term gold prices of US\$1,200/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Investment summary

Wheaton Precious Metals is a large cap precious metals streaming company with interests in 19 operating mines and 9 development projects. Company guidance outlines gold equivalent ounce (GEO) production of approximately 670 koz in 2019, increasing to an average of 750 koz from 2019 to 2023. We forecast 5-year revenue exposure of approximately 55% gold, 38% silver, 4% palladium and 3% cobalt. The company is focused on pursuing opportunities that provide exposure to long-life, low-cost assets and returning capital to shareholders through its cash flow-linked dividend.

Investment outlook:

- With strong operating margins and limited outstanding capital commitments, we believe WPM is well positioned to pursue acquisitions and pay down debt.
- WPM's offshore tax dispute with the CRA was settled in December 2018, removing a key overhang on the shares.
- WPM provides investors with direct income exposure with its quarterly dividend linked to 30% of operating cash flows.
- Our Outperform rating is premised upon our view of WPM's low-cost, long-duration portfolio as a key differentiator, enabling the company to generate stable long-term cash flows with reinvestment risk below that of its peers. In our view, the company's relative valuation discount to the senior royalty group at current spot gold/silver represents an opportunity for investors.

Upcoming catalysts and milestones

- Peñasquito production ramp-up, pyrite leach project benefits, and high grade processing sequence (2020+)
- Constancia permitting and potential mining of high-grade-gold Pampacancha satellite deposit (2020-21)
- Neves-Corvo doubling of zinc production from expansion project (1H20)
- Salobo III +12mtpa expansion project decision (2021)
- Rosemont potential permitting (after 2021) and construction advancement

Key risks

In addition to general operating and financial risks for WPM related to commodities (gold, silver, palladium and cobalt) and FX, we highlight:

- Elevated concentration risk, in particular with Salobo/Vale and Penasquito/Newmont
- Above-average debt levels vs. peer group
- Achievement of production targets at Peñasquito/Newmont
- Achievement of permitting and construction projections at Rosemont/Hudbay and Pascua-Lama/Barrick
- Successful advancement by underlying operators of exploration and development-stage royalties

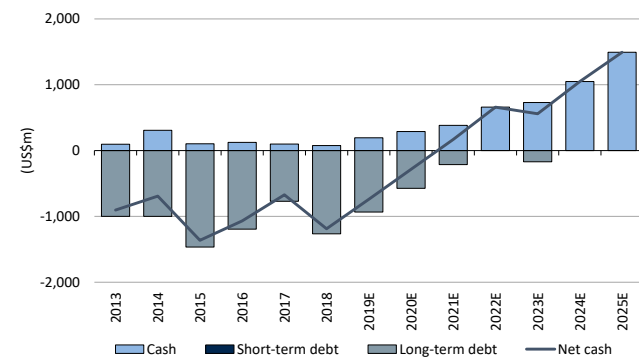
Exhibit 2: Wheaton Precious Metals – Catalysts, opportunities and risks

Catalysts and milestones	<ul style="list-style-type: none"> • Peñasquito/Newmont production ramp-up after the recent blockade, pyrite leach project benefits, and high grade processing sequence (2020+) • Constancia/Hudbay permitting of high-grade-gold Pampacancha satellite deposit (2020) and potential mining (2020–24) • Neves-Corvo/Lundin doubling of zinc production from expansion project (1H20) • Salobo/Vale Salobo III project decision (2021) and expansion +12mtpa completion (2023) • Rosemont/Hudbay potential permitting (2021+) and construction advancement (three years)
Opportunities	<ul style="list-style-type: none"> • Rosemont/Hudbay potential permitting advancement • Potential advancement of early-deposit model production options, including Kutcho, Cotabambas and Toroparu • A rebound in cobalt prices benefiting Voisey’s Bay in 2021 • Ongoing higher-than-expected output from Salobo and potential Salobo future expansion • Pascua-Lama/Barrick potential development
Risks and uncertainties	<ul style="list-style-type: none"> • Very high concentration risk, in particular with Salobo and Penasquito • Achievement of ramp-up and production targets at Peñasquito pyrite leach project • Achievement of permitting and construction projections at Rosemont/Hudbay and Pascua-Lama/Barrick • Successful advancement to production by underlying operators of exploration-stage royalties • Tax treatment of offshore streaming income uncertainties • Commodity price risk (gold, silver, palladium and cobalt prices), technical/operating risk and financing risk

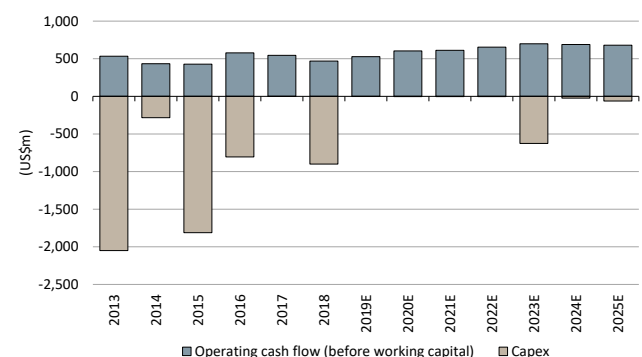
Source: Company reports, RBC Capital Markets estimates

Exhibit 3: Wheaton Precious Metals – Financial forecasts at spot gold

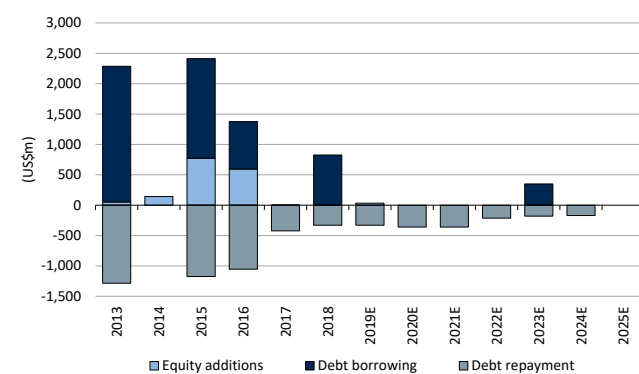
Cash and debt



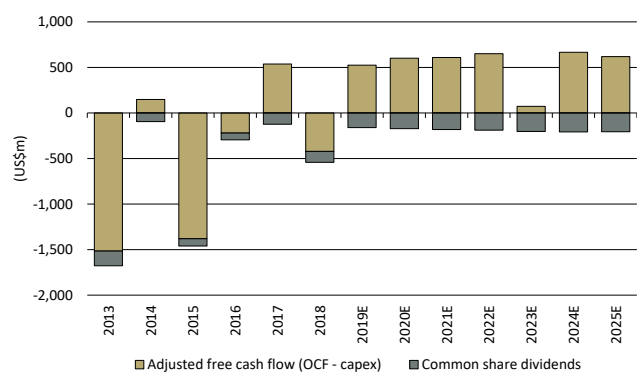
Operating cash flow and capital spending



Changes in debt and equity



Free cash flow and common share dividends



Priced as of market close November 29, 2019 ET. Source: Company reports, RBC Capital Markets estimates

Exhibit 4: Wheaton Precious Metals – Net asset valuation at spot gold

Wheaton Precious Metals Corp.									
Net asset valuation at spot gold (US\$)									
Shares (FD, FF, ITM) (m)	448.101								
Market capitalization (US\$m)	12,386								
	Risk-weighted NAV			NAV at various discount rates					
	Discount rate	(\$m)	(/sh) (\$)	5%		7%		10%	
				(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)
Gold and silver assets									
777/Hudbay (GSS), Canada (MB)	5%	53	0.12	53	0.12	51	0.11	49	0.11
Antamina/Glencore (SS), Peru	5%	795	1.77	795	1.77	679	1.51	550	1.23
Constancia/Hudbay (GSS), Peru	5%	324	0.72	324	0.72	288	0.64	244	0.55
Kutcho/Desert Star (GSS & convert), Canada (BC)	10%	31	0.07	61	0.14	46	0.10	31	0.07
Los Fillos/Leagold (SS - finite), Mexico	5%	8	0.02	8	0.02	7	0.02	7	0.01
Minto/Pembridge (GSS), Canada (YK)	5%	34	0.08	34	0.08	33	0.07	31	0.07
Neves-Corvo/Lundin (SS), Portugal	5%	118	0.26	118	0.26	106	0.24	92	0.20
Pascua-Lama/Barrick (SS), Argentina & Chile	10%	261	0.58	667	1.49	453	1.01	261	0.58
Peñasquito/Goldcorp (SS), Mexico	5%	1,017	2.27	1,017	2.27	913	2.04	787	1.76
Rosemont/Hudbay (GSS), US (AZ)	5%	223	0.50	223	0.50	137	0.31	60	0.13
Salobo/Vale (GS), Brazil	5%	2,737	6.11	2,737	6.11	2,260	5.04	1,757	3.92
San Dimas/First Majestic (SS), Mexico	5%	212	0.47	212	0.47	200	0.45	183	0.41
Stillwater/Sibanye-Stillwater (GPS), US (MO)	5%	531	1.19	531	1.19	463	1.03	385	0.86
Stratoni/Eldorado (SS), Greece	5%	44	0.10	44	0.10	42	0.09	38	0.09
Sudbury/Vale (GS - finite), Canada (ON)	5%	298	0.67	298	0.67	270	0.60	234	0.52
Yauliyacu/Glencore (SS), Peru	5%	148	0.33	148	0.33	136	0.30	120	0.27
Zinkgruvan/Lundin (SS), Sweden	5%	135	0.30	135	0.30	126	0.28	115	0.26
Gold exploration properties		0	0.00	0	0.00	0	0.00	0	0.00
Gold hedge book		0	0.00	0	0.00	0	0.00	0	0.00
Total precious metals assets		6,970	15.55	7,405	16.53	6,210	13.86	4,944	11.03
Base metals and other assets									
Voisey's Bay/Vale (CS), Canada (NL)	8%	301	0.67	301	0.67	301	0.67	264	0.59
Other exploration		0	0.00	0	0.00	0	0.00	0	0.00
Investments		278	0.62	278	0.62	278	0.62	278	0.62
Total other assets		579	1.29	579	1.29	579	1.29	542	1.21
Balance sheet and expenses									
Basic working capital		124	0.28	124	0.28	124	0.28	124	0.28
Value of ITM instruments		55	0.12	55	0.12	55	0.12	55	0.12
Estimated working capital additions		350	0.78	350	0.78	350	0.78	350	0.78
Long-term debt		-1,014	-2.26	-1,014	-2.26	-1,014	-2.26	-1,014	-2.26
Estimated debt additions		-350	-0.78	-350	-0.78	-350	-0.78	-350	-0.78
General & administrative expense	5%	-621	-1.39	-621	-1.39	-502	-1.12	-383	-0.85
Exploration expense	5%	0	0.00	0	0.00	0	0.00	0	0.00
Interest tax shield	5%	2	0.00	2	0.00	2	0.00	2	0.00
Reclamation & closure liability		0	0.00	0	0.00	0	0.00	0	0.00
Net financial assets		-1,455	-3.25	-1,455	-3.25	-1,335	-2.98	-1,216	-2.71
Net asset value (US\$)		6,094	13.60	6,529	14.57	5,453	12.17	4,270	9.53
Share price (US\$)		27.64	27.64	27.64	27.64	27.64	27.64	27.64	27.64
NAV multiple (P/NAV) (x)		2.03	2.03	1.90	1.90	2.27	2.27	2.90	2.90
Input assumptions									
		2019E	2020E	2021E	Long term				
Gold price (US\$/oz)		1,387	1,464	1,464	1,464				
Silver price (US\$/oz)		16.11	17.03	17.03	17.03				
Copper price (US\$/lb)		2.73	2.71	2.73	2.81				

Notes: Base metals cash flow discounted at a minimum 8% discount rate. GSS - gold and silver stream, SS - silver stream, GPS - gold and palladium stream. Priced as of market close November 29, 2019 ET. Source: Company reports, RBC Capital Markets estimates

Wheaton Precious Metals Corp.: Forecasts at spot gold

Rating	Outperform	Basic shares (m)	445.2	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	448.1/459.1	Josh Wolfson, CFA
Target price at RBC price deck	US\$33.00	Basic mkt cap (US\$m)	12,306	(416) 842-9893
Share price	US\$27.64	Enterprise value (US\$m)	13,168	josh.wolfson@rbccm.com

All US\$m unless noted		Year Ended December 31				
Operating Statistics		2018	2019E	2020E	2021E	2022E
Gold equivalent ounce (GEO) prod. (koz)*		688	674	681	692	742
Salobo		271	263	252	227	215
Sudbury		24	33	33	36	36
Peñasquito		64	71	90	97	123
Yauliyacu		26	25	28	28	34
Antamina		68	59	61	51	51
Constancia		47	46	37	32	66
San Dimas		54	43	46	46	46
Other		133	134	134	175	170
Equity gold production (koz)*		374	390	381	357	374
Equity silver production (moz)*		24.5	22.3	23.2	23.2	25.8
Equity palladium production (koz)*		14.7	22.6	27.7	30.2	30.1
Equity cobalt production (mlbs)*		0.0	0.0	0.0	2.6	2.6
Gold equivalent sales (koz)*		625	632	632	631	660
Total cash costs (US\$/GEO)		392	411	410	405	410
AISC (US\$/GEO)		447	469	457	449	453
Fully loaded costs (US\$/GEO)		505	547	508	492	478

All US\$m unless noted		Year Ended December 31				
Input Prices		2018	2019E	2020E	2021E	2022E
Key commodities						
Gold (US\$/oz)		1,269	1,387	1,464	1,464	1,464
Silver (US\$/oz)		15.71	16.11	17.03	17.03	17.03
Palladium (US\$/oz)		1,030	1,526	1,575	1,500	1,350
Cobalt (US\$/lb)		33.1	15.6	17.5	20.0	22.5
Key currencies						
US\$/C\$		0.77	0.75	0.75	0.75	0.75
US\$/EUR		1.18	1.12	1.10	1.10	1.10

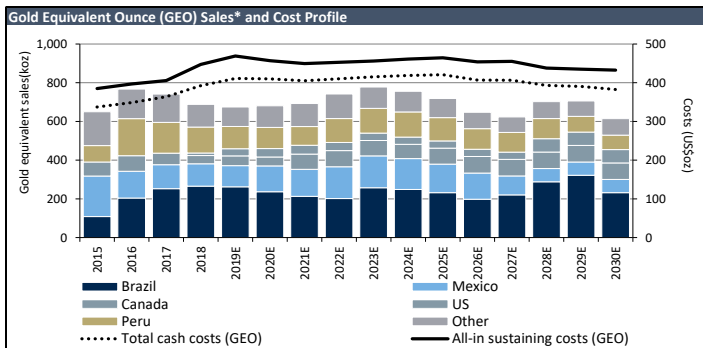
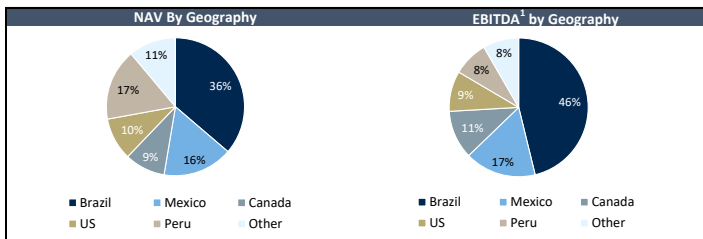
Valuation	2018	2019E	2020E	2021E	2022E
P/E (x)	57.1	48.0	37.3	35.3	31.0
P/CF (x)	26.2	23.4	20.4	20.2	19.0
EV/EBITDA (x)	26.5	23.3	21.0	20.9	20.1
FCF/EV yield**	-3.2%	4.0%	4.6%	4.6%	4.9%

GEO Reserves and Resources	2014	2015	2016	2017	2018
Proven and probable					
Oz (m)	21.9	21.8	23.8	20.9	20.8
Assumed reserve additions (moz)					1.8
LOM production (moz)					13.1
Measured, indicated & inferred (exclusive of reserves)					
Oz (m)	18.0	24.0	25.5	28.0	27.3
Reserve and resource statistics					
Reserves/sh (x1,000)	60.0	53.9	53.0	47.1	46.8
Reserves & resources/sh (x1,000)	109.3	113.3	109.8	110.4	108.1
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	1,028		EV/resource (US\$/oz)		274
Total acquisition cost (US\$/oz)	1,395		EV/reserve (US\$/oz)		634

Income Statement	2018	2019E	2020E	2021E	2022E
Total revenue	794	879	925	924	966
% gold	56%	62%	57%	53%	51%
% silver	43%	34%	38%	37%	39%
% palladium	1%	4%	5%	5%	4%
% other/cobalt	0%	0%	0%	5%	6%
Operating costs	246	262	259	256	271
G&A	52	53	39	39	39
Exploration	0	0	0	0	0
Depreciation	252	264	265	258	246
Other	0	0	0	0	0
Adjusted EBITDA	497	564	627	629	657
Adjusted EBIT	244	300	362	371	411
Net interest expense	35	46	31	19	4
Unusual/other items	164	-260	-61	-38	-7
EBT	443	86	332	352	408
Taxes	16	-5	2	2	8
Minority interest	0	0	0	0	0
Other	0	0	0	0	0
Net income (reported)	427	92	330	350	399
Net income (adjusted)	215	257	330	350	399
EPS (reported) (US\$/sh)	0.96	0.21	0.74	0.78	0.89
EPS (adjusted) (US\$/sh)	0.48	0.58	0.74	0.78	0.89
Average shares (m)	443	446	446	447	448

Net asset value (US\$)					
Salobo/Vale (GS), Brazil	2,737	6.11	36%	43%	
Peñasquito/Goldcorp (SS), Mexico	1,017	2.27	13%	11%	
Antamina/Glencore (SS), Peru	795	1.77	11%	4%	
Stillwater/Sibanye-Stillwater (GPS), US (MO)	531	1.19	7%	7%	
Constancia/Hudbay (GSS), Peru	324	0.72	4%	7%	
Sudbury/Vale (GS - finite), Canada (ON)	298	0.67	4%	3%	
Voisey's Bay/Vale (CS), Canada (NL)	301	0.67	4%	0%	
Pascua-Lama/Barrick (SS), Argentina & Chile	261	0.58	3%	0%	
San Dimas/First Majestic (SS), Mexico	212	0.47	3%	1%	
Zinkgruvan/Lundin (SS), Sweden	135	0.30	2%	3%	
Rosemont/Hudbay (GSS), US (AZ)	223	0.50	3%	6%	
Other	714	1.59	9%	15%	
Total mining and investment assets	7,548	16.85	64%	57%	
Balance sheet items/expenditures	-1,455	-3.25			
Total NAV	6,094	13.60			
P/NAV at spot gold (x)		2.03			

Cash Flow Statement	2018	2019E	2020E	2021E	2022E
Net income (reported)	427	92	330	350	399
Depreciation	252	264	265	258	246
Other	-211	171	9	3	8
Operating cash flow	468	527	604	612	654
Operating cash flow (US\$/sh)	1.06	1.18	1.35	1.37	1.46
Working capital changes	9	0	0	0	0
Cash from operations	477	527	604	612	654
Capital expenditure	-900	-2	-3	-3	-3
Net investments	38	23	0	0	0
Investing cash flow	-861	20	-3	-3	-3
Common share dividends	120	160	172	181	189
Debt additions	825	0	0	0	0
Debt repayments	-331	-331	-360	-360	-214
Equity financing	1	33	0	0	0
Other net financing	-134	-132	-146	-154	-161
Financing cash flow	361	-429	-506	-514	-374
Foreign exchange	0	0	0	0	0
Change in cash	-23	118	95	95	277
Free cash flow*	-422	524	601	609	651
Free cash flow* (\$/sh)	-0.95	1.18	1.35	1.36	1.45



Balance Sheet	2018	2019E	2020E	2021E	2022E
Assets					
Cash	76	194	289	383	660
Short-term investments	0	0	0	0	0
Other current assets	4	6	6	6	6
Current assets	80	200	294	389	665
Non-current assets	6,390	6,031	5,769	5,514	5,271
Total assets	6,470	6,231	6,063	5,903	5,936
Liabilities					
Short-term debt	0	0	0	0	0
Current liabilities	29	34	34	34	34
Long-term debt	1,264	934	574	214	0
Other non-current liabilities	5	11	11	6	7
Total liabilities	1,298	979	619	254	41
Total shareholder equity	5,172	5,253	5,445	5,649	5,896
Net debt	1,188	740	285	-170	-660
Net debt / EBITDA (x)	2.4	1.3	0.5	-0.3	-1.0
ROE (Net income/Equity)	8.5%	1.8%	6.2%	6.3%	6.9%
ROA (Net income/Total assets)	7.0%	1.4%	5.4%	5.9%	6.7%
ROIC (NOPAT/Assets + Net debt)	3.8%	4.9%	6.2%	6.6%	7.5%
CRIC (FCF/Equity + Total debt)**	-7.0%	8.3%	9.8%	10.2%	11.1%

* Production in concentrate, prior to payables. Sales shown after payables.** FCF = operating cash flow - capex; † 2019-2021 average EBITDA

Priced as of market close, November 29, 2019 ET

Source: RBC Capital Markets estimates, company reports, Bloomberg

Wheaton Precious Metals Corp.: Forecasts at RBC price deck

Rating	Outperform	Basic shares (m)	445.2	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	448.1/459.1	Josh Wolfson, CFA
Target price at RBC price deck	US\$33.00	Basic mkt cap (US\$m)	12,306	(416) 842-9893
Share price	US\$27.64	Enterprise value (US\$m)	13,168	josh.wolfson@rbccm.com

All US\$m unless noted		Year Ended December 31				
Operating Statistics		2018	2019E	2020E	2021E	2022E
Gold equivalent ounce (GEO) prod. (koz)*		688	676	681	703	754
Salobo		271	263	252	227	215
Sudbury		24	33	33	36	36
Peñasquito		64	71	90	101	128
Yauliyacu		26	25	28	29	36
Antamina		68	59	61	53	53
Constancia		47	46	37	33	67
San Dimas		54	43	46	46	46
Other		133	134	133	179	173
Equity gold production (koz)*		374	390	380	357	374
Equity silver production (moz)*		24.5	22.3	23.2	23.2	25.8
Equity palladium production (koz)*		14.7	22.6	27.7	30.2	30.1
Equity cobalt production (mlbs)*		0.0	0.0	0.0	2.6	2.6
Gold equivalent sales (koz)*		625	634	632	642	670
Total cash costs (US\$/GEO)		392	411	411	400	404
AISC (US\$/GEO)		447	468	458	443	446
Fully loaded costs (US\$/GEO)		505	546	509	486	471

All US\$m unless noted		Year Ended December 31				
Input Prices		2018	2019E	2020E	2021E	2022E
Key commodities						
Gold (US\$/oz)		1,269	1,390	1,500	1,450	1,450
Silver (US\$/oz)		15.71	16.23	17.50	17.50	17.50
Palladium (US\$/oz)		1,030	1,526	1,575	1,500	1,350
Cobalt (US\$/lb)		33.1	15.6	17.5	20.0	22.5
Key currencies						
US\$/C\$		0.77	0.76	0.76	0.77	0.78
US\$/EUR		1.18	1.11	1.10	1.11	1.13

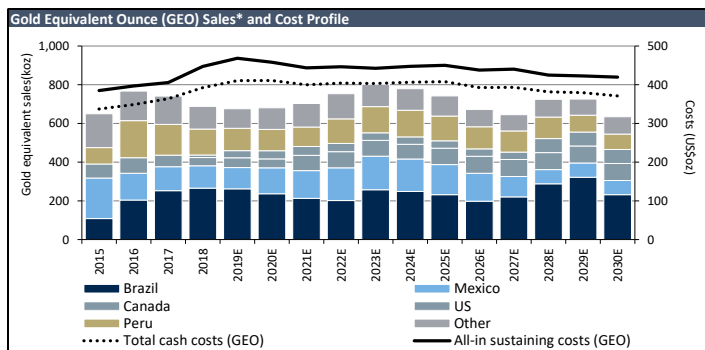
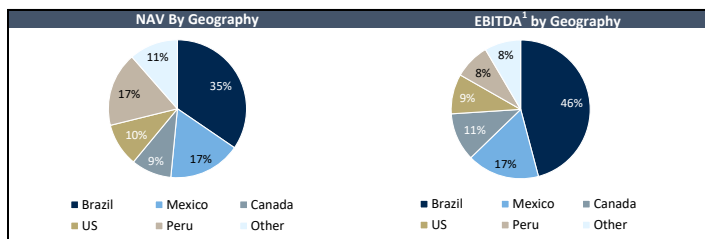
Valuation	2018	2019E	2020E	2021E	2022E
P/E (x)	57.1	47.2	35.0	34.6	30.5
P/CF (x)	26.2	23.2	19.7	20.0	18.8
EV/EBITDA (x)	26.5	23.2	20.3	20.7	19.9
FCF/EV yield**	-3.2%	4.0%	4.7%	4.7%	5.0%

GEO Reserves and Resources	2014	2015	2016	2017	2018
Proven and probable					
Oz (m)	21.9	21.8	23.8	20.9	20.8
Assumed reserve additions (moz)					1.9
LOM production (moz)					13.5
Measured, indicated & inferred (exclusive of reserves)					
Oz (m)	18.0	24.0	25.5	28.0	27.3
Reserve and resource statistics					
Reserves/sh (x1,000)	60.0	53.9	53.0	47.1	46.8
Reserves & resources/sh (x1,000)	109.3	113.3	109.8	110.4	108.1
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	997		EV/resource (US\$/oz)		274
Total acquisition cost (US\$/oz)	1,356		EV/reserve (US\$/oz)		634

Income Statement	2018	2019E	2020E	2021E	2022E
Total revenue	794	883	948	932	972
% gold	56%	62%	57%	52%	50%
% silver	43%	34%	38%	38%	40%
% palladium	1%	4%	5%	5%	4%
% other/cobalt	0%	0%	0%	5%	6%
Operating costs	246	262	260	257	271
G&A	52	53	39	39	39
Exploration	0	0	0	0	0
Depreciation	252	264	265	258	244
Other	0	0	0	0	0
Adjusted EBITDA	497	568	649	636	662
Adjusted EBIT	244	304	384	378	418
Net interest expense	35	46	31	19	4
Unusual/other items	164	-260	-61	-37	-6
EBT	443	91	354	359	415
Taxes	16	-5	2	2	8
Minority interest	0	0	0	0	0
Other	0	0	0	0	0
Net income (reported)	427	96	353	358	407
Net income (adjusted)	215	261	353	358	407
EPS (reported) (US\$/sh)	0.96	0.21	0.79	0.80	0.91
EPS (adjusted) (US\$/sh)	0.48	0.59	0.79	0.80	0.91
Average shares (m)	443	446	446	447	448

Net asset value (US\$)					
Salobo/Vale (GS), Brazil	2,579	5.76	35%	43%	
Peñasquito/Goldcorp (SS), Mexico	1,055	2.35	14%	11%	
Antamina/Glencore (SS), Peru	817	1.82	11%	4%	
Stillwater/Sibanye-Stillwater (GPS), US (MO)	524	1.17	7%	7%	
Constancia/Hudbay (GSS), Peru	325	0.73	4%	7%	
Sudbury/Vale (GS - finite), Canada (ON)	287	0.64	4%	3%	
Voisey's Bay/Vale (CS), Canada (NL)	301	0.67	4%	0%	
Pascua-Lama/Barrick (SS), Argentina & Chile	268	0.60	4%	0%	
San Dimas/First Majestic (SS), Mexico	205	0.46	3%	1%	
Zinkgruvan/Lundin (SS), Sweden	140	0.31	2%	3%	
Rosemont/Hudbay (GSS), US (AZ)	234	0.52	3%	6%	
Other	730	1.63	10%	15%	
Total mining and investment assets	7,464	16.66	65%	57%	
Balance sheet items/expenditures	-1,455	-3.25			
Total NAV	6,010	13.41			
P/NAV at RBC price deck (x)		2.06			

Cash Flow Statement	2018	2019E	2020E	2021E	2022E
Net income (reported)	427	96	353	358	407
Depreciation	252	264	265	258	244
Other	-211	171	9	3	9
Operating cash flow	468	531	626	619	659
Operating cash flow (US\$/sh)	1.06	1.19	1.40	1.38	1.47
Working capital changes	9	0	0	0	0
Cash from operations	477	531	626	619	659
Capital expenditure	-900	-2	-3	-3	-3
Net investments	38	23	0	0	0
Investing cash flow	-861	20	-3	-3	-3
Common share dividends	120	160	176	186	191
Debt additions	825	0	0	0	0
Debt repayments	-331	-331	-360	-360	-214
Equity financing	1	33	0	0	0
Other net financing	-134	-132	-149	-158	-162
Financing cash flow	361	-429	-509	-518	-376
Foreign exchange	0	0	0	0	0
Change in cash	-23	122	114	97	281
Free cash flow*	-422	529	623	616	656
Free cash flow* (\$/sh)	-0.95	1.19	1.40	1.38	1.46



Balance Sheet	2018	2019E	2020E	2021E	2022E
Assets					
Cash	76	198	312	409	690
Short-term investments	0	0	0	0	0
Other current assets	4	6	6	6	6
Current assets	80	204	317	415	695
Non-current assets	6,390	6,031	5,769	5,514	5,273
Total assets	6,470	6,235	6,087	5,929	5,968
Liabilities					
Short-term debt	0	0	0	0	0
Current liabilities	29	34	34	34	34
Long-term debt	1,264	934	574	214	0
Other non-current liabilities	5	11	12	7	7
Total liabilities	1,298	979	619	254	41
Net shareholder equity	5,172	5,257	5,468	5,675	5,927
Net debt	1,188	736	262	-195	-690
Net debt / EBITDA (x)	2.4	1.3	0.4	-0.3	-1.0
ROE (Net income/Equity)	8.5%	1.8%	6.6%	6.4%	7.0%
ROA (Net income/Total assets)	7.0%	1.5%	5.7%	6.0%	6.8%
ROIC (NOPAT/Assets + Net debt)	3.8%	5.0%	6.5%	6.7%	7.6%
CRIC (FCF/Equity + Total debt)**	-7.0%	8.4%	10.2%	10.3%	11.1%

* Production in concentrate, prior to payables. Sales shown after payables.** FCF = operating cash flow - capex; † 2019-2021 average EBITDA

Priced as of market close, November 29, 2019 ET

Source: RBC Capital Markets estimates, company reports, Bloomberg

Valuation

Our WPM target price of US\$33 is based upon 2.3x our risk-weighted NAV at a long-term gold prices of US\$1,400/oz and 27x our 2020-2021 SFCF estimate, which would be equivalent to 26x EBITDA. These multiples are in line with the the average for the large cap royalty & streaming peers, supported by the company's long-life, low-cost asset base and strong free cash flow outlook, balanced by the company's above-average concentration. Our Outperform rating is supported by WPM's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Risks to rating and price target

In addition to general operating and financial risks for WPM related to commodities (gold, silver, palladium and cobalt) and FX, we highlight:

- Very high concentration risk, in particular with Salobo and Penasquito
- Achievement of ramp-up and production targets at Peñasquito
- Achievement of permitting and construction projections at Rosemont/Hudbay and Pascua-Lama/Barrick
- Successful advancement by underlying operators of exploration and development-stage royalties

Company description

Wheaton Precious Metals is a large cap precious metals streaming company with interests in 19 operating mines and 9 development projects. Company guidance outlines gold equivalent ounce (GEO) production of approximately 670 koz in 2019, increasing to an average of 750 koz from 2019 to 2023. We forecast 5-year revenue exposure of approximately 55% gold, 38% silver, 4% palladium and 3% cobalt. The company is focused on pursuing opportunities that provide exposure to long-life, low-cost assets and returning capital to shareholders through its cash flow-linked dividend.

Yamana Gold Inc.

Recomposing a pathway to prosperity

Our view: In conjunction with AUY's transformative portfolio recomposition, the company is now capable of generating net positive FCF going-forward, enabling greater flexibility for the company to make capital allocation decisions. We expect the company to maintain above-average capital spending to sustain long-term production. We are assuming coverage of AUY with a Sector Perform rating and US\$3.75 PT.

Key points:

Re-focusing the operating outlook, deleveraging, and generating FCF. In recent years, AUY has undergone a transformational reorganization by rationalizing its core portfolio of operating mines and deleveraging its balance sheet. As a result, AUY now maintains an ownership interest in five operating mines and features net debt to EBITDA leverage of 1.4x (5 years prior: twelve mines and >3x leverage). Core to AUY's current portfolio are its Malartic (41%), Cerro Moro (20%), and Jacobina (21%) mines, which combined represent 82% of the company's overall valuation. In contrast to the past, these cornerstone assets and current elevated gold prices should contribute to AUY's renewed ability to generate corporate free cash flow, and in the short term slightly above that of its peer group (AUY 2020E/21E FCF/EV of 5.6/6.3% vs. group peers 5.9/4.8%).

Malartic underground expected to become a new core target. With year-end 2018 results, AUY and its 50/50 JV partner AEM reported an initial resource of 5.3 moz at 2.06 g/t from the East Malartic and Odyssey underground targets at Malartic (100% basis). Subsequently, the JV has discovered the East Gouldie target at greater depth, where early indications outline the potential for an additional multi-million ounce deposit at higher grades (>3 g/t). Combined, these targets have the potential to contribute to Malartic mine life extension, where production declines would otherwise be expected post-Barnat processing in ~2023. In this context, the current priority level of Jacobina's Phase II expansion could decline.

Recognizing interim outlook uncertainties. Higher production depletion risks exist by 2024-25 with AUY's Cerro Moro, El Penon, and Minera Florida mines, even with our incorporation of Malartic UG upside. However, recent early stage exploration results at these shorter-duration assets provide indications of interim potential success. We view interim FCF generation as above average for AUY, but our forecasts are below consensus due to the incorporation of higher capital spending (+US\$50m). Following a refresh of its portfolio, we view AUY's strategic outlook as critical over the upcoming 1-3 year period and its capital allocation decisions having material consequences.

Sector: Precious Minerals & Diamonds - large cap

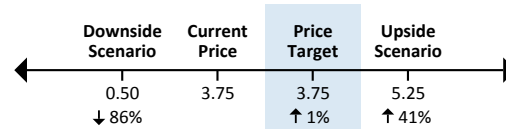
Sector Perform

NYSE: AUY; USD 3.75; TSX: YRI

Price Target USD 3.75

WHAT'S INSIDE	
<input type="checkbox"/> Rating/Risk Change	<input type="checkbox"/> Price Target Change
<input checked="" type="checkbox"/> In-Depth Report	<input type="checkbox"/> Est. Change
<input type="checkbox"/> Preview	<input type="checkbox"/> News Analysis

Scenario Analysis*



*Implied Total Returns

Key Statistics

Shares O/S (MM):	950.4	Market Cap (MM):	3,564
Dividend:	0.04	Yield:	1.1%
NAVPS:	1.89	P/NAVPS:	1.98x
		Enterprise Val. (MM):	4,145
		Avg. Daily Volume:	17,118,782

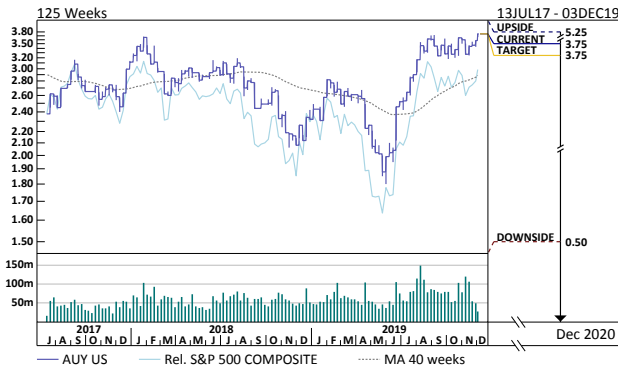
RBC Estimates

FY Dec	2018A	2019E	2020E	2021E
EPS, Adj Basic	0.08	0.12	0.17	0.11
P/AEPS	46.9x	31.3x	22.1x	34.1x
CFPS, Adj Basic	0.50	0.51	0.65	0.61
P/ACFPS	7.5x	7.4x	5.8x	6.1x
FCFPS	(0.14)	(0.03)	0.28	0.28
P/FCF	nm	nm	13.4x	13.4x
Production	1,178.5	1,017.2	1,021.0	1,012.7
EPS, Adj Basic	Q1	Q2	Q3	Q4
2018	0.01A	0.03A	0.01A	0.03A
2019	0.02A	0.02A	0.05A	0.03E
2020	0.04E	0.04E	0.04E	0.05E
CFPS, Adj Basic				
2018	0.19A	0.14A	0.07A	0.09A
2019	0.09A	0.15A	0.12A	0.15E
2020	0.16E	0.16E	0.17E	0.16E

All values in USD unless otherwise noted.

Target/Upside/Downside Scenarios

Exhibit 1: Yamana Gold Inc.



Source: Bloomberg and RBC Capital Markets estimates for Upside/Downside/Target

Price target/base case

Our AUY price target of US\$3.75 is based upon 1.6x our risk-adjusted NAV at a long-term gold price of US\$1,400/oz and 20x our 2020-2021 SFCF estimate, which would be equivalent to 7x EBITDA. These multiples are above the intermediate producer group average, supported by the encouraging outlook at the company's cornerstone operations. Our Sector Perform rating is supported by AUY's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Upside scenario

Our upside value of US\$5.25 is based upon higher long-term gold prices of US\$1,600/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Downside scenario

Our downside value of US\$0.50 is based upon lower long-term gold prices of US\$1,200/oz, while maintaining our existing operating, financial, and target multiple assumptions.

Investment summary

Yamana Gold is an intermediate gold producer with a portfolio of 5 operating mines in Canada, Argentina, Brazil, and Chile. 2019 guidance is for production of 1,010 koz AuEq at AISC of \$920-960/oz. In recent years, AUY has materially reduced financial leverage via asset disposition, including the 3Q19 \$800m sale of the Chapada mine. Today, AUY's core valuation is contributed by 3 mines, Malartic, Cerro Moro, and Jacobina, which combined represent >80% of our overall NAV estimate for the company.

Investment outlook:

- Short- and medium-term, AUY has the potential for favourable free cash flow, meaningfully improved from the company's performance in recent years.
- This outlook is further supported by expected upside from Jacobina's Phase 1 and 2 throughput expansions and the potential development of Malartic's regional underground exploration targets (Gouldie, Odyssey, East Malartic).
- Long-term, based upon AUY's reported reserves, production pressure could materialize by ~2024-25 due to depletion of the company's Cerro Moro, El Penon, and Minera Florida mines, absent further demonstrated exploration success.
- Our Sector Perform rating is predicated upon our view that AUY's relative valuation fairly reflects the company's improved balance sheet and near-term FCF outlook, offset by our expectation of increased capital spending to sustain long-term production.

Upcoming catalysts and milestones

- Resource upside at Canadian Malartic (1Q20)
- Malartic production from high-grade Barnat resource (2020)
- Jacobina Phase I expansion to 180koz (mid-2020) and pre-feasibility study for potential Phase II expansion to 225koz (1Q20)
- Completion of feasibility study for combined Agua Rica/ Alumbarrera copper-gold project (JV with Newmont) (2020)

Key risks

In addition to general operating and financial risks for AUY related to commodities (gold, silver and copper) and FX (CAD, ARS, BRL, CLP), we highlight:

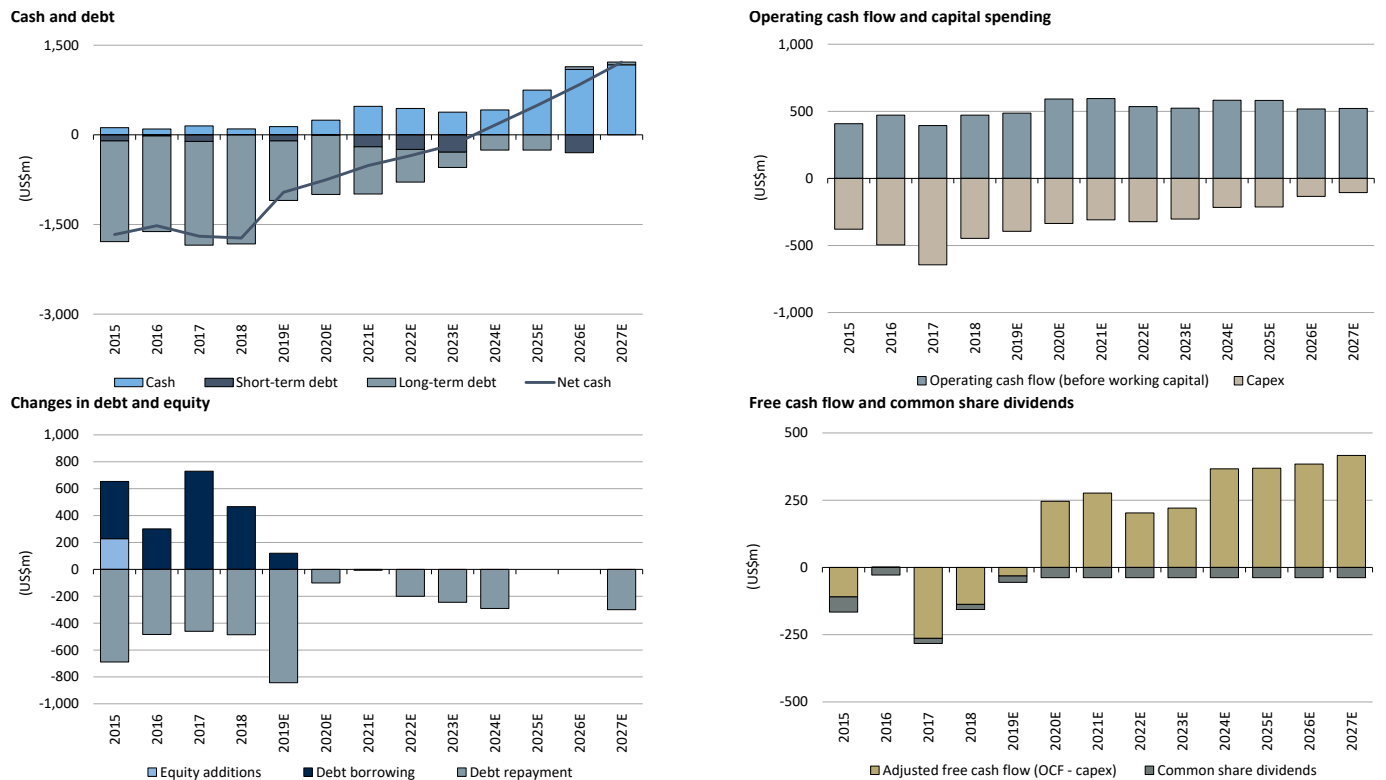
- Political risk exposure to Chile, Brazil, and Argentina
- Potential strategic drift or transformation changes, and associated balance sheet/capital allocation uncertainties
- Achievement of Jacobina improved grade profile and throughput expansion expectations

Exhibit 2: Yamana Gold – Catalysts, opportunities and risks

Catalysts and milestones	<ul style="list-style-type: none"> • East Malartic, Odyssey, and East Gouldie resource upside at Canadian Malartic (1Q20) • Malartic production from high-grade Barnat resource (2020) • Completion of feasibility study for combined Agua Rica and Alumbrera copper-gold project (2020) • Jacobina Phase I expansion to 180koz (mid-2020) and pre-feasibility study for potential Phase II expansion to 225koz (1Q20)
Opportunities	<ul style="list-style-type: none"> • Potential upside to existing Jacobina production guidance • Potential development upside from Malartic underground targets, including Odyssey and East Gouldie zones • Potential divestiture of non-core assets including Suruca royalty, Agua Rica, Suyai, and Leagold equity interest
Risks and uncertainties	<ul style="list-style-type: none"> • Potential for M&A activity • Achievement of Cerro Moro production ramp-up targets and general labour risks • High debt load and risks at lower gold prices • Interim closure costs and liabilities at Alumbrera • Geopolitical and royalty/tax risk in Argentina and Brazil • Chilean unrest and its potential implications on short-term output and fiscal term agreements, and increasing environmental pressure in Chile, and • Commodity price risk (most notably gold, silver and copper prices), technical/operating risk and financing risk

Source: Company reports, RBC Capital Markets estimates

Exhibit 3: Yamana Gold – Financial forecasts at spot gold



Source: Company reports, RBC Capital Markets estimates (Priced as of market close on November 29, 2019 ET)

Exhibit 4: Yamana Gold – Net asset valuation at spot gold

Yamana Gold Inc.									
Net asset valuation at spot gold (US\$)									
Shares (FD, FF, ITM) (m)	950.42								
Market capitalization (US\$m)	3,403								
	Risk-weighted NAV			NAV at various discount rates					
	Discount rate	(\$m)	(/sh) (\$)	5%		7%		10%	
				(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)	(\$m)	(/sh) (\$)
Gold assets									
El Peñón (100.0%), Chile	5%	417	0.44	417	0.44	392	0.41	360	0.38
Malartic OP (50.0%), Canada (QC)	5%	1,296	1.36	1,296	1.36	1,212	1.28	1,103	1.16
Malartic UG (50.0%), Canada (QC)	5%	413	0.43	413	0.43	289	0.30	164	0.17
Jacobina Complex (100.0%), Brazil	5%	864	0.91	864	0.91	748	0.79	613	0.65
Minera Florida (100.0%), Chile	5%	89	0.09	89	0.09	83	0.09	74	0.08
Cerro Moro (100.0%), Argentina	5%	816	0.86	816	0.86	753	0.79	672	0.71
Gold exploration properties		80	0.08	80	0.08	80	0.08	80	0.08
Gold hedge book and streams	5%	-78	-0.08	-78	-0.08	-73	-0.08	-66	-0.07
Total gold assets		3,897	4.10	3,897	4.10	3,485	3.67	2,999	3.16
Base metals and other assets									
Copper streams and hedges	8%	0	0.00	0	0.00	0	0.00	0	0.00
Currency hedge book	8%	0	0.00	0	0.00	0	0.00	0	0.00
Other exploration		150	0.16	150	0.16	150	0.16	150	0.16
Investments		95	0.10	95	0.10	95	0.10	95	0.10
Total other assets		245	0.26	245	0.26	245	0.26	245	0.26
Balance sheet and expenses									
Basic working capital		-219	-0.23	-219	-0.23	-219	-0.23	-219	-0.23
Value of ITM instruments		0	0.00	0	0.00	0	0.00	0	0.00
Estimated working capital additions		0	0.00	0	0.00	0	0.00	0	0.00
Long-term debt		-1,045	-1.10	-1,045	-1.10	-1,045	-1.10	-1,045	-1.10
Estimated debt additions		0	0.00	0	0.00	0	0.00	0	0.00
General & administrative expense	5%	-552	-0.58	-552	-0.58	-485	-0.51	-407	-0.43
Exploration expense	5%	-54	-0.06	-54	-0.06	-51	-0.05	-48	-0.05
Interest tax shield	5%	68	0.07	68	0.07	66	0.07	63	0.07
Reclamation & closure liability		-190	-0.20	-190	-0.20	-190	-0.20	-190	-0.20
Net financial assets		-1,992	-2.10	-1,992	-2.10	-1,924	-2.02	-1,846	-1.94
Net asset value (US\$)		2,149	2.26	2,149	2.26	1,806	1.90	1,397	1.47
Share price (US\$)			3.58		3.58		3.58		3.58
NAV multiple (P/NAV) (x)			1.58		1.58		1.88		2.44
Input assumptions		2019E	2020E	2021E	Long term				
Gold price (US\$/oz)		1,387	1,464	1,464	1,464				
Silver price (US\$/oz)		16.11	17.03	17.03	17.03				
Copper price (US\$/lb)		2.73	2.71	2.73	2.69				

Note: Base metals cash flow discounted at a minimum 8% discount rate.

Source: Company reports, RBC Capital Markets estimates (Priced as of market close on November 29, 2019 ET)

Yamana Gold Inc.: Forecasts at spot gold

Rating	Sector Perform	Basic shares (m)	950.4	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	950.4/951.7	Josh Wolfson, CFA
Target price at RBC price deck	US\$3.75	Basic mkt cap (US\$m)	3,403	(416) 842-9893
Share price	US\$3.58	Enterprise value (US\$m)	4,405	josh.wolfson@rbccm.com

All US\$m unless noted		Year Ended December 31				
Operating Statistics		2018	2019E	2020E	2021E	2022E
Equity gold production—total (koz)		1,080	896	878	894	862
El Peñón		152	155	152	149	135
Malartic OP		349	333	352	366	339
Cerro Moro		93	126	134	130	132
Jacobina Complex		145	157	162	170	175
Minera Florida		82	73	78	79	77
Other		261	52	0	0	3
Equity gold production—reported (koz)		935	896	878	894	858
Equity silver production (moz)		8.0	10.4	12.3	9.8	10.2
Equity GEO production—reported (koz)		1,179	1,017	1,021	1,008	980
Total cash costs (co-product) (US\$/oz)		644	667	676	662	697
El Peñón		833	782	794	798	833
Malartic OP		558	583	569	563	612
Cerro Moro		429	717	727	650	663
Jacobina Complex		649	633	633	640	646
Minera Florida		916	894	849	910	985
Total cash costs (by-product) (US\$/oz)		551	619	676	662	694
Fully loaded costs (co-product) (US\$/oz)		1,147	1,263	1,192	1,137	1,213
AISC—reported (US\$/oz)		943	969	978	957	990

All US\$m unless noted		Year Ended December 31				
Input Prices		2018	2019E	2020E	2021E	2022E
Key commodities						
Gold (US\$/oz)		1,269	1,387	1,464	1,464	1,464
Silver (US\$/oz)		15.71	16.11	17.03	17.03	17.03
Zinc (US\$/lb)		1.33	1.15	1.03	1.03	1.02
Oil (US\$/bbl)		65	57	58	58	59
Key currencies						
US\$/C\$		0.77	0.75	0.75	0.75	0.75
ARS/US\$		26.42	47.14	59.88	59.88	59.88
BRL/US\$		3.63	3.97	4.24	4.24	4.24
CLP/US\$		640	713	809	809	809

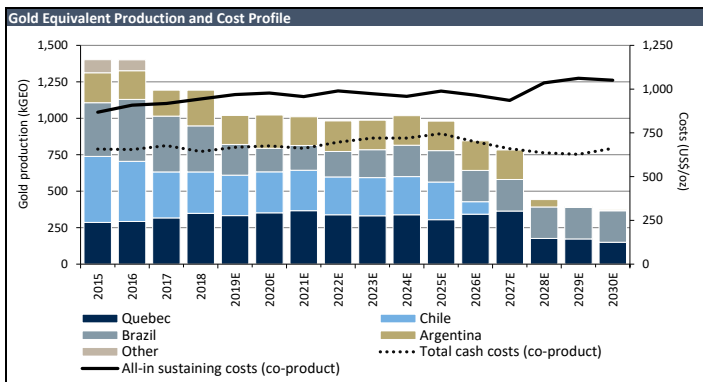
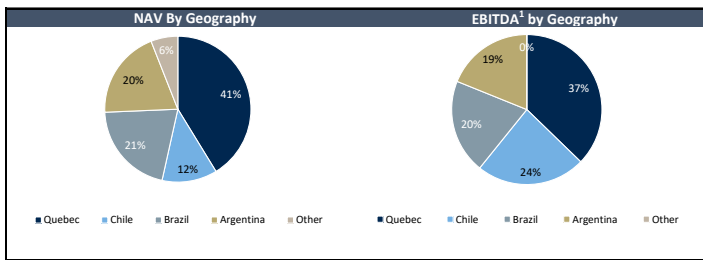
Valuation	2018	2019E	2020E	2021E	2022E
P/E (x)	46.0	30.4	25.0	28.7	33.0
P/CF (x)	7.2	7.0	5.7	5.7	6.4
EV/adjusted EBITDA (x)	6.5	6.1	6.2	6.3	6.9
FCF/EV yield*	-3.1%	-0.7%	5.6%	6.3%	4.6%

Gold Reserves and Resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	1,688.1	781.1	842.2	842.2	865.7
Grade (g/t)	0.8	0.6	0.6	0.5	0.4
Oz (m)	26.2	15.9	16.7	13.7	12.5
Assumed reserve additions (moz)					4.8
LOM production (moz)					10.3
Measured, indicated & inferred (excl)					
Oz (m)	24.8	25.2	21.0	17.7	18.0
Reserve and resource statistics					
Reserves/sh (x1,000)	29.8	16.8	17.6	14.5	13.2
Reserves & resources/sh (x1,000)	58.1	43.4	39.7	33.0	32.2
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	640		EV/resource (US\$/oz)		144
Total acquisition cost (US\$/oz)	1,335		EV/reserve (US\$/oz)		352

Net Asset Value	NAV (\$m)	/sh (\$)	% NAV	%Reserve	%EBITDA†
El Peñón (100.0%), Chile	417	0.44	10%	12%	16%
Malartic OP (50.0%), Canada (QC)	1,296	1.36	31%	41%	37%
Malartic UG (50.0%), Canada (QC)	413	0.43	10%	0%	0%
Jacobina Complex (100.0%), Brazil	864	0.91	21%	31%	16%
Minera Florida (100.0%), Chile	89	0.09	2%	6%	8%
Cerro Moro (100.0%), Argentina	816	0.86	20%	10%	21%
Other	247	0.26	6%	0%	3%
Total mining and investment assets	4,141	4.36	100%	100%	100%
Balance sheet items and expenditures	-1,992	-2.10			
Total	2,149	2.26			
P/NAV at spot gold (x)		1.58			

Income Statement	2018	2019E	2020E	2021E	2022E
Total revenue	1,799	1,588	1,477	1,460	1,412
% gold	72%	78%	85%	88%	87%
% silver	7%	11%	14%	11%	12%
% copper	20%	11%	0%	0%	0%
% other	1%	1%	1%	1%	1%
Operating costs	1,010	774	666	662	674
G&A	92	79	77	78	78
Exploration	13	12	20	20	20
Depreciation	438	465	452	473	470
Other	0	0	0	0	0
Adjusted EBITDA	678	723	715	700	640
Adjusted EBIT	239	258	263	226	170
Net interest expense	135	143	62	52	22
Unusual/other items	-556	-74	-125	-104	-44
EBT	-182	327	200	174	148
Taxes	121	72	64	56	47
Minority interest	-13	0	0	0	0
Other	5	-16	0	0	3
Net income (reported)	-285	239	136	119	103
Net income (adjusted)	74	112	136	119	103
EPS (reported) (US\$/sh)	-0.30	0.25	0.14	0.12	0.11
EPS (adjusted) (US\$/sh)	0.08	0.12	0.14	0.12	0.11
Average shares (m)	949	950	950	950	950

Cash Flow Statement	2018	2019E	2020E	2021E	2022E
Net income (reported)	-285	239	136	119	103
Depreciation	438	465	452	473	470
Other	318	-217	4	3	-38
Operating cash flow	472	487	592	595	535
Operating cash flow (US\$/sh)	0.50	0.51	0.62	0.63	0.56
Working capital changes	-162	-84	-10	-10	-10
Cash from operations	309	403	582	585	525
Capital expenditure	-447	-394	-336	-309	-323
Net investments	117	823	0	0	0
Investing cash flow	-330	429	-336	-309	-323
Common share dividends	19	24	38	38	38
Debt additions	466	120	0	0	0
Debt repayments	-487	-843	-101	-7	-200
Equity financing	0	0	0	0	0
Other net financing	-19	-71	-38	-38	-38
Financing cash flow	-40	-794	-139	-45	-238
Foreign exchange	3	1	0	0	0
Change in cash	-54	39	107	232	-35
Free cash flow*	-138	-32	246	277	203
Free cash flow* (\$/sh)	-0.14	-0.03	0.26	0.29	0.21



Balance Sheet	2018	2019E	2020E	2021E	2022E
Assets					
Cash	99	138	245	476	441
Short-term investments	0	0	0	0	0
Other current assets	331	266	266	266	266
Current assets	429	403	510	742	707
Non-current assets	7,652	6,750	6,620	6,445	6,307
Total assets	8,081	7,153	7,130	7,187	7,014
Liabilities					
Short-term debt	2	101	7	200	245
Current liabilities	498	431	336	530	575
Long-term debt	1,823	997	991	791	546
Other non-current liabilities	1,770	1,736	1,499	1,471	1,423
Total liabilities	4,092	3,164	2,826	2,792	2,543
Total shareholder equity	3,989	3,989	4,304	4,395	4,471
Net debt	1,727	961	753	514	349
Net debt / EBITDA (x)	2.5	1.3	1.1	0.7	0.5
ROE (Net income/Equity)	-6.9%	5.8%	3.2%	2.7%	2.3%
ROA (Net income/Total assets)	-3.4%	3.1%	1.9%	1.7%	1.5%
ROIC (NOPAT/Assets + Net debt)	2.0%	3.4%	3.9%	3.4%	2.5%
CROIC (FCF/Equity + Total debt)*	-2.3%	-0.6%	4.6%	5.2%	3.8%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
Priced as of market close November 29, 2019 ET. Source: RBC Capital Markets estimates, company reports, Bloomberg

Yamana Gold Inc.: Forecasts at RBC price deck

Rating	Sector Perform	Basic shares (m)	950.4	RBC Capital Markets
Risk	NA	Diluted shares (ITM/FD) (m)	950.4/951.7	Josh Wolfson, CFA
Target price at RBC price deck	US\$3.75	Basic mkt cap (US\$m)	3,403	(416) 842-9893
Share price	US\$3.58	Enterprise value (US\$m)	4,405	josh.wolfson@rbccm.com

All US\$m unless noted		Year Ended December 31				
Operating Statistics		2018	2019E	2020E	2021E	2022E
Equity gold production—total (koz)		1,080	896	878	894	862
El Peñón		152	155	152	149	135
Malartic OP		349	333	352	366	339
Cerro Moro		93	126	134	130	132
Jacobina Complex		145	157	162	170	175
Minera Florida		82	73	78	79	77
Other		261	52	0	0	3
Equity gold production—reported (koz)		935	896	878	894	858
Equity silver production (moz)		8.0	10.4	12.3	9.8	10.2
Equity GEO production—reported (koz)		1,179	1,017	1,021	1,013	984
Total cash costs (co-product) (US\$/oz)		644	668	679	667	709
El Peñón		833	781	794	802	850
Malartic OP		558	586	576	573	630
Cerro Moro		429	717	733	642	654
Jacobina Complex		649	633	633	646	658
Minera Florida		916	894	849	923	1,014
Total cash costs (by-product) (US\$/oz)		551	620	679	667	707
Fully loaded costs (co-product) (US\$/oz)		1,147	1,264	1,206	1,138	1,218
AISC—reported (US\$/oz)		943	969	981	962	1,001

All US\$m unless noted		Year Ended December 31				
Input Prices		2018	2019E	2020E	2021E	2022E
Key commodities						
Gold (US\$/oz)		1,269	1,390	1,500	1,450	1,450
Silver (US\$/oz)		15.71	16.23	17.50	17.50	17.50
Zinc (US\$/lb)		1.33	1.16	1.05	1.00	1.00
Oil (US\$/bbl)		65	57	58	58	59
Key currencies						
US\$/C\$		0.77	0.76	0.76	0.77	0.78
ARS/US\$		26.42	47.00	52.48	48.86	45.24
BRL/US\$		3.63	3.94	4.00	3.90	3.80
CLP/US\$		640	702	740	713	685

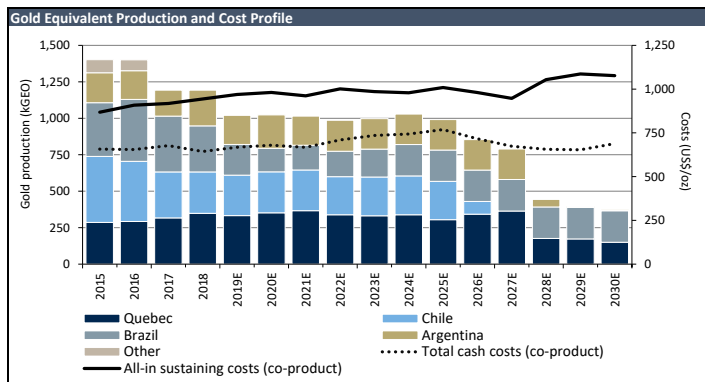
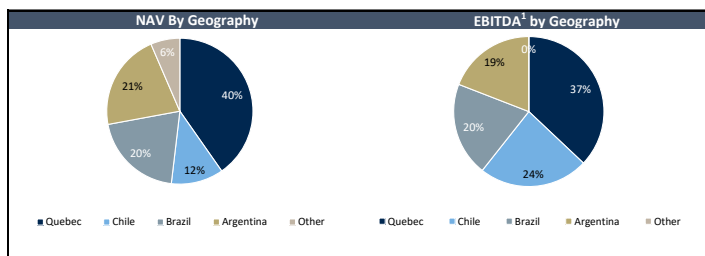
Valuation	2018	2019E	2020E	2021E	2022E
P/E (x)	46.0	29.7	21.4	31.8	39.2
P/CF (x)	7.2	7.0	5.5	5.8	6.6
EV/adjusted EBITDA (x)	6.5	6.1	5.9	6.4	7.1
FCF/EV yield*	-3.1%	-0.7%	6.1%	6.0%	4.2%

Gold Reserves and Resources	2014	2015	2016	2017	2018
Proven and probable					
Tonnes (m)	1,688.1	781.1	842.2	842.2	865.7
Grade (g/t)	0.8	0.6	0.6	0.5	0.4
Oz (m)	26.2	15.9	16.7	13.7	12.5
Assumed reserve additions (moz)					4.8
LOM production (moz)					10.3
Measured, indicated & inferred (excl)					
Oz (m)	24.8	25.2	21.0	17.7	18.0
Reserve and resource statistics					
Reserves/sh (x1,000)	29.8	16.8	17.6	14.5	13.2
Reserves & resources/sh (x1,000)	58.1	43.4	39.7	33.0	32.2
Current per-ounce statistics					
Adjusted EV/LOM production (US\$/oz)	642		EV/resource (US\$/oz)		144
Total acquisition cost (US\$/oz)	1,359		EV/reserve (US\$/oz)		352

Income Statement	2018	2019E	2020E	2021E	2022E
Total revenue	1,799	1,592	1,514	1,452	1,405
% gold	72%	78%	85%	88%	86%
% silver	7%	11%	14%	12%	12%
% copper	20%	10%	0%	0%	0%
% other	1%	1%	1%	1%	1%
Operating costs	1,010	775	669	671	690
G&A	92	79	77	78	78
Exploration	13	12	20	20	20
Depreciation	438	465	452	474	472
Other	0	0	0	0	0
Adjusted EBITDA	678	726	748	683	617
Adjusted EBIT	239	261	296	209	146
Net interest expense	135	143	62	51	22
Unusual/other items	-556	-74	-125	-103	-44
EBT	-182	330	234	158	124
Taxes	121	72	75	50	40
Minority interest	-13	0	0	0	0
Other	5	-16	0	0	3
Net income (reported)	-285	241	159	107	87
Net income (adjusted)	74	115	159	107	87
EPS (reported) (US\$/sh)	-0.30	0.25	0.17	0.11	0.09
EPS (adjusted) (US\$/sh)	0.08	0.12	0.17	0.11	0.09
Average shares (m)	949	950	950	950	950

Net Asset Value	NAV (\$m)	/sh (\$)	% NAV	%Reserve	%EBITDA†
El Peñón (100.0%), Chile	376	0.40	10%	12%	16%
Malartic OP (50.0%), Canada (QC)	1,218	1.28	32%	41%	37%
Malartic UG (50.0%), Canada (QC)	309	0.32	8%	0%	0%
Jacobina Complex (100.0%), Brazil	766	0.81	20%	31%	16%
Minera Florida (100.0%), Chile	62	0.07	2%	6%	8%
Cerro Moro (100.0%), Argentina	812	0.85	21%	10%	21%
Other	245	0.26	6%	0%	3%
Total mining and investment assets	3,787	3.98	100%	100%	100%
Balance sheet items and expenditures	-1,992	-2.10			
Total	1,795	1.89			
P/NAV at RBC price deck (x)		1.90			

Cash Flow Statement	2018	2019E	2020E	2021E	2022E
Net income (reported)	-285	241	159	107	87
Depreciation	438	465	452	474	472
Other	318	-218	5	1	-39
Operating cash flow	472	489	616	583	519
Operating cash flow (US\$/sh)	0.50	0.51	0.65	0.61	0.55
Working capital changes	-162	-84	-10	-10	-10
Cash from operations	309	405	606	573	509
Capital expenditure	-447	-394	-336	-309	-323
Net investments	117	823	0	0	0
Investing cash flow	-330	429	-336	-309	-323
Common share dividends	19	24	38	38	38
Debt additions	466	120	0	0	0
Debt repayments	-487	-843	-101	-7	-200
Equity financing	0	0	0	0	0
Other net financing	-19	-71	-38	-38	-38
Financing cash flow	-40	-794	-139	-45	-238
Foreign exchange	3	1	0	0	0
Change in cash	-54	41	131	220	-51
Free cash flow*	-138	-30	270	264	187
Free cash flow* (\$/sh)	-0.14	-0.03	0.28	0.28	0.20



Balance Sheet	2018	2019E	2020E	2021E	2022E
Assets					
Cash	99	139	271	491	439
Short-term investments	0	0	0	0	0
Other current assets	331	266	266	266	266
Current assets	429	405	537	756	705
Non-current assets	7,652	6,749	6,619	6,444	6,305
Total assets	8,081	7,155	7,156	7,200	7,010
Liabilities					
Short-term debt	2	101	7	200	245
Current liabilities	498	431	336	530	575
Long-term debt	1,823	997	991	791	546
Other non-current liabilities	1,770	1,737	1,499	1,470	1,421
Total liabilities	4,092	3,165	2,826	2,791	2,541
Total shareholder equity	3,989	3,989	4,330	4,409	4,469
Net debt	1,727	959	726	500	351
Net debt / EBITDA (x)	2.5	1.3	1.0	0.7	0.6
ROE (Net income/Equity)	-6.9%	5.9%	3.7%	2.5%	2.0%
ROA (Net income/Total assets)	-3.4%	3.2%	2.2%	1.5%	1.2%
ROIC (NOPAT/Assets + Net debt)	2.0%	3.5%	4.3%	3.2%	2.2%
CROIC (FCF/Equity + Total debt)*	-2.3%	-0.5%	5.1%	4.9%	3.5%

* FCF = operating cash flow - capex; † 2019-2021 average EBITDA
 Priced as of market close November 29, 2019 ET. Source: RBC Capital Markets estimates, company reports, Bloomberg

Valuation

Our AUY price target of US\$3.75 is based upon 1.6x our risk-adjusted NAV at a long-term gold price of US\$1,400/oz and 20x our 2020-2021 SFCF estimate, which would be equivalent to 7x EBITDA. These multiples are above the intermediate producer group average, supported by the encouraging outlook at the company's cornerstone operations. Our Sector Perform rating is supported by AUY's implied return to our price target relative to its peers, while accounting for its company-specific risks.

Risks to rating and price target

In addition to general operating and financial risks for AUY related to commodities (gold and copper) and FX (CAD, ARS, BRL, CLP), we highlight:

- Political risk exposure to Chile, Brazil, and Argentina
- Potential strategic drift or transformation changes and the associated balance sheet and capital allocation uncertainties
- Achievement of Jacobina improved grade profile and throughput expansion expectations

Company description

Yamana Gold is an intermediate gold producer with a portfolio of 5 operating mines in Canada, Argentina, Brazil, and Chile. 2019 guidance is for production of 1,010 koz AuEq at AISC of \$920-960/oz. In recent years, AUY has materially reduced financial leverage via asset disposition, including the 3Q19 \$800m sale of the Chapada mine. Today, AUY's core valuation is contributed by 3 mines, Malartic, Cerro Moro, and Jacobina, which combined represent >75% of our overall NAV estimate for the company.

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