

Precious Metals: Easy come...But for how long will easy stay

Global precious metals equities outlook

Our view: Following gold's correction in mid-2020 from an abatement of prior speculative investment, prices have rebounded, largely reflecting a one-sided reflation trade of rising inflation absent rising nominal yields, and increasing short US\$ positioning. Should positioning normalize, economic growth track favourably, or monetary conditions tighten from an exceptionally low baseline, gold price momentum in 2021 may be challenged. Nonetheless, gold equities today are well-positioned financially to withstand volatility and valuations do not factor in a continuation of current higher prices.

Key Takeaways:

- **Monetary and fiscal policy remain highly supportive, but an accelerating recovery and rising inflation at the margin could be counteracted by rising nominal yields.** In June 2020, the FOMC issued initial post-pandemic targets, outlining exceptionally accommodative monetary policy and clear bias to only tighten once inflation has sustainably achieved, and potentially exceeded, the Fed's 2% target. Consensus expectations now outline YoY inflation could temporarily surpass 2.5% in 1H21, building upon the reflation narrative, and that multi-year inflation/growth/employment expectations are largely tracking ahead of original FOMC targets. With longer-term 10Y market inflation expectations now having increased to 2.10%, in line with the Fed's 2%, while nominal rates have been slow to adjust (10Y 1.10%), we see risks that economic growth could lead to nominal rate changes that match or outpace inflation changes, or that that incremental monetary policy changes going forward could skew (eventually, and somewhat) tighter. These changes could pressure real rates higher, a negative for gold.
- **Irrespective of gold price outlook uncertainties, we think gold equities are well-positioned financially. Valuation looks fair at lower prices, and should higher prices continue, windfall gains have the potential to be extended.** At spot gold, our coverage trades at a 2021/22E FCF/EV of 6.2%/6.4% and EV/EBITDA of 7.3x/7.1x (vs. S&P500 valuation of 4.0%/4.5% and 14.3x/13.1x). Utilizing our mid-cycle pricing assumption of \$1,500/oz, sector valuation represents a 2021 FCF/EV of 3.1% and EV/EBITDA of 10.4x. We continue to highlight (1) higher gold prices have de-levered sector balance sheets fully, supporting the ability for producers to withstand price volatility, (2) free cash flow remains robust and budgeting is based upon significantly more conservative prices than the current environment, (3) historically-concerning past pro-cyclical behaviors are largely absent, and (4) return of capital remains a growing focus, with dividends now competitive to the S&P and supported down to ~\$1,350/oz. Short term, we see some risks heading into 2021 guidance and year-end reserves as the effect of COVID-19 has deferred capital, re-sequenced production, and reduced exploration, but this is reflected in our estimates.
- **We have revised our gold price assumptions in line with the RBC [commodities team](#).** Our updated gold price forecasts are \$1,815/oz and \$1,785/oz in 2021/22 (-4%/-1%), while our long-term \$1,500/oz price is maintained. For further commodity changes details, refer to pages 49-51, while estimate revisions for global coverage may be found on pages 64-70. On average, our price targets decreased by 3% (see pages 65-66). Our preferred global equities today include Kinross (KGC US), Kirkland Lake (KL US), Northern Star (NST AU), Polymetal (POLY LN), and Royal Gold (RGLD US).

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All values in USD unless otherwise noted.

Priced as of market close
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For Required Non-U.S. Analyst and Conflicts Disclosures, please see page 71.

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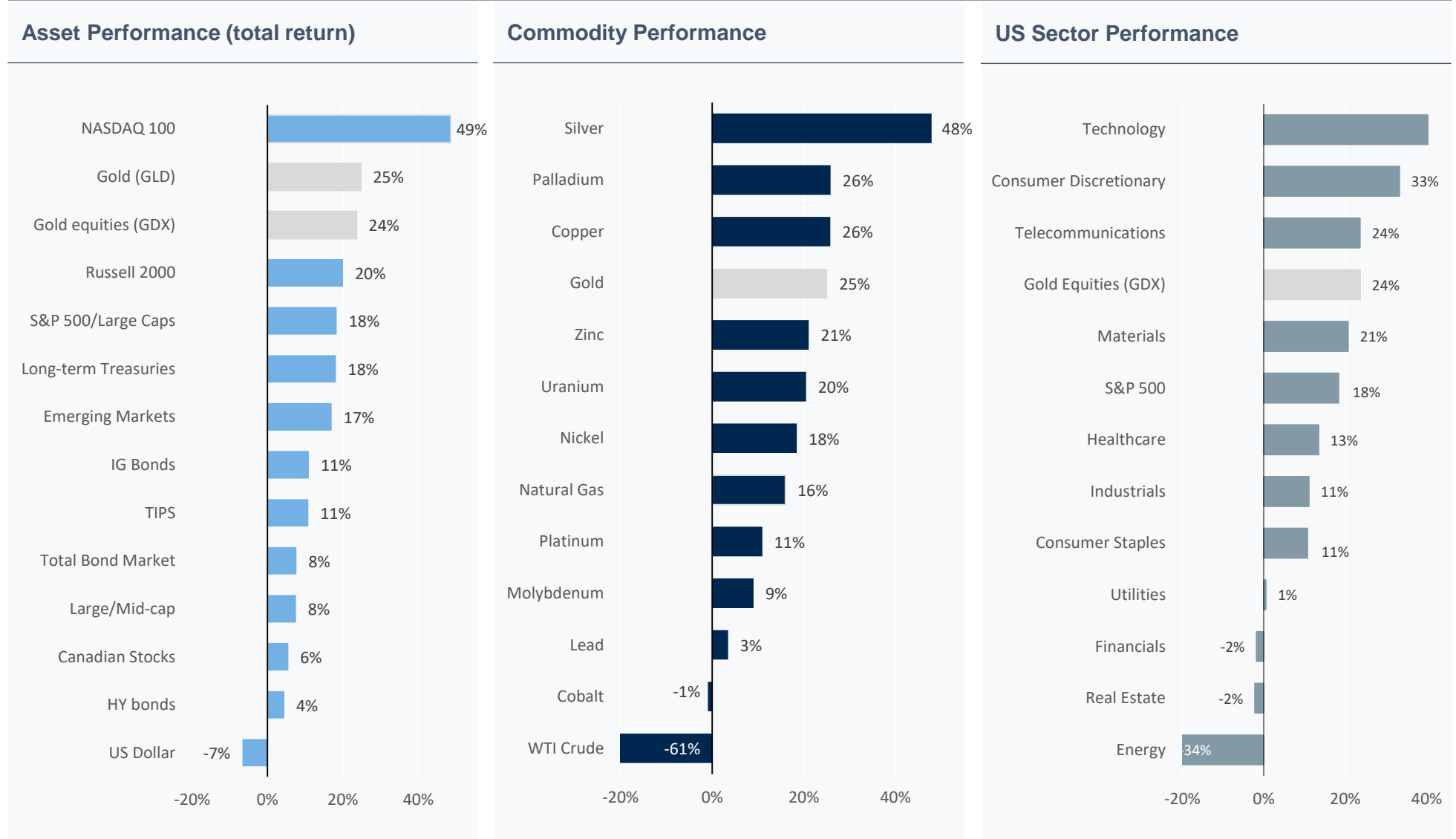
2020 in review



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2020 recap: Global asset and commodity performance

In 2020, gold's performance outpaced most major indices, and performed favourably vs. most commodities. Gold equities also performed favourably compared to other major US sectors.

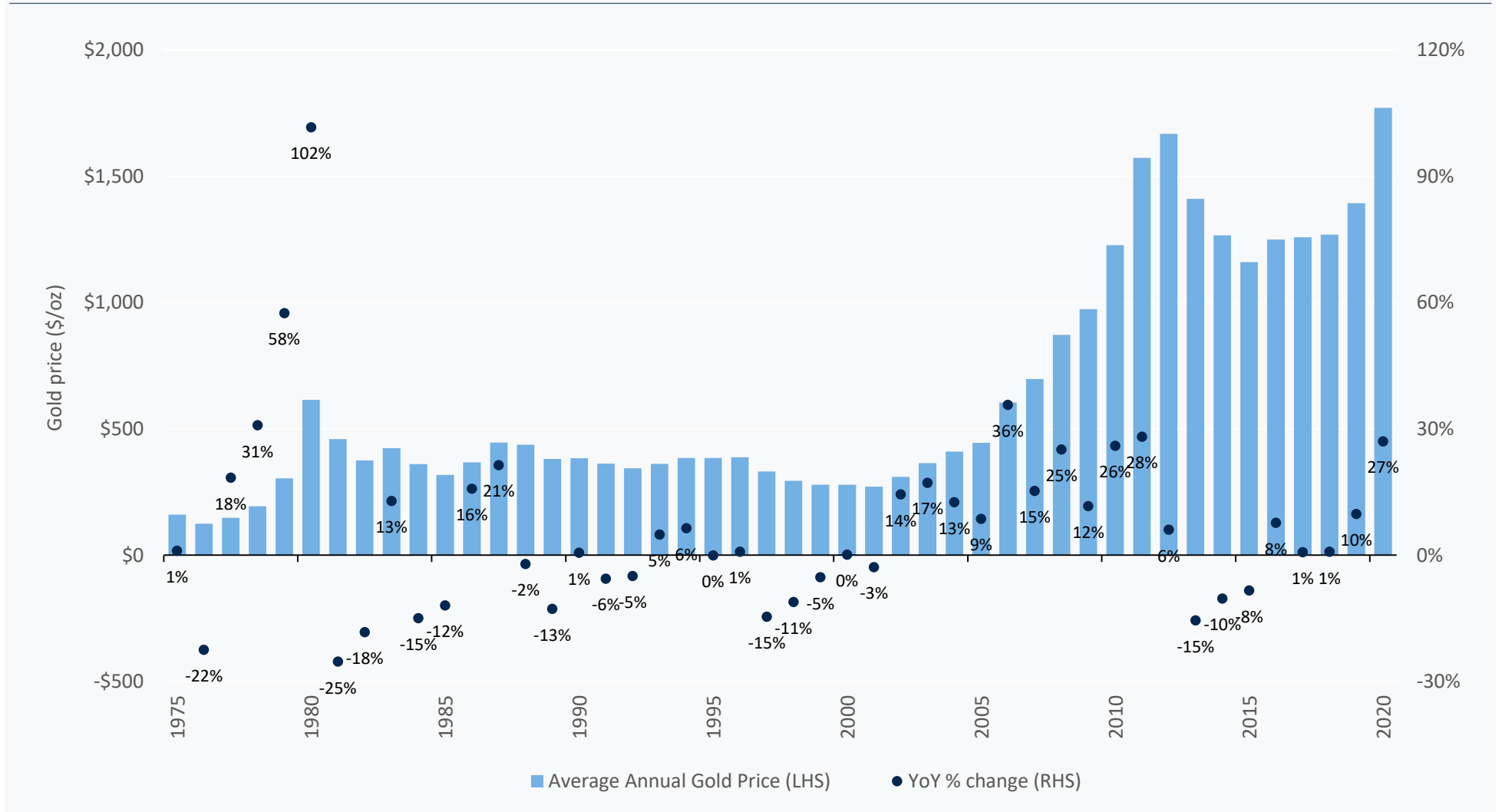


Source: Bloomberg, RBC Capital Markets

2020 recap: Average annual gold prices achieved a record high in 2020

In 2020, gold prices averaged a record high \$1,770/oz. Average prices increased 27% YoY, representing the largest annual increase since 2011, when prior cyclical price highs were achieved. Median annual average prices since 1975 have increased by 6%.

Average annual gold price and % change YoY

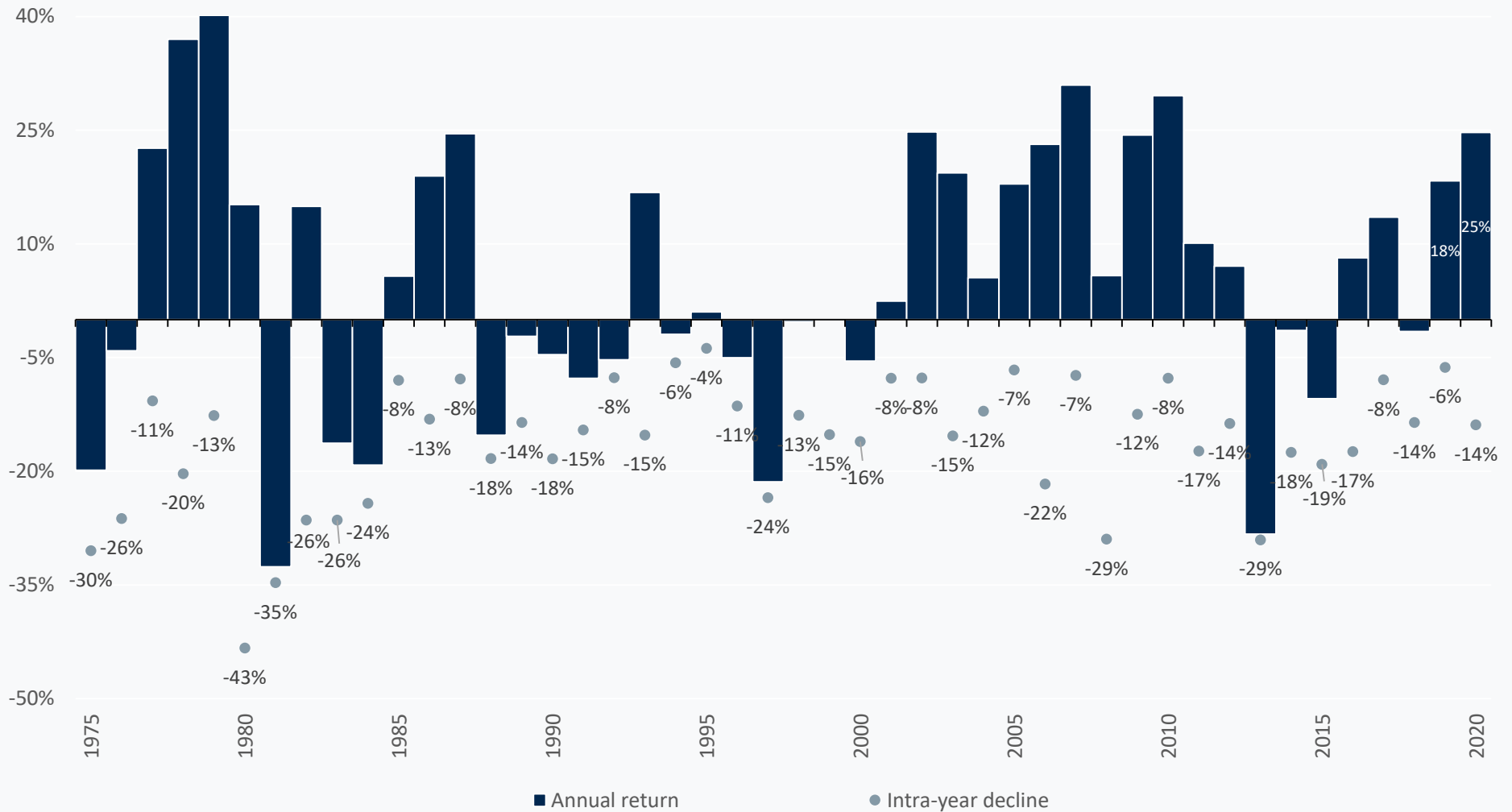


Source: Bloomberg, RBC Capital Markets

2020 recap: Gold prices increased, while intra-year drawdowns were high, but not atypical

In 2020, gold increased 25% and experienced a maximum drawdown of 14%. Since 1975, median calendar year gold price returns have been +6% and drawdowns have been -14%. Gold price volatility is high and material corrections can be experienced even when prices are increasing.

Annual gold price returns and intra-year declines



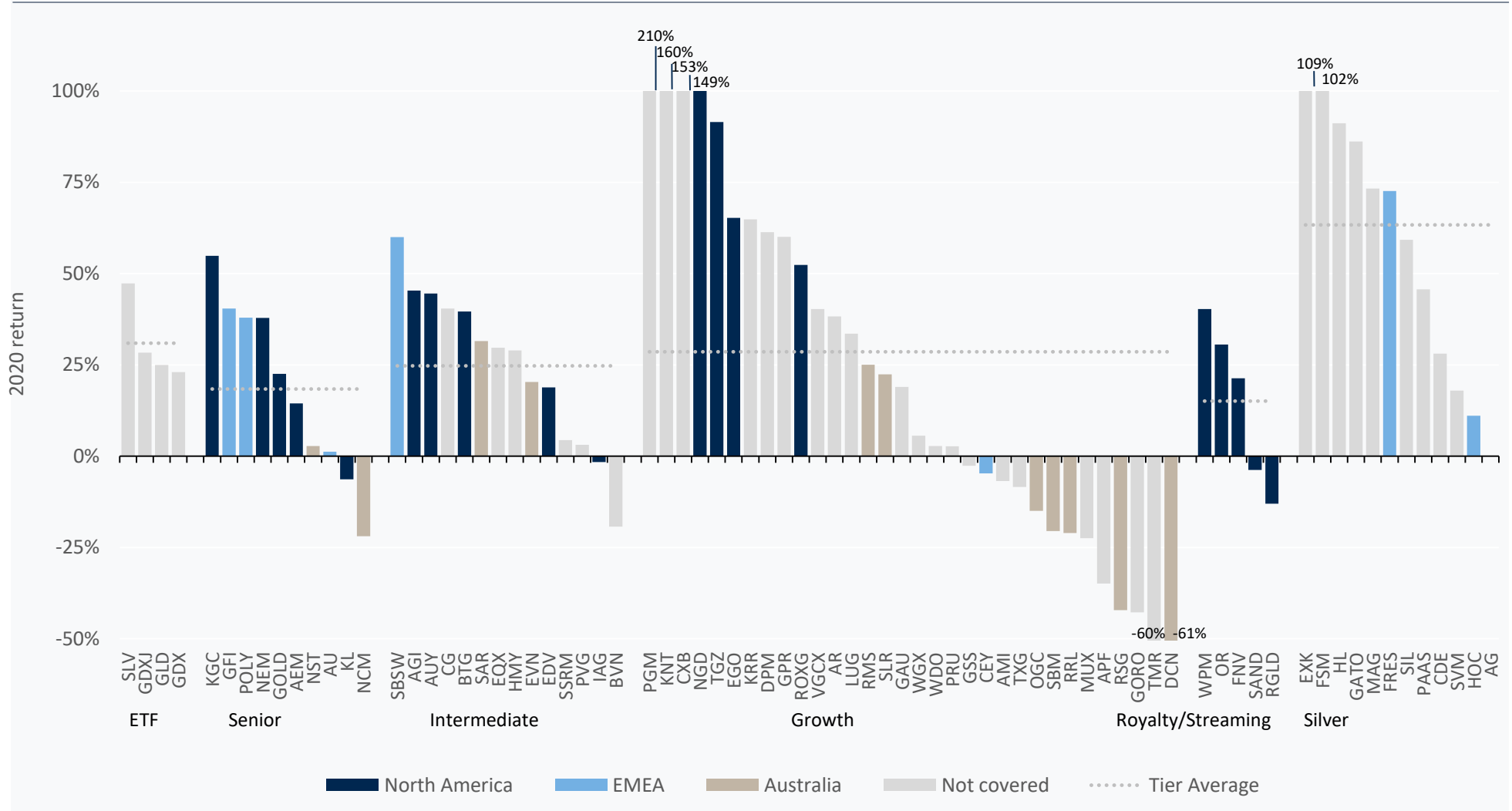
Notes: Intra-year declines refers to the largest price decline experienced from a high to a subsequent low during the year.

Source: Bloomberg, RBC Capital Markets

2020 recap: Precious metals equities performed in line with gold prices

In 2020, gold prices increased by 25%, silver prices increased by 48%, and precious equity indices increased by ~24% (despite their operating leverage). Silver producers outperformed, while smaller growth gold producers also fared well, but with elevated dispersion by individual company.

2020 returns across sector and RBC global precious metals coverage universe

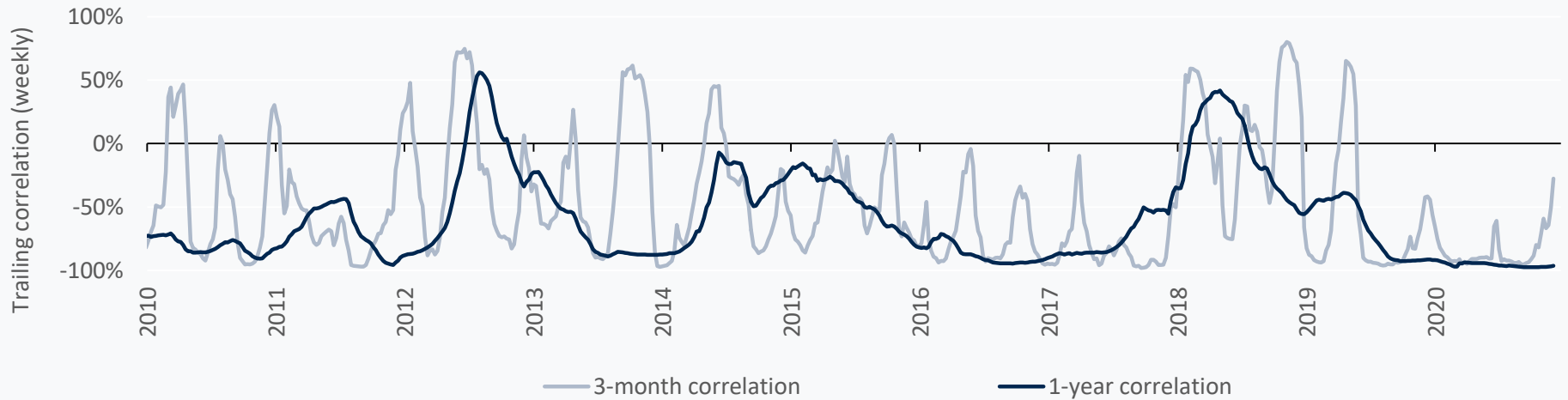


Source: Bloomberg, RBC Capital Markets

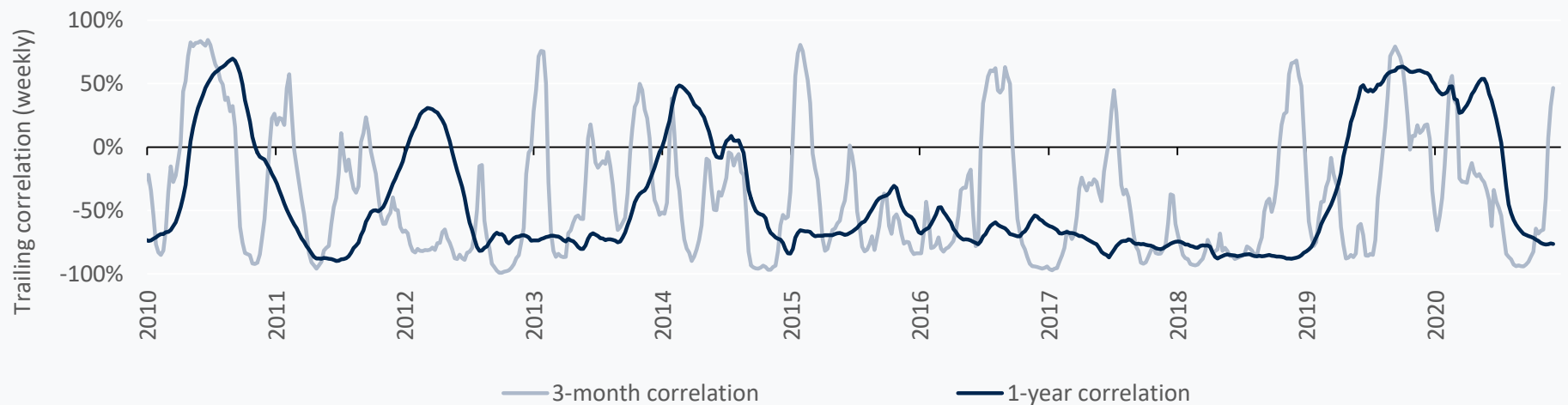
2020 recap: Gold performance was correlated with real rates, while US\$ weakness was a factor in 2H

In 2020, gold prices were highly correlated to declining real interest rates. Post-gold's decline in August, price changes were inconsistent with typical correlations. Over the long term, gold prices have demonstrated the highest correlation to real interest rates and the US dollar.

Gold to TIPS yield correlation (weekly)



Gold to US dollar correlation (weekly)



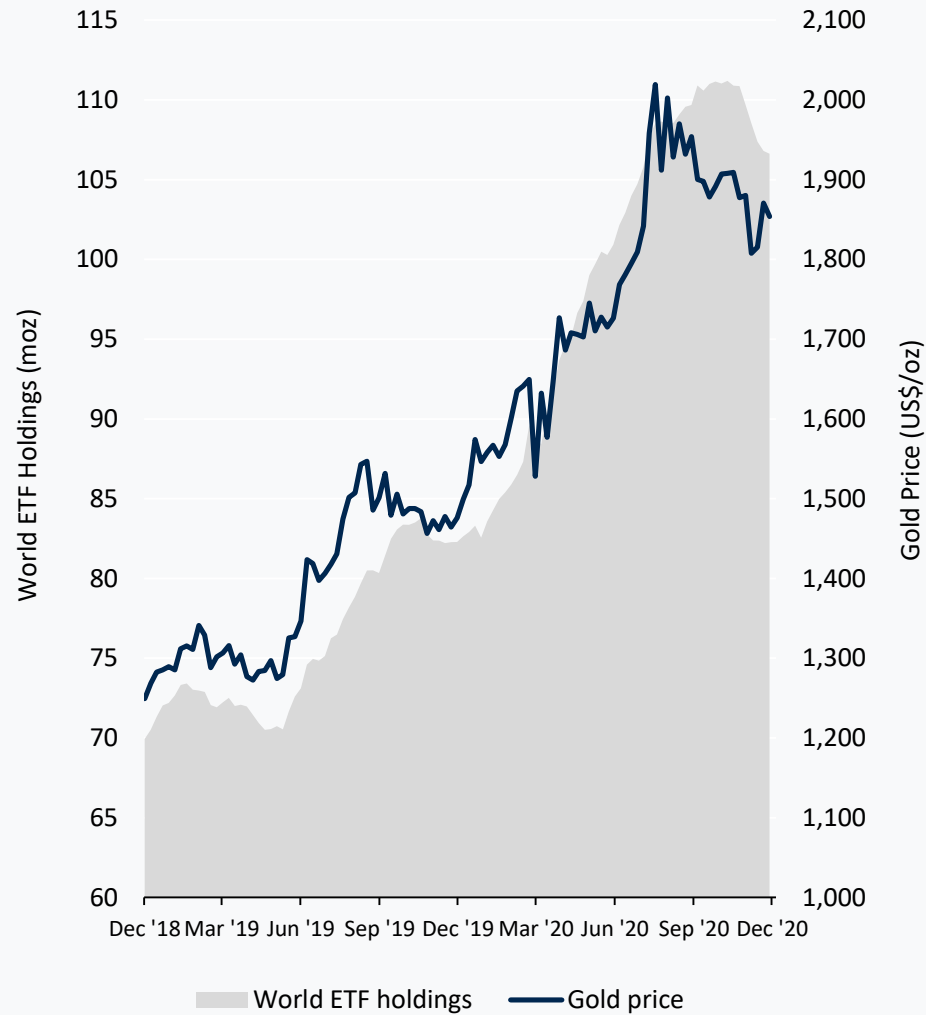
Notes: Top – TIPS yield represented with USGGT10Y Index . Bottom – US dollar represented with DXY Dollar Index

Source: Bloomberg, RBC Capital Markets

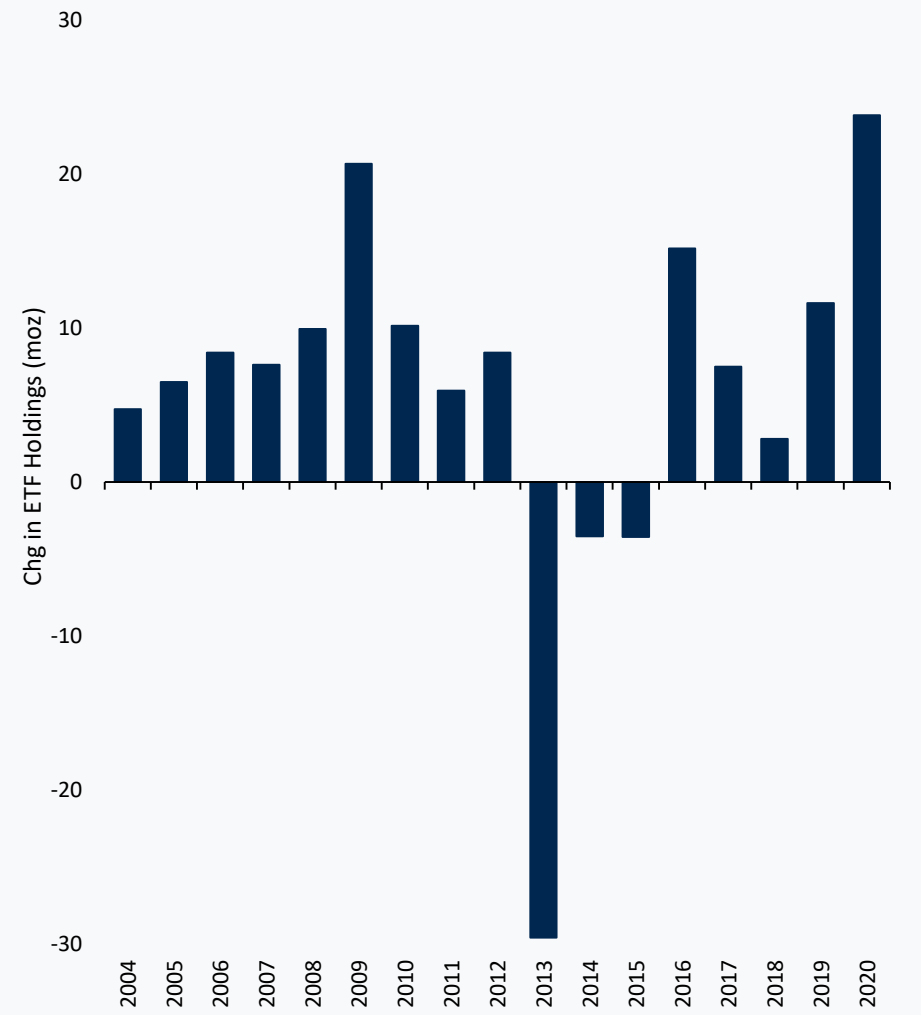
2020 recap: ETF flows were a record high and dominated gold price movement

ETF positions for gold registered record inflows in 2020 of 24moz and were a key factor in delivering higher prices. The relevance of net long speculative gold futures and options positioning in 2020 declined, traditionally a short-term coincident price indicator.

Global gold ETF positions (2-year)



Annual global gold ETF flows

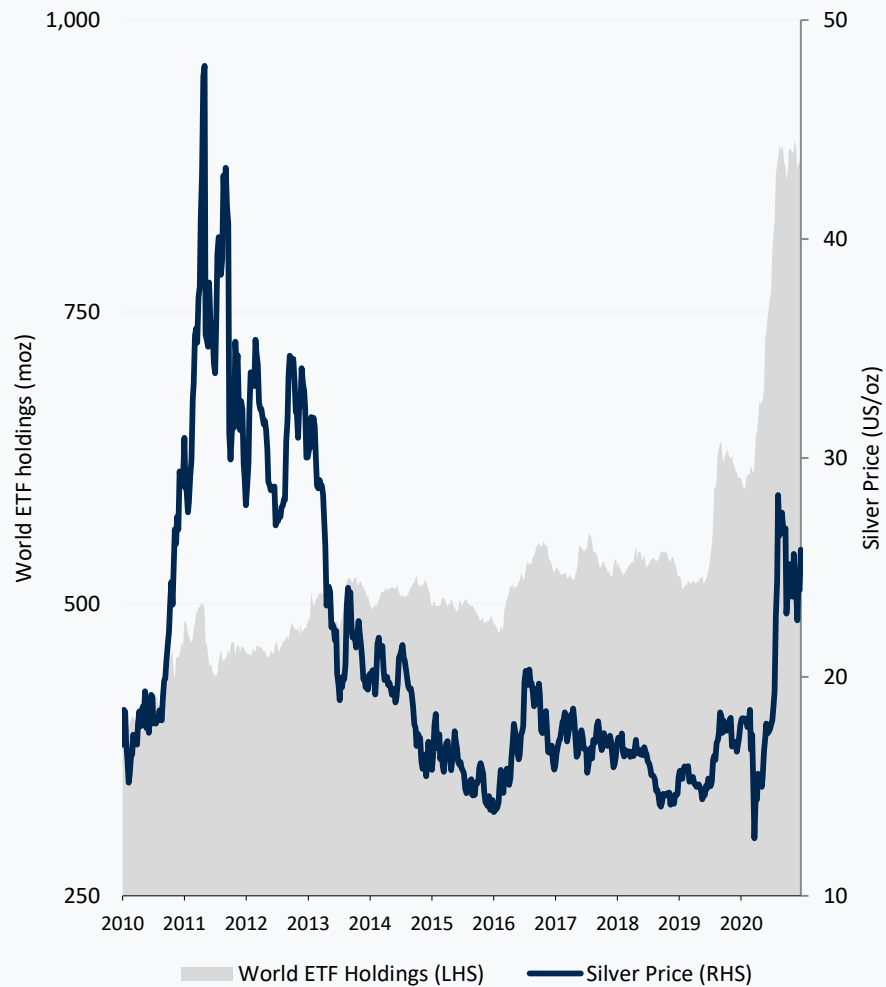


Source: Bloomberg, RBC Capital Markets

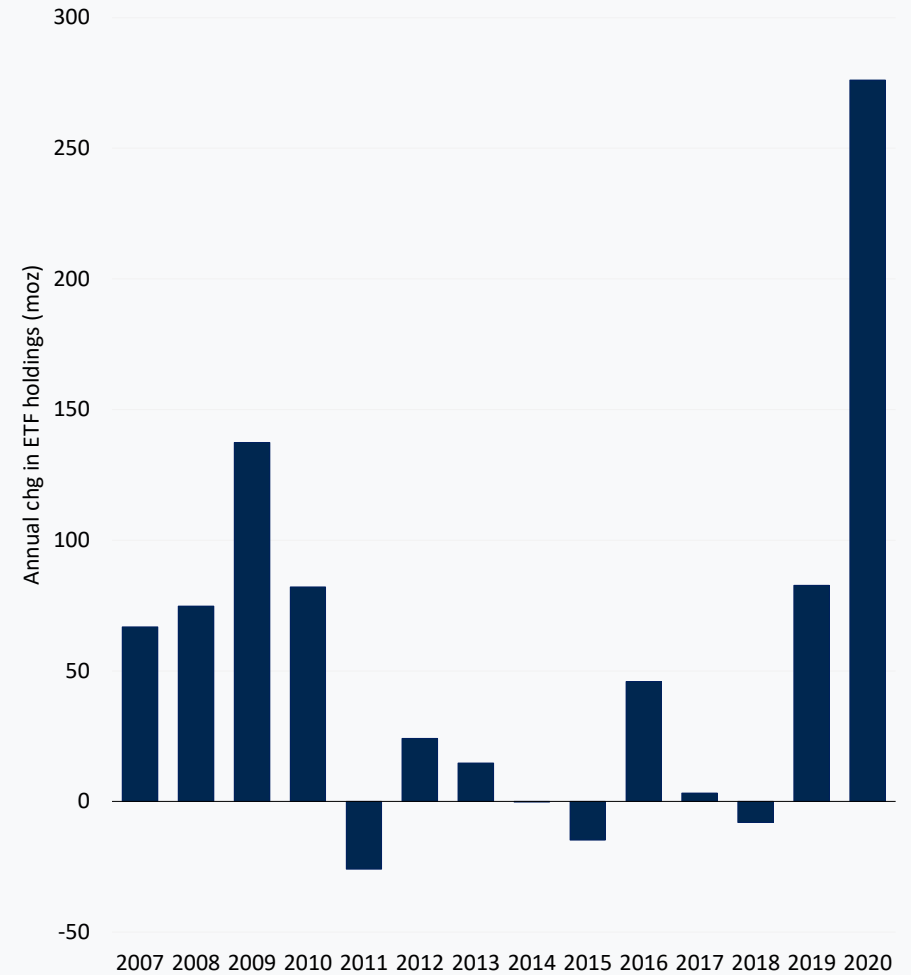
2020 recap: Silver ETF demand entered a new paradigm

Physical demand for silver from ETFs surpassed any prior annual inflows achieved. Silver mine production is ~1/10 the value of the gold market and sharply higher silver ETF investment demand has had a meaningful impact on silver prices.

Silver ETF positions



Annual change in silver ETF holdings

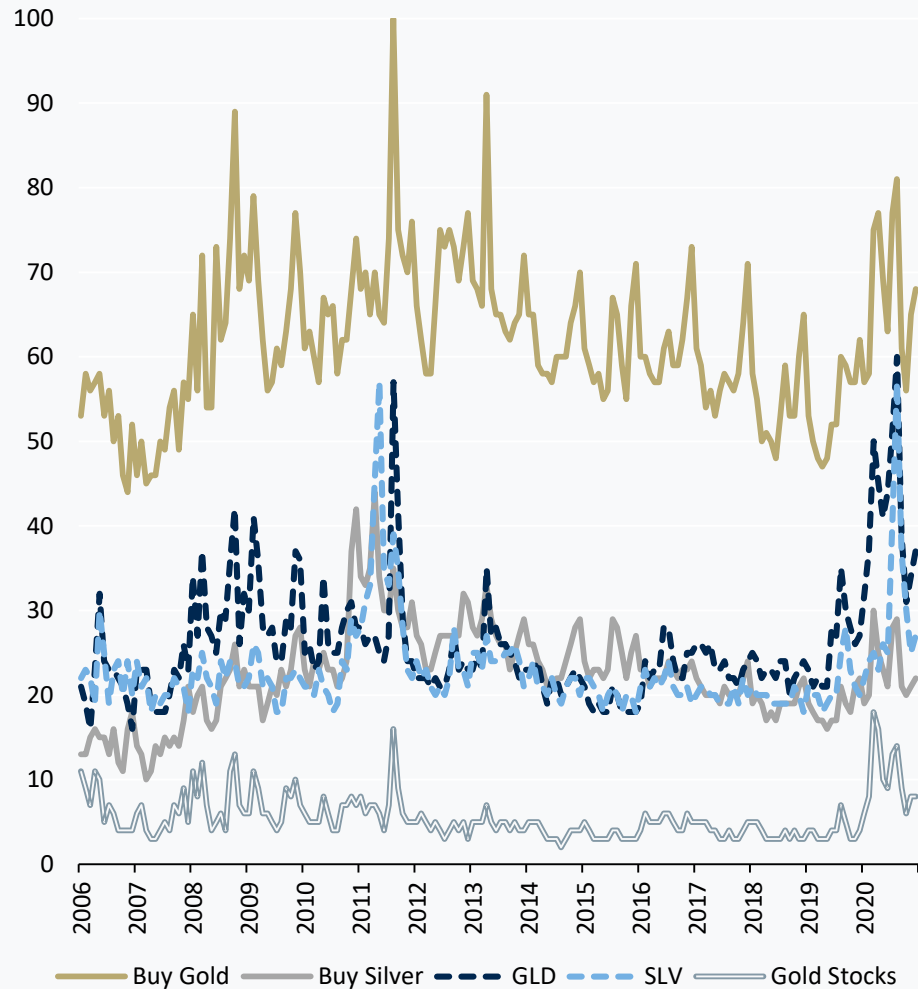


Notes: LHS - Priced as of December 18, 2020. ETF holdings represent global silver holdings
Source: Bloomberg, RBC Capital Markets

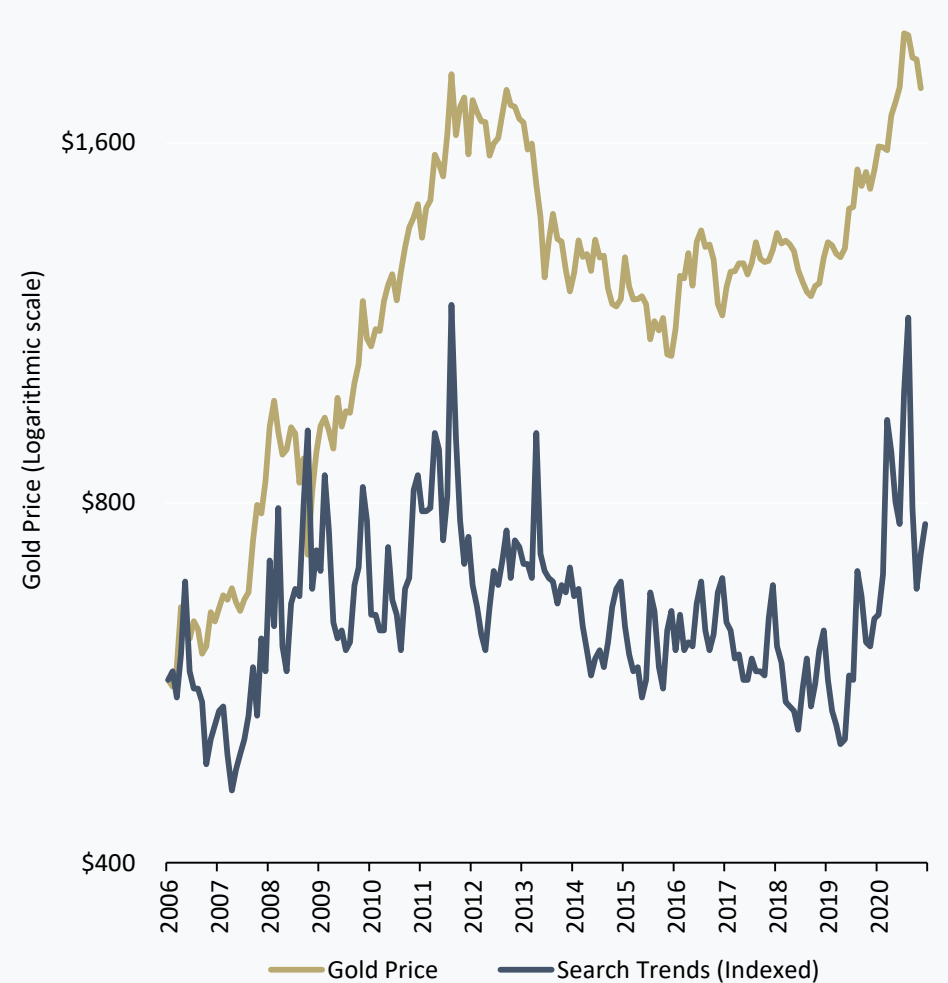
2020 recap: Speculative interest was a factor in higher gold and gold equity prices

Price gains for gold and gold equities were fundamentally supported in 2020, although elevated short-term price gains mid-year in part reflected high levels of speculative interest, which in some cases surpassed gold's prior highs in 2011. More recently, speculative investment interest has declined.

Search trends for precious metals investing



Precious metals search trend index vs. gold price



Notes: LHS numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term. RHS 'Search Trends (Indexed)' indexes the average score of the precious metals search trends to the monthly gold price as of January 2004.

Source: Google, Bloomberg, RBC Capital Markets

Key macroeconomic and gold investment themes

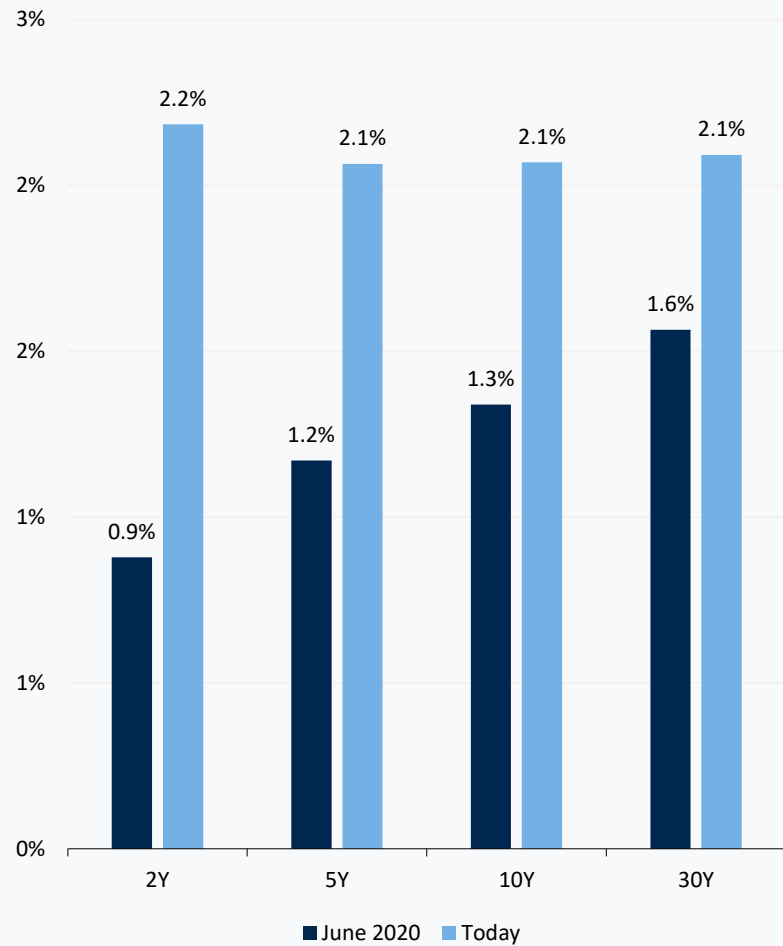


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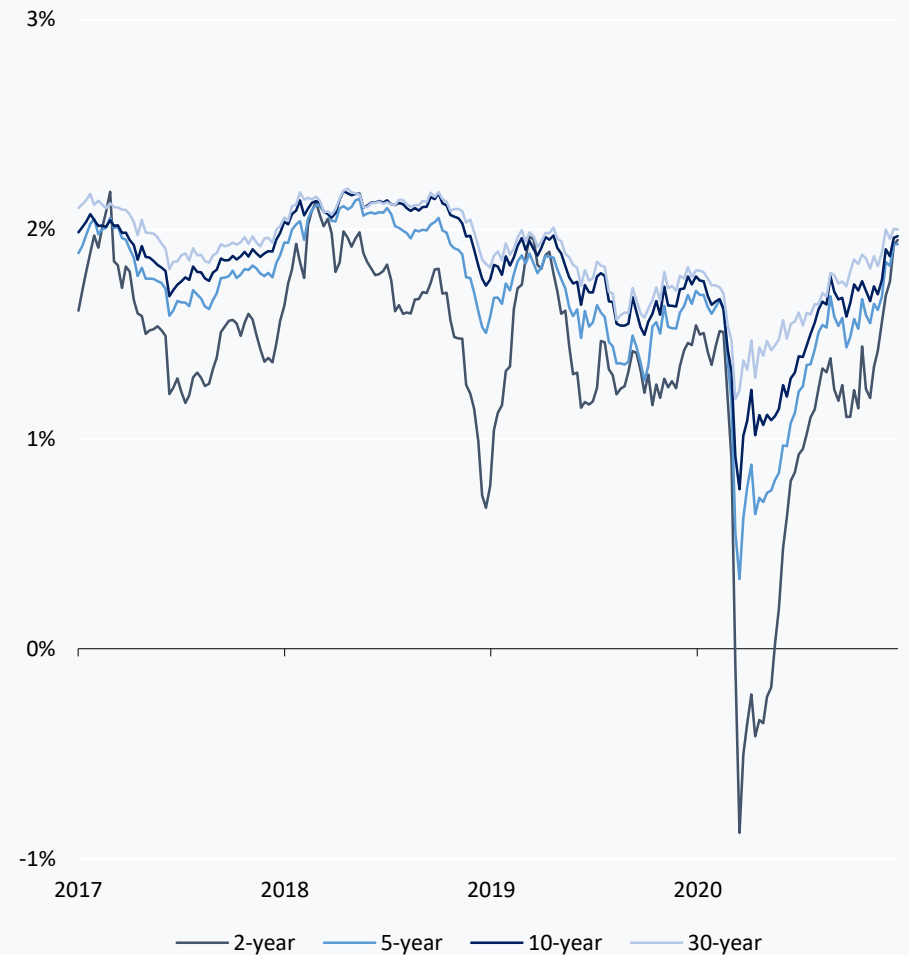
Gold themes: Reflation theme has yielded higher inflation expectations

Inflation expectations across all durations have increased sharply post-pandemic lows. Inflation expectations today reflect monetary and fiscal policy being successful, and the re-emergence of economic growth.

Market inflation expectations changes



Market inflation expectations over time

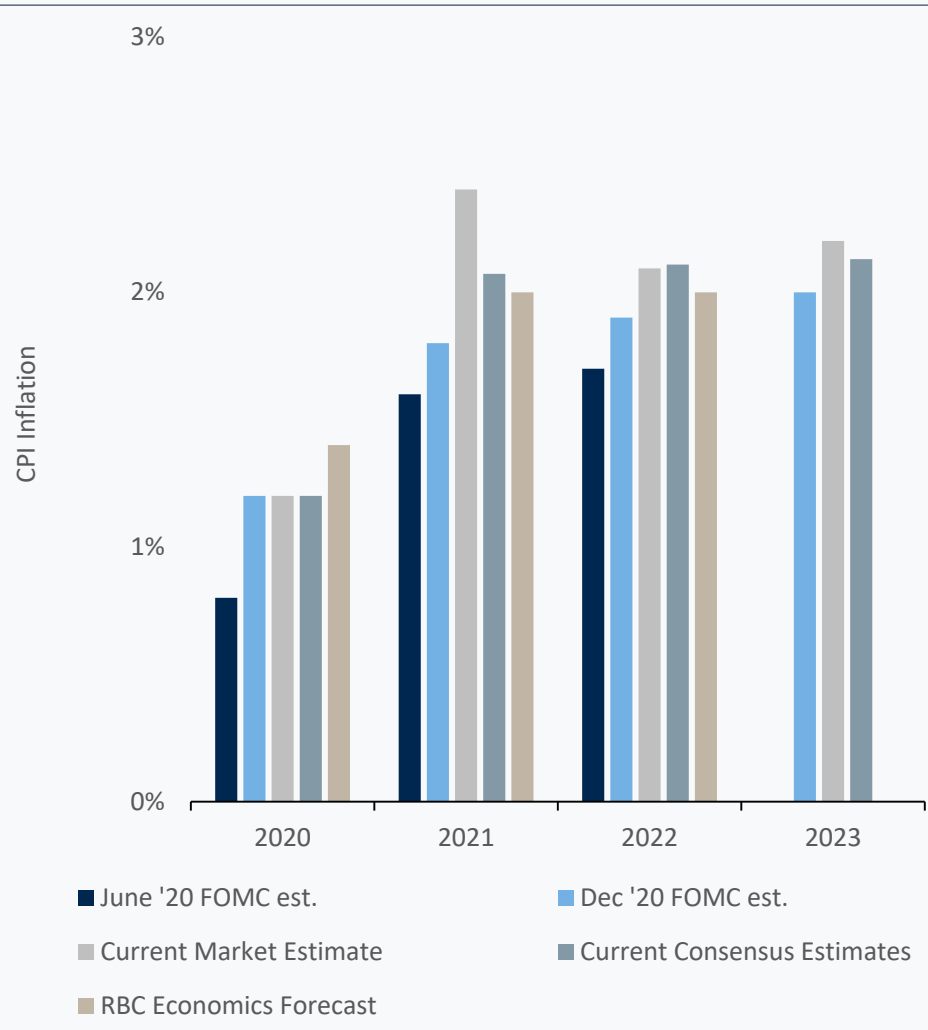


Source: Bloomberg, RBC Capital Markets

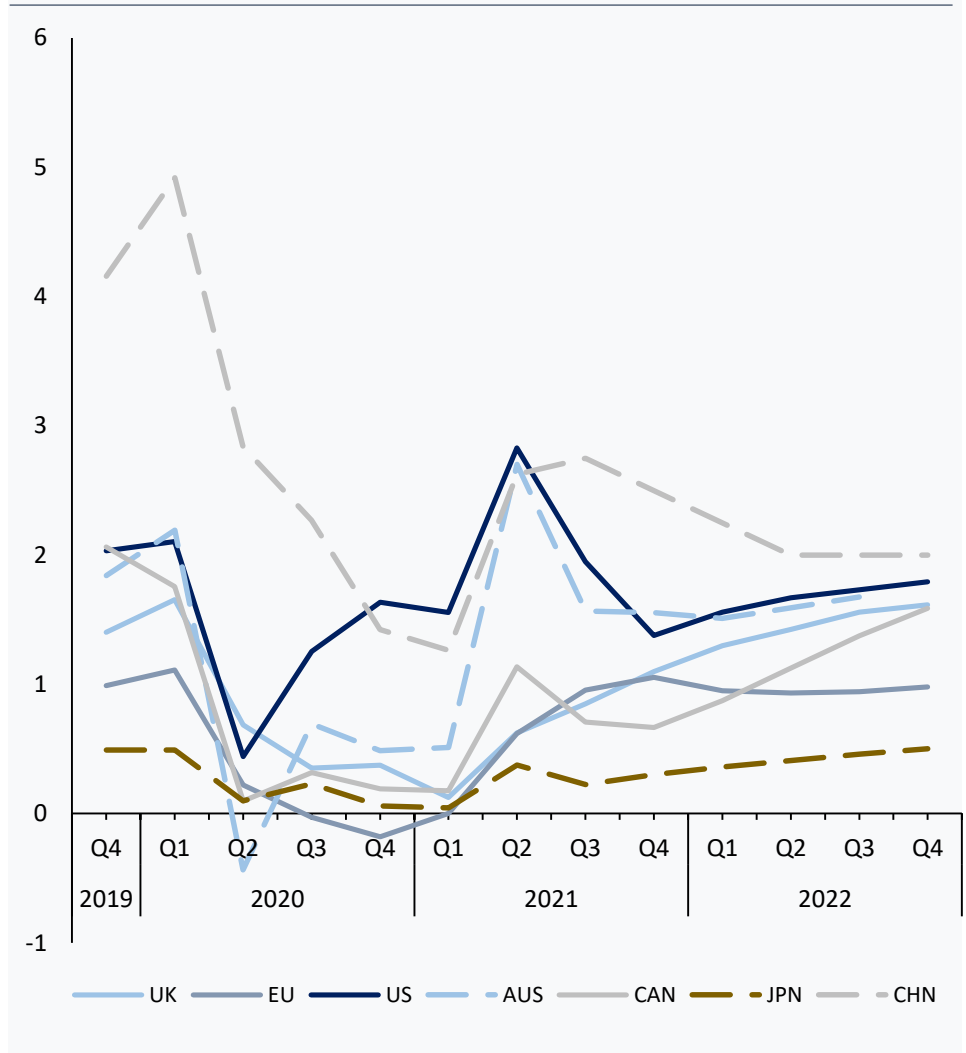
Gold themes: Inflation expectations now imply the Fed will achieve its targets

Firmer upcoming YoY CPI is expected in 1H21, which may reinforce the inflation narrative. As compared to the FOMC's original post-pandemic economic forecasts issued in June 2020, both the FOMC and the market have begun to incorporate higher inflation expectations earlier.

CPI estimates—FOMC vs. consensus and the market



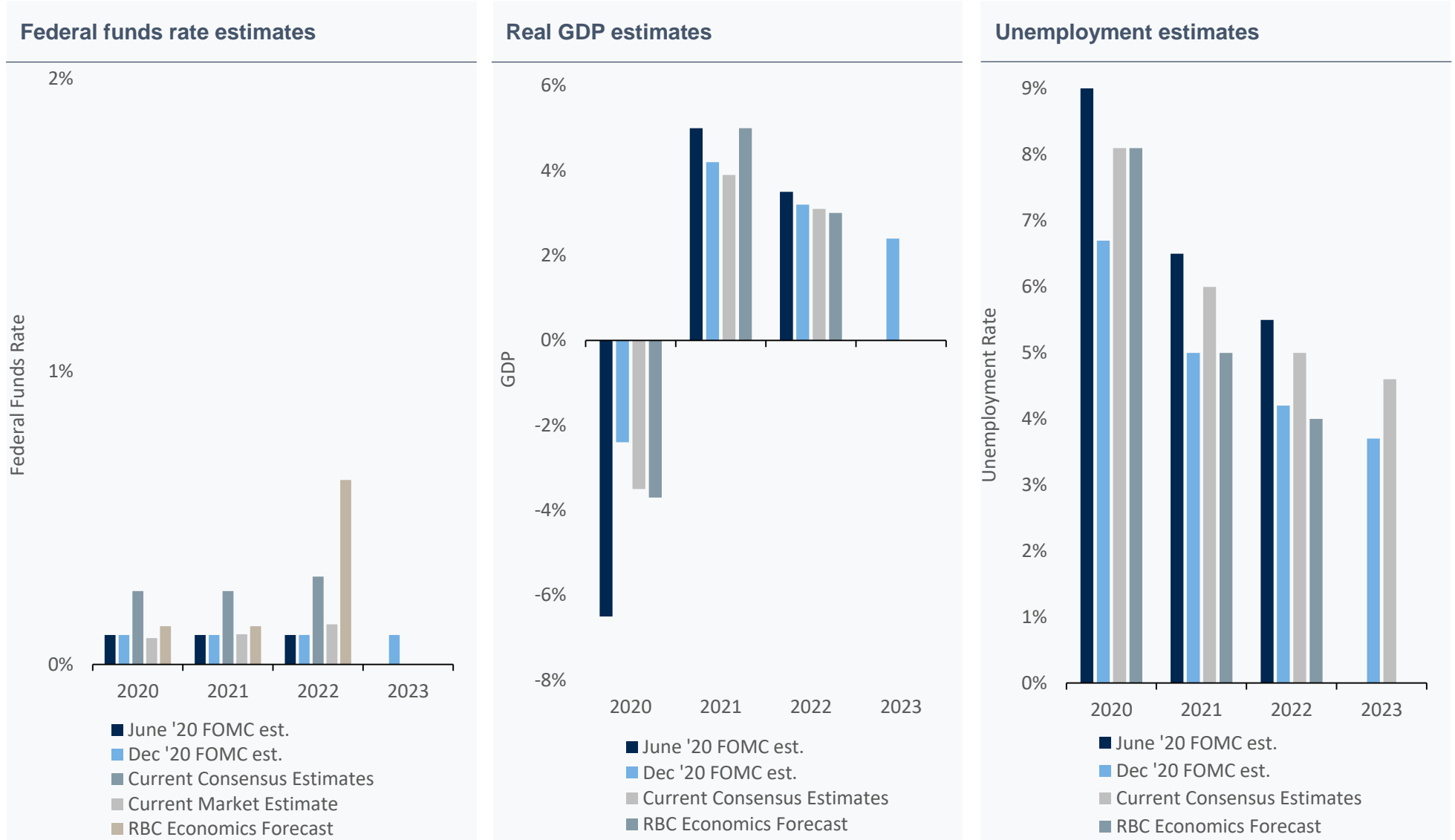
OECD Inflation forecasts by country (YoY)



Source: OECD Economic Outlook, Bloomberg, RBC Capital Markets

Gold themes: Unemployment and growth tracking somewhat better than FOMC targets

As compared to original FOMC post-pandemic forecasts issued in June 2020, unemployment and GDP results have been tracking favourably. Fed funds rate expectations currently target 0% until 2023, although better economic data at the margin could expedite this.



Source: Bloomberg, US Federal Reserve, RBC Capital Markets

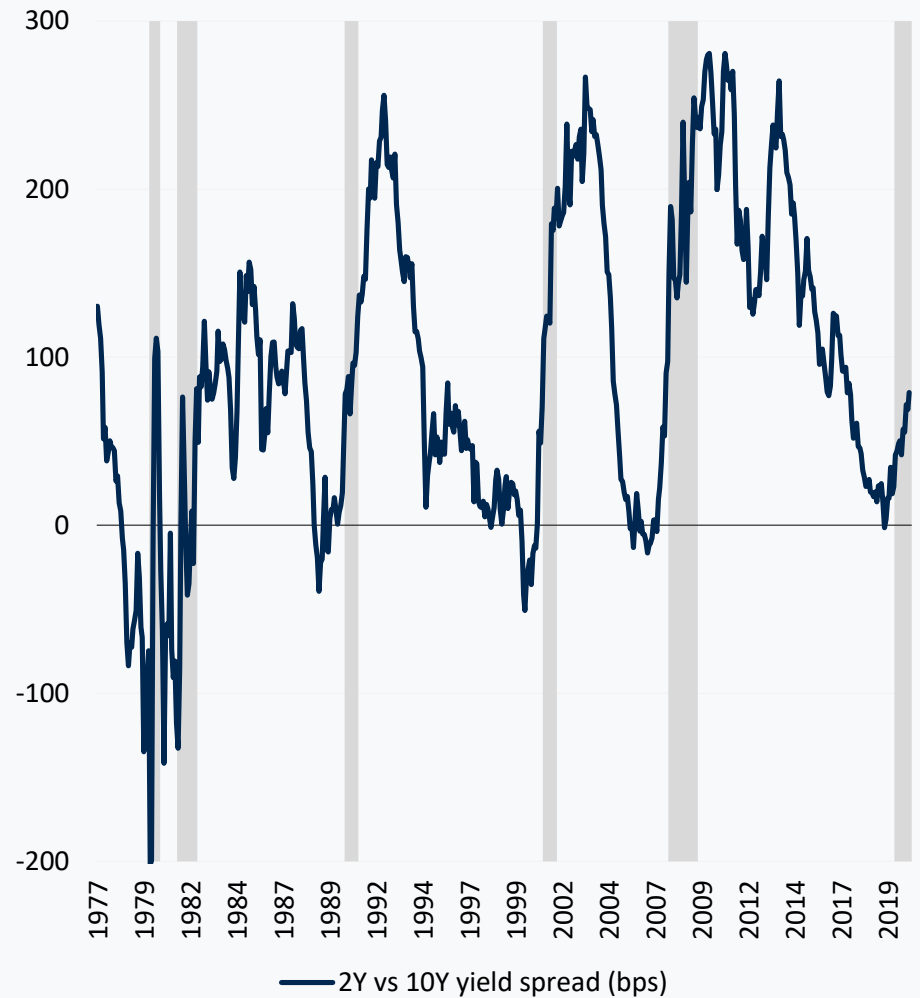
Gold themes: Post-recession expansions typically increase long-term yields

Economic recoveries typically feature incremental monetary tightening and a steepening of the yield curve. 10Y yields of 1.2% are exceptionally low today, in part influenced by ongoing Fed purchases, but these longer-term yields have the potential to increase over the course of the recovery.

US Fed fund rate vs 10Y yield (quarterly, 1963-2020)



2-10Y US Treasury yield curve

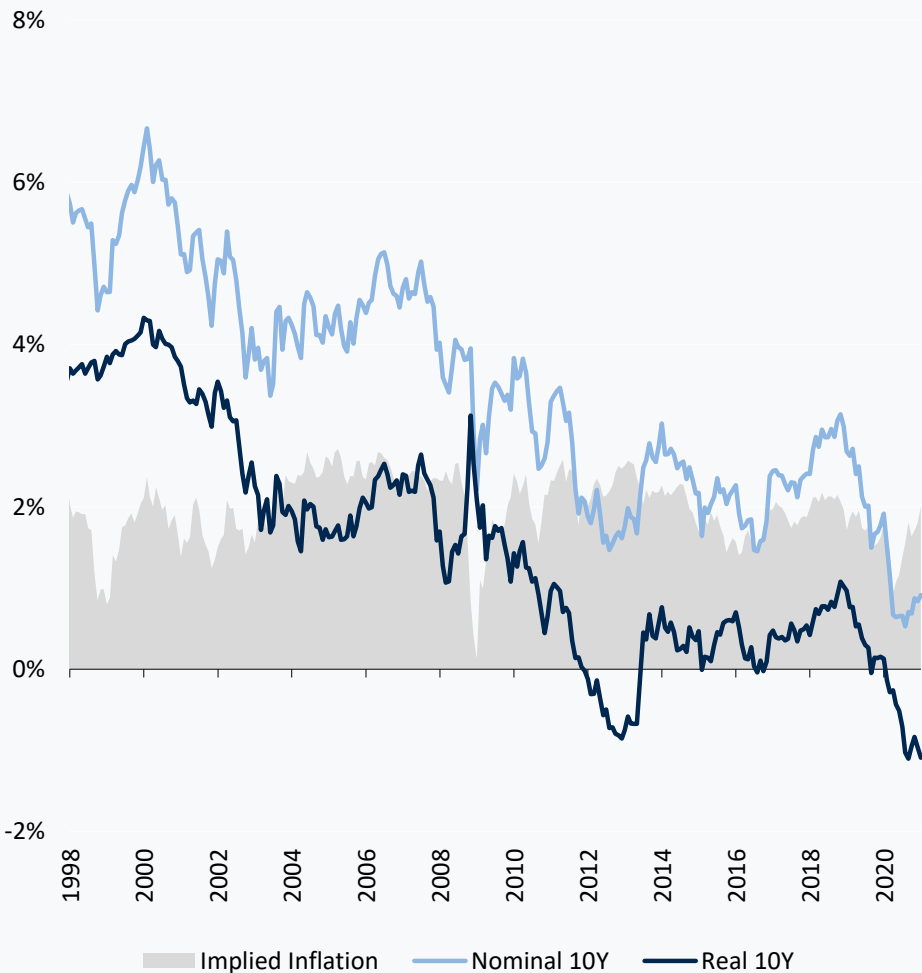


Source: Bloomberg, RBC Capital Markets

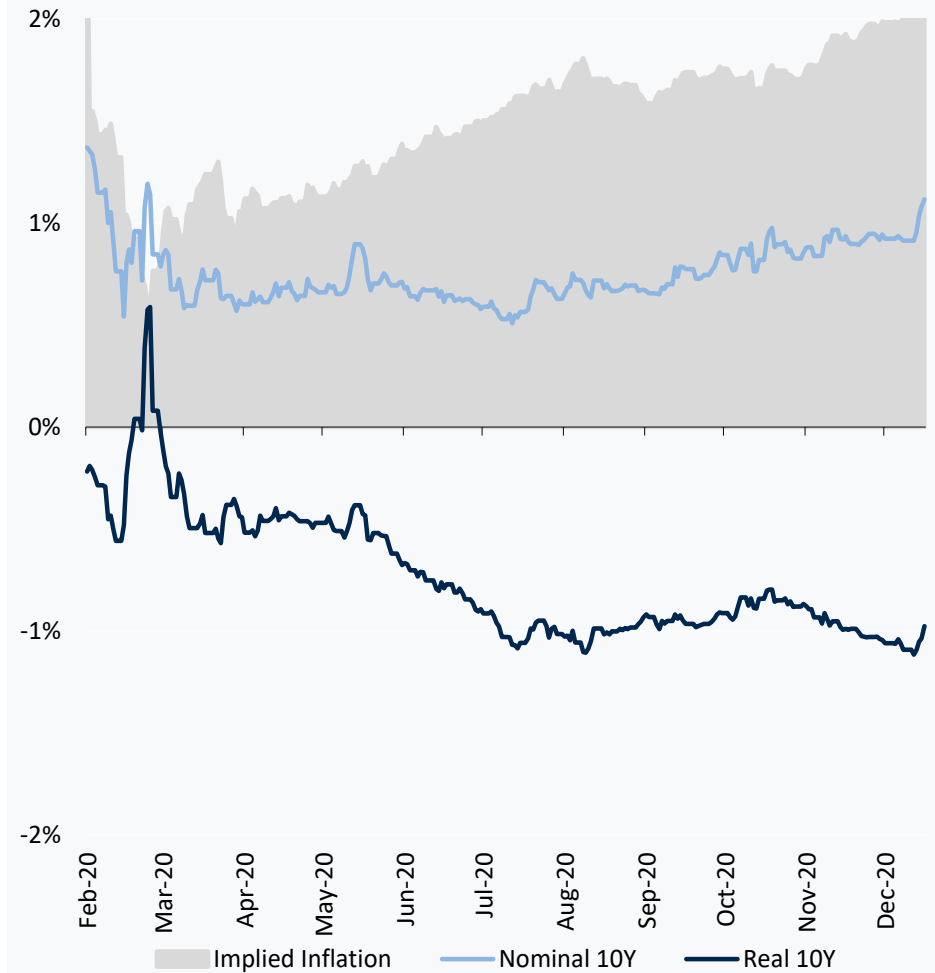
Gold themes: Rising inflation expectations have contributed to lower real rate expectations

Over the long term, 10Y real yields have declined, overwhelmingly reflecting declining nominal rate expectations, and limited changes to inflation expectations. More recently, real rate changes have been driven by rising inflation expectations absent a meaningful change in nominal yields.

Nominal and real 10-year treasury yields (long-term)



Nominal and real 10-year treasury yields (short-term)

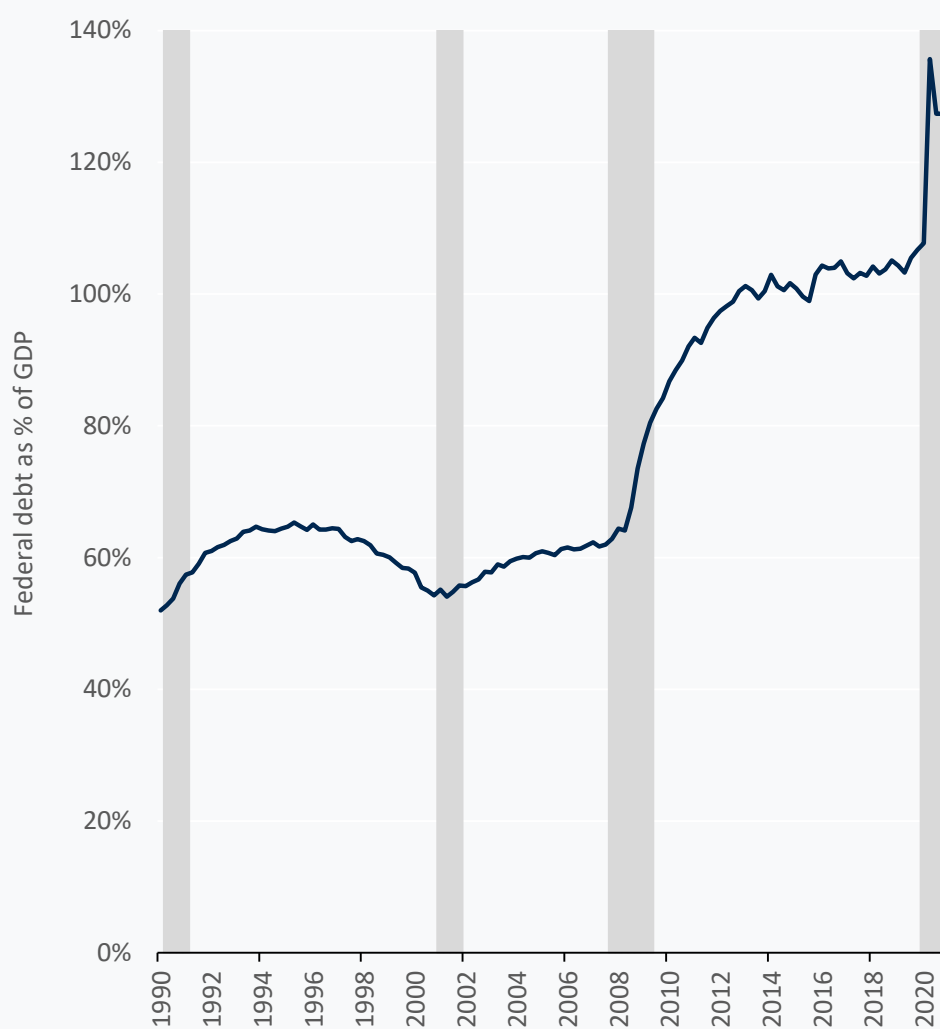


Notes: Implied inflation calculated as the difference between nominal and real 10Y yields.
Source: Bloomberg, RBC Capital Markets

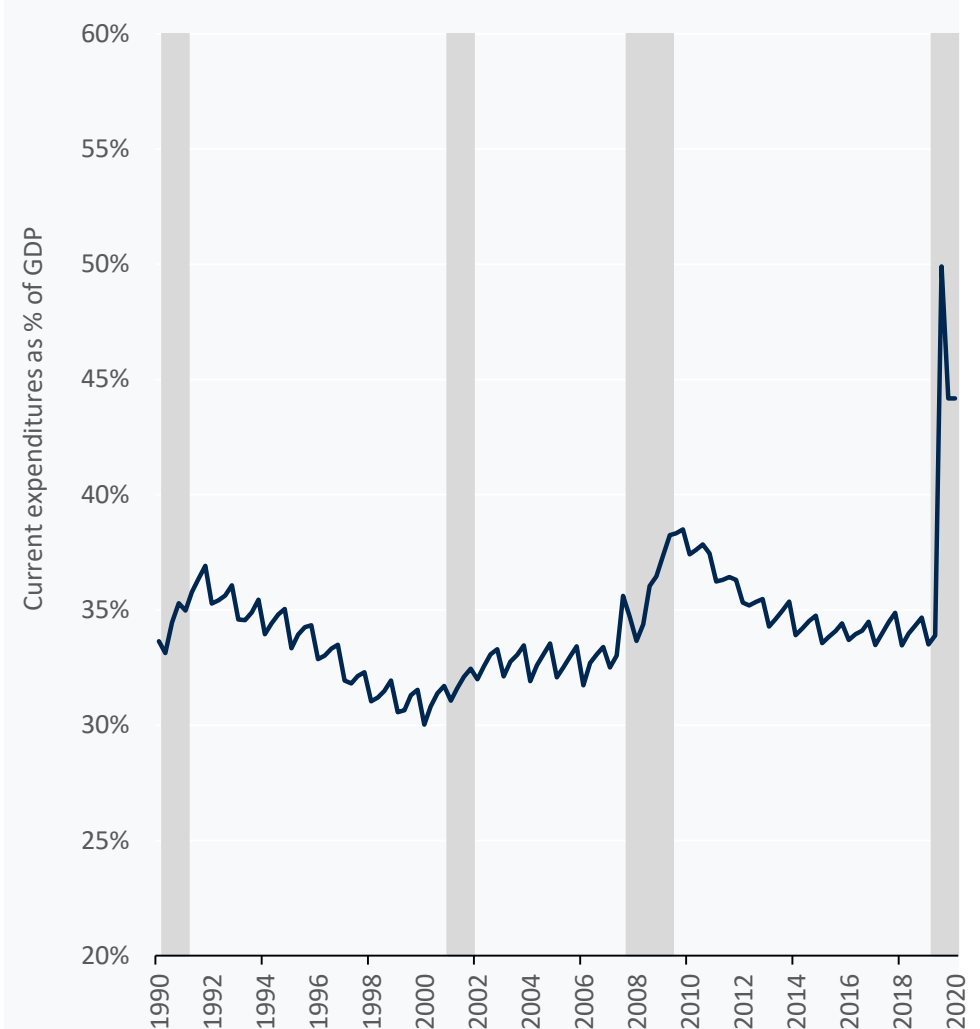
Gold themes: Aggressive fiscal spending has emerged as a key tool (and could continue)

In 2020, aggressive fiscal spending has emerged as a tool to dampen the impact of recession conditions and, post its success, may be deployed more willingly as a tool going forward. Utilization of these fiscal tools could raise the prospects of medium to long-term inflation materializing.

US debt to GDP



Government spending to GDP



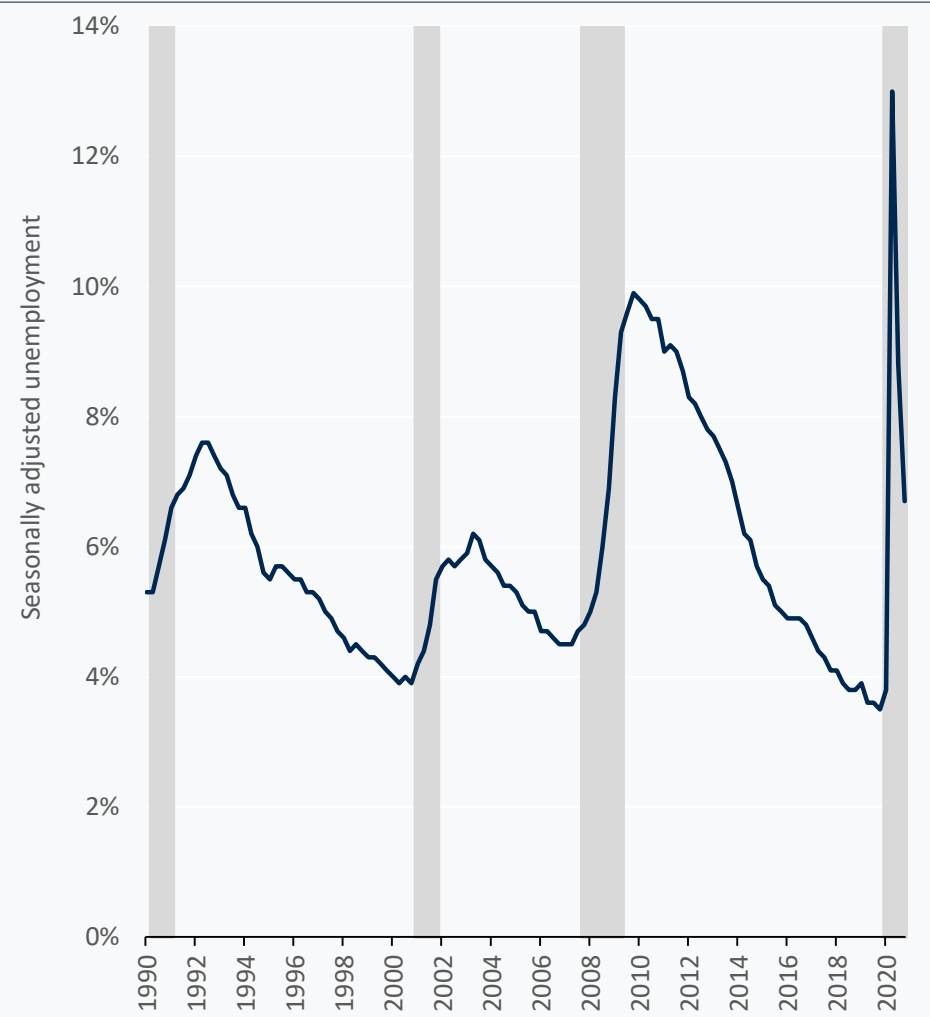
Notes: LHS - Federal debt as % of GDP represented with FDTGATPD INDEX; RHS - Entitlements and mandatory spending as % of GDP represented as GVRECUR Index divided by GDPACUR\$ Index.

Source: Bloomberg, RBC Capital Markets

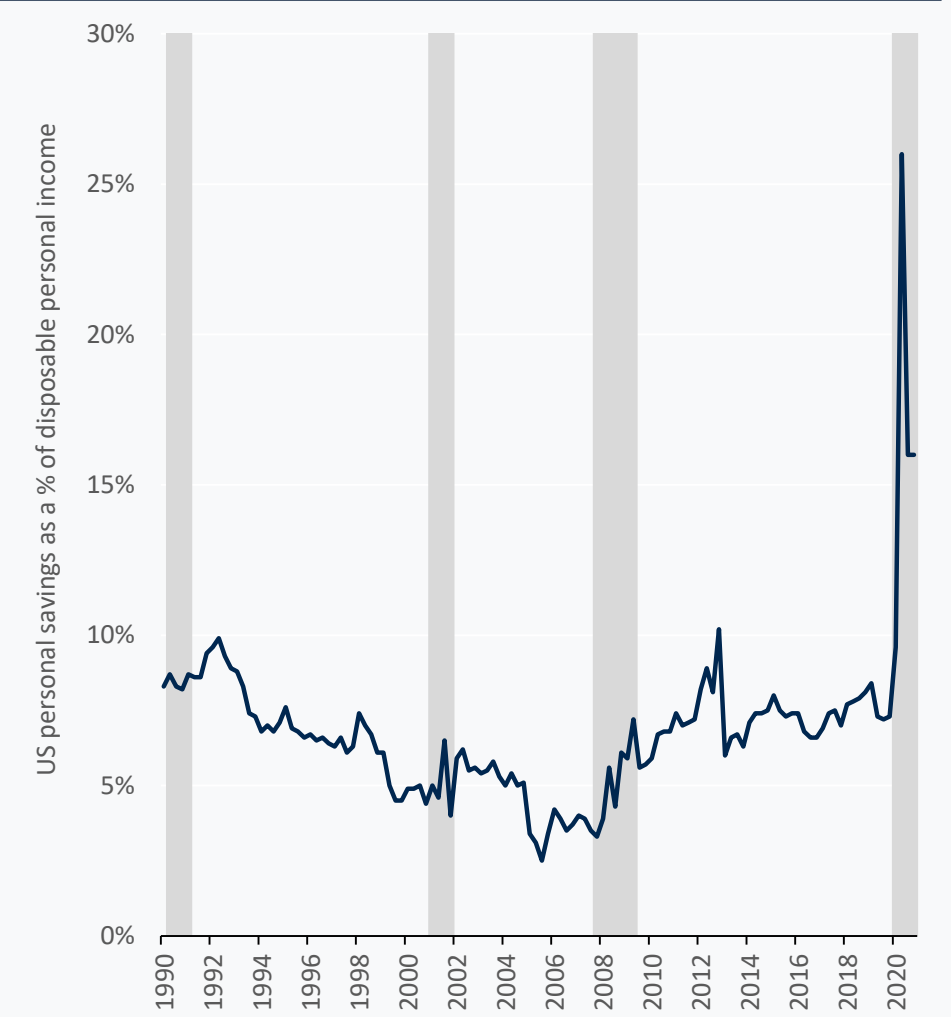
Gold themes: US employment is recovering and personal savings rates have sharply increased

Despite higher unemployment, the personal savings rate has sharply increased, a function of health-related spending constraints and fiscal stimulus. Current savings have the potential to increase future consumption demand, and could contribute to inflation.

US unemployment rate, seasonally adjusted



US personal savings rate



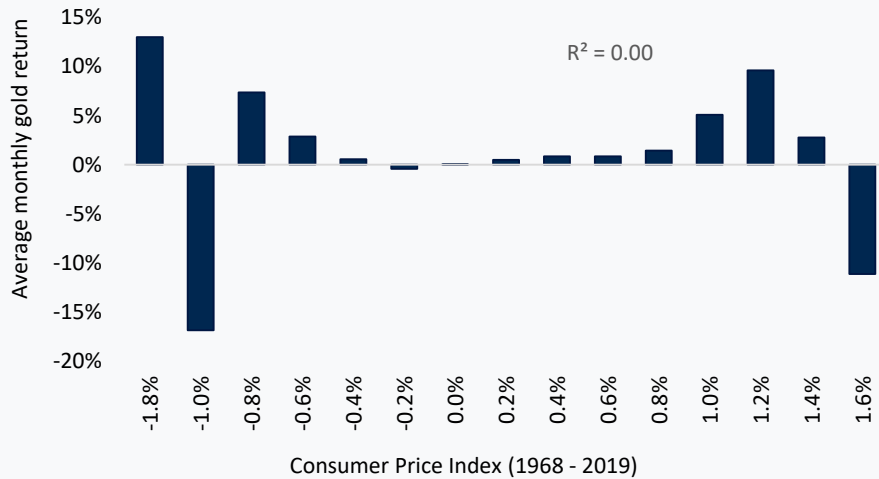
Notes: LHS - Seasonally adjusted unemployment represented with USURTOT Index. Recessions shaded in light grey; RHS - US personal savings as a % of disposable personal income represented with PIDSDPS Index.

Source: Bloomberg, RBC Capital Markets

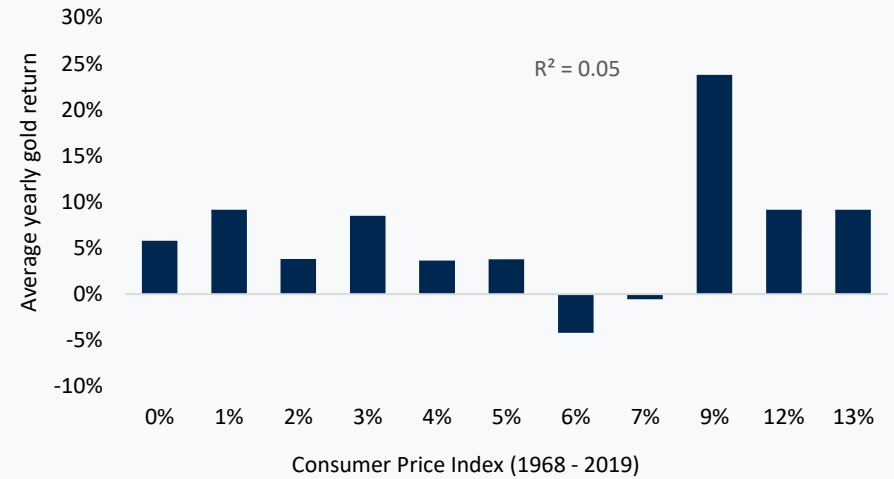
Gold themes: Gold performance demonstrates a weak correlation to inflation alone

Inflation is frequently cited as a key factor for gold price performance, but in isolation, gold's performance demonstrates a low correlation to inflation. Evaluating inflation absent a perspective upon nominal yields can be misleading.

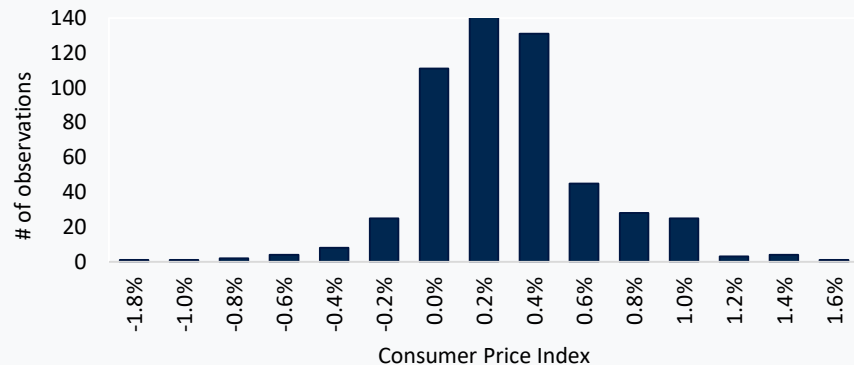
US CPI vs gold performance – Monthly (1968-2019)



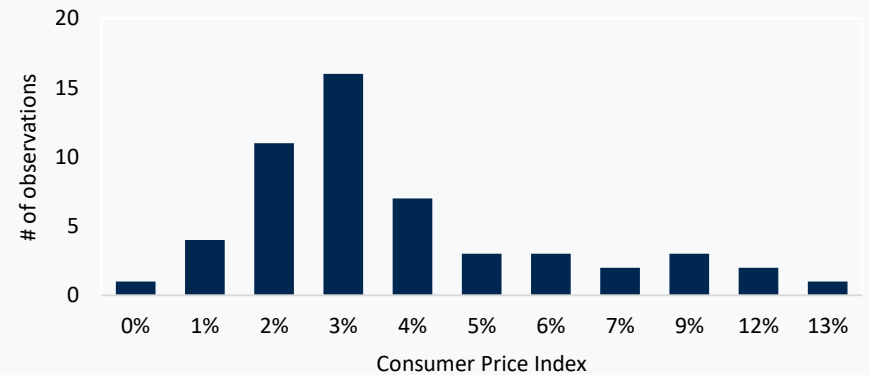
US CPI vs gold performance – Annually (1968-2019)



Frequency of observations



Frequency of observations

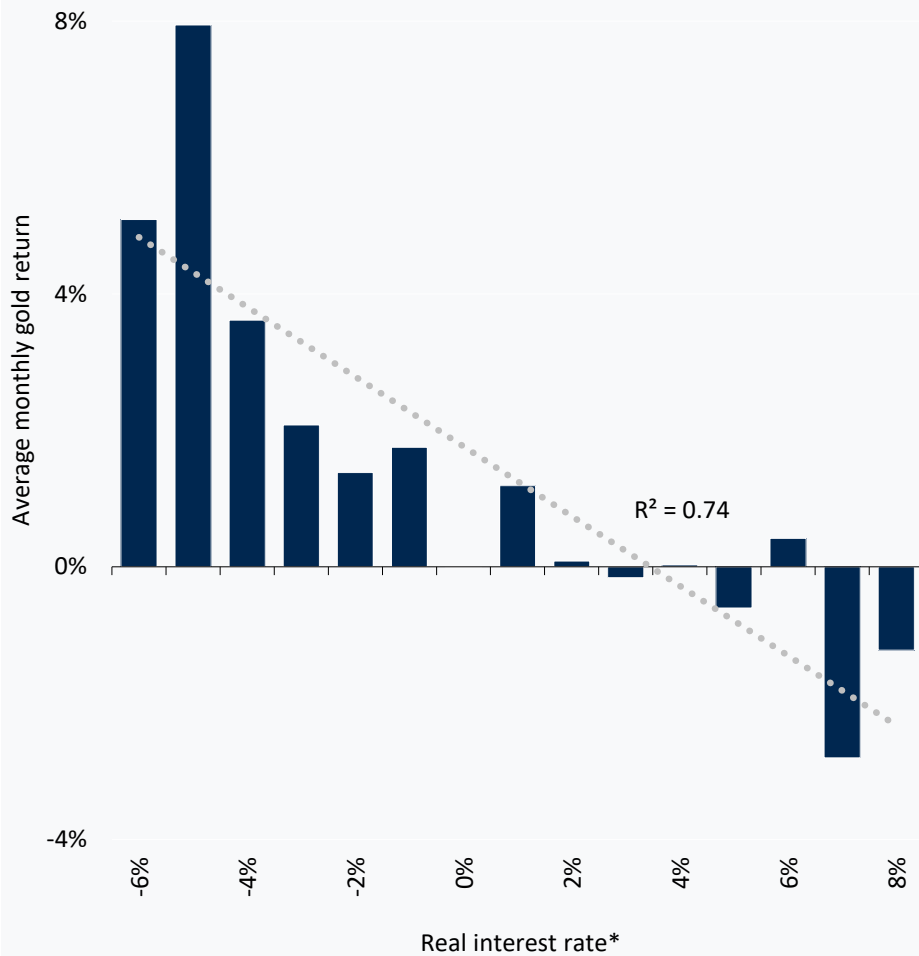


Note:
Source: Bloomberg, RBC Capital Markets

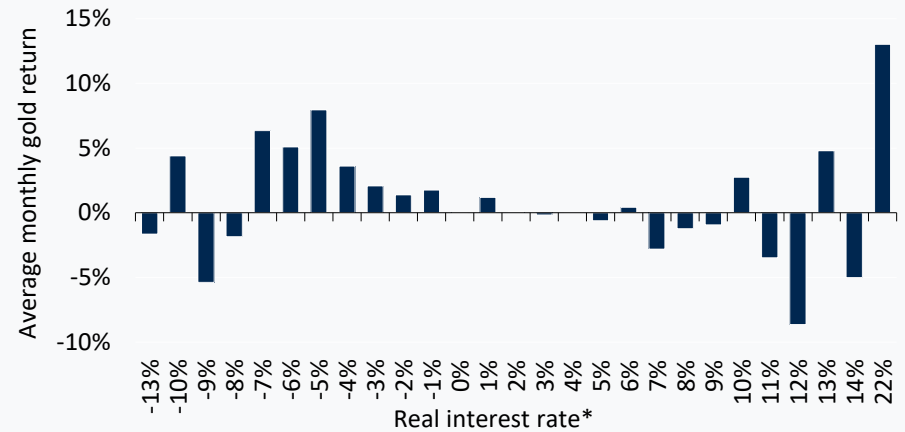
Gold themes: Gold is most consistently correlated to real yields over the long term

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.

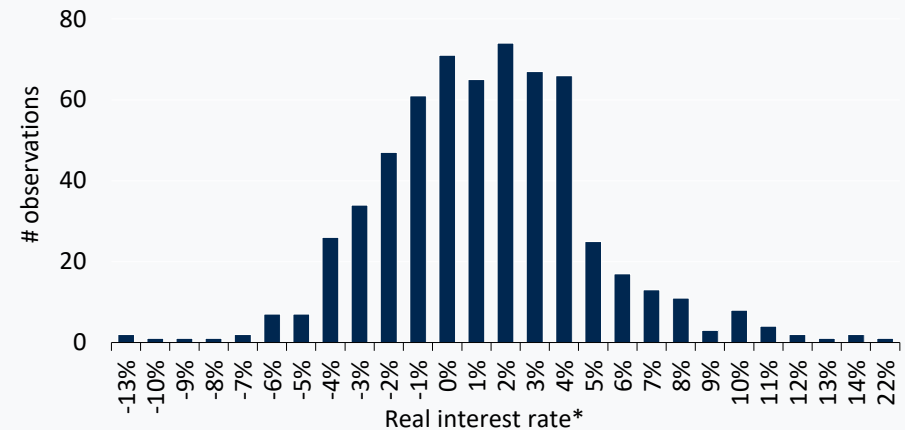
US real interest rates vs monthly gold performance (1968-2018)
95% of observations



100% of observations



Frequency of observations

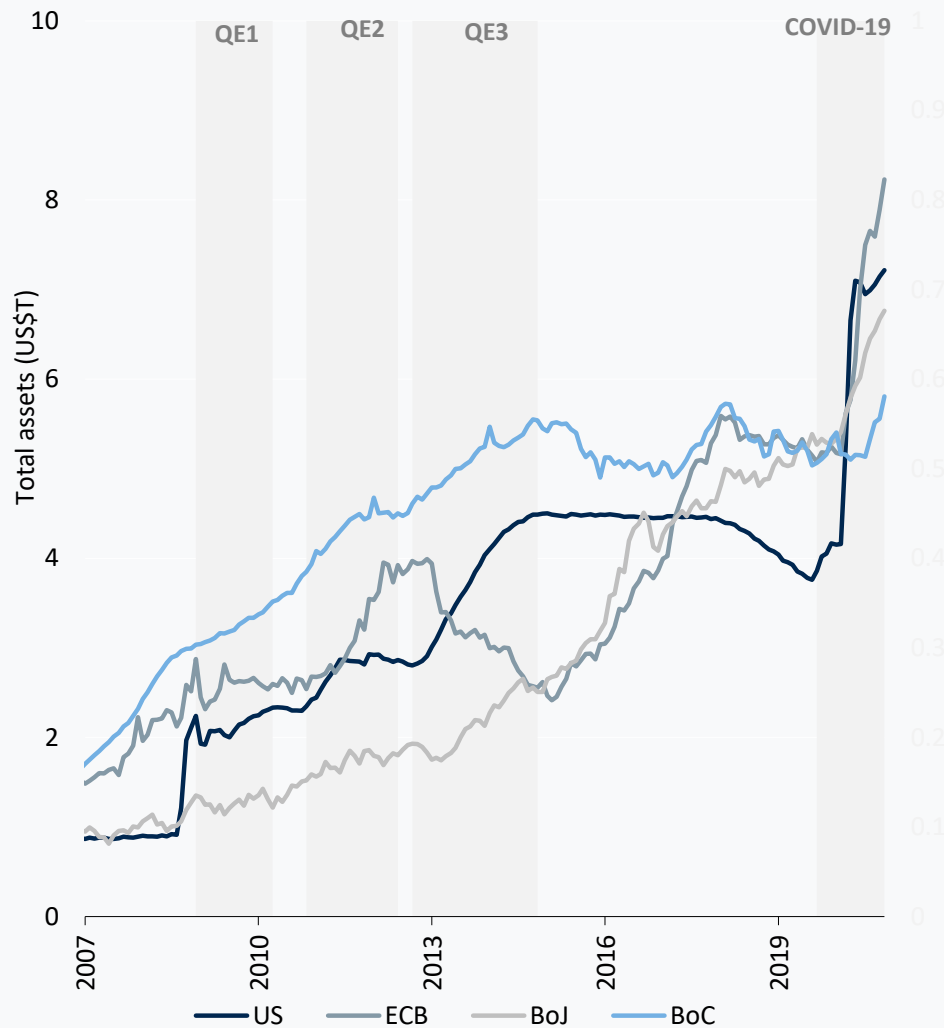


Notes: Real interest rate calculated as the monthly yield of US one-year t-notes with constant maturity adjusted for inflation. Inflation represented by annualized month over month CPI to match duration. Source: Bloomberg, RBC Capital Markets

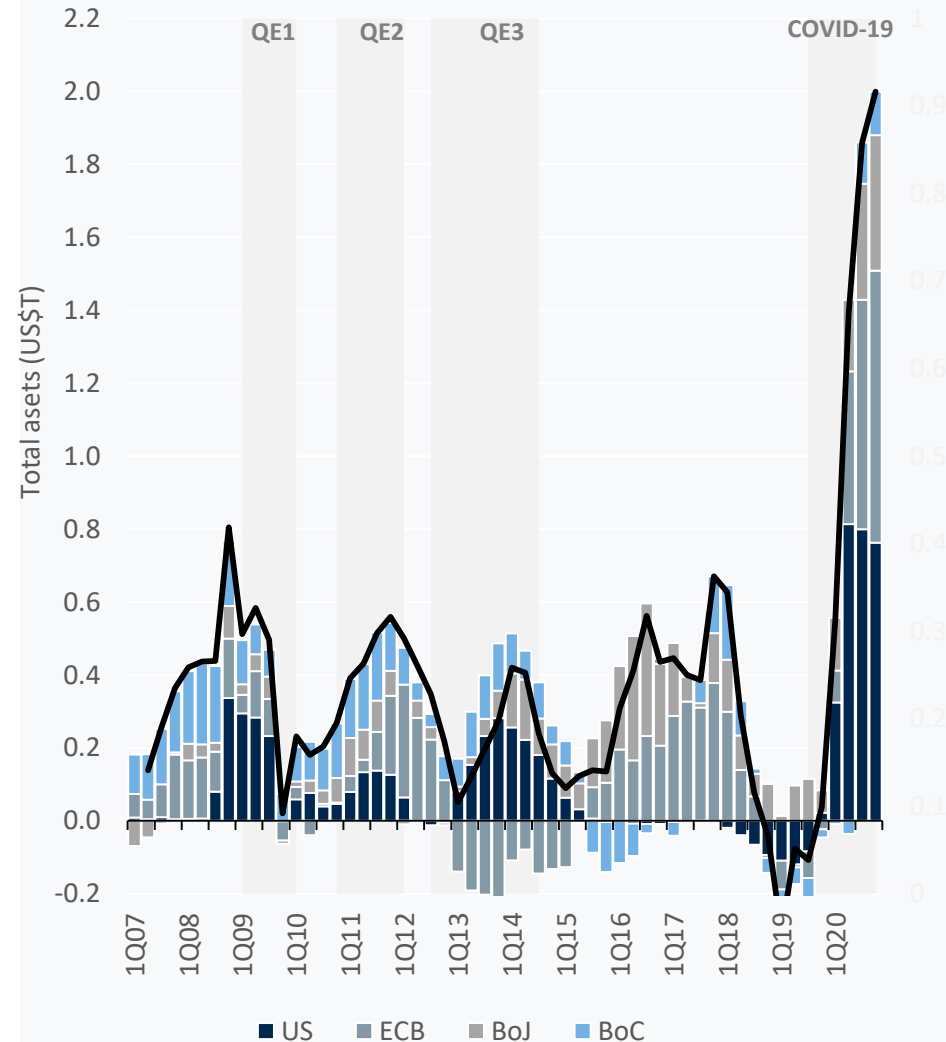
Gold themes: Global central banks have continued to support looser monetary policy

In addition to short-term interest rate setting, central banks have accumulated assets in an effort to reduce long-term yields. Global central bank asset accumulation in 2020 far exceeded that experienced during the global financial crisis, but is expected to decelerate with economic growth.

Central banks balance sheets



Central banks balance sheets 1Y rolling change



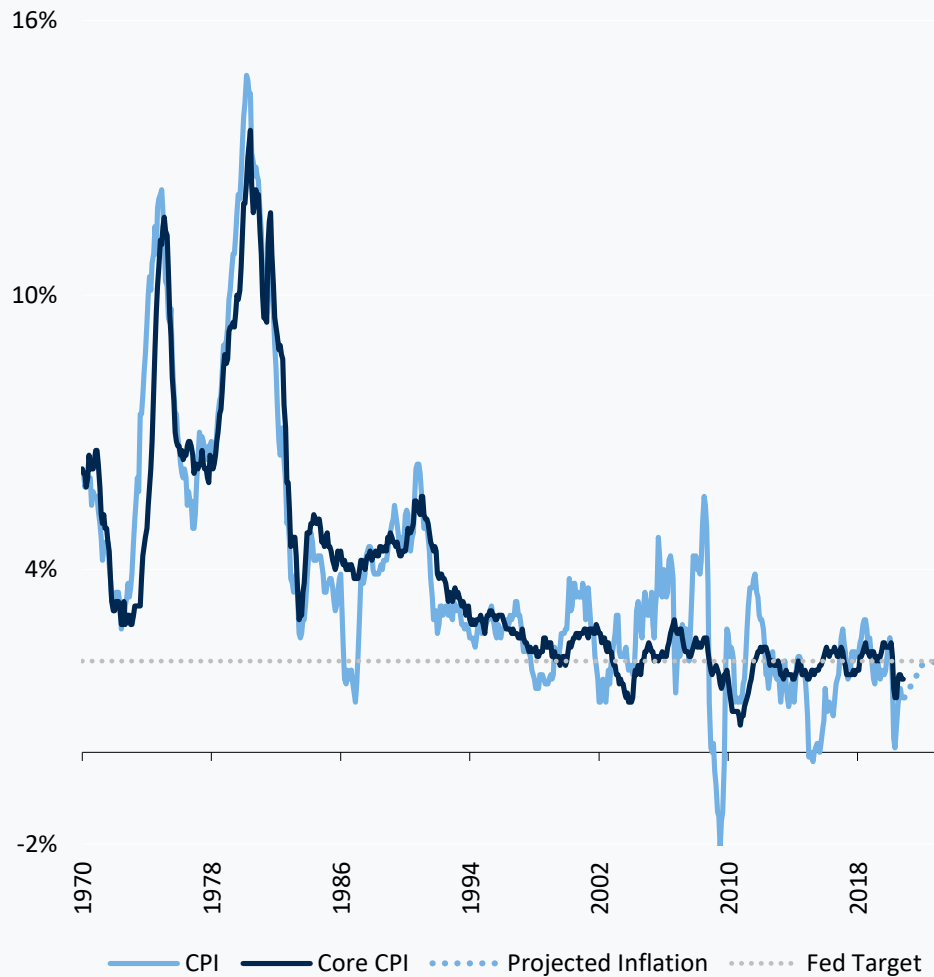
Notes: RHS – 1Y rolling change calculated as the average quarterly change in assets over the previous 4 quarters.

Source: Bloomberg, RBC Capital Markets

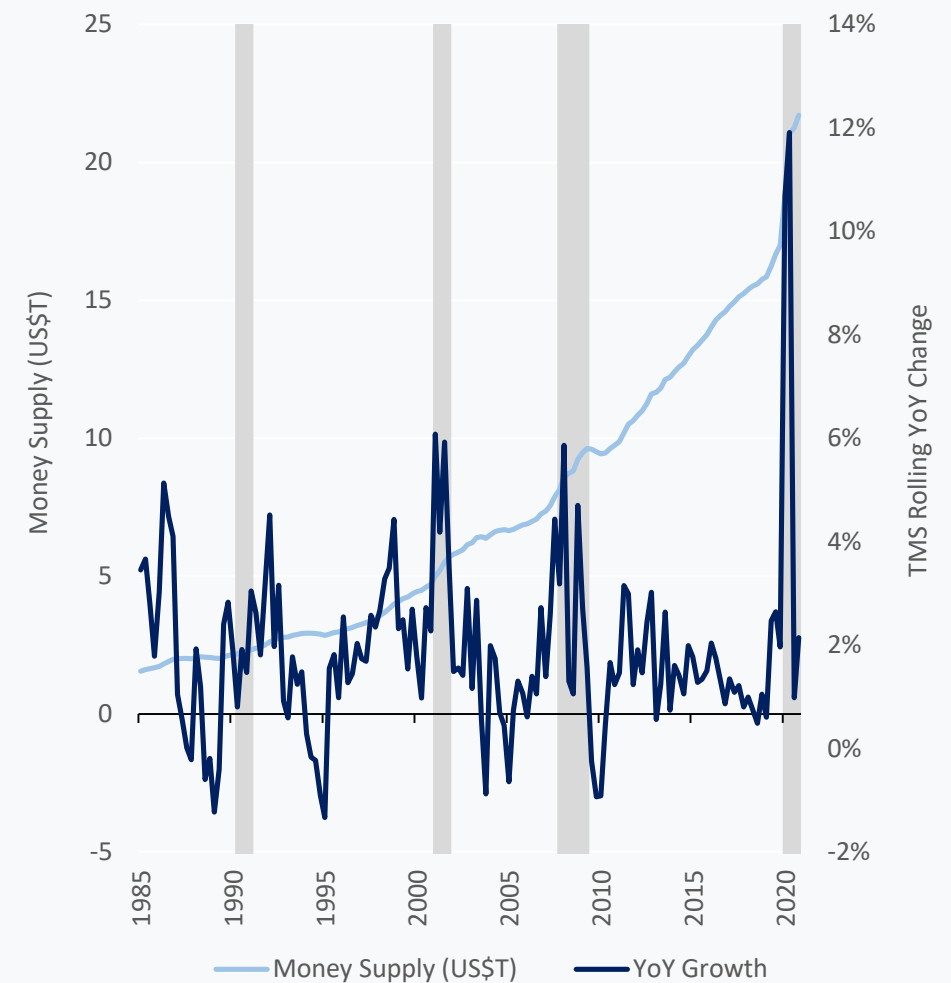
Gold themes: Despite aggressive monetary policy historically, inflation has remained contained

Aggressive monetary policy in effect since the 2008 financial crisis, including near-zero interest rates and quantitative easing, has not yielding high inflation. In our view, the effectiveness of this policy absent inflation encourages its utilization and supports lower-than-equilibrium nominal rates.

Headline and core CPI inflation



Money supply YoY (MZM)



Notes: Projected 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

Gold themes: Long-term shifts in monetary policy have been supportive for gold

Monetary policy easing has continued to pressure bond yields, leading to a substantial volume of negative yielding debt outside the US. As the availability of global safe haven assets has declined, gold's relevance has increased.

Global negative yielding nominal debt



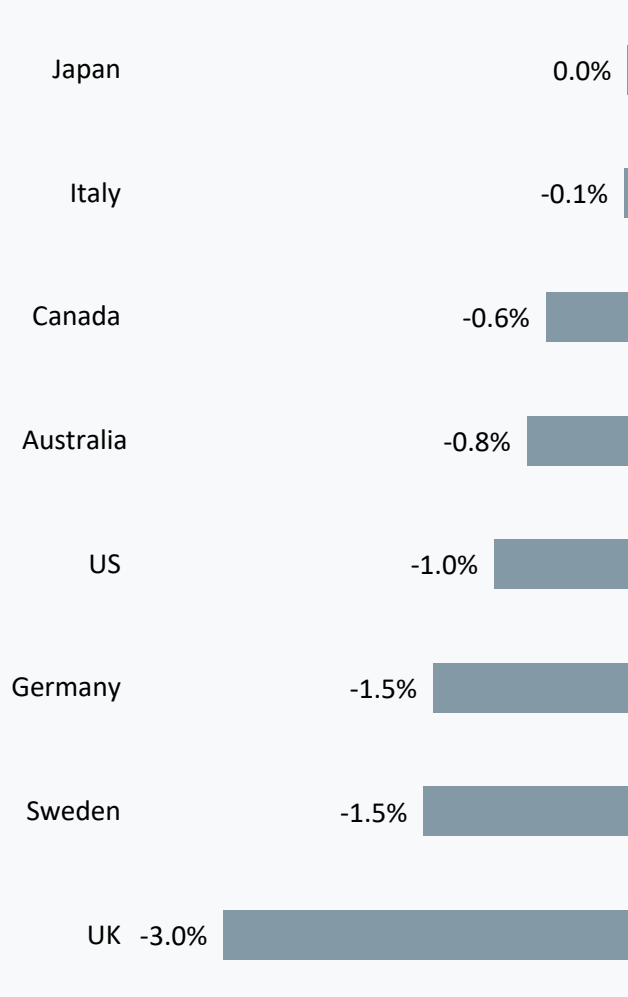
Bond yields by country

	2Y	3Y	5Y	7Y	10Y	15Y	30Y
China	2.9%	2.9%	3.1%	3.3%	3.3%	3.6%	3.8%
Mexico (USD)	NA	0.4%	1.0%	1.9%	2.6%	3.1%	3.6%
Brazil (USD)	0.6%	NA	NA	NA	3.2%	NA	4.3%
South Korea	0.9%	1.0%	1.4%	NA	1.7%	NA	1.8%
Australia	0.1%	0.1%	0.4%	0.6%	1.0%	1.3%	1.9%
United States	0.1%	0.2%	0.4%	0.6%	0.9%	NA	1.7%
Canada	0.2%	0.3%	0.4%	0.5%	0.7%	NA	1.3%
New Zealand	0.2%	NA	0.3%	0.5%	0.9%	1.4%	NA
Italy	-0.5%	-0.3%	-0.1%	0.2%	0.5%	0.9%	1.4%
Greece	NA	NA	0.0%	0.2%	0.6%	0.8%	NA
United Kingdom	-0.1%	-0.1%	0.0%	0.1%	0.3%	0.5%	0.8%
Japan	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.2%	0.6%
Spain	-0.6%	-0.6%	-0.4%	-0.3%	0.0%	0.3%	0.8%
Sweden	-0.4%	NA	-0.4%	NA	0.0%	NA	NA
Portugal	-0.7%	-0.6%	-0.5%	-0.3%	0.0%	0.3%	0.7%
France	-0.7%	-0.7%	-0.7%	-0.6%	-0.4%	-0.2%	0.3%
Netherlands	-0.8%	-0.8%	-0.7%	-0.7%	-0.5%	-0.4%	-0.1%
Germany	-0.7%	-0.8%	-0.8%	-0.7%	-0.6%	-0.4%	-0.2%
Switzerland	-0.9%	-0.9%	-0.8%	-0.7%	-0.6%	-0.5%	-0.4%

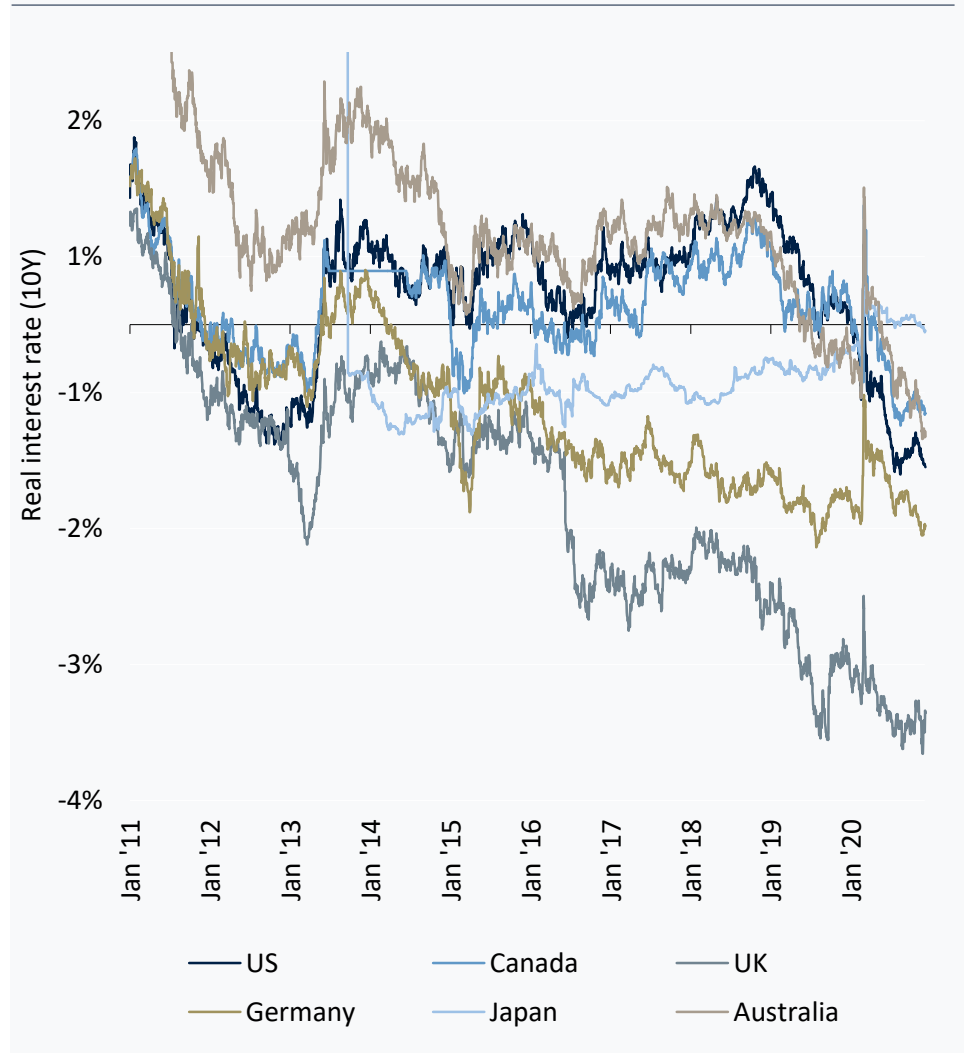
Gold themes: Real interest rates globally are low and remain supportive to gold prices

Global real interest rate expectations declined in 2020. Market expectations outline either zero or negative real interest rates are forecast across all major economies over the next 10 years.

Real interest rates globally today (10Y yield)



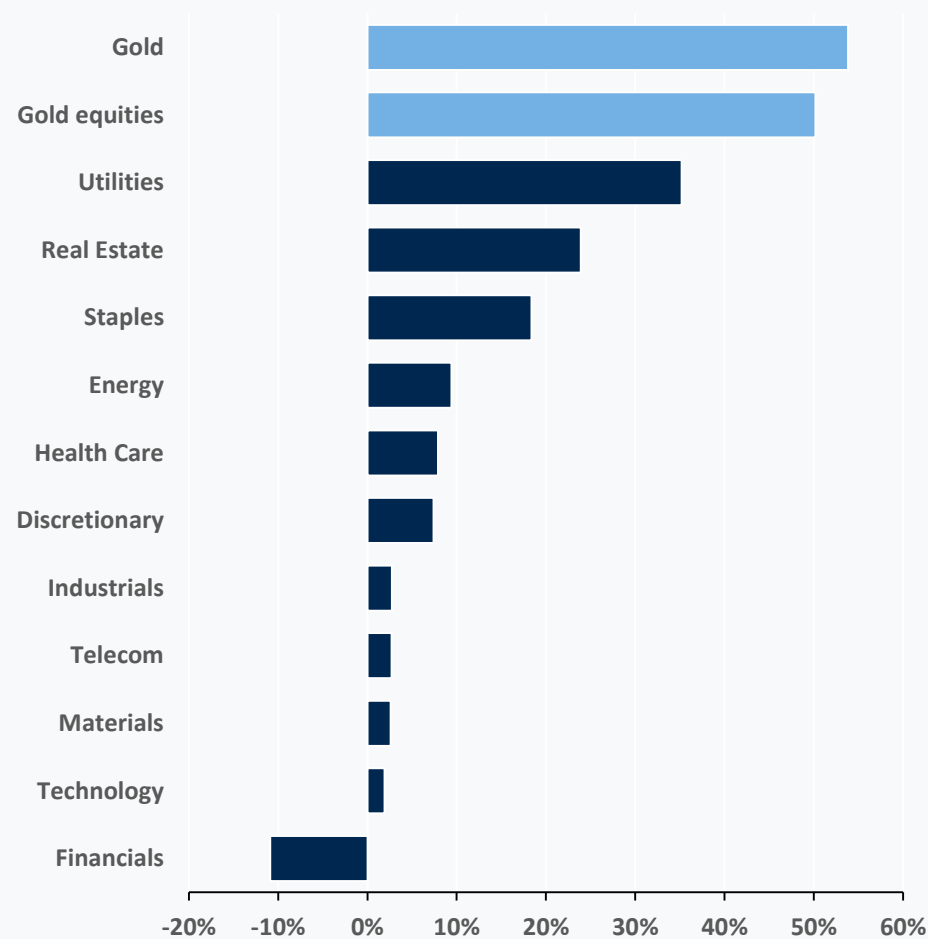
Real interest rates over time (10Y yield)



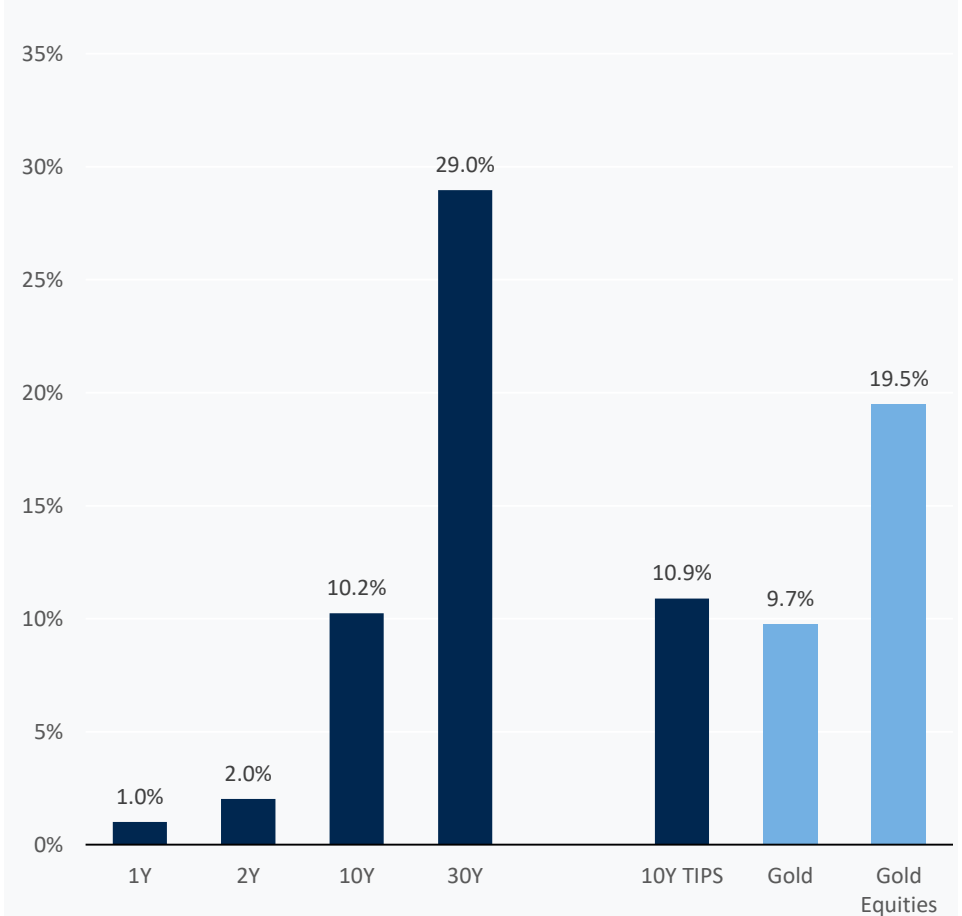
Gold themes: Real rate changes have varying effects on assets

Changes in real rate yields demonstrate a strong inverse correlation to both gold and gold equities, compared to other market investments. Future interest rate or yield 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 yields



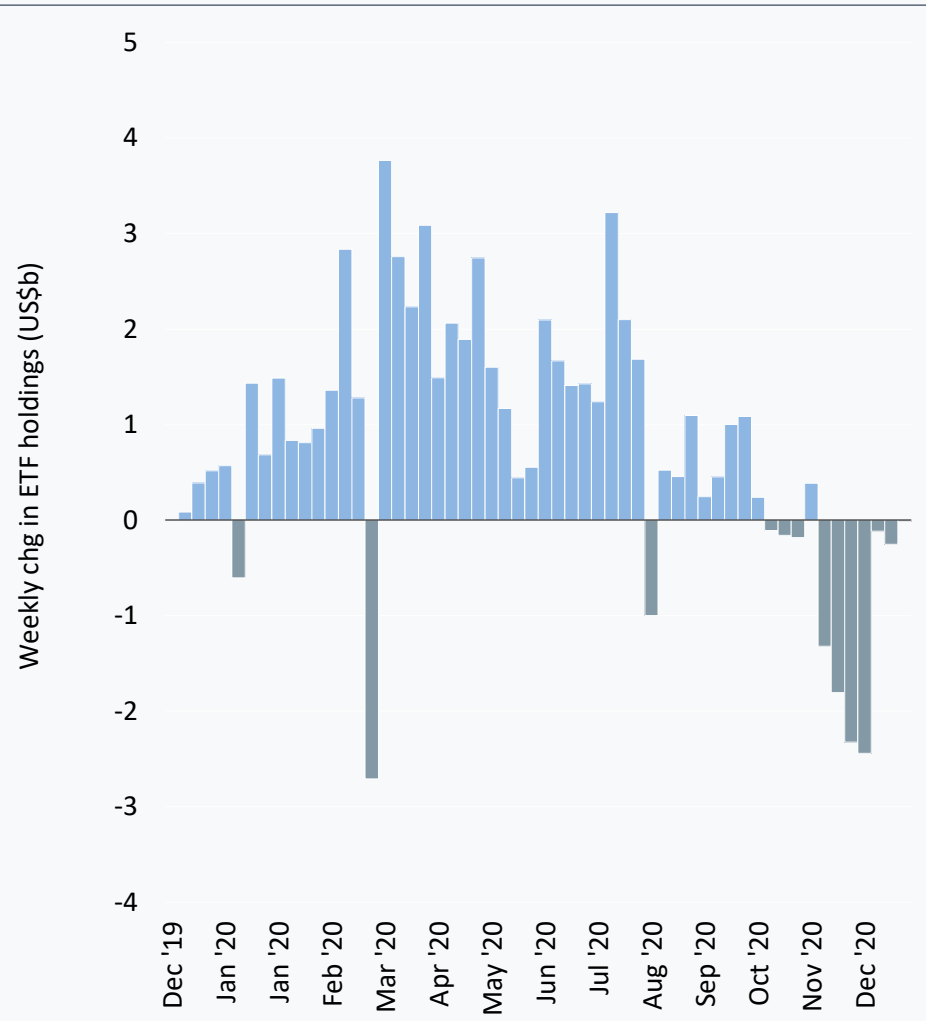
Notes: LHS - Correlations are in relation to the TIPS notes index ETF (weekly since 2014) which is a combination of 1-5Y (~40%), 5-10Y (~40%) and +15Y (~20%) yields; Industry metrics measured by S&P 500 GICS, gold equities measured by XAU Index; RHS - Price change for Treasuries based upon a parallel 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

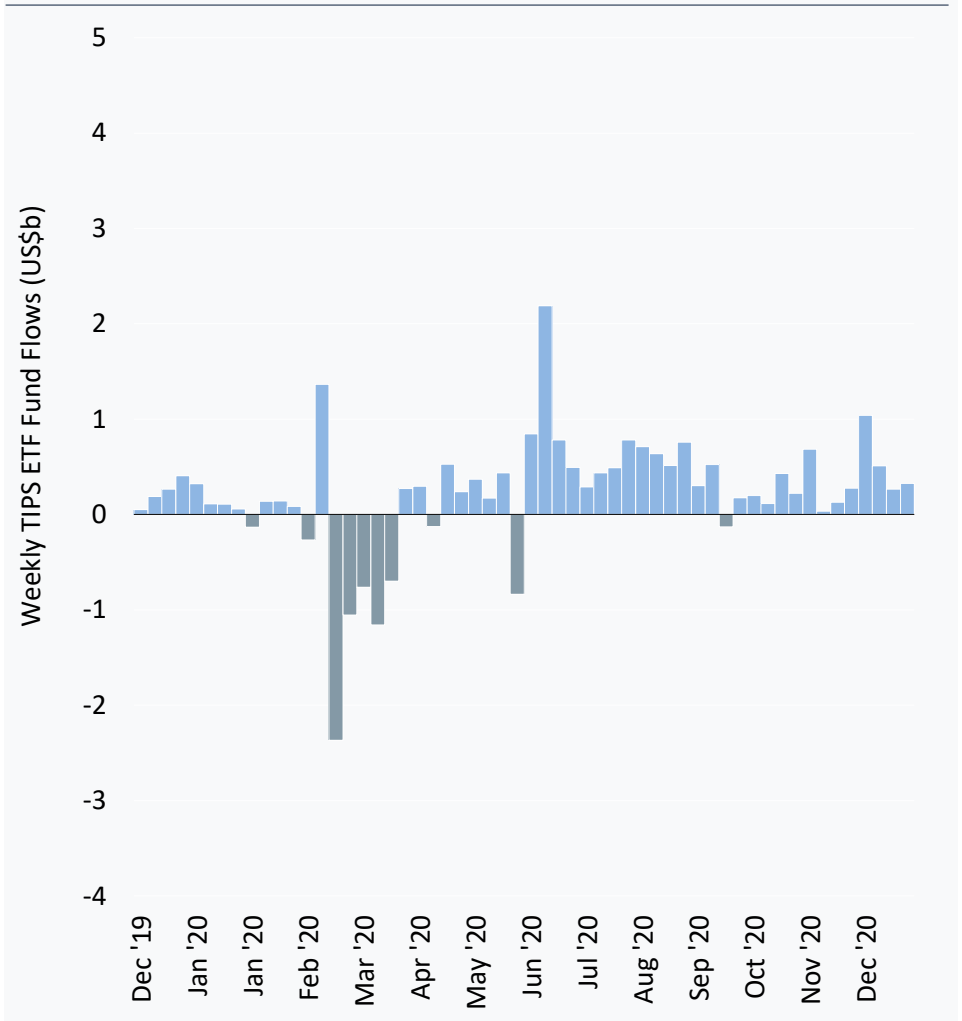
Gold themes: Gold ETF outflows pressured prices, but inflation protection demand remains elevated

Gold prices in 2020 peaked over the course of 3Q, coinciding with record investment inflows into physical gold ETFs. After this point, declining inflows and sharp outflows were experienced for gold, but investment into other inflation-protection vehicles, has remained steady.

Flows into physical gold ETFs



Flows into inflation protected bond ETFs



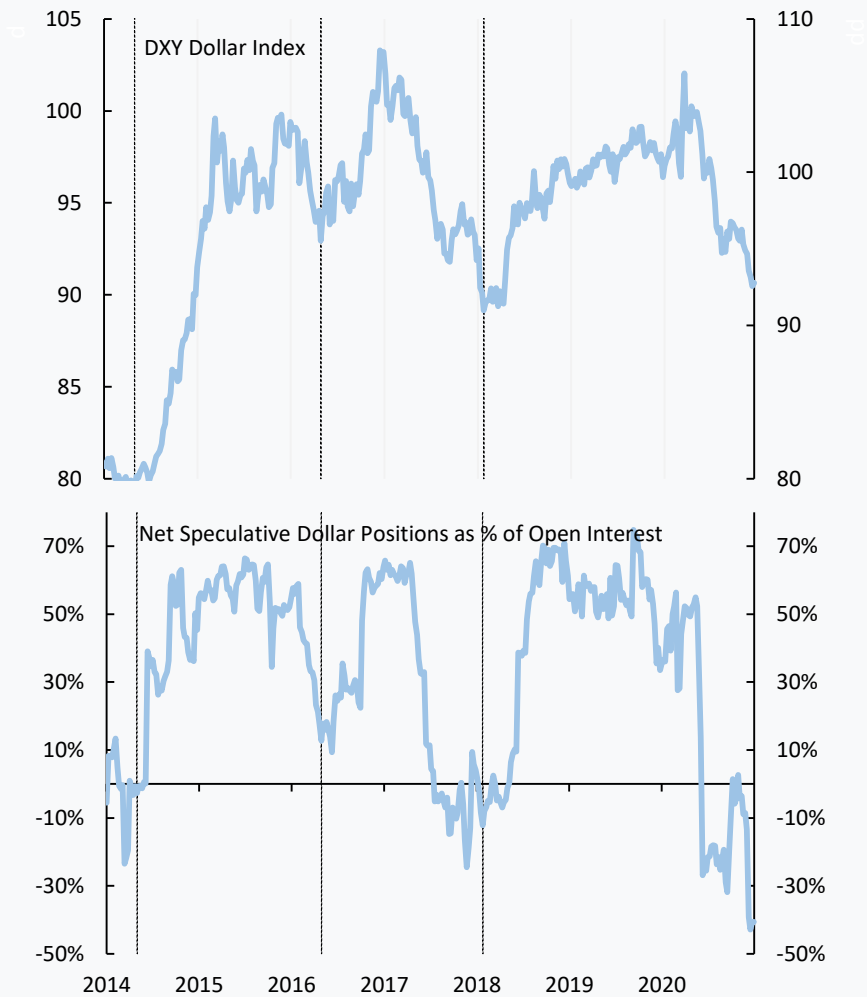
Notes: RHS - TIPS ETFs include TIP & STIP (iShares TIPS ETF), SCHP (Schwab US TIPS ETF), VTIP (Vanguard Short-Term TIPS ETF), STIP & SPIP (SPDR Portfolio TIPS ETF), TDTT (FlexShares iBoxx TIPS ETF)

Source: Bloomberg, RBC Capital Markets

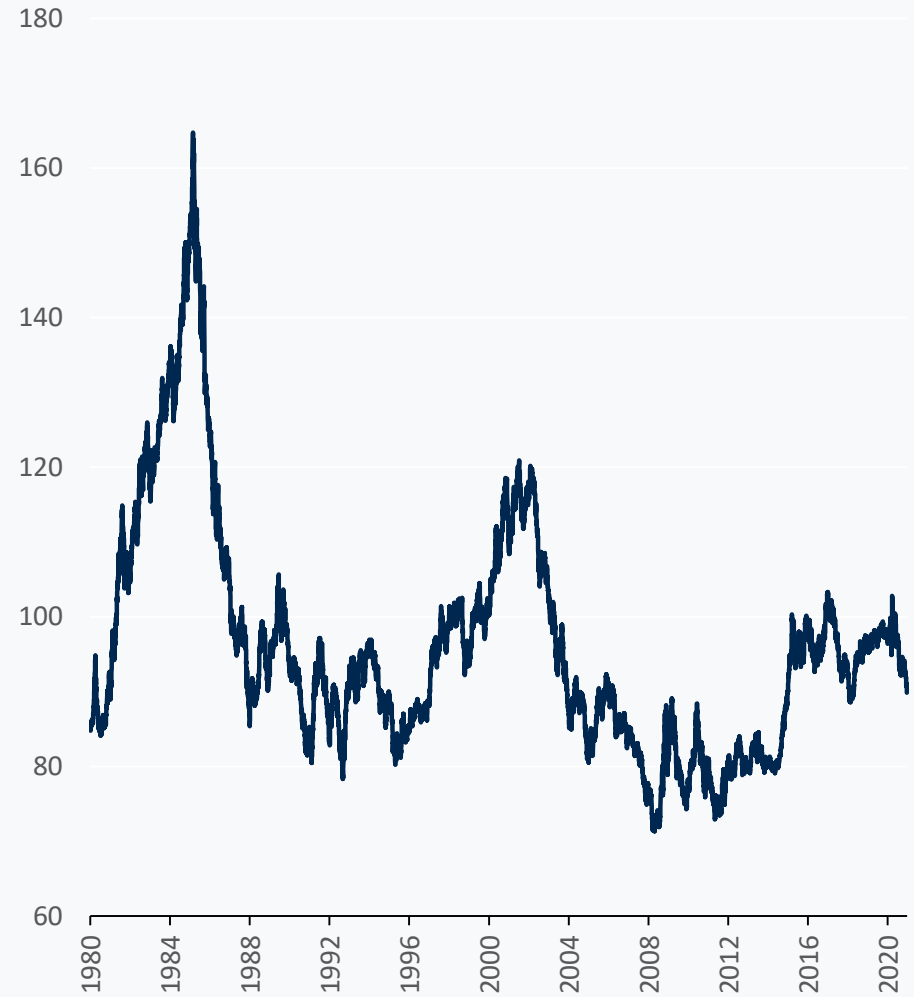
Gold themes: Dollar weakness has benefitted gold recently, but positioning is extended

US dollar weakness has represented a tailwind for gold prices, although US dollar net speculative long positions are at levels which have previously coincided with prior lows. In our view, interest rate differentials, lower indebtedness, and relative growth are supportive of the US dollar longer term.

US dollar (short-term) and CFTC net long speculative positions



US dollar (long-term, trade-weighted)

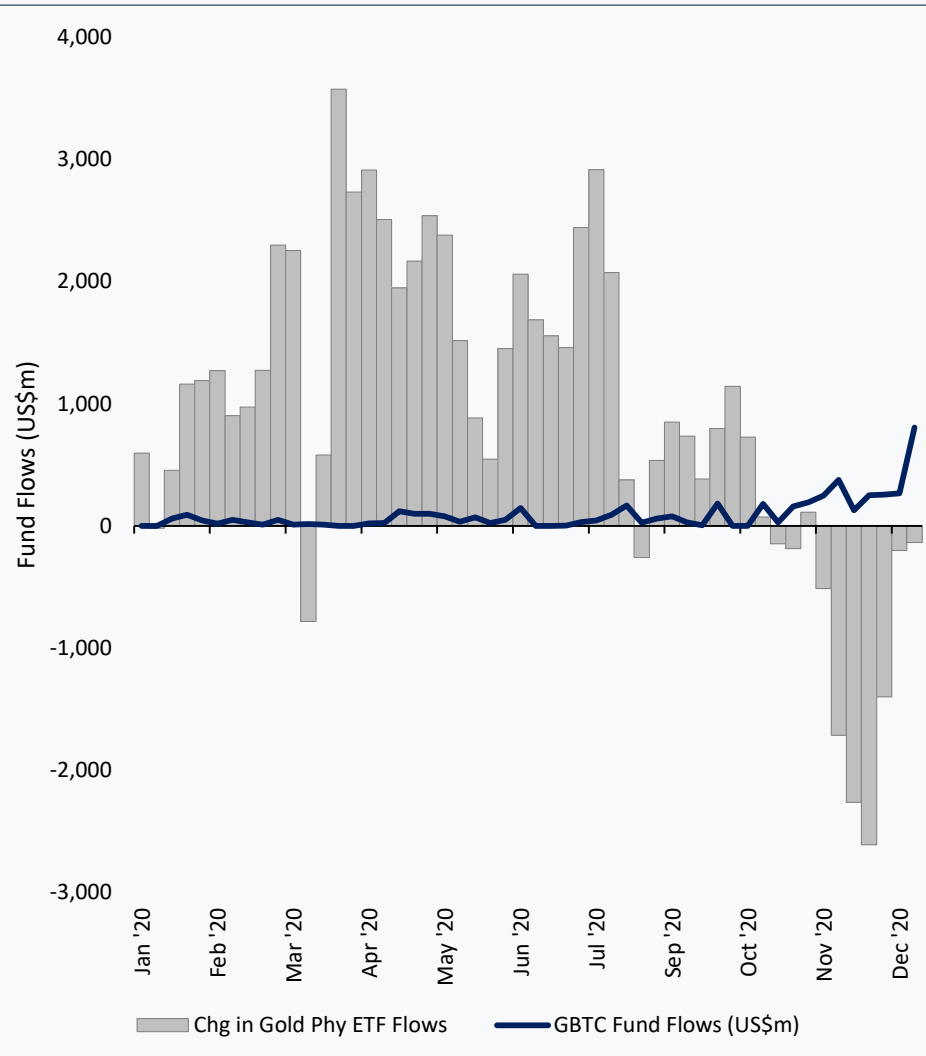


Source: Bloomberg, RBC Capital Markets

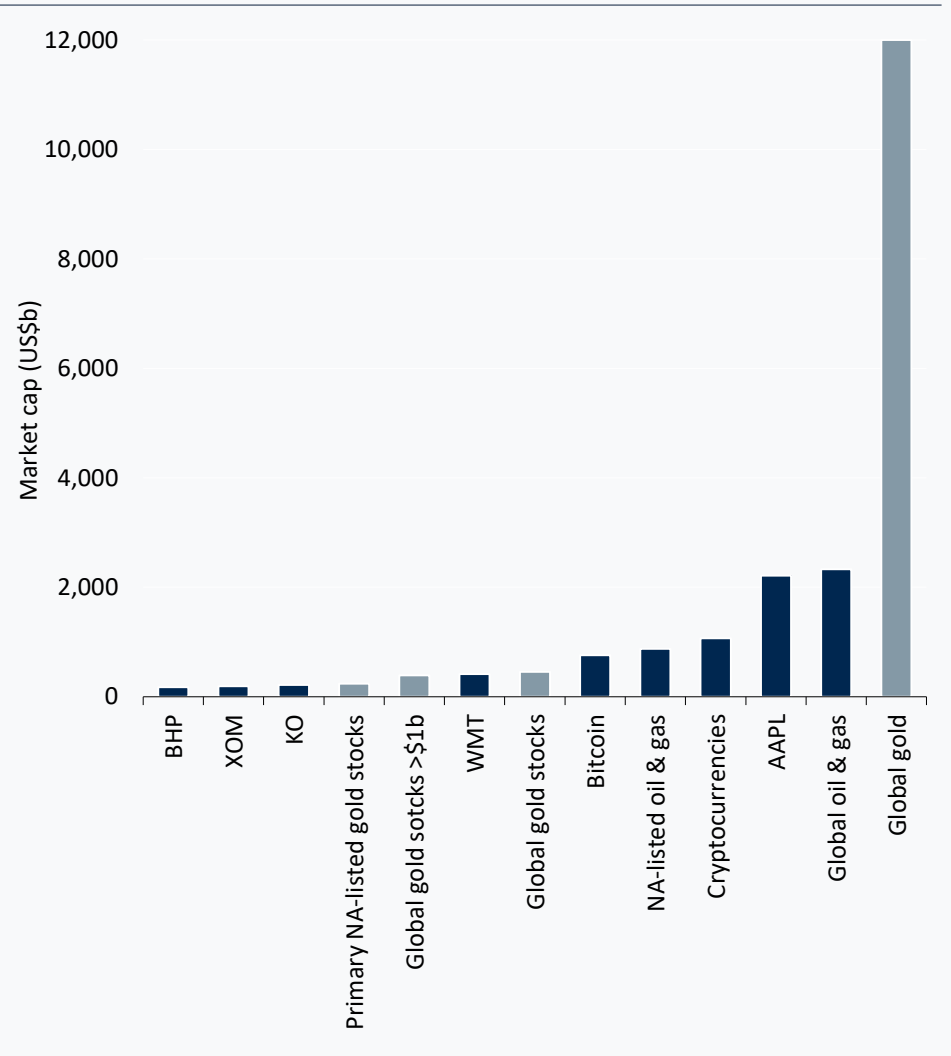
Gold themes: Bitcoin flows have grown, but are low by dollar value

Estimated flows into bitcoin listed products increased in late 2020, potentially at the expense of gold; however, calculated dollar values invested are low. In comparison to other asset classes which compete with gold, such as global equities and bonds, the materiality of bitcoin as a competitor for flows is viewed as having been insignificant thus far. Today, the value of the bitcoin market (and also global gold equities) is small compared to gold.

Fund inflows—GBTC bitcoin fund vs. gold ETFs



Gold and gold equities market in context

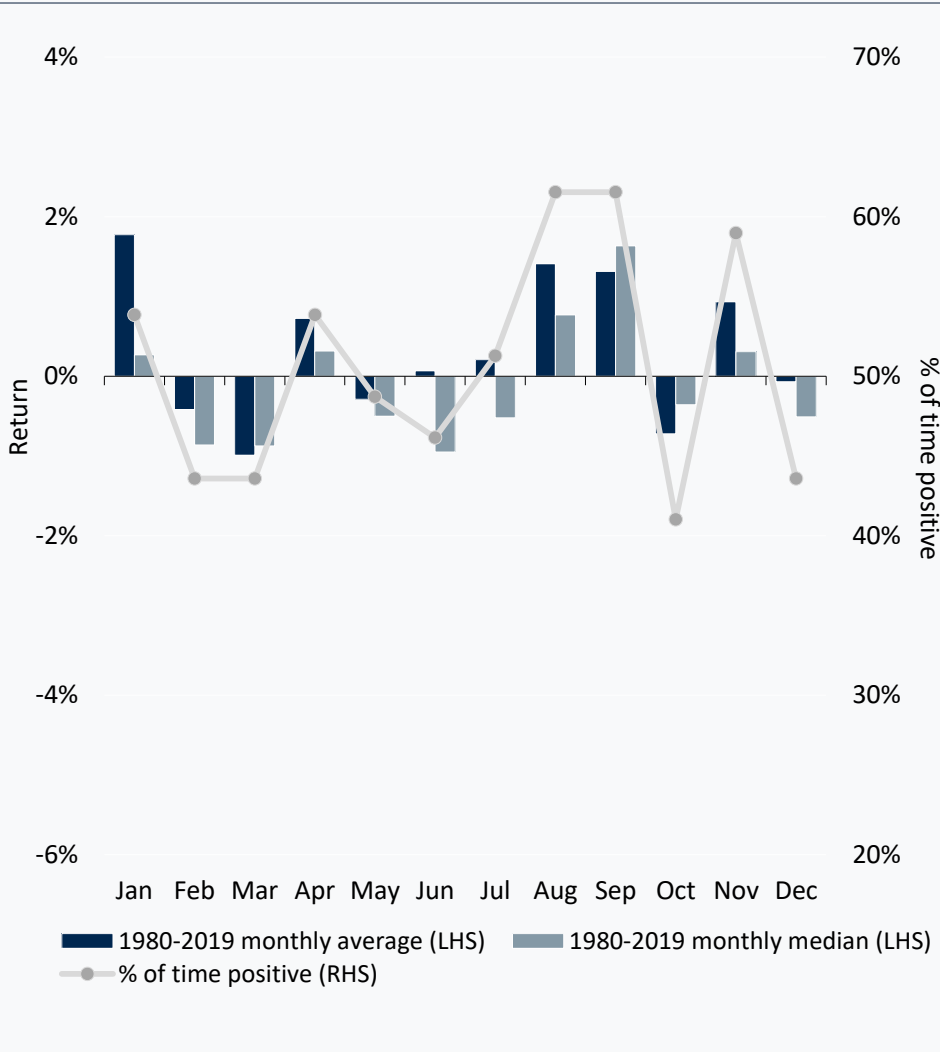


Source: Bloomberg, CoinMarketCap, World Gold Council, RBC Capital Markets

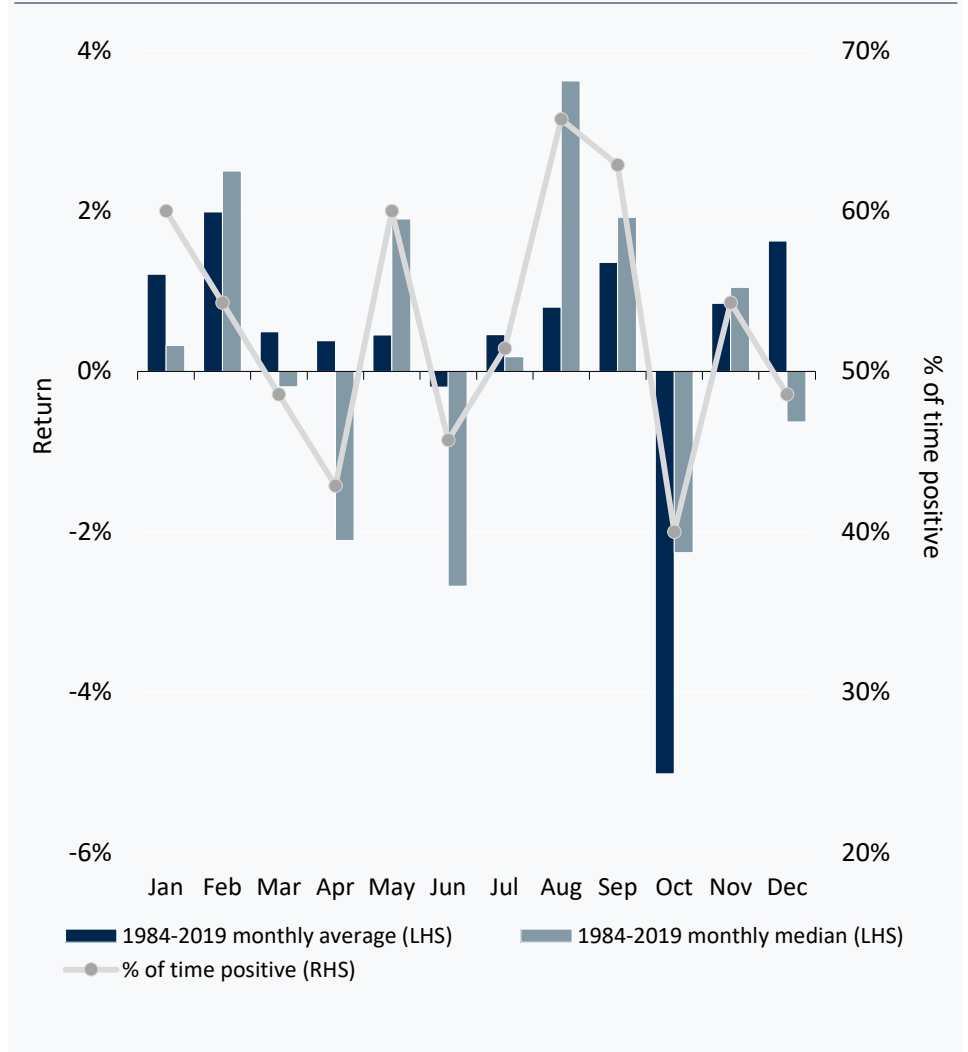
Gold themes: Gold is entering a seasonally slower period

Positive gold price seasonality has traditionally been exhibited in August, September, and November. Positive gold equity price seasonality is exhibited in February, May, August, September, and November. Some months include high price gains for a smaller sample set, skewing 'average' data.

Gold price seasonality



Gold equity seasonality



Source: Bloomberg, RBC Capital Markets

Gold equity themes and valuation trends

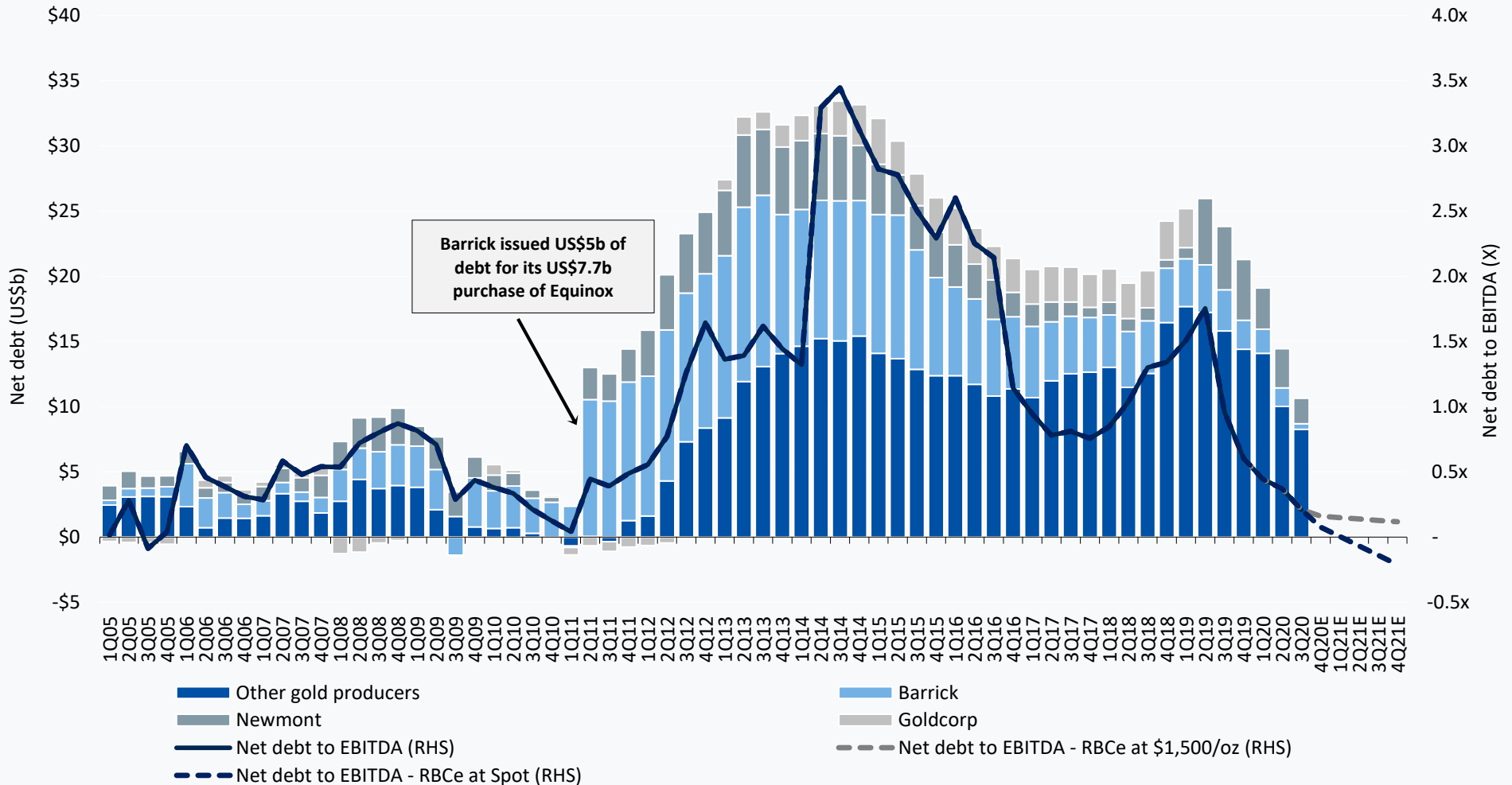


Capital
Markets

Gold equity themes: Balance sheets have materially improved, credit risks are viewed as low

Balance sheet deleveraging has remained a core focus for the gold sector. Current leverage for the sector is low, and we forecast companies will be in a net cash position in early 2021. Even at significantly lower gold prices, credit risks are viewed as low for gold producers.

Net debt for top 25 gold producers

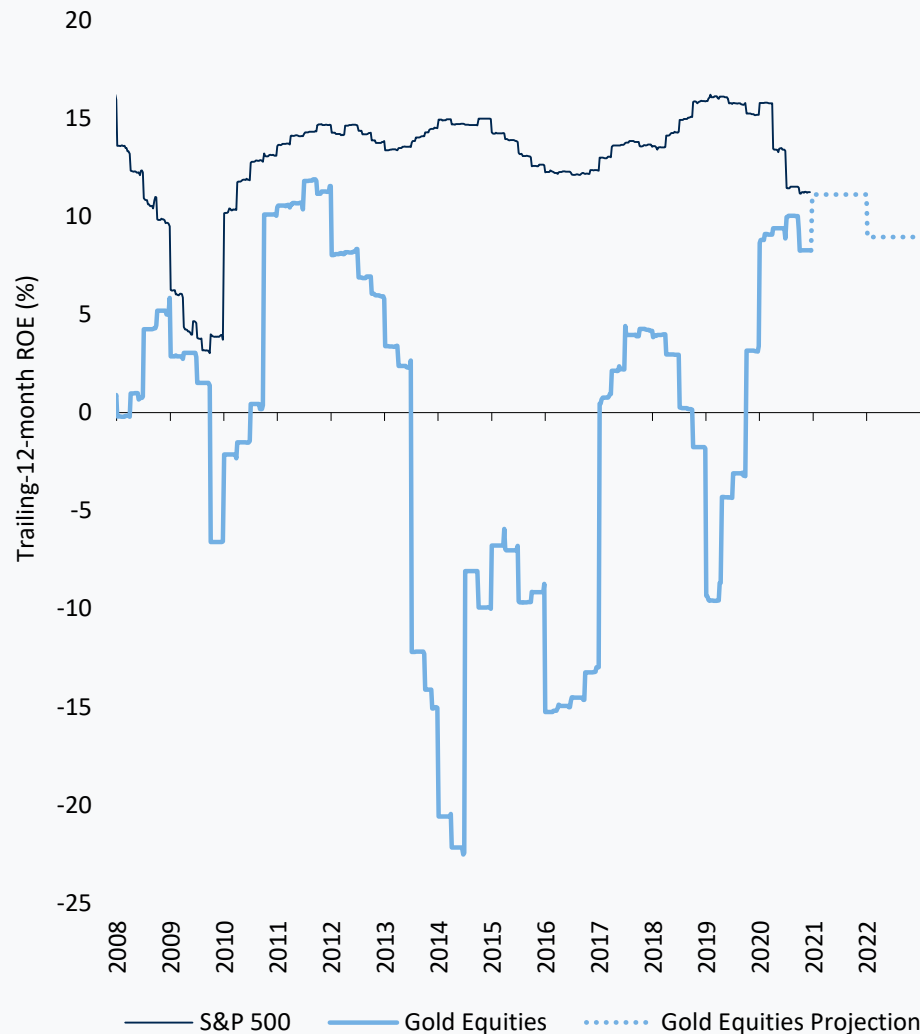


Note: Data for Goldcorp included until 1Q19, at which point the company was acquired by Newmont. Net debt to EBITDA forecasts reflect companies in RBCCM coverage universe. Source: Bloomberg, RBC Capital Markets estimates

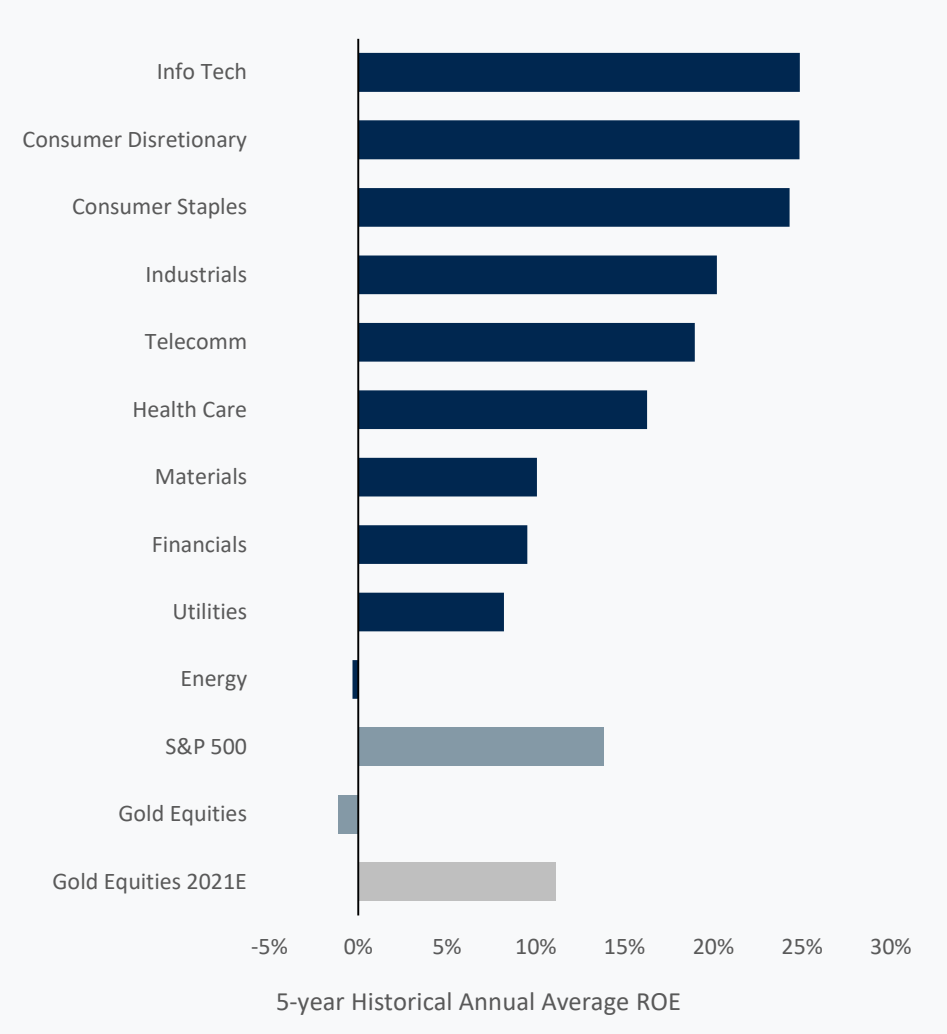
Gold equity themes: Returns generated for gold equities have improved with higher gold prices

Return on equity generated by the gold sector has historically lagged the broader market, even during gold bull markets. 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 significantly improved the gold sector's financial results.

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



5-year historical annual average ROE by sector

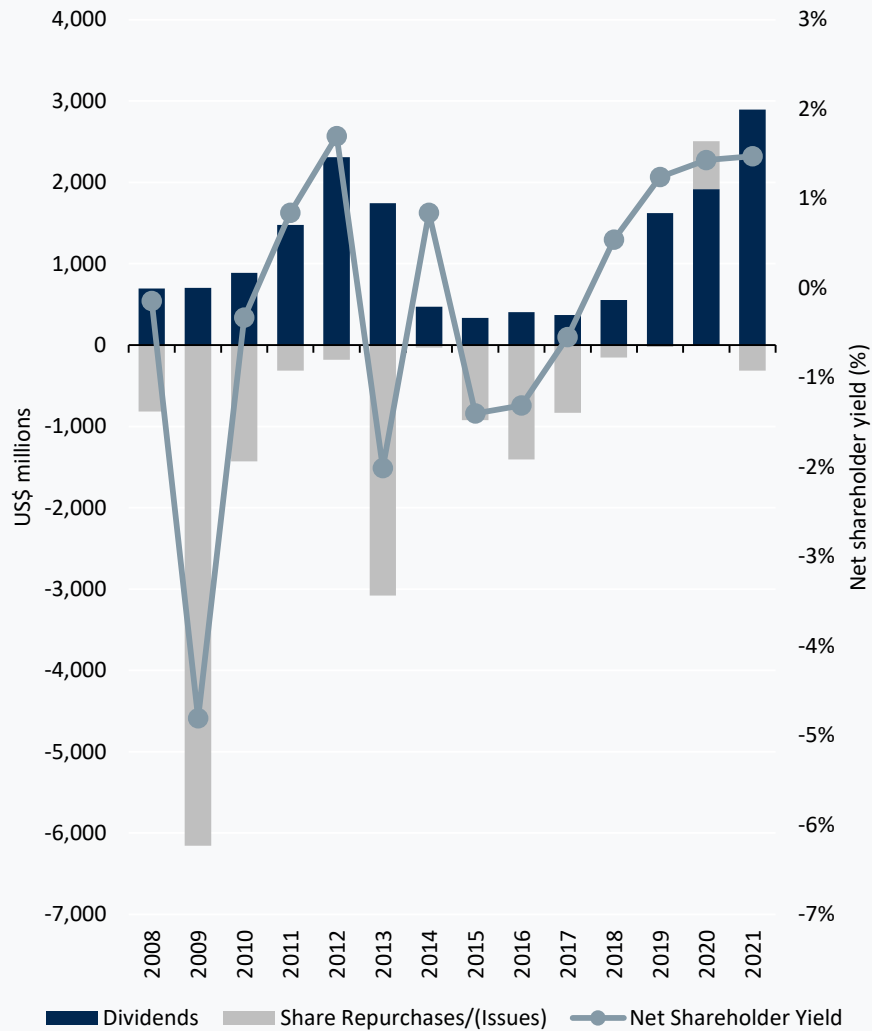


Note: ROE for gold equities measured by S&P/TSX Global Gold Index. ROE and performance for S&P 500 sectors measured by GICS indices, with the exception of real estate, measured by US MSCI index. Source: Bloomberg, RBC Capital Markets estimates

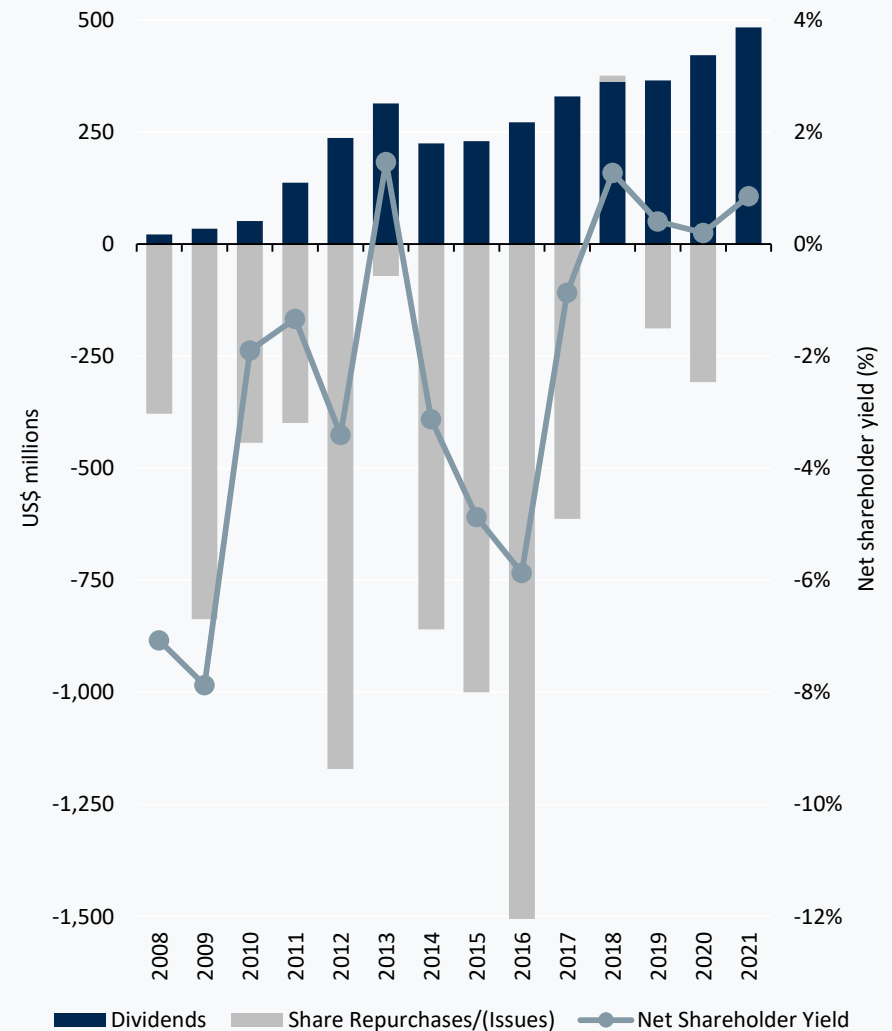
Gold equity themes: Dividends have increased in importance and are rising

In recent years, companies have placed increasing importance upon return of capital via dividends. Excess cash flow at current gold prices could encourage special dividend payments, which historically have not been customary.

Gold producer dividends and share repurchases/(issues)



Royalty company dividends and share repurchases/(issues)

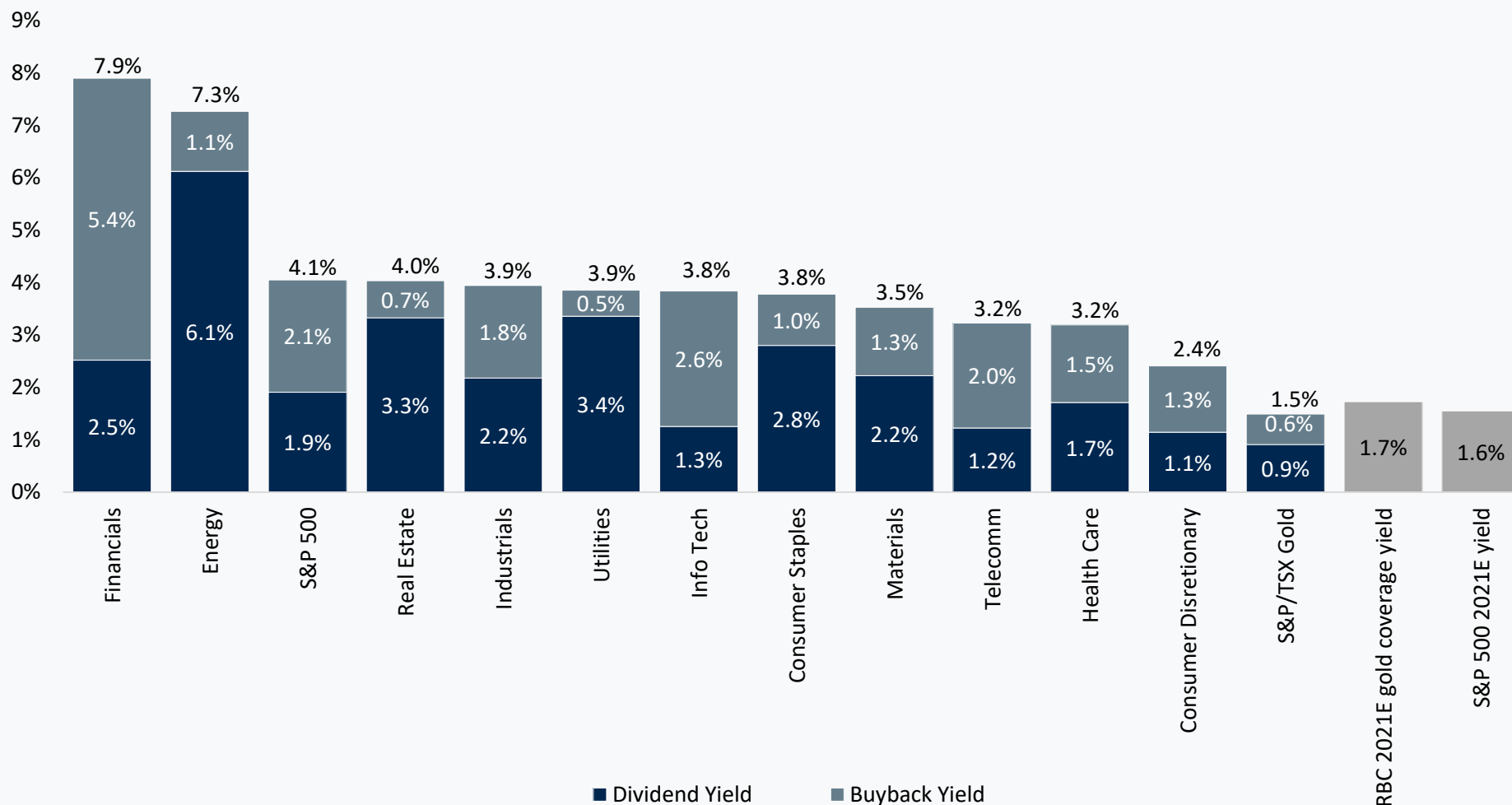


Source: Bloomberg, RBC Capital Markets

Gold equity themes: Dividends have improved, and are more competitive on a go-forward basis

Return of capital has become an important theme for gold companies. Forward dividends for the gold sector are now competitive vs. the S&P500, but on a trailing basis have lagged due to the sector's focus upon financial liquidity and debt repayment.

Trailing 12-month shareholder yield (dividend and buyback)



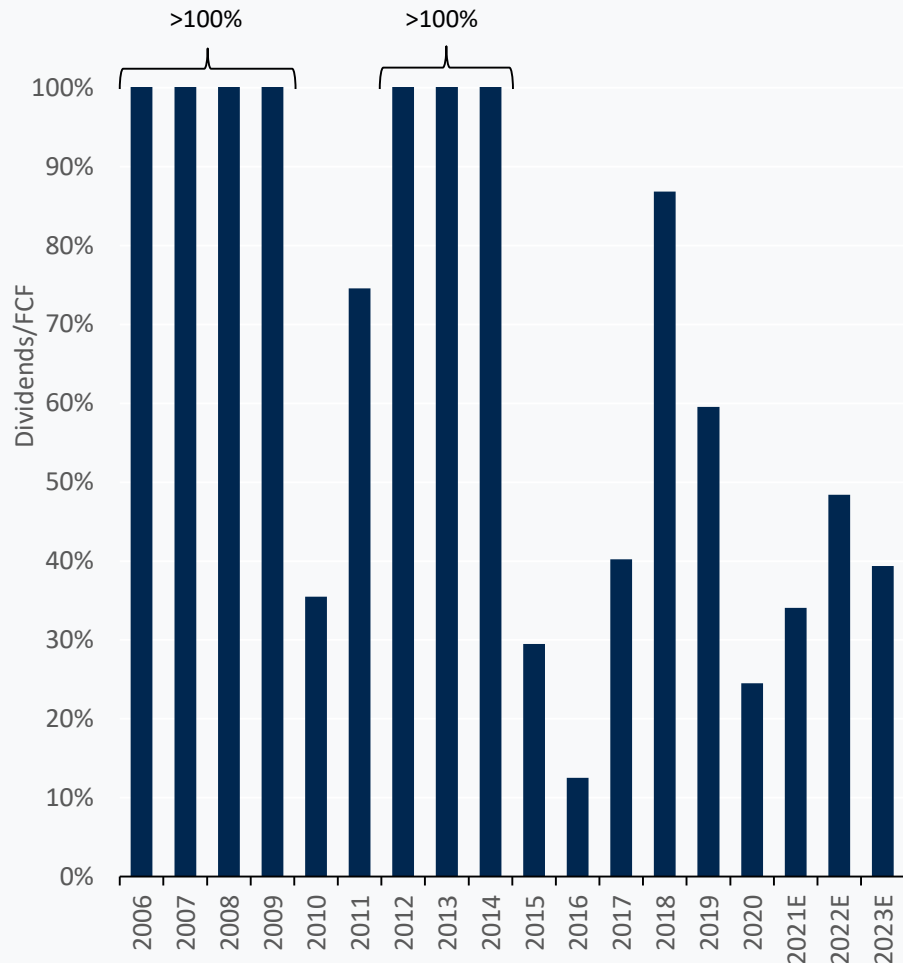
Note: Yields for gold equities measured by S&P/TSX Global Gold Index. Yields for S&P 500 sectors measured by GICS indices. Gold coverage dividend yield calculated as weighted average by market capitalization for FNV, OR, RGLD, SAND, WPM, AEM, GOLD, KGC, KL, NEM, AGI, BTG, EDV, IAG, AU, EGO, NGD, ROXG, TGZ.

Source: Bloomberg, RBC Capital Markets

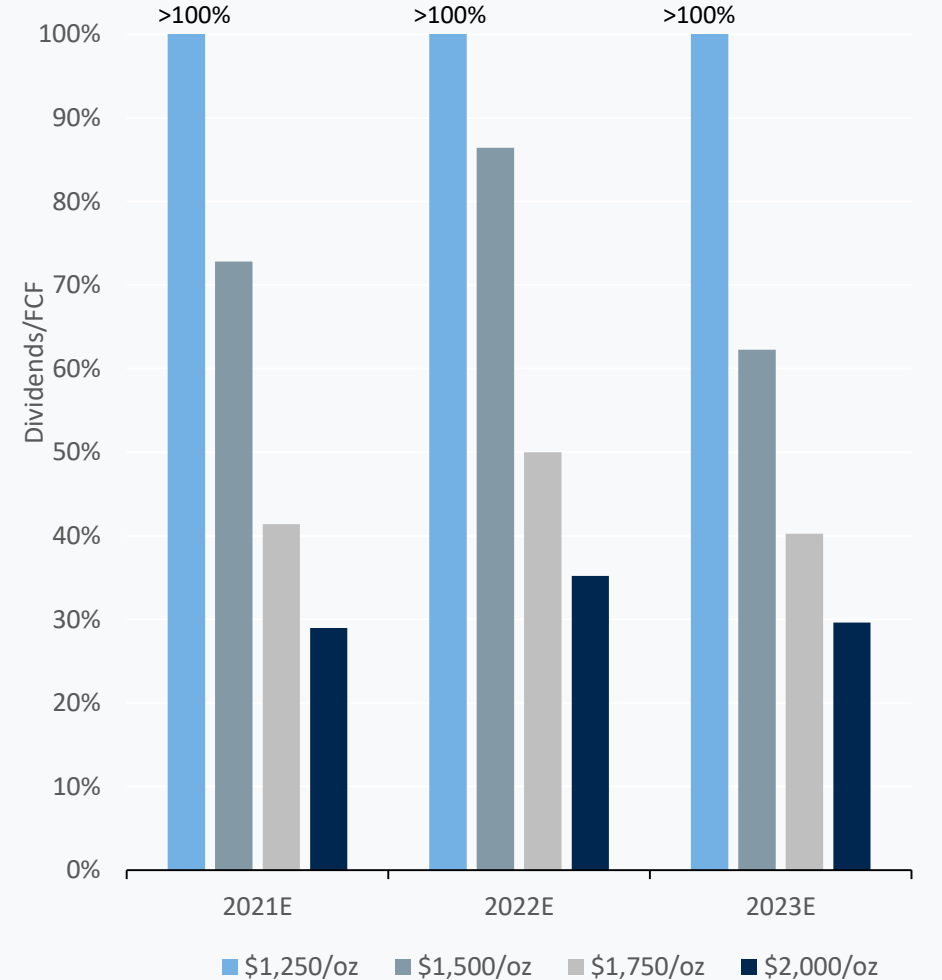
Gold equity themes: Dividend sustainability is a high consideration for management

In contrast to the past, current dividends represent a fraction of forecast free cash flow. Increasing dividends at a level that remains sustainable in a lower price environment has been a core focus item for management teams.

Dividends as a percentage of free cash flow



Sensitivity – Dividends as a percentage of free cash flow



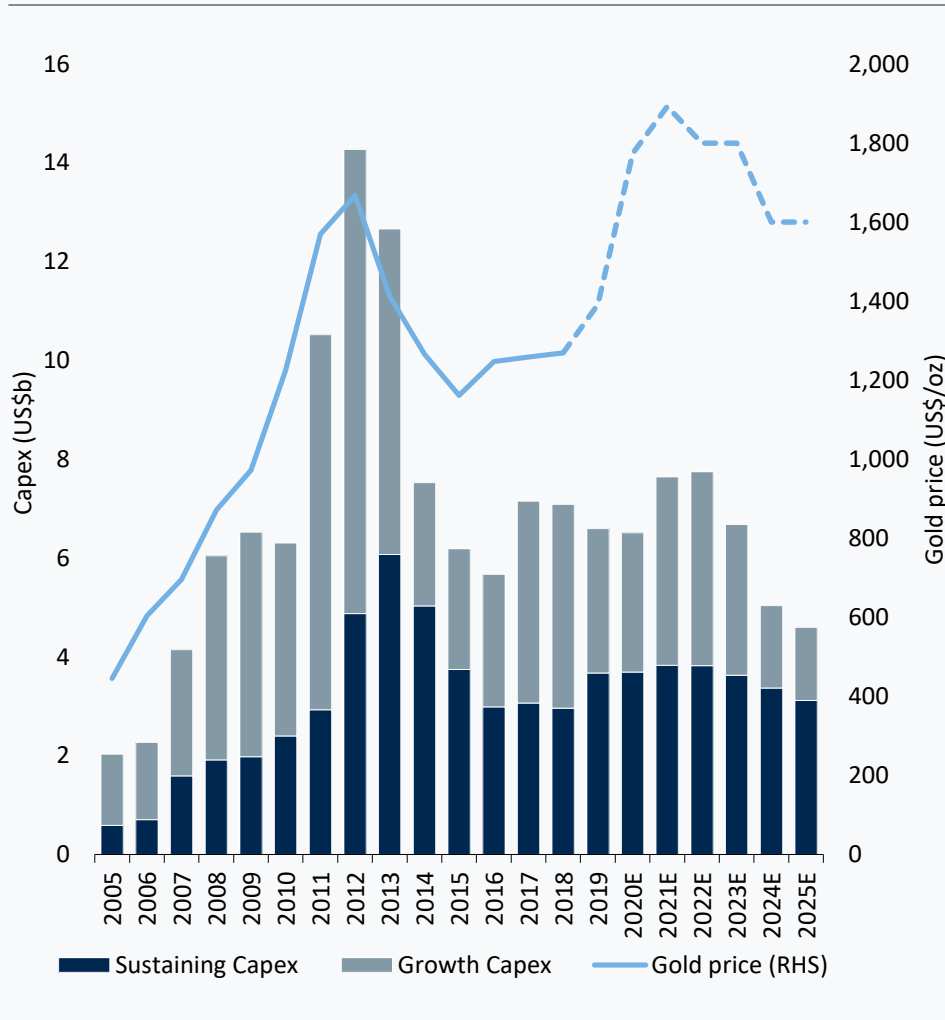
Notes: Data includes dividends/free cash flow historicals and RBCCM estimates for AEM, AGI, AUJ, BTG, EGO, KGC, GOLD, IAG, KL, NEM for periods when dividends were/are expected to be paid; LHS assumes RBCCM price deck forecasts.

Source: Company reports, RBC Capital Markets estimates

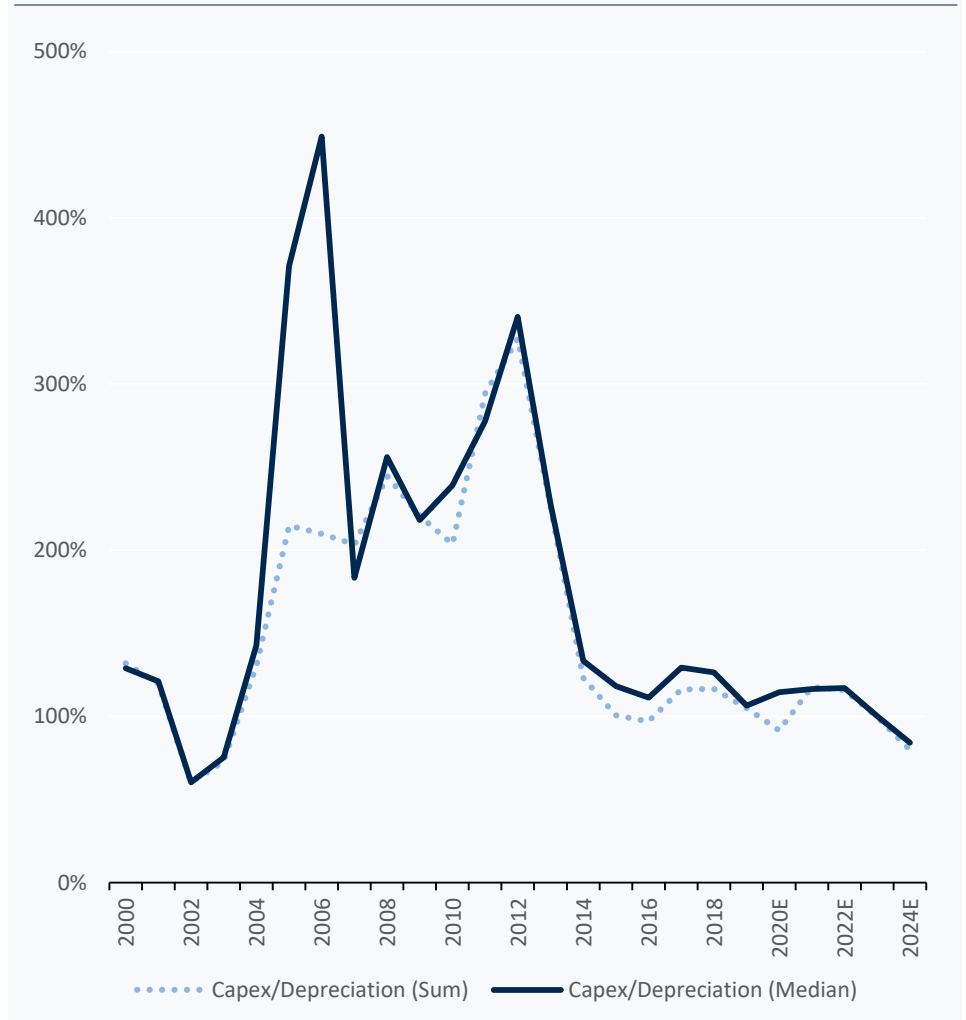
Gold equity themes: The current capital spending cycle is sustainable for producers

Historically, capital spending for gold producers has correlated to gold price changes, overall amplifying cyclicality. Despite rising gold prices, capital spending has been relatively contained in the current cycle and at a level that would be indicative of investment towards sustainable volumes.

Gold producer coverage capital spending



Capex as a % of depreciation

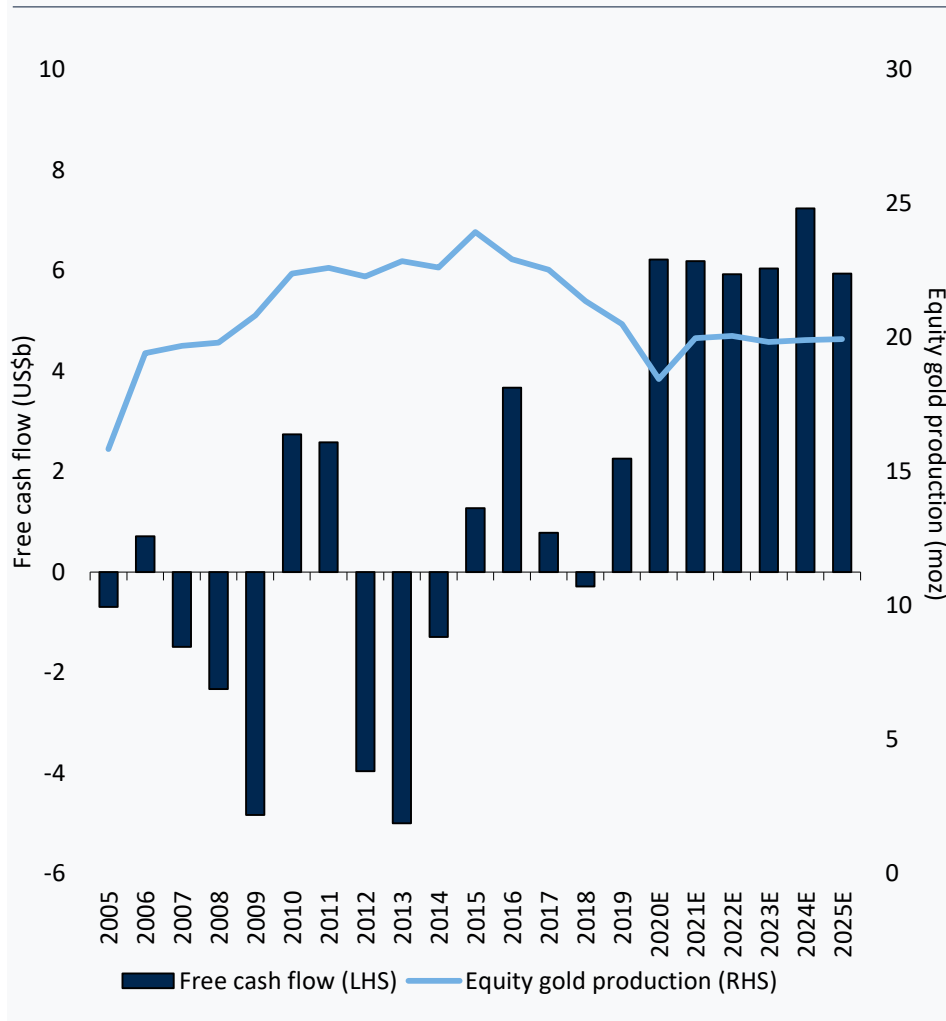


Note: Data for our coverage universe includes AEM, AGI, AUJ, BTG, EGO, GOLD, IAG, KGC, NEM, NGD, FNV, RGLD, WPM as well as RRS (acq'd by Barrick Q1/19) and GG (acq'd by NEM Q2/19). Forecast FCF is at RBC price deck, which incorporates a long-term gold price of \$1,500/oz. Source: Company reports, RBC Capital Markets estimates

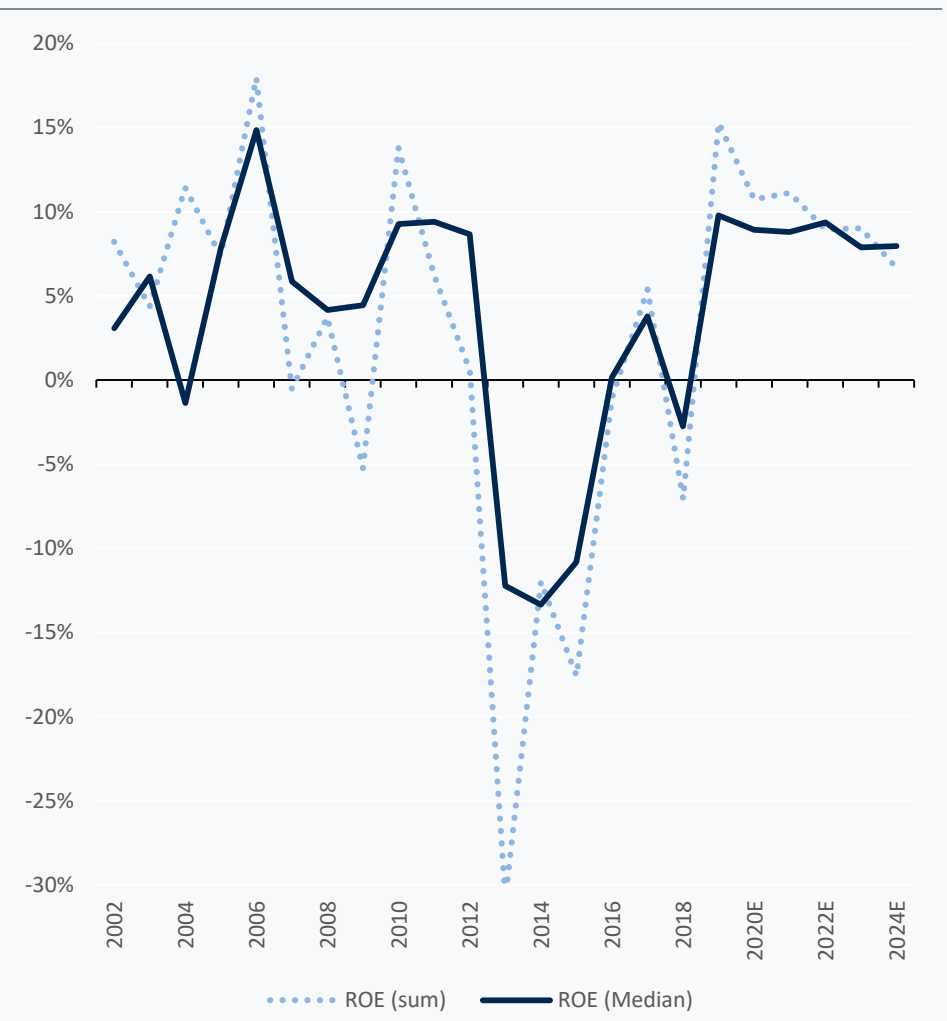
Gold equity themes: FCF historically impacted by capital spending, now set to improve

Historically, overinvestment to generate output growth has resulted in diminishing shareholder returns. We currently forecast producers have the potential to generate record free cash flow in 2020+ and double digit ROE.

Gold producer coverage free cash flow and production



Return on equity



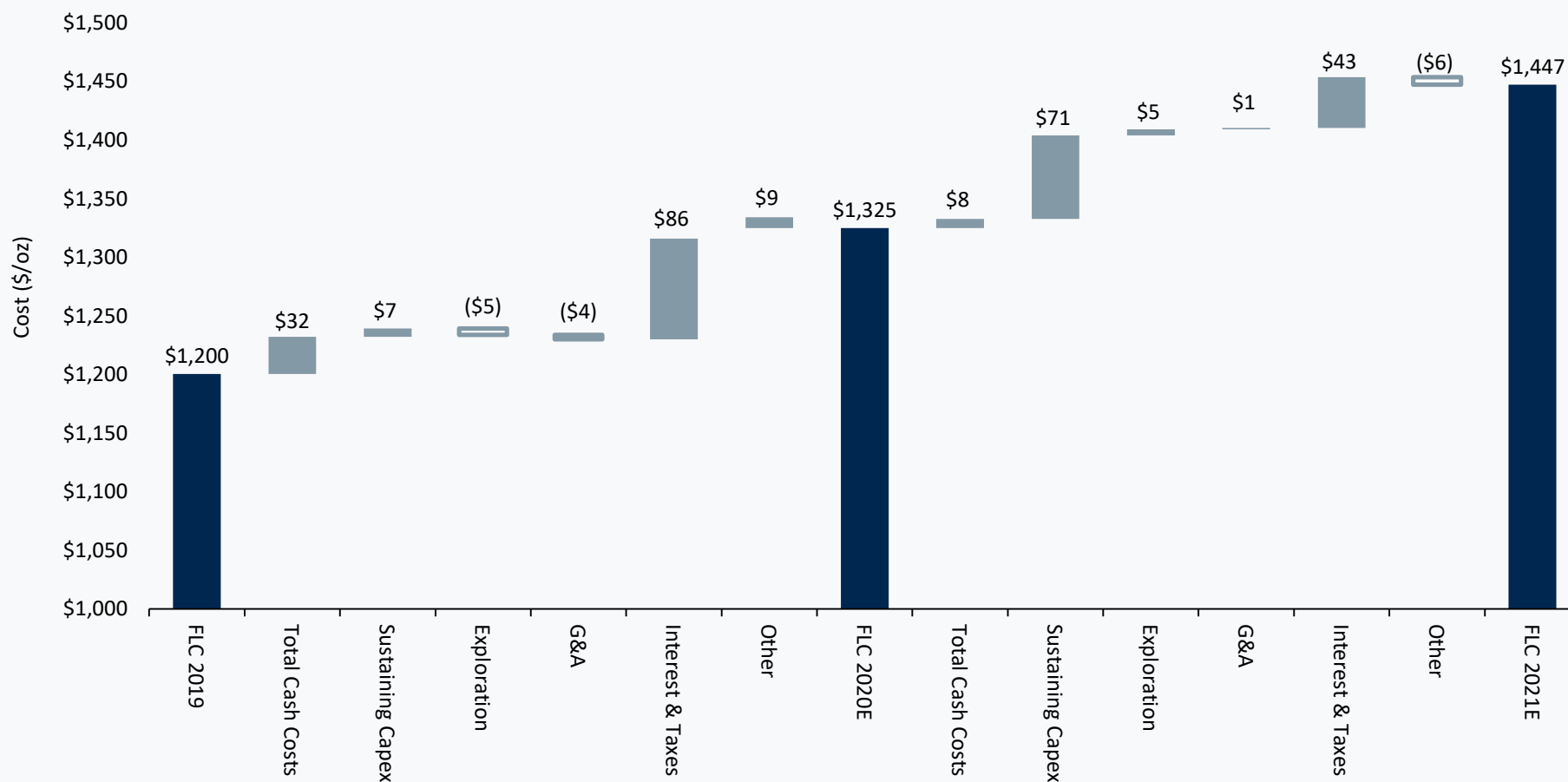
Notes: Data includes dividends/free cash flow historicals and RBCCM estimates for AEM, AGI, AUJ, BTG, EGO, KGC, GOLD, IAG, KL, NEM for periods when dividends were/are expected to be paid; LHS assumes RBCCM price deck forecasts.

Source: Company reports, RBC Capital Markets estimates

Gold equity themes: We calculate higher cost inflation in 2021, in line with 2020 trends

On a fully loaded basis, we calculate gold production costs of US\$1,325/oz in 2020E for companies under coverage (+10% YoY). Our cost forecast in 2021E is \$1,447oz, a 9% increase YoY, where higher capital spending and taxes are key contributors. Capital spending deferrals from 2020 as a result of COVID-19 constraints are a function of higher costs in 2021, and costs could decline in 2022.

Drivers of change in gold producers' fully loaded costs (FLC) per ounce (2019 to 2021E)

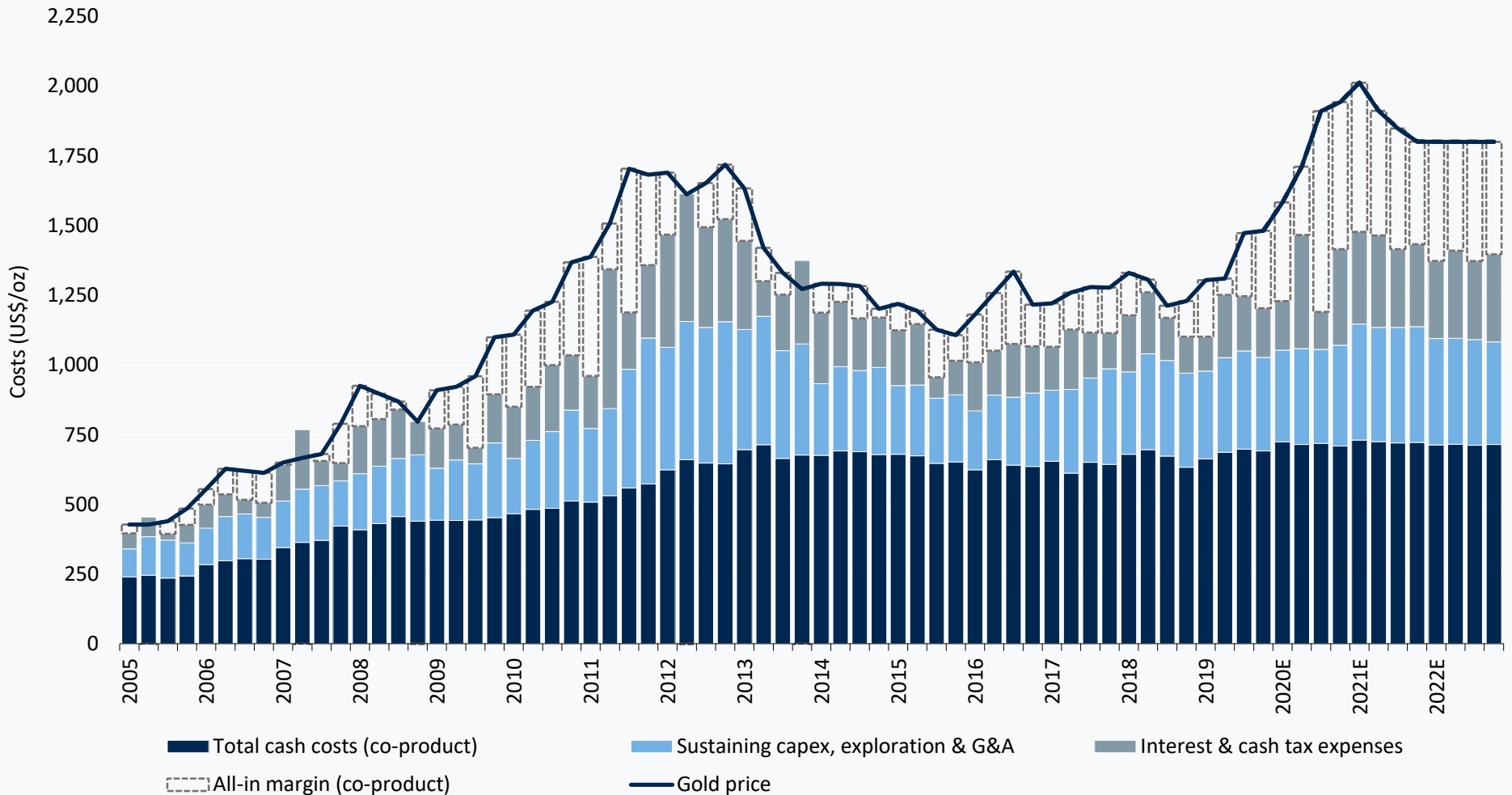


Note: Data for our gold producer coverage universe includes AEM, AGI, AUY, BTG, EGO, GOLD, IAG, KGC, KL, NEM and NGD, as well as RRS (acq'd by Barrick Q1/19) and GG (acq'd by NEM Q2/19). Sustaining capex includes mine-site project capital.
Source: Bloomberg, RBC Capital Markets estimates

Gold equity themes: Producer costs are correlated to gold, but margins have expanded somewhat

We calculate gold producer costs on a fully-loaded basis, representing break-even prices before dividends, debt repayment, and true growth capital for greenfield projects. The correlation between costs and the gold price has been >95% over the last 15 years, thereby eroding margin expansion.

Gold producer coverage cost structure and margin over time



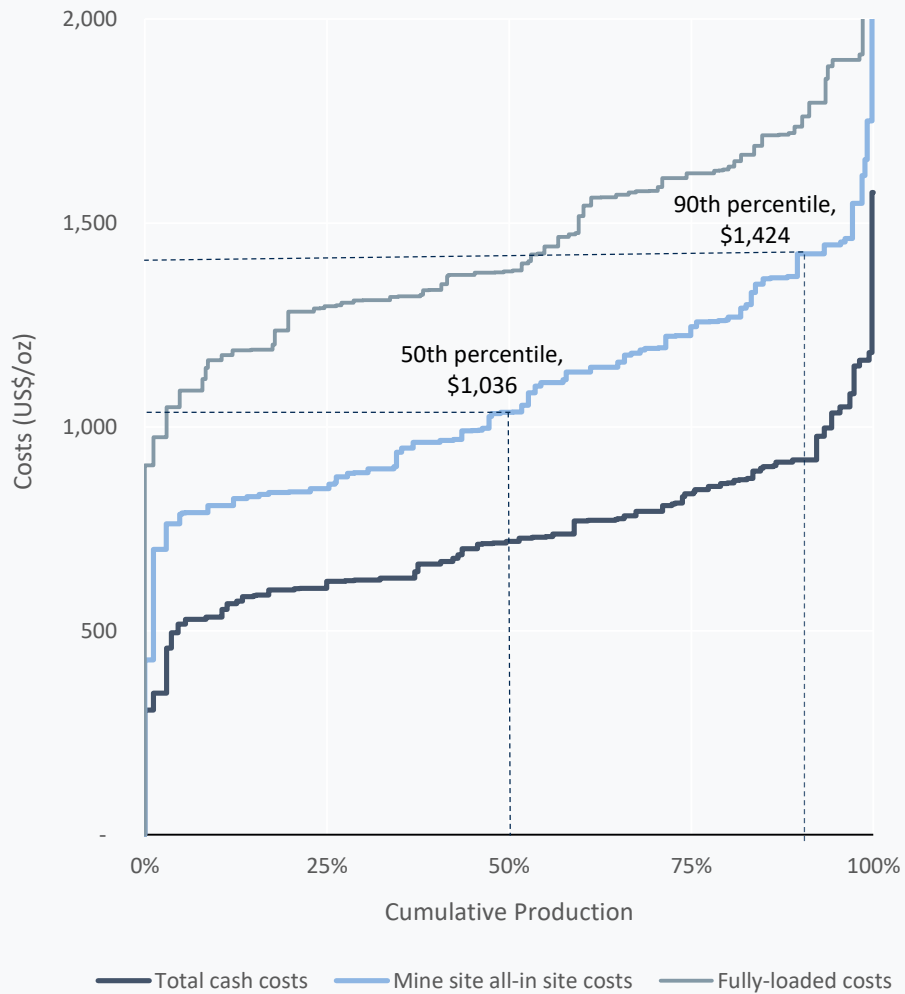
Note: Data for our NA gold producer coverage universe as well as RRS (acq'd by Barrick Q1/19) and GG (acq'd by NEM Q2/19).

Source: Bloomberg, RBC Capital Markets estimates

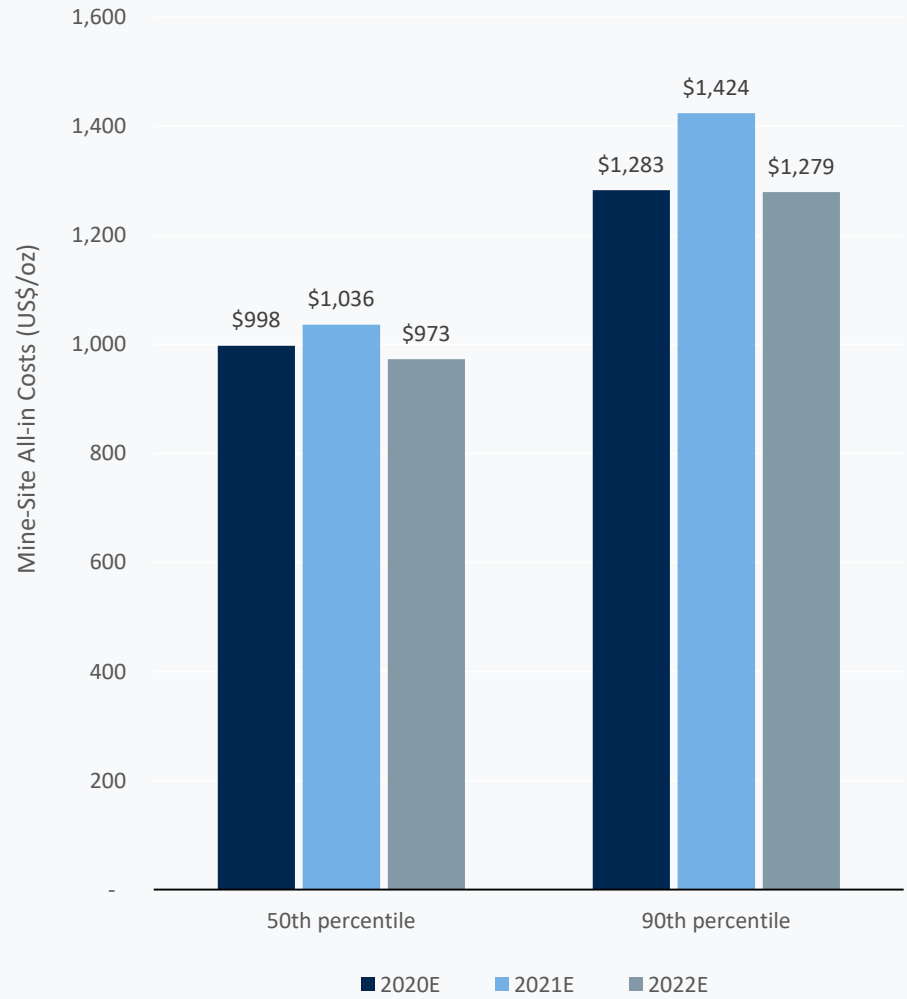
Gold equity themes: Current gold prices are comfortably above the marginal cost of production

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, 2021E



Gold coverage mine-site all-in costs, 2020-22E



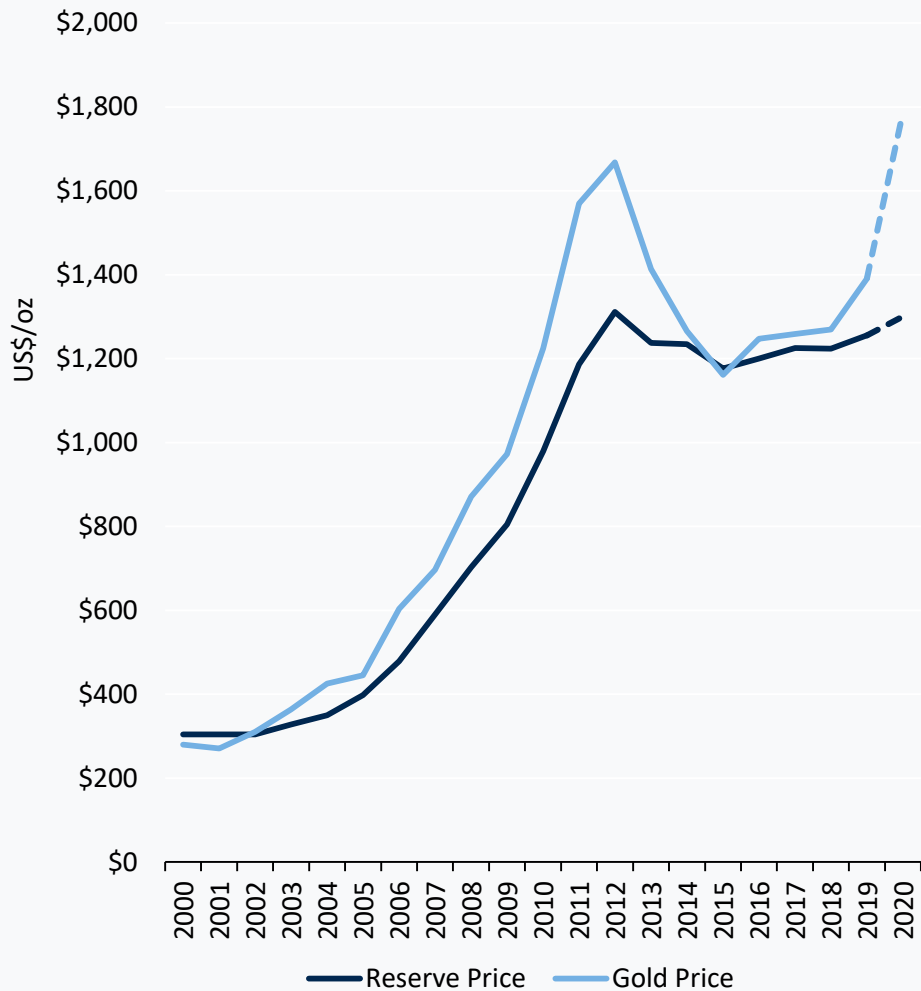
Note: Data for mines operated by our gold producer coverage universe including AEM, AGI, AUJ, BTG, EGO, GOLD, IAG, KGC, KL, NEM and NGD. Median cost curve figures can vary from estimated coverage costs due to the impact of equity ownership interests in the underlying assets.

Source: Bloomberg, RBC Capital Markets estimates

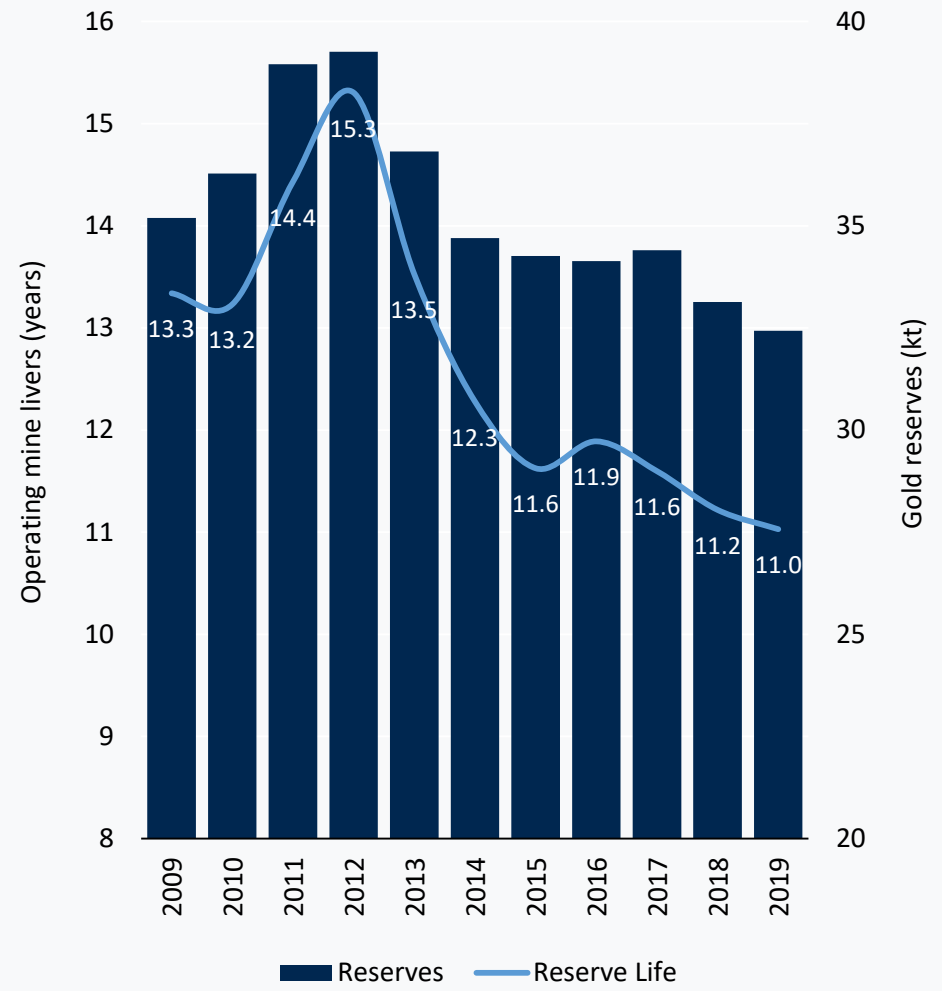
Gold equity themes: Reserve pricing assumptions are conservative

Despite rising gold prices, the underlying assumptions for calculating economic reserves by producers have largely remained stable. Maintaining or extending reserve lives is an important deliverable for the sector, where the quality of these reserves and underlying price assumptions is key.

Mineral reserve versus actual gold prices



Mine lives for the global gold sector



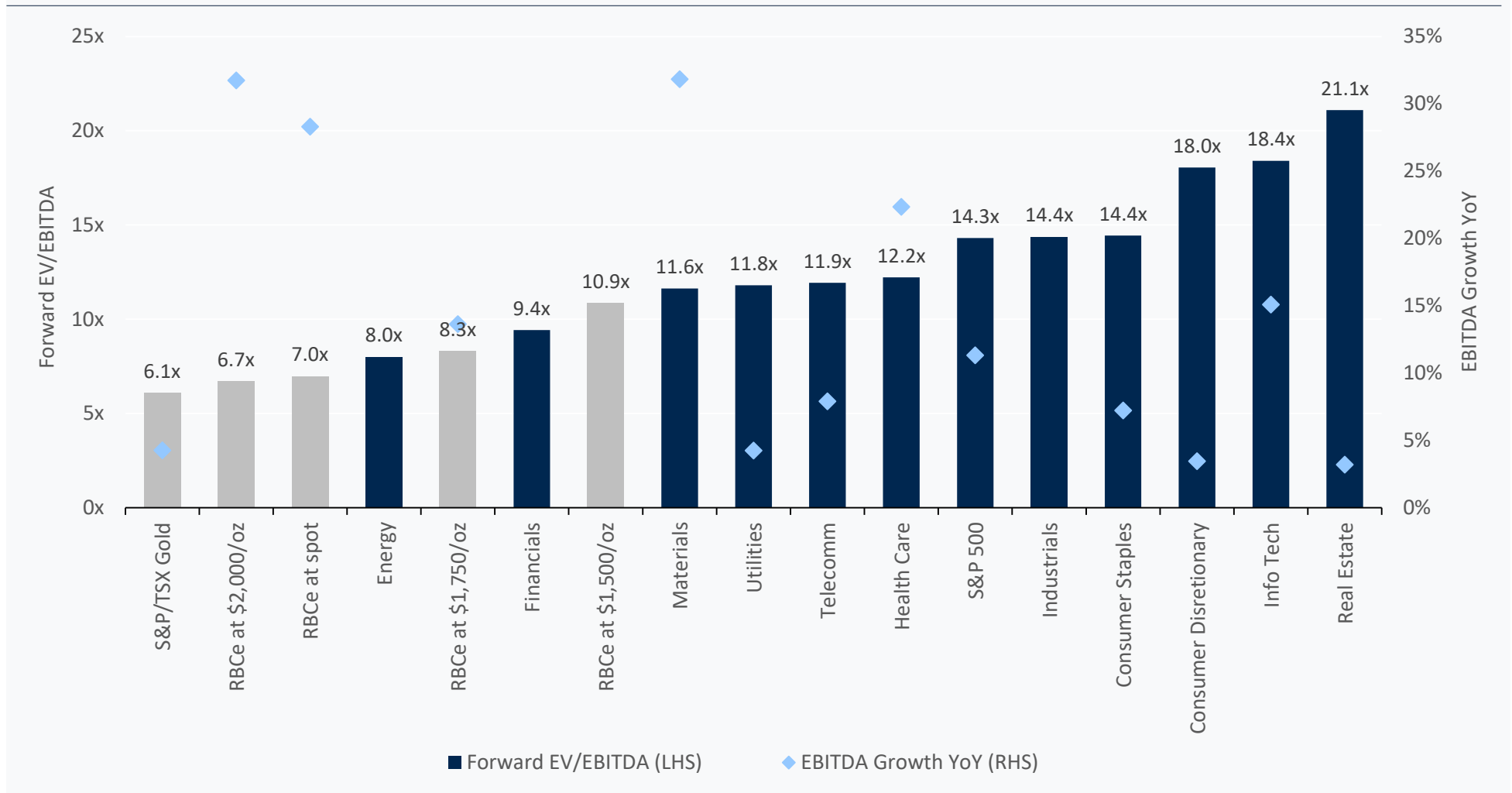
Note: Mine lives calculated as year-end reserves divided by recovery adjusted annual production. Reserve prices include AEM, AGI, AUY, BTG, CG, DPM, EGO, GOLD, IAG, KGC, KL, NEM, NGD, SSRM.

Source: Bloomberg, Company reports, RBC Capital Markets

Gold equity themes: EV/EBITDA valuation for gold equities outline the sector is undervalued

On an EV/EBITDA basis, gold equities at RBC estimates and the consensus in 2021 outline the sector is valued attractively on a relative basis. At lower gold price assumptions, gold equities are still valued attractively.

Forward EV/EBITDA valuation by sector (2021E)



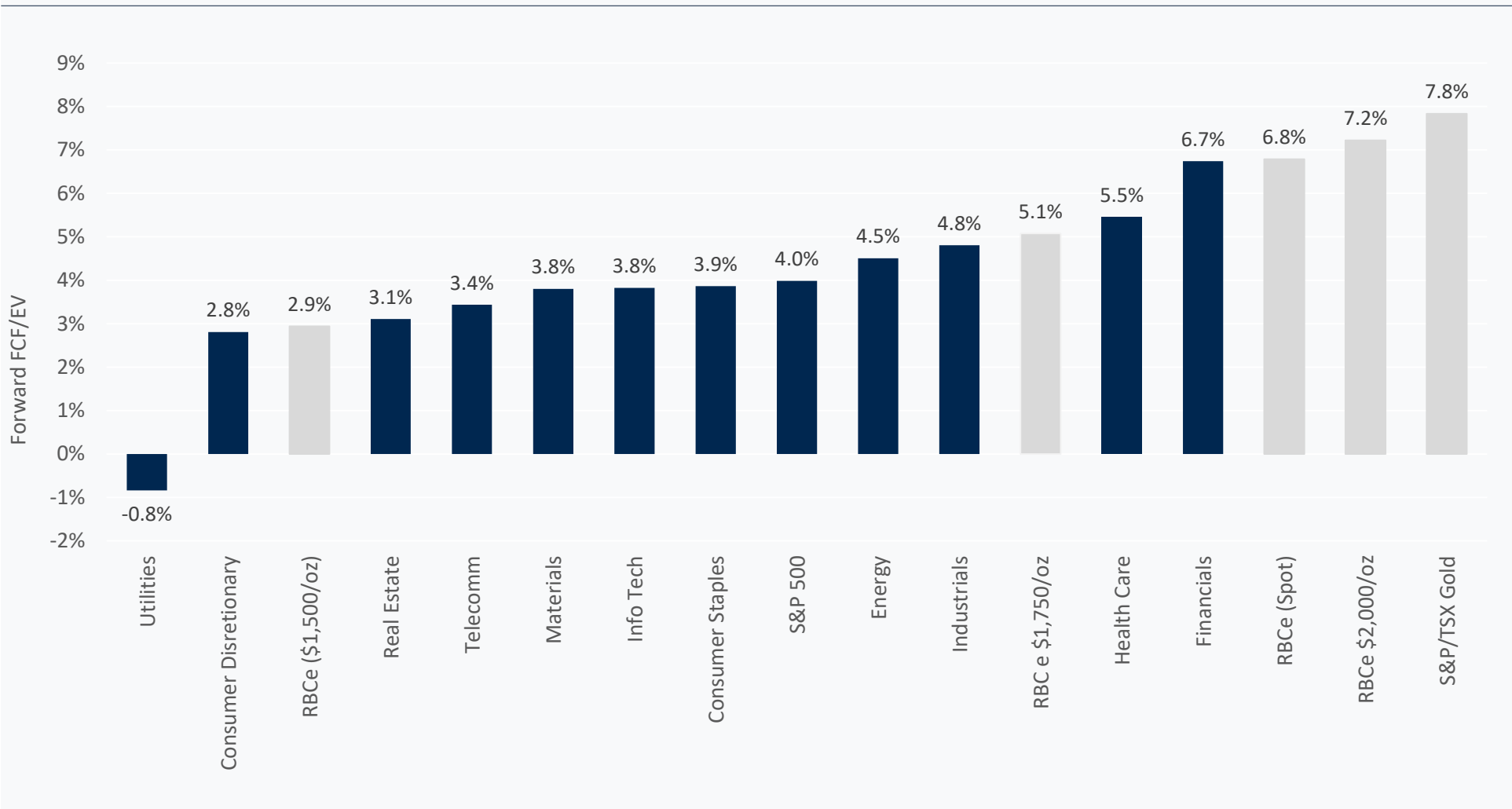
Note: Forward EV/EBITDA and EBITDA growth for gold equities measured by S&P/TSX Global Gold Index. Forward EV/EBITDA and EBITDA growth for S&P 500 sectors measured by GICS indices. Forward EV/EBITDA and EBITDA growth for RBCe figures measured by RBC estimates for North American gold coverage universe.

Source: Bloomberg, RBC Capital Markets estimates

Gold equity themes: FCF/EV valuation for gold equities outline the sector may be undervalued

On an FCF/EV basis, gold equities at RBC estimates and the consensus in 2021 outline the sector is valued attractively on a relative basis. At lower gold price assumptions, gold equities could become less attractive on this metric.

Forward FCF/EV valuation by sector (2021E)



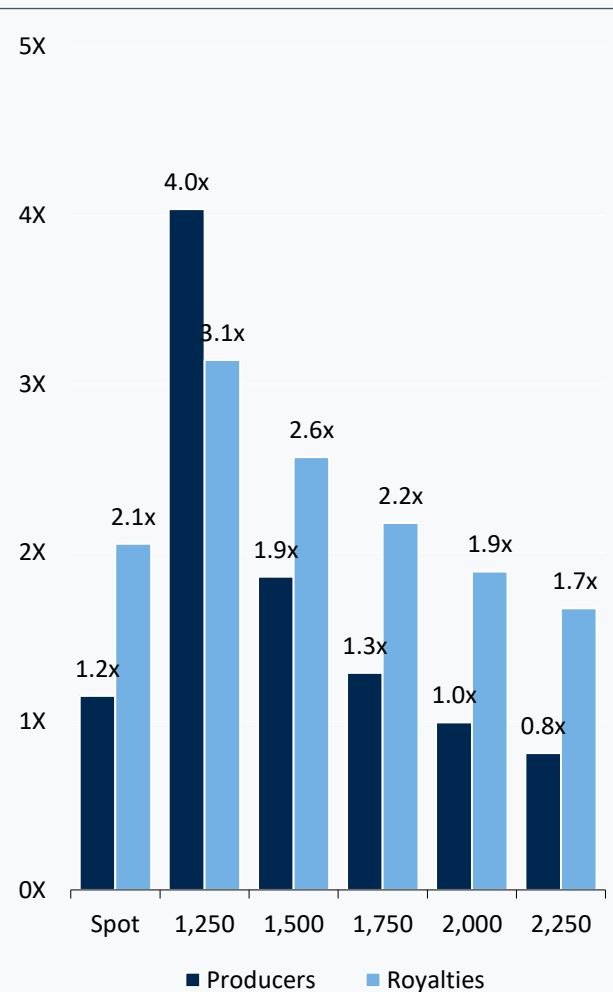
Note: Forward FCF/EV for gold equities measured by S&P/TSX Global Gold Index. Forward FCF/EV for S&P 500 sectors measured by GICS indices. Forward FCF/EV for RBCe figures measured by RBC estimates for North American gold coverage universe.

Source: Bloomberg, RBC Capital Markets estimates

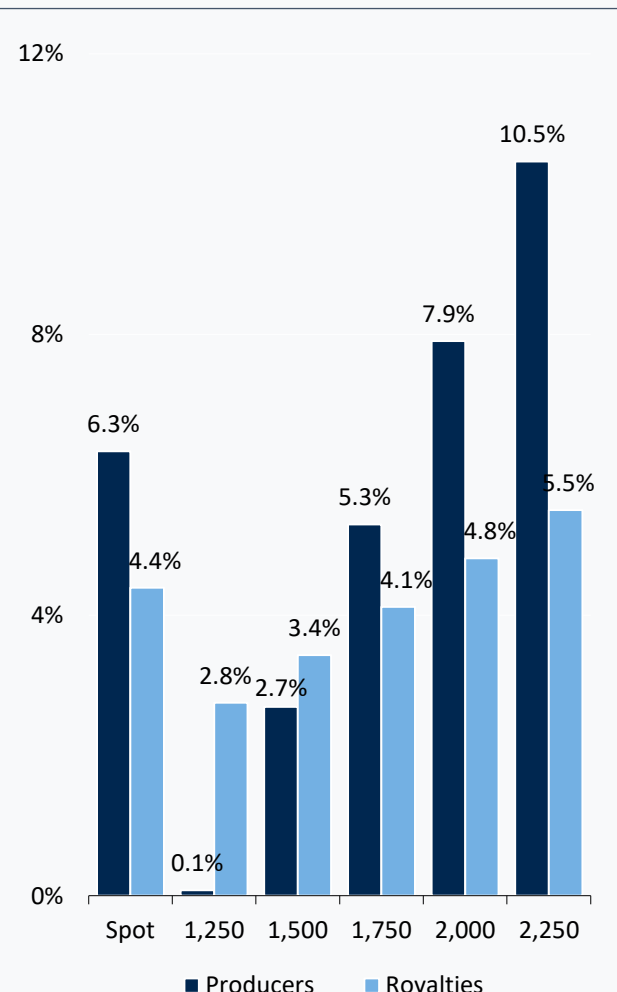
Gold equity themes: Valuation sensitivity of North American gold producers and royalty companies

At spot gold, our North American coverage trades at a 2021 FCF/EV of 6.2% and EV/EBITDA of 7.3x. At a pricing assumption of \$1,500/oz, sector valuation represents FCF/EV of 3.1% and EV/EBITDA of 10.4x.

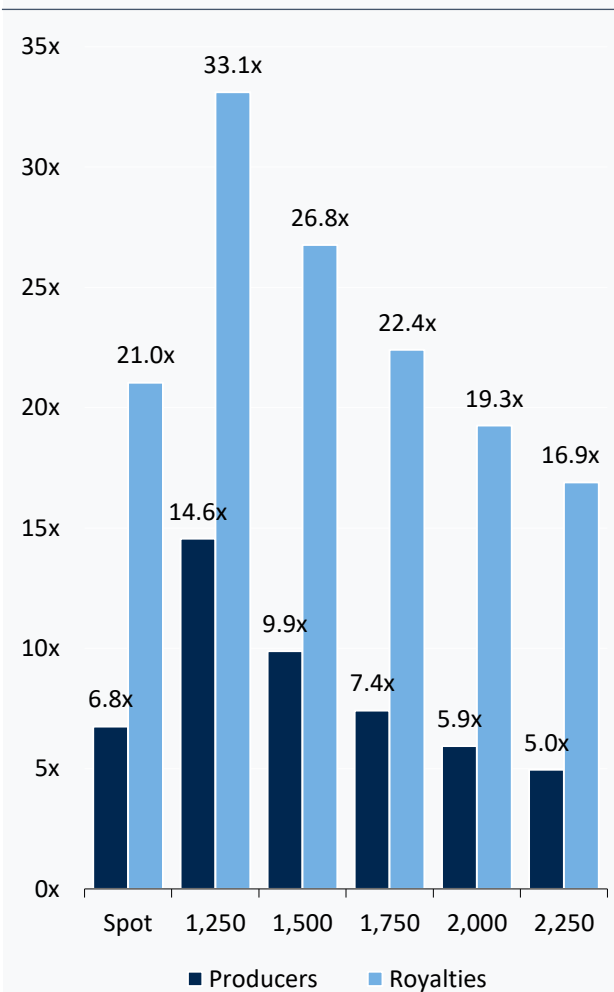
P/NAV sensitivity to gold prices



FCF/EV (2021) sensitivity to gold prices



EV/EBITDA (2021) sensitivity gold prices



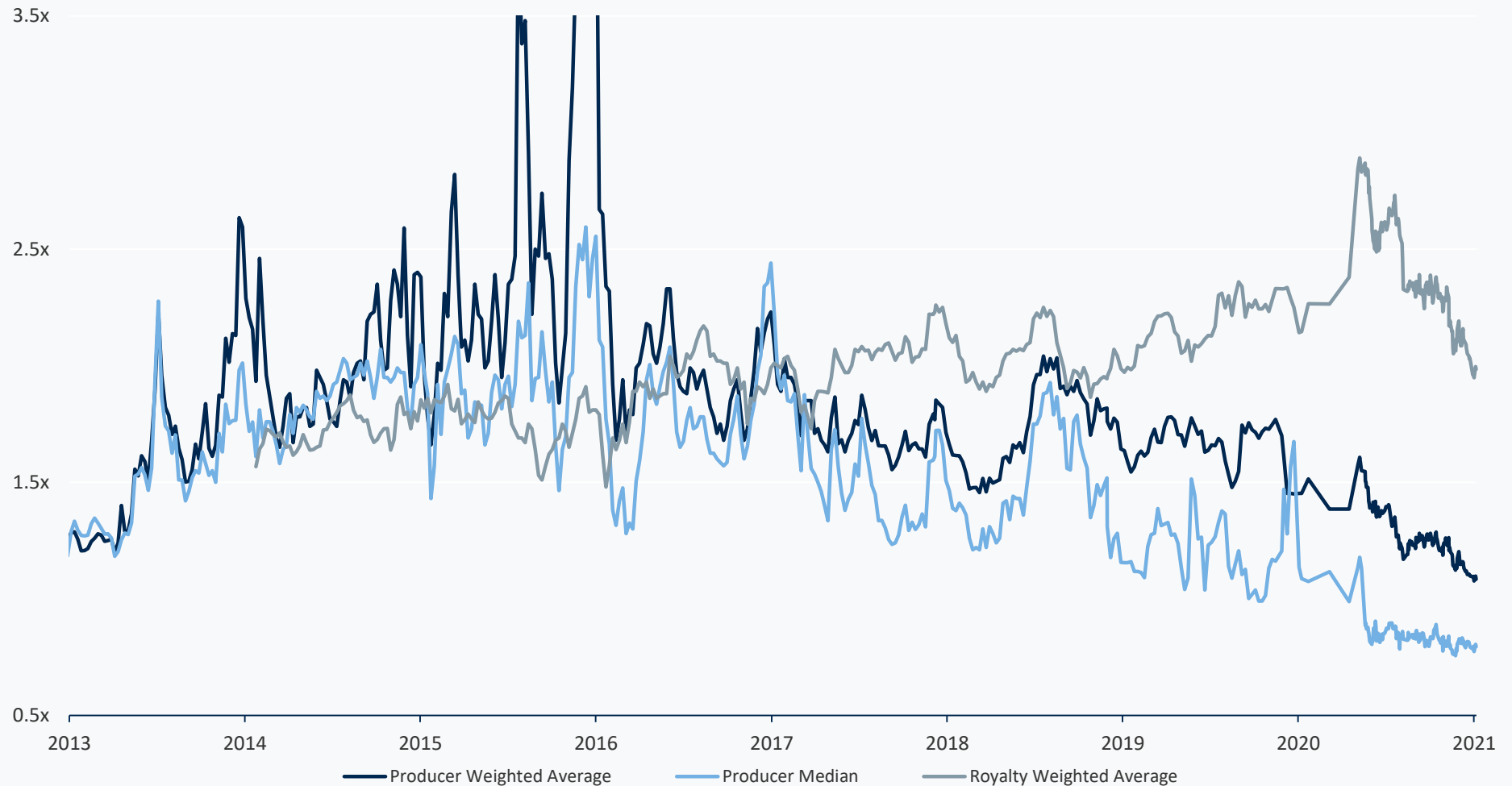
Notes: Producers and royalties values represent North American coverage universe weighted by market capitalization for P/NAV and weighted by enterprise value for FCF/EV and EV/EBITDA. Priced as of January 8, 2020.

Source: Bloomberg, RBC Capital Markets estimates

Gold equity themes: Valuation over time of North American producers and royalty companies

At spot gold prices, the producer universe P/NAV valuation has contracted over time, while the royalty universe's premium has expanded. At current valuations, we view the investment merits of producers as slightly more preferable to those of the royalty group.

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: Consensus gold equity FCF/EV valuation has improved over time

FCF/EV valuation for the gold equity sector has considerably improved over time, a function of both higher gold prices and business improvement. Consensus estimates outline gold equities are competitive on a valuation basis to generalist investment options.

Historical 1-year forward FCF/EV yield—Consensus estimates



Source: Bloomberg, RBC Capital Markets

Price deck & changes summary



Capital
Markets

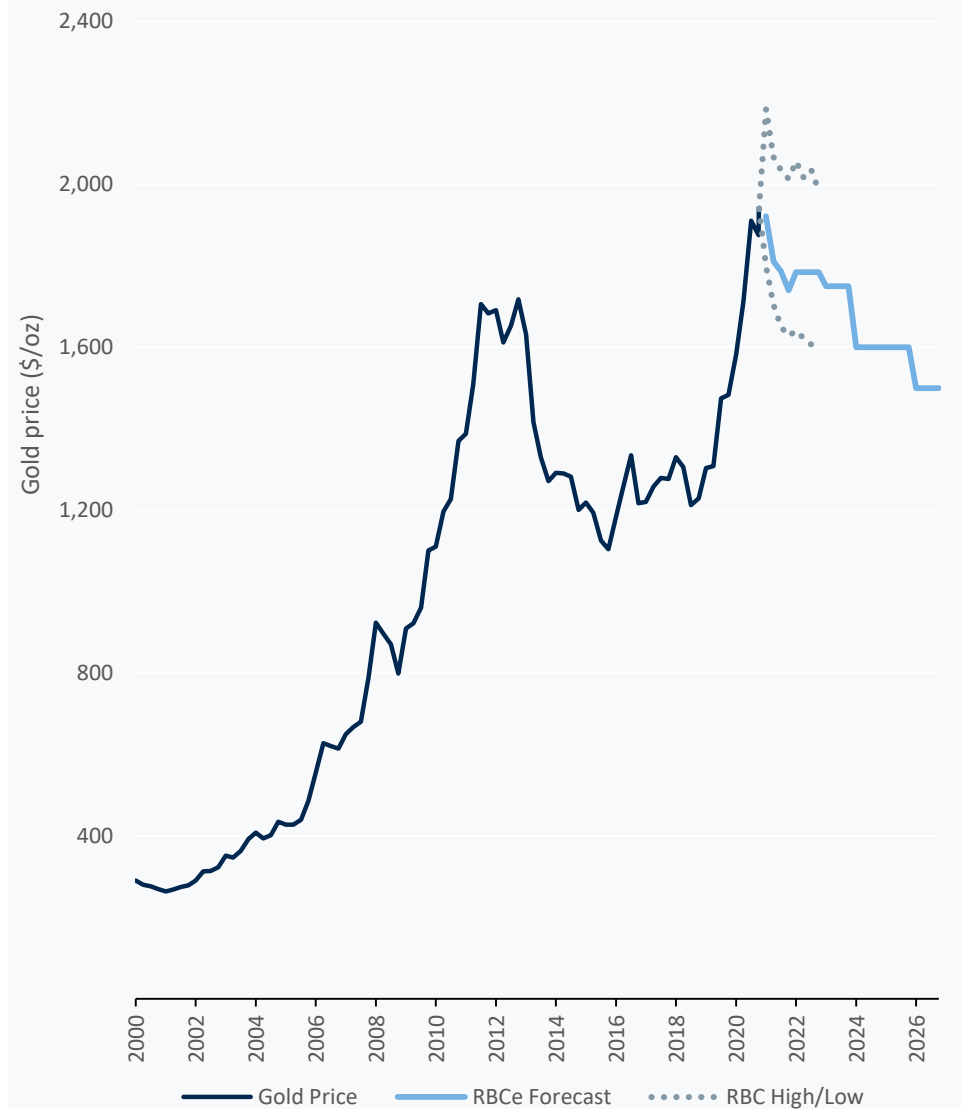
Gold price forecasts

Gold price forecast changes (\$/oz)

	New	Previous	Change
Q1/21E	\$1,922	\$2,012	-4%
Q2/21E	\$1,810	\$1,911	-5%
Q3/21E	\$1,787	\$1,848	-3%
Q4/21E	\$1,740	\$1,801	-3%

	New	Previous	Change
2021E	\$1,815	\$1,893	-4%
2022E	\$1,785	\$1,800	-1%
2023E	\$1,750	\$1,800	-3%
2024E	\$1,600	\$1,600	--
2025E	\$1,600	\$1,600	--
2026E (LT)	\$1,500	\$1,500	--

RBC gold price forecast



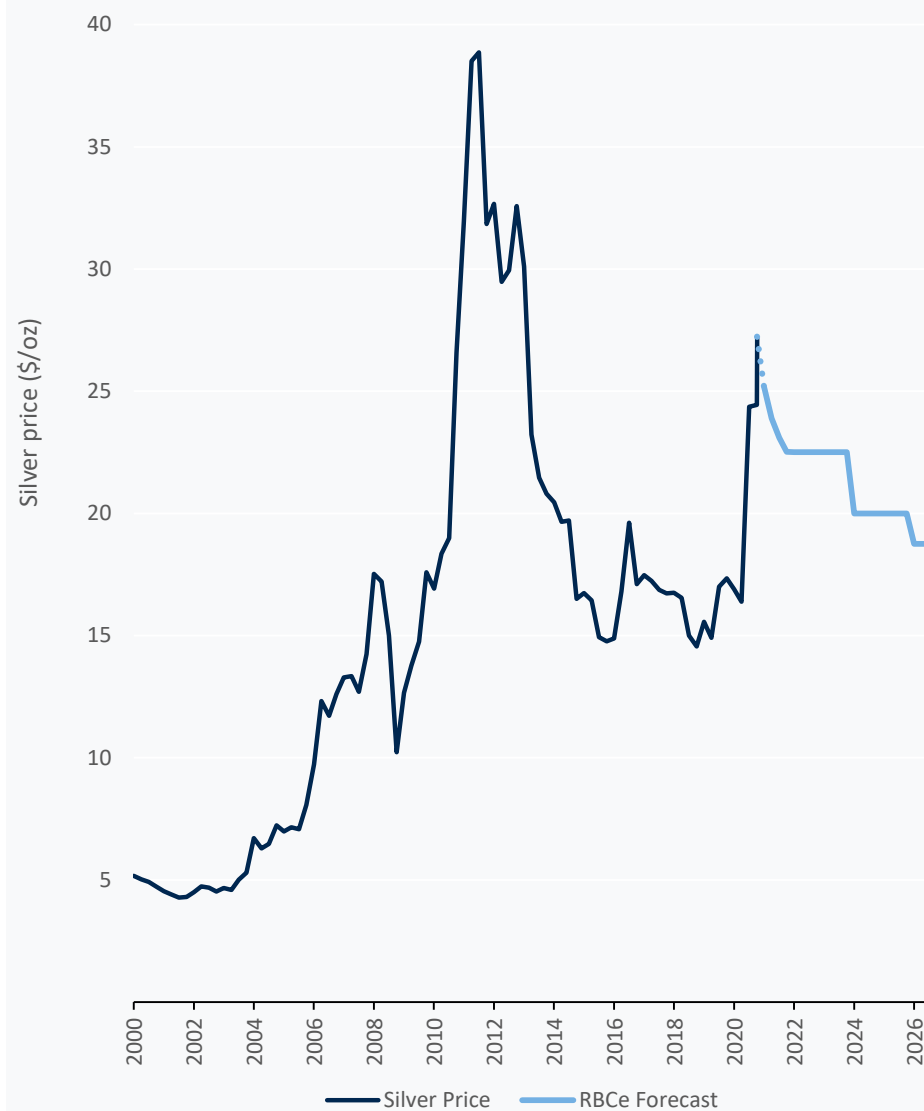
Silver price forecasts

Silver price forecast changes (\$/oz)

	New	Previous	Change
Q1/21E	\$25.15	\$25.15	--
Q2/21E	\$23.89	\$23.89	--
Q3/21E	\$23.10	\$23.10	--
Q4/21E	\$22.51	\$22.51	--

	New	Previous	Change
2021E	\$23.66	\$23.66	--
2022E	\$22.50	\$22.50	--
2023E	\$22.50	\$22.50	--
2024E	\$20.00	\$20.00	--
2025E	\$20.00	\$20.00	--
2026E (LT)	\$18.75	\$18.75	--

RBC silver price forecast



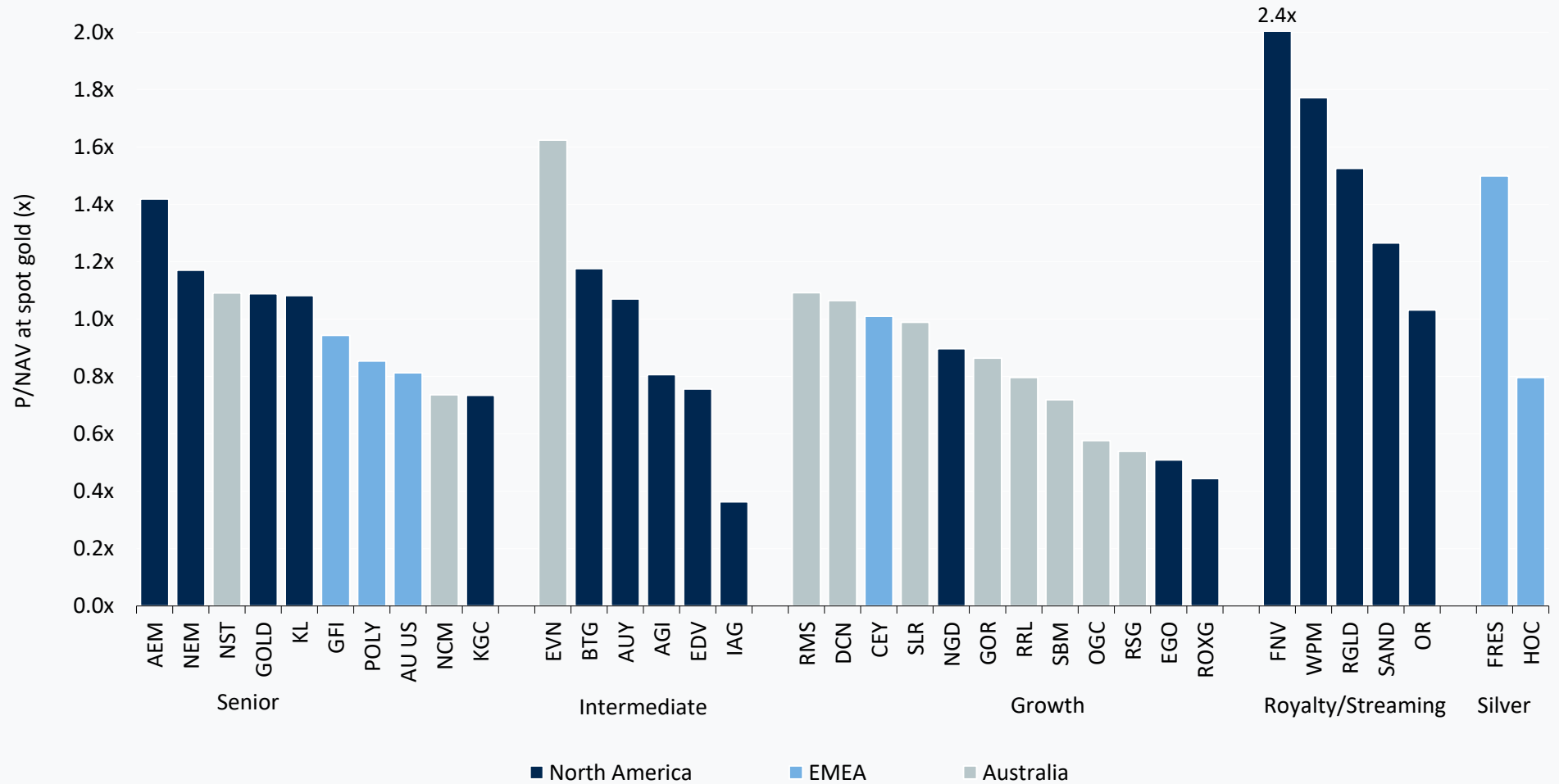
Sensitivities and Valuation



Capital
Markets

Coverage themes: Relative P/NAV comparison

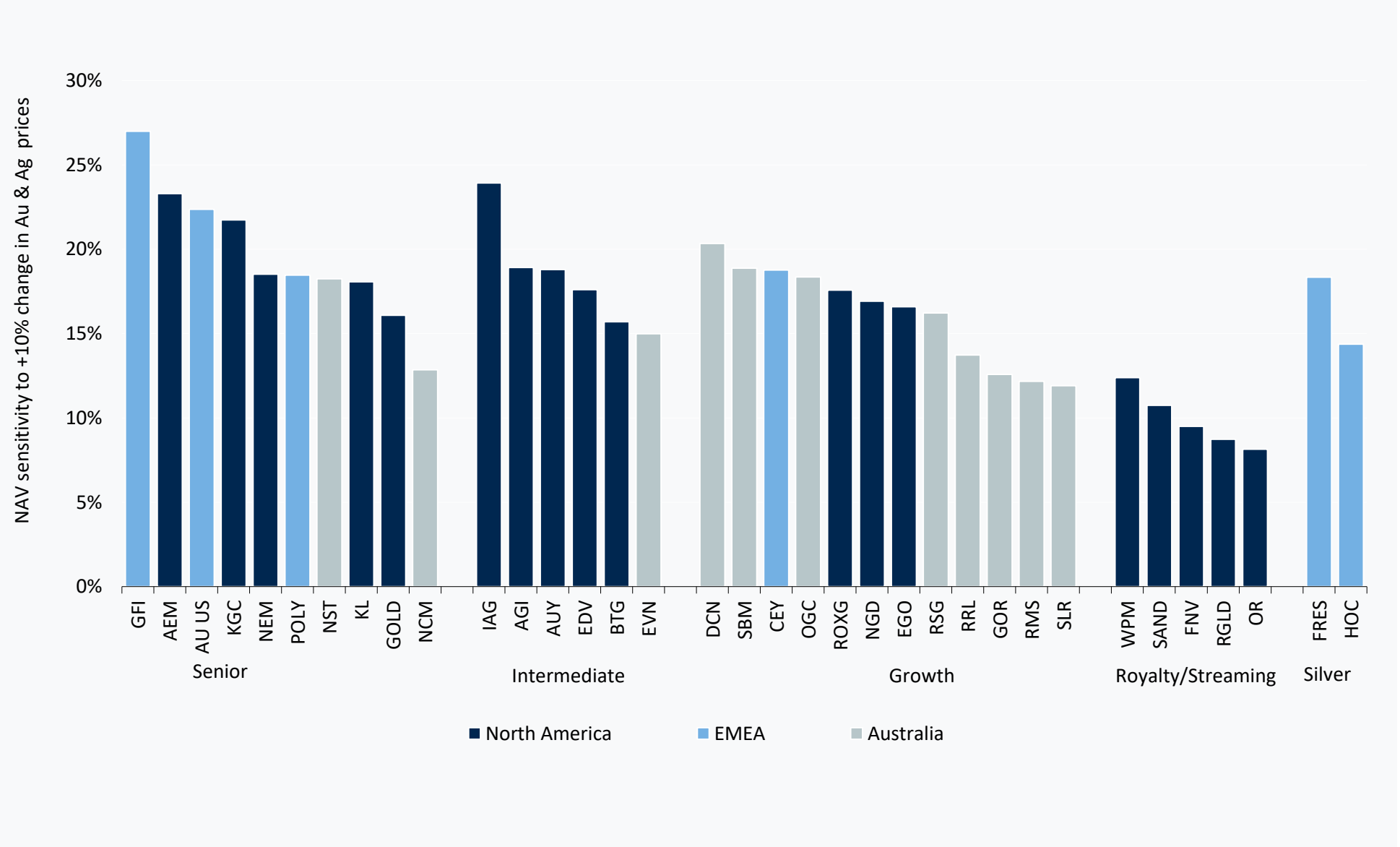
P/NAV at spot gold



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 estimates

Coverage themes: NAV sensitivity to gold prices

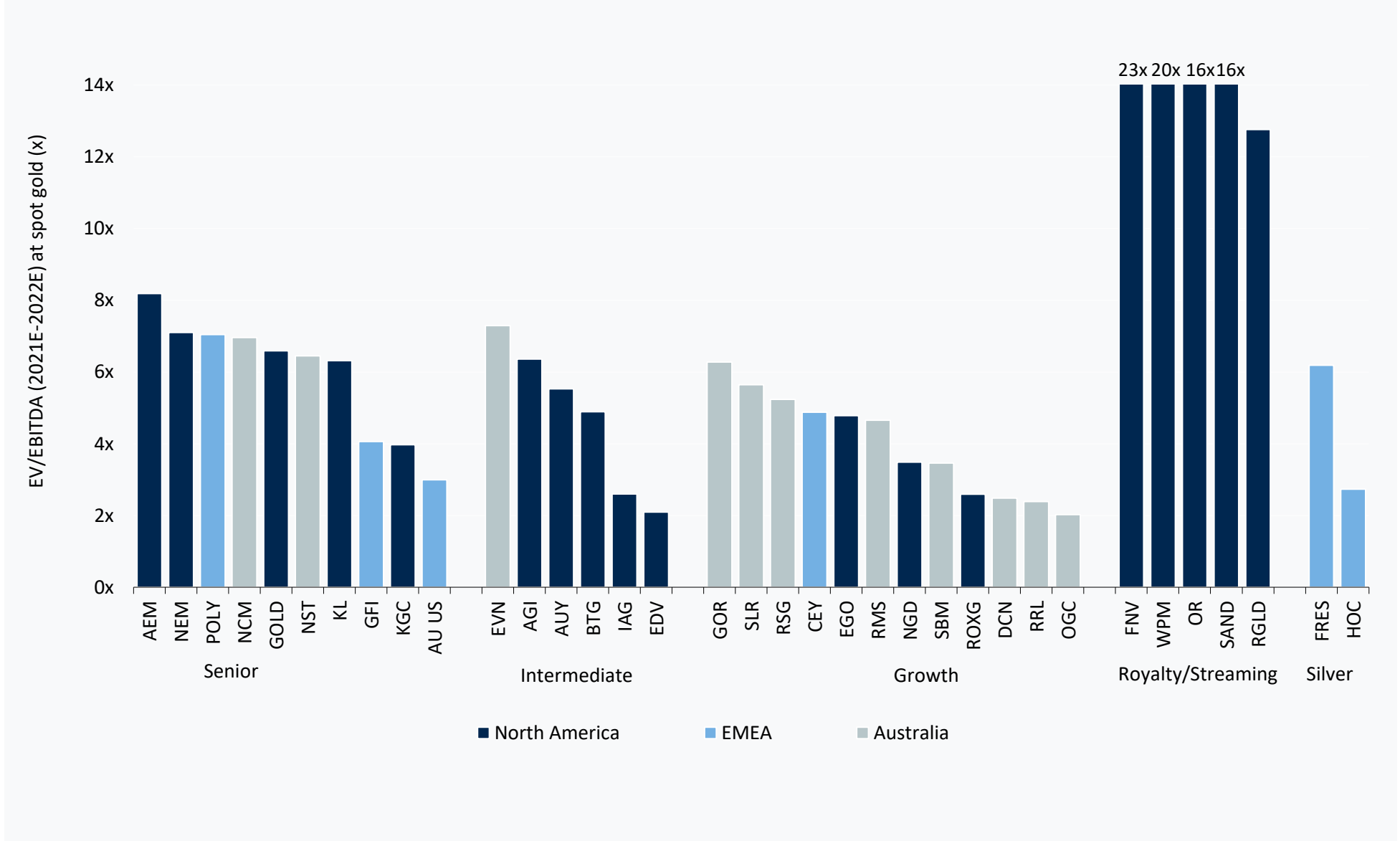
NAV sensitivity for +10% change in gold and silver prices



Note: Scenarios assume the spot gold/silver price ratio and spot base metals and currencies.
 Source: Company reports, RBC Capital Markets estimates

Coverage themes: Relative EV/EBITDA comparison

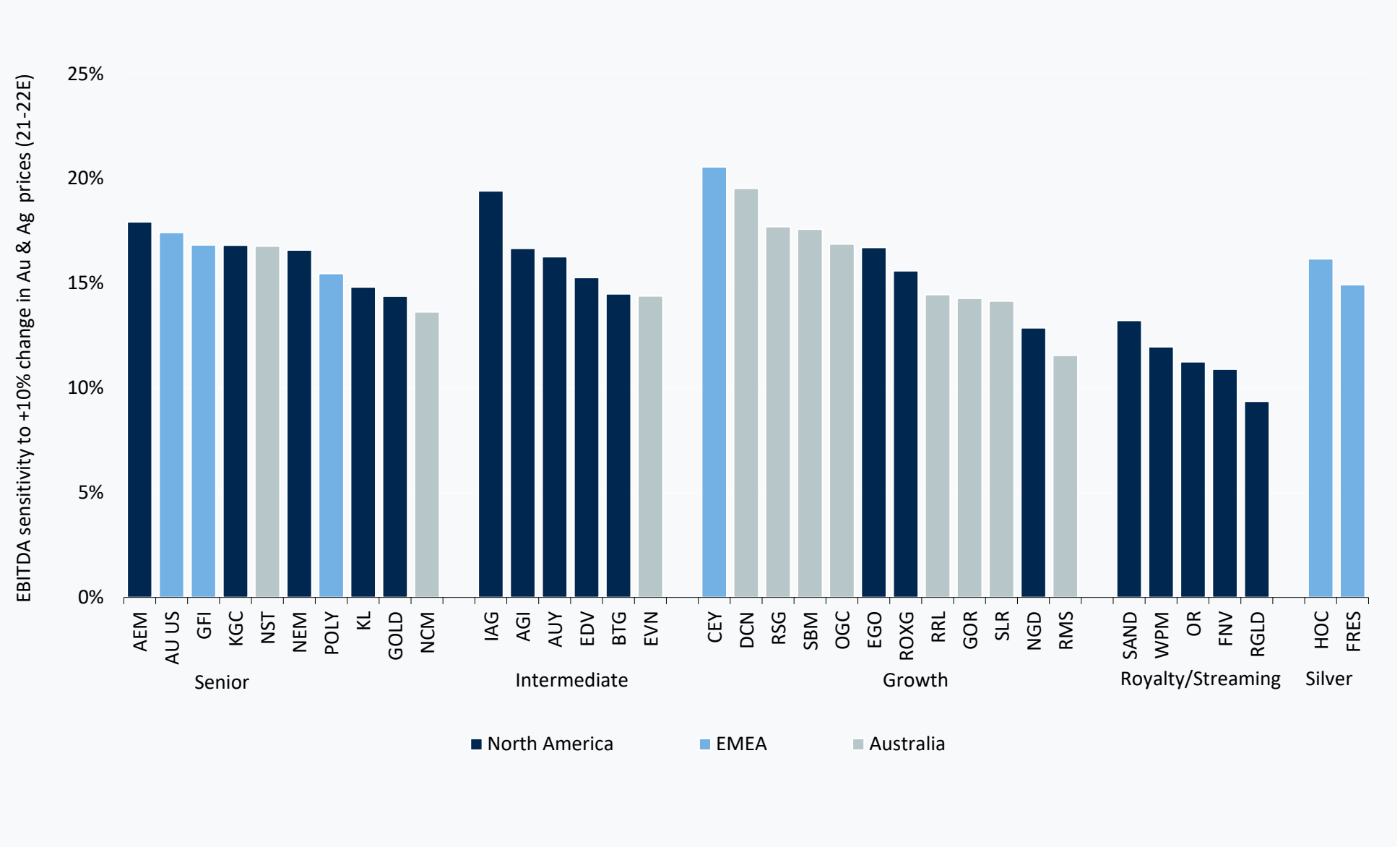
EV/EBITDA (2021-2022E) at spot gold



Source: Bloomberg, RBC Capital Markets estimates

Coverage themes: EBITDA sensitivity to gold prices

EBITDA sensitivity for +10% change in gold and silver prices



Note: Scenarios assume the spot gold/silver price ratio and spot base metals and currencies.
 Source: Company reports, RBC Capital Markets estimates

Coverage themes: Relative FCF comparison

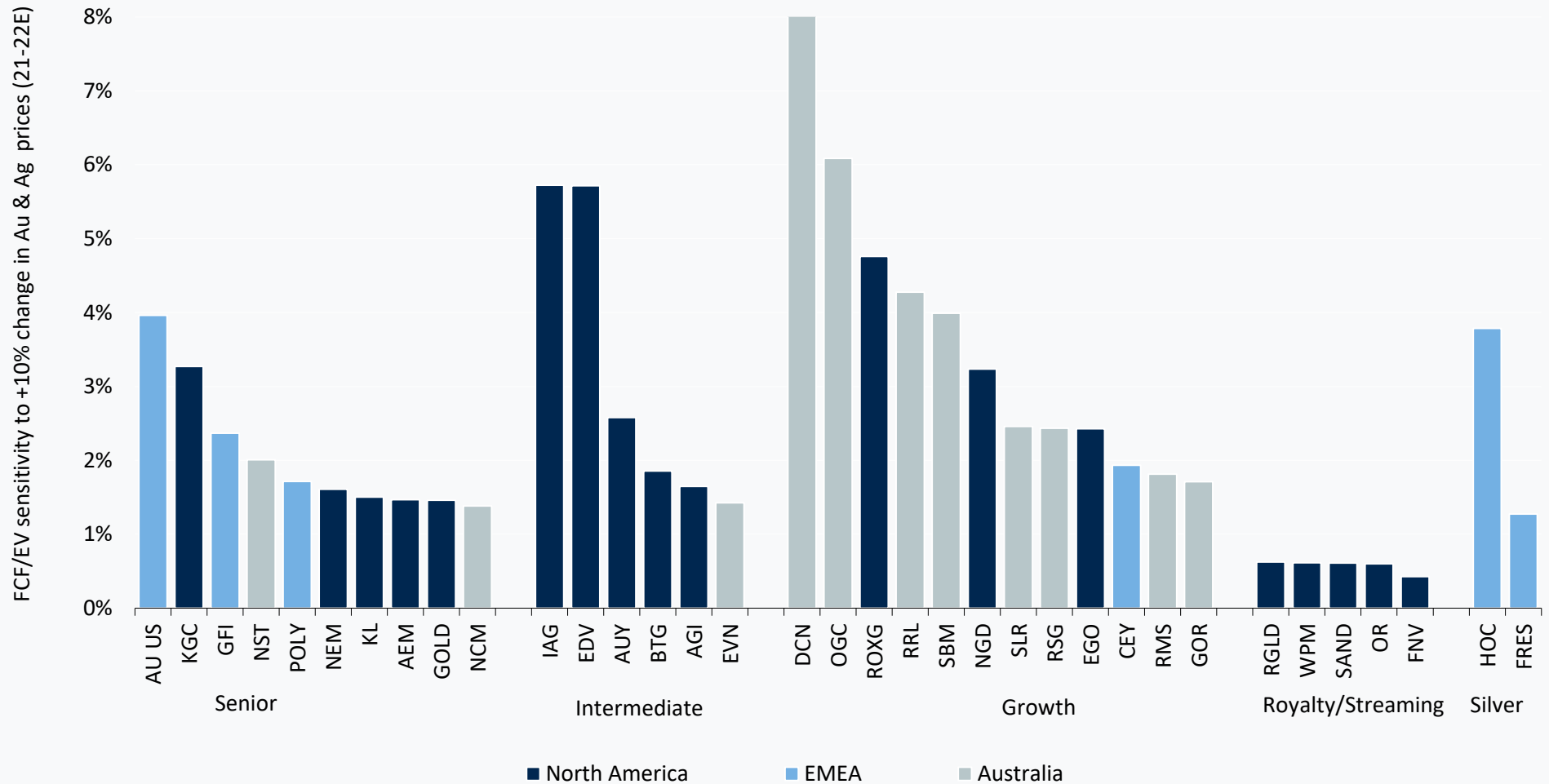
FCF/EV yield (2021-2022E) at spot gold



Source: Bloomberg, RBC Capital Markets estimates

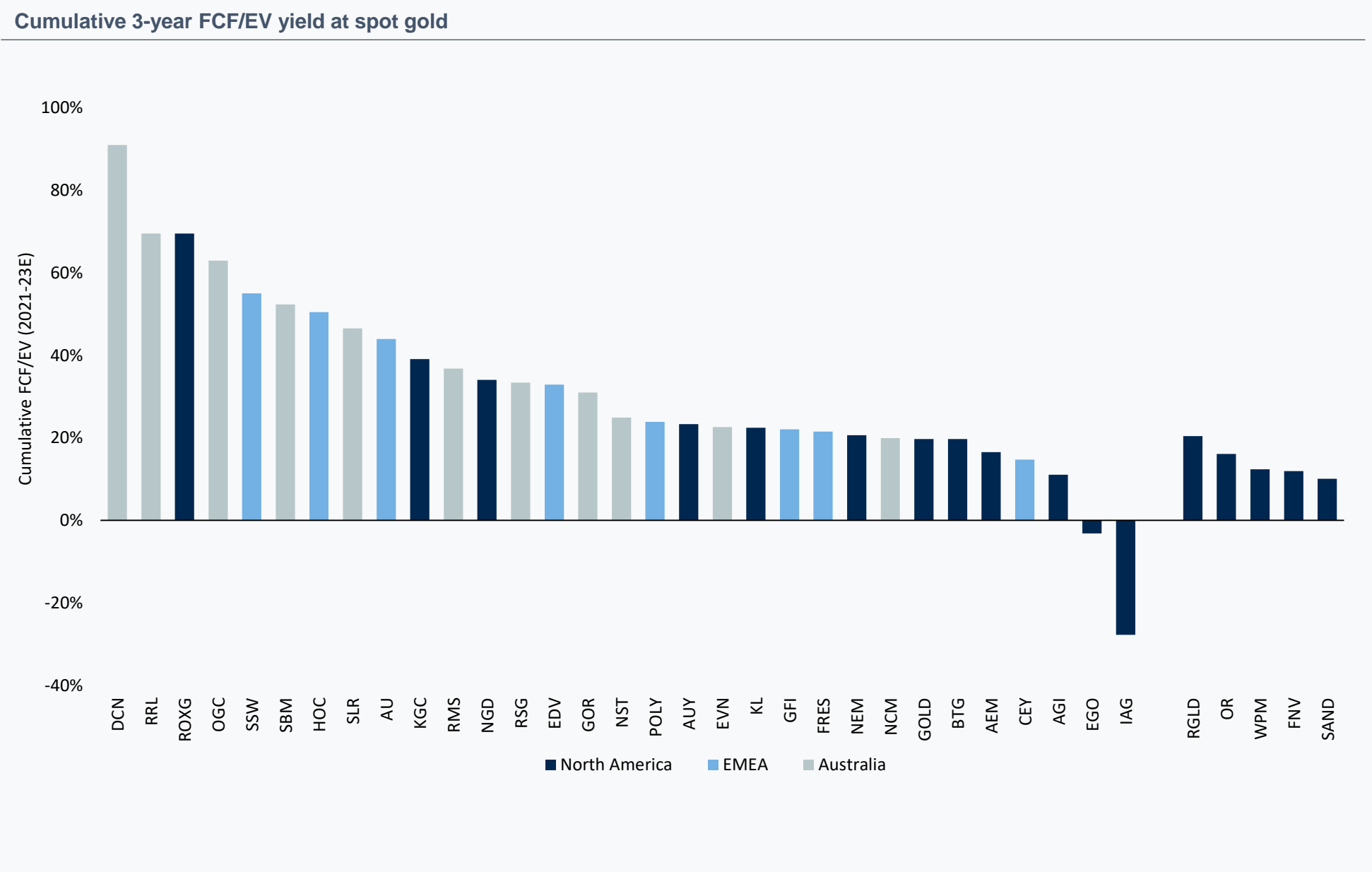
Coverage themes: FCF sensitivity to gold prices

FCF/EV sensitivity for +10% change in gold and silver prices



Note: Scenarios assume the spot gold/silver price ratio and spot base metals and currencies.
Source: Company reports, RBC Capital Markets estimates

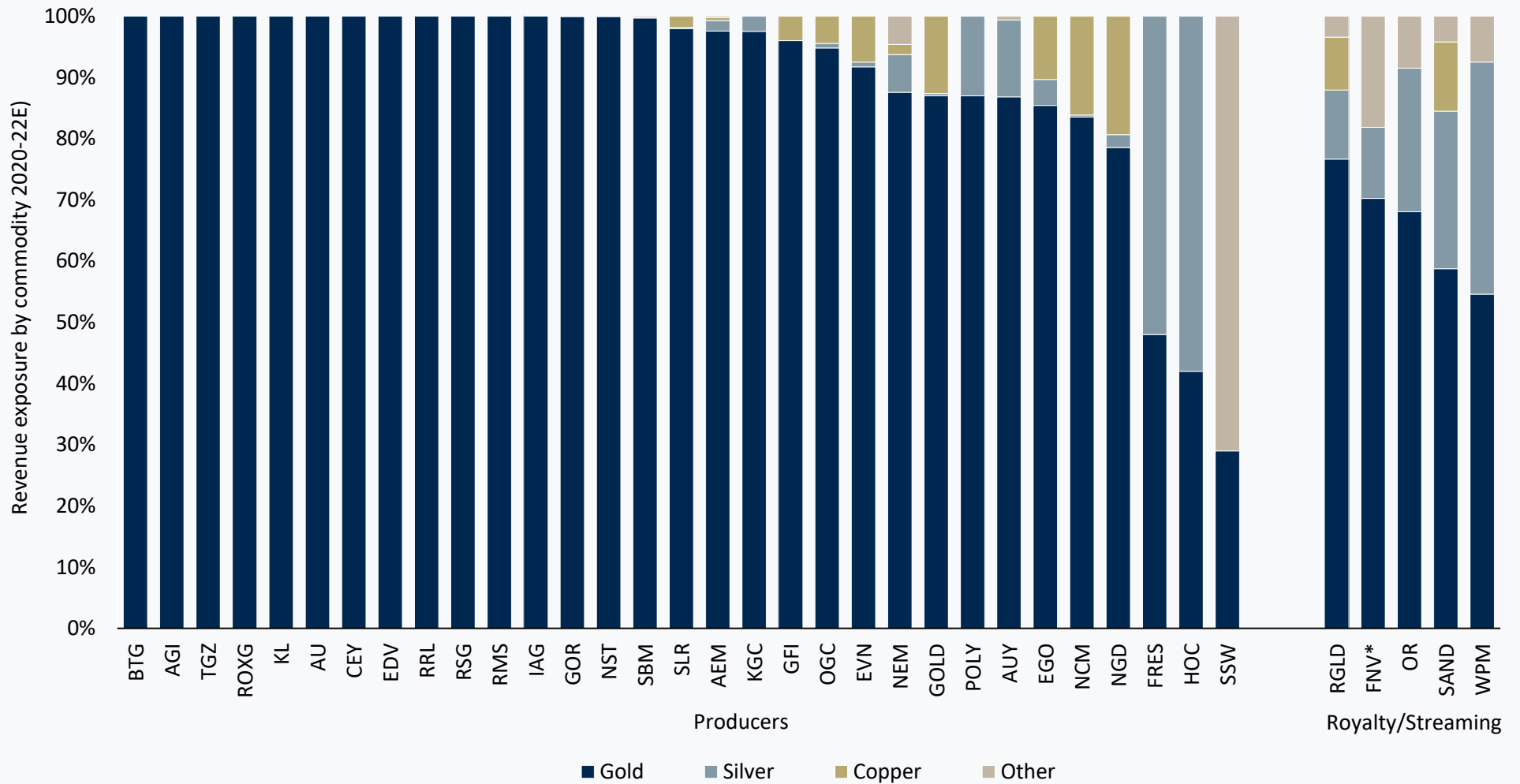
Coverage themes: Cumulative forecast FCF over time



Source: Bloomberg, RBC Capital Markets estimates

Coverage themes: Commodity exposure comparison

Forecast revenue breakdown by commodity, 2020-22E



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

Global comparable tables



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Appendix I: Valuation tables

Company	Ticker	Analyst	Rating & Risk	Operational Forecasts									Reserves and Resources		Balance Sheet			Dividend	Market Cap (\$M)	EV (1) (\$M)		
				Production (Koz)			Cash Costs (\$/oz)			AISC (\$/oz)			(P&P) (4)	(M&I) (4)	Cash 2019A	LTD 2019A	Net-Debt EBITDA	Yield				
				2019A	2020E	2021E	2019A	2020E	2021E	2019A	2020E	2021E										
Royalties & Streaming																						
Franco-Nevada	FNV	JW	SP	516	511	580	\$264	\$277	\$283	\$376	\$443	\$412	n.a.	n.a.	\$132	\$80	-0.08x	0.8%	\$24,865	\$24,398		
Osisko Gold Royalties	OR	JW	O	78	66	84	\$129	\$71	\$45	\$708	\$1,071	\$669	n.a.	n.a.	C\$108	C\$369	2.62x	1.1%	\$2,225	\$2,402		
Royal Gold	RGLD	JW	O	337	311	351	\$237	\$270	\$252	\$445	\$507	\$521	n.a.	n.a.	\$81	\$135	0.16x	1.1%	\$7,205	\$7,067		
Sandstorm Gold Royalties	SAND	JW	SP	64	52	61	\$285	\$245	\$196	\$595	\$529	\$551	n.a.	n.a.	\$7	\$45	0.67x	-	\$1,436	\$1,346		
Wheaton Precious Metals	WPM	JW	SP	692	662	730	\$415	\$418	\$410	\$615	\$578	\$548	n.a.	n.a.	\$104	\$875	1.41x	1.2%	\$20,155	\$20,436		
Average							\$266	\$256	\$237	\$548	\$626	\$540					0.95x	0.8%				
Senior Gold Producers																						
Agnico-Eagle	AEM	JW	SP	1,782	1,733	2,177	\$695	\$826	\$751	\$937	\$1,064	\$962	21.6	39.6	\$322	\$1,735	1.38x	1.9%	\$18,239	\$19,798		
AngloGold Ashanti	AU US	TB	O	3,282	3,043	3,137	\$776	\$790	\$753	\$988	\$1,065	\$963	22.5	51.5	\$456	\$1,299	0.54x	1.3%	\$10,009	\$10,101		
Barrick Gold	GOLD	JW	O	5,578	4,802	4,740	\$688	\$721	\$706	\$891	\$970	\$967	71.0	170.0	\$3,314	\$5,583	0.57x	1.5%	\$42,960	\$43,398		
Gold Fields	GFI	TB	SP	2,195	2,225	2,345	\$740	\$786	\$782	\$961	\$968	\$1,013	54.0	90.1	\$515	\$1,161	0.50x	2.4%	\$8,642	\$9,445		
Kinross Gold	KGC	JW	O	2,472	2,329	2,364	\$706	\$737	\$764	\$983	\$976	\$1,046	24.3	59.8	\$575	\$1,850	0.94x	1.5%	\$10,003	\$11,020		
Kirkland Lake Gold	KL	JW	O	975	1,350	1,326	\$322	\$468	\$522	\$564	\$810	\$814	20.5	31.6	\$707	\$15	-0.71x	1.7%	\$11,552	\$10,928		
Newcrest Mining	NCM	PK	SP	2,347	2,122	2,025	\$596	\$598	\$528	\$804	\$891	\$776	52.2	102.2	A\$666	A\$1,995	0.81x	0.6%	\$17,337	\$16,929		
Newmont	NEM	JW	SP	6,291	5,901	6,474	\$713	\$736	\$757	\$967	\$1,035	\$989	95.7	169.9	\$2,243	\$7,092	1.40x	2.5%	\$52,183	\$54,958		
Northern Star	NST	PK	O	813	982	1,580	\$785	\$855	\$871	\$960	\$1,071	\$1,017	19.4	34.1	A\$1,365	A\$520	-1.48x	1.3%	\$12,070	\$10,883		
Polymetal	POLY	TB	O	1,611	1,600	1,502	\$645	\$577	\$649	\$929	\$933	\$887	23.7	29.4	\$253	\$1,732	1.36x	3.9%	\$11,679	\$12,931		
Average							\$735	\$763	\$739	\$953	\$1,023	\$967					0.59x	1.7%				
Intermediate Gold Producers																						
Alamos Gold	AGI	JW	SP	495	427	496	\$721	\$762	\$721	\$951	\$1,036	\$1,031	9.7	17.1	\$183	\$0	-0.63x	0.8%	\$3,755	\$3,601		
B2Gold	BTG	JW	SP	864	919	936	\$571	\$519	\$583	\$821	\$745	\$867	8.2	5.8	\$141	\$270	0.21x	2.7%	\$6,127	\$5,810		
Endeavour Mining	EDV	WL	O	569	761	1,419	\$722	\$765	\$699	\$867	\$933	\$866	15.5	28.6	\$190	\$726	1.51x	-	\$4,065	\$3,929		
Evolution Mining	EVN	PK	SP	734	731	736	\$537	\$560	\$596	\$746	\$758	\$812	8.7	22.2	A\$170	A\$0	-0.21x	2.3%	\$6,850	\$6,769		
IAMGOLD	IAG	JW	SP	762	659	706	\$907	\$993	\$949	\$1,125	\$1,224	\$1,263	16.7	27.9	\$831	\$420	-1.95x	-	\$1,739	\$1,543		
Sibanye-Stillwater	SBSW	TB	O	935	984	1,300	\$1,415	\$1,300	\$1,050	\$1,503	\$1,476	\$1,204	25.7	87.2	R5,619	R23,971	1.23x	0.0%	\$12,017	\$11,368		
Yamana Gold	AUY	JW	SP	900	783	875	\$667	\$694	\$666	\$978	\$1,060	\$1,012	7.9	20.5	\$159	\$1,119	1.30x	1.8%	\$5,807	\$6,480		
Average							\$791	\$799	\$752	\$999	\$1,033	\$1,008					0.21x	1.1%				
Junior Gold Producers																						
Centamin	CEY	TB	SP	481	442	400	\$699	\$710	\$918	\$943	\$1,071	\$1,320	7.3	19.3	\$291	\$0	-1.03x	3.8%	\$2,099	\$1,862		
Dacian Gold Ltd	DCN	PK	SP - Spec	147	125	107	\$852	\$953	\$1,011	\$1,072	\$1,062	\$1,109	1.2	2.4	A\$21	A\$56	0.49x	-	\$198	\$197		
Eldorado Gold	EGO	JW	SP	393	529	466	\$589	\$630	\$718	\$818	\$928	\$1,244	16.6	28.5	\$178	\$500	1.52x	-	\$2,475	\$2,567		
Gold Road Resources	GOR	PK	O	51	130	152	\$542	\$634	\$686	\$766	\$901	\$832	1.8	2.4	A\$101	A\$142	2.40x	-	\$956	\$940		
New Gold	NGD	JW	U	319	291	346	\$855	\$865	\$812	\$1,313	\$1,358	\$1,251	11.8	18.0	\$83	\$730	2.78x	-	\$1,583	\$1,866		
OceanaGold	OGC	PK	O	470	291	402	\$733	\$878	\$693	\$1,061	\$1,274	\$980	5.6	12.2	\$49	\$204	0.72x	-	\$1,436	\$991		
Ramellus Resources	RMS	PK	SP	195	233	276	\$656	\$580	\$740	\$834	\$833	\$950	0.7	2.4	A\$62	A\$0	-0.48x	1.1%	\$1,106	\$1,261		
Regis Resources	RRL	PK	SP	361	342	386	\$671	\$768	\$730	\$810	\$909	\$829	4.2	7.1	A\$159	A\$22	-0.40x	5.2%	\$1,528	\$961		
Resolute Mining	RSG	PK	SP	385	399	363	\$894	\$622	\$572	\$1,080	\$764	\$765	5.9	10.7	A\$124	A\$610	3.94x	-	\$714	\$1,226		
Roxgold	ROXG	WL	SP - Spec	128	117	112	\$489	\$594	\$602	\$844	\$996	\$840	0.6	1.1	\$42	\$33	-0.09x	-	\$466	\$452		
St. Barbara	SBM	PK	SP	352	365	388	\$639	\$844	\$813	\$891	\$1,007	\$970	3.9	9.2	A\$79	A\$125	0.17x	3.3%	\$1,324	\$1,411		
Silver Lake Resources	SLR	PK	O	222	265	255	\$839	\$703	\$763	\$890	\$960	\$965	0.8	2.8	A\$179	A\$0	-1.14x	-	\$1,347	\$1,585		
Average							\$705	\$734	\$740	\$944	\$999	\$976					0.90x	1.0%				
Silver Producers																						
Fresnillo	FRES	TB	SP	134	132	116	\$7.45	\$8.76	\$8.76	\$13.28	\$13.82	\$13.09	1,278.9	2,575.3	\$337	\$805	0.70x	0.6%	\$12,503	\$12,611		
Hochschild Mining	HOC	TB	O	39	39	25	\$9.40	\$7.64	\$7.58	\$11.29	\$12.02	\$13.66	106.4	354.6	\$166	\$200	0.10x	1.5%	\$1,565	\$1,511		
Average							\$8.42	\$8.20	\$8.17	\$12.29	\$12.92	\$13.37					0.40x	1.1%				

Source: Company reports, RBC Capital Markets estimates

Estimate, target, and rating revisions summary



Capital
Markets

Appendix II: Rating and price target revisions

Exhibit 1: Summary of rating and price target changes

Company	Ticker	Analyst	Rating			Current Price	Price Target (12-month)			Implied Rt. to Target	NAV/sh			2021-22E Avg. Adj EBITDA		
			Prev.	New	Chg		Prev.	New	% Chg		Prev.	New	% Chg	Prev.	New	% Chg
Senior Producers																
Agnico-Eagle	AEM	JW	SP	SP		\$75.06	\$88.00	\$83.00	-6%	12%	\$31.69	\$30.21	-5%	\$2,205	\$2,141	-3%
AngloGold Ashanti	AU US	TB	O	O		\$24.06	\$38.00	\$38.00	0%	59%	\$19.18	\$21.94	14%	\$3,302	\$3,152	-5%
Barrick Gold	GOLD	JW	O	O		\$24.16	\$31.00	\$30.00	-3%	26%	\$14.60	\$14.91	2%	\$5,608	\$5,725	2%
Gold Fields	GFI	TB	SP	SP		\$9.89	\$13.00	\$12.25	-6%	26%	\$7.62	\$7.28	-4%	\$2,323	\$2,215	-5%
Kinross Gold	KGC	JW	O	O		\$7.95	\$12.00	\$12.00	0%	52%	\$6.84	\$6.68	-2%	\$2,491	\$2,392	-4%
Kirkland Lake Gold	KL	JW	O	O		\$42.98	\$55.00	\$55.00	0%	30%	\$27.94	\$27.05	-3%	\$1,631	\$1,560	-4%
Newcrest Mining	NCM	PK	SP	SP		A\$27.67	A\$34.00	A\$31.00	-9%	13%	A\$30.73	A\$30.21	-2%	\$2,266	\$2,332	3%
Northern Star	NST	PK	O	O		A\$13.44	A\$16.50	A\$15.50	-6%	17%	A\$9.69	A\$9.25	-4%	A\$2,232	A\$2,012	-10%
Newmont	NEM	JW	SP	SP		\$64.85	\$76.00	\$76.00	0%	20%	\$36.15	\$36.19	0%	\$6,935	\$6,669	-4%
Polymetal	POLY	TB	O	O		£18.24	£24.50	£24.00	-2%	36%	£13.55	£13.45	-1%	\$1,641	\$2,120	29%
Average									-3%	29%	0%			0%		
Intermediate Producers																
Alamos Gold	AGI	JW	SP	SP		\$9.59	\$10.00	\$9.00	-10%	-5%	\$7.56	\$7.44	-2%	\$531	\$504	-5%
B2Gold	BTG	JW	SP	SP		\$5.84	\$7.50	\$6.75	-10%	18%	\$3.74	\$3.69	-1%	\$1,097	\$1,055	-4%
Endeavour Mining	EDV	WL	O	O		C\$32.65	C\$51.00	C\$47.00	-8%	44%	C\$34.60	C\$32.77	-5%	\$1,741	\$1,666	-4%
Evolution Mining	EVN	PK	SP	SP		A\$5.17	A\$5.50	A\$5.25	-5%	4%	A\$2.68	A\$2.58	-4%	A\$1,208	A\$1,134	-6%
IAMGOLD	IAG	JW	SP	SP		\$3.67	\$4.75	\$4.50	-5%	23%	\$5.64	\$5.52	-2%	\$541	\$510	-6%
Sibanye-Stillwater	SBSW	TB	O	O		\$16.45	\$22.50	\$25.00	11%	52%	\$15.08	\$17.87	18%	R\$64,909	R\$101,128	56%
Yamana Gold	AUY	JW	SP	SP		\$6.01	\$7.00	\$6.25	-11%	6%	\$3.77	\$3.49	-7%	\$1,054	\$1,012	-4%
Average									-5%	20%	-1%			4%		

Note: Arrows denote ratings change

Source: RBC Capital Markets estimates, Bloomberg.

Appendix II: Rating and price target revisions

Exhibit 2: Summary of rating and price target changes (cont'd)

Company	Ticker	Analyst	Rating			Current Price	Price Target (12-month)			Implied Rt. to Target	NAV/sh			2021-22E Avg. Adj EBITDA		
			Prev.	New	Chg		Prev.	New	% Chg		Prev.	New	% Chg	Prev.	New	% Chg
Growth Producers																
Centamin	CEY	TB	SP	SP		£1.34	£1.40	£1.35	-4%	4%	£1.03	£1.00	-3%	\$366	\$460	26%
Dacian Gold Ltd	DCN	PK	SP - Spec	SP - Spec		A\$0.49	A\$0.50	A\$0.45	-10%	-7%	A\$0.45	A\$0.40	-11%	A\$106	A\$94	-11%
Eldorado Gold	EGO	JW	SP	SP		\$14.16	\$12.00	\$12.00	0%	-15%	\$17.60	\$17.33	-1%	\$484	\$461	-5%
Gold Road Resources	GOR	PK	O	O		A\$1.41	A\$2.00	A\$1.75	-13%	25%	A\$1.39	A\$1.35	-3%	A\$201	A\$182	-9%
New Gold	NGD	JW	U	U		\$2.34	\$1.50	\$2.00	33%	-15%	\$1.71	\$1.73	1%	\$438	\$462	5%
OceanaGold	OGC	PK	O	O		A\$2.63	A\$3.25	A\$3.00	-8%	14%	A\$3.63	A\$3.52	-3%	\$467	\$452	-3%
Ramelius Resources	RMS	PK	SP	SP		A\$1.77	A\$2.25	A\$2.00	-11%	14%	A\$1.55	A\$1.46	-6%	A\$359	A\$332	-7%
Regis Resources	RRL	PK	SP	SP		A\$3.88	A\$4.75	A\$4.50	-5%	21%	A\$4.31	A\$4.10	-5%	A\$539	A\$489	-9%
Resolute Mining	RSG	PK	SP	SP		A\$0.84	A\$1.20	A\$1.10	-8%	32%	A\$1.33	A\$1.27	-5%	A\$292	A\$280	-4%
Roxgold	ROXG	WL	SP - Spec	SP - Spec		C\$1.64	C\$2.00	C\$2.25	13%	37%	C\$2.21	C\$2.63	19%	\$156	\$152	-3%
Silver Lake Resources	SLR	PK	O	O		A\$2.00	A\$2.75	A\$2.50	-9%	25%	A\$1.94	A\$1.84	-6%	A\$373	A\$341	-9%
St. Barbara	SBM	PK	SP	SP		A\$2.46	A\$3.25	A\$2.75	-15%	15%	A\$2.78	A\$2.61	-6%	A\$549	A\$487	-11%
Average									-3%	9%		-2%			-3%	
Royalty Companies																
Franco-Nevada	FNV	JW	SP	SP		\$130.32	\$145.00	\$140.00	-3%	8%	\$44.19	\$44.24	0%	\$964	\$950	-1%
Osisko Gold Royalties	OR	JW	O	O		\$13.30	\$14.00	\$16.00	14%	21%	\$10.36	\$10.60	2%	C\$185	C\$178	-3%
Royal Gold	RGLD	JW	SP	O	▲	\$109.95	\$155.00	\$150.00	-3%	37%	\$58.94	\$59.04	0%	\$497	\$500	1%
Sandstorm Gold Royalties	SAND	JW	SP	SP		\$7.36	\$8.00	\$8.00	0%	9%	\$4.54	\$4.54	0%	\$75	\$75	0%
Wheaton Precious Metals	WPM	JW	SP	SP		\$44.86	\$50.00	\$51.00	2%	15%	\$17.33	\$17.70	2%	\$896	\$885	-1%
Average									2%	18%		1%			-1%	
Silver Companies																
Fresnillo	FRES	TB	SP	SP		£12.47	£11.00	£10.50	-5%	-15%	£5.62	£5.52	-2%	\$1,785	\$2,342	31%
Hochschild Mining	HOC	TB	O	O		£2.26	£3.30	£3.00	-9%	34%	£1.82	£2.16	19%	\$456	\$613	34%
Average									-7%	10%		8%			33%	

See page 71-72 for price target multiples.

Note: Arrows denote ratings change
Source: RBC Capital Markets estimates, Bloomberg.

Appendix III: Summary of estimate and multiple revisions

Exhibit 3: 2020-2022 estimates summary

Company	Ticker	Analyst	Rating	2020E EPS		2021E EPS		2022E EPS		2020E CFPS		2021E CFPS		2022E CFPS	
				Previous	New	Previous	New	Previous	New	Previous	New	Previous	New	Previous	New
Senior Producers															
Agnico-Eagle	AEM	JW	SP	\$1.91	\$1.89	\$3.61	\$3.23	\$3.49	\$3.49	\$5.06	\$5.04	\$7.12	\$6.98	\$7.00	\$6.99
AngloGold Ashanti	AU US	TB	O	\$2.82	\$2.73	\$4.37	\$3.91	\$4.16	\$4.08	\$4.60	\$4.52	\$5.70	\$5.28	\$5.52	\$5.45
Barrick Gold	GOLD	JW	O	\$1.09	\$1.09	\$1.05	\$1.08	\$0.87	\$0.87	\$2.53	\$2.53	\$2.80	\$2.82	\$2.41	\$2.41
Gold Fields	GFI	TB	SP	\$0.57	\$0.55	\$1.01	\$0.90	\$0.90	\$0.87	\$1.27	\$1.26	\$1.60	\$1.51	\$1.53	\$1.51
Kinross Gold	KGC	JW	O	\$0.72	\$0.72	\$0.77	\$0.68	\$0.82	\$0.82	\$1.48	\$1.48	\$1.54	\$1.43	\$1.64	\$1.64
Kirkland Lake Gold	KL	JW	O	\$3.26	\$3.27	\$3.19	\$2.93	\$2.86	\$2.86	\$4.58	\$4.59	\$5.36	\$5.05	\$4.54	\$4.54
Newcrest Mining	NCM	PK	SP	\$1.23	\$1.23	\$1.44	\$1.48	\$1.39	\$1.46	\$2.36	\$2.35	\$2.20	\$2.25	\$2.08	\$2.15
Newmont	NEM	JW	SP	\$2.55	\$2.55	\$3.82	\$3.49	\$2.94	\$2.94	\$5.71	\$5.71	\$6.96	\$6.62	\$6.56	\$6.56
Northern Star	NST	PK	O	A\$0.64	A\$0.59	A\$1.04	A\$0.87	A\$1.13	A\$1.01	A\$1.24	A\$1.17	A\$1.52	A\$1.34	A\$1.65	A\$1.51
Polymetal	POLY	TB	O	\$2.11	\$2.05	\$2.09	\$1.98	\$2.17	\$3.17	\$2.74	\$2.69	\$2.72	\$2.60	\$2.82	\$3.81
Intermediate Producers															
Alamos Gold	AGI	JW	SP	\$0.38	\$0.38	\$0.64	\$0.56	\$0.61	\$0.61	\$1.00	\$1.00	\$1.33	\$1.24	\$1.06	\$1.06
B2Gold	BTG	JW	SP	\$0.48	\$0.48	\$0.51	\$0.47	\$0.44	\$0.44	\$0.83	\$0.83	\$0.76	\$0.72	\$0.73	\$0.73
Endeavour Mining	EDV	WL	O	\$2.41	\$2.41	\$3.68	\$3.32	\$3.22	\$3.15	\$5.15	\$5.15	\$6.20	\$5.81	\$5.66	\$5.59
Evolution Mining	EVN	PK	SP	A\$0.31	A\$0.30	A\$0.31	A\$0.27	A\$0.30	A\$0.27	A\$0.60	A\$0.58	A\$0.57	A\$0.53	A\$0.59	A\$0.57
IAMGOLD	IAG	JW	SP	\$0.23	\$0.23	\$0.43	\$0.36	\$0.33	\$0.33	\$0.74	\$0.76	\$1.07	\$0.98	\$0.51	\$0.51
Sibanye-Stillwater	SBSW	TB	O	\$11.17	\$10.38	\$17.13	\$16.68	\$9.38	\$21.81	\$13.88	\$13.05	\$16.41	\$16.24	\$9.48	\$20.17
Yamana Gold	AUY	JW	SP	\$0.29	\$0.29	\$0.37	\$0.32	\$0.32	\$0.32	\$0.72	\$0.72	\$0.92	\$0.84	\$0.84	\$0.83
Growth Producers															
Centamin	CEY	TB	SP	\$0.12	\$0.12	\$0.14	\$0.13	\$0.14	\$0.19	\$0.38	\$0.38	\$0.29	\$0.26	\$0.35	\$0.45
Dacian Gold Ltd	DCN	PK	SP - Spec	A\$0.02	A\$0.01	A\$0.12	A\$0.10	A\$0.16	A\$0.13	A\$0.08	A\$0.07	A\$0.16	A\$0.14	A\$0.21	A\$0.19
Eldorado Gold	EGO	JW	SP	\$0.96	\$0.96	\$0.82	\$0.71	\$0.56	\$0.56	\$2.42	\$2.42	\$1.98	\$1.85	\$1.76	\$1.76
Gold Road Resources	GOR	PK	O	A\$0.09	A\$0.08	A\$0.15	A\$0.13	A\$0.13	A\$0.12	A\$0.19	A\$0.18	A\$0.22	A\$0.19	A\$0.16	A\$0.15
New Gold	NGD	JW	U	\$0.01	\$0.01	\$0.12	\$0.13	\$0.15	\$0.15	\$0.29	\$0.29	\$0.54	\$0.55	\$0.64	\$0.64
OceanaGold	OGC	PK	O	(\$0.12)	(\$0.13)	\$0.20	\$0.17	\$0.30	\$0.30	\$0.43	\$0.42	\$0.41	\$0.38	\$0.62	\$0.62
Ramelius Resources	RMS	PK	SP	A\$0.24	A\$0.23	A\$0.22	A\$0.19	A\$0.24	A\$0.22	A\$0.44	A\$0.43	A\$0.34	A\$0.31	A\$0.37	A\$0.35
Regis Resources	RRL	PK	SP	A\$0.43	A\$0.40	A\$0.66	A\$0.57	A\$0.61	A\$0.56	A\$0.69	A\$0.65	A\$0.84	A\$0.75	A\$0.77	A\$0.72
Resolute Mining	RSG	PK	SP	(A\$0.01)	(A\$0.01)	A\$0.09	A\$0.07	A\$0.09	A\$0.09	A\$0.05	A\$0.05	A\$0.22	A\$0.20	A\$0.19	A\$0.19
Roxgold	ROXG	WL	SP - Spec	\$0.09	\$0.09	\$0.14	\$0.12	\$0.22	\$0.22	\$0.20	\$0.20	\$0.28	\$0.26	\$0.43	\$0.43
Silver Lake Resources	SLR	PK	O	A\$0.39	A\$0.37	A\$0.29	A\$0.25	A\$0.33	A\$0.30	A\$0.38	A\$0.36	A\$0.42	A\$0.38	A\$0.46	A\$0.43
St. Barbara	SBM	PK	SP	A\$0.26	A\$0.24	A\$0.40	A\$0.33	A\$0.44	A\$0.39	A\$0.57	A\$0.54	A\$0.68	A\$0.60	A\$0.70	A\$0.64
Royalty Companies															
Franco-Nevada	FNV	JW	SP	\$2.63	\$2.63	\$3.37	\$3.20	\$3.16	\$3.12	\$4.11	\$4.10	\$4.82	\$4.66	\$4.56	\$4.53
Osisko Gold Royalties	OR	JW	O	C\$0.25	C\$0.26	C\$0.50	C\$0.46	C\$0.45	C\$0.45	C\$0.67	C\$0.68	C\$1.05	C\$0.99	C\$1.08	C\$1.08
Royal Gold*	RGLD	JW	O	\$2.83	\$2.83	\$3.63	\$3.67	\$3.40	\$3.40	\$6.16	\$6.16	\$6.92	\$6.95	\$6.75	\$6.75
Sandstorm Gold Royalties	SAND	JW	SP	\$0.11	\$0.11	\$0.17	\$0.16	\$0.18	\$0.18	\$0.35	\$0.35	\$0.39	\$0.39	\$0.38	\$0.38
Wheaton Precious Metals	WPM	JW	SP	\$1.14	\$1.14	\$1.37	\$1.33	\$1.34	\$1.34	\$1.76	\$1.76	\$2.00	\$1.97	\$1.97	\$1.97
Silver Producers															
Fresnillo	FRES	TB	SP	\$0.41	\$0.39	\$0.81	\$0.76	\$0.89	\$1.42	\$1.54	\$1.51	\$2.33	\$2.25	\$2.49	\$3.40
Hochschild Mining	HOC	TB	O	\$0.06	\$0.07	\$0.18	\$0.18	\$0.28	\$0.31	\$0.38	\$0.39	\$0.55	\$0.53	\$0.70	\$0.71

*RGLD estimates represent calendar years rather than fiscal years ending June 30. Source: RBC Capital Markets estimates

Appendix III: Summary of estimate and multiple revisions

Exhibit 4: 2020-2022 estimates summary (cont'd)

Company	Ticker	Analyst	Rating	2020E FCFPS		2021E FCFPS		2022E FCFPS		2020E Production*		2021E Production*		2022E Production*	
				Previous	New	Previous	New	Previous	New	Previous	New	Previous	New	Previous	New
Senior Producers															
Agnico-Eagle	AEM	JW	SP	\$2.00	\$1.96	\$3.76	\$3.55	\$3.75	\$3.75	1,737	1,733	2,108	2,177	2,179	2,179
AngloGold Ashanti	AU US	TB	O	\$1.87	\$1.80	\$3.35	\$2.94	\$4.16	\$3.30	3,043	3,043	3,137	3,137	3,139	3,139
Barrick Gold	GOLD	JW	O	\$1.22	\$1.22	\$1.12	\$1.14	\$1.02	\$1.02	4,802	4,802	4,673	4,740	4,633	4,633
Gold Fields	GFI	TB	SP	\$0.72	\$0.71	\$0.59	\$0.48	\$0.59	\$0.56	2,222	2,225	2,340	2,345	2,370	2,371
Kinross Gold	KGC	JW	O	\$0.68	\$0.67	\$0.76	\$0.65	\$0.93	\$0.93	2,329	2,329	2,364	2,364	2,563	2,563
Kirkland Lake Gold	KL	JW	O	\$2.40	\$2.40	\$2.75	\$2.42	\$2.53	\$2.53	1,350	1,350	1,326	1,326	1,382	1,382
Newcrest Mining	NCM	PK	SP	\$0.98	\$0.98	\$0.90	\$0.95	\$1.30	\$1.36	2,122	2,122	2,025	2,025	2,062	2,062
Newmont	NEM	JW	SP	\$4.14	\$4.15	\$4.30	\$3.95	\$3.30	\$3.30	5,901	5,901	6,463	6,474	6,280	6,280
Northern Star	NST	PK	O	A\$0.68	A\$0.61	A\$0.80	A\$0.63	A\$1.00	A\$0.86	982	982	1,580	1,580	1,920	1,920
Polymetal	POLY	TB	O	\$1.37	\$1.32	\$1.61	\$1.50	\$1.87	\$2.88	1,600	1,600	1,502	1,502	1,653	1,653
Intermediate Producers															
Alamos Gold	AGI	JW	SP	\$0.34	\$0.34	\$0.38	\$0.28	\$0.11	\$0.11	427	427	496	496	500	500
B2Gold	BTG	JW	SP	\$0.58	\$0.58	\$0.40	\$0.36	\$0.26	\$0.26	919	919	936	936	953	953
Endeavour Mining	EDV	WL	O	\$3.03	\$3.03	\$4.59	\$4.19	\$4.07	\$3.99	761	761	1,419	1,419	1,383	1,383
Evolution Mining	EVN	PK	SP	\$0.32	\$0.30	\$0.31	\$0.27	\$0.37	\$0.35	731	731	736	736	806	806
IAMGOLD	IAG	JW	SP	\$0.01	\$0.03	(\$0.57)	(\$0.66)	(\$0.46)	(\$0.46)	659	659	706	706	715	715
Sibanye-Stillwater	SBSW	TB	O	\$3.39	\$2.57	\$13.35	\$13.18	\$10.22	\$23.99	984	984	1,300	1,300	1,309	1,309
Yamana Gold	AUY	JW	SP	\$0.40	\$0.39	\$0.51	\$0.43	\$0.35	\$0.34	783	783	875	875	905	905
Growth Producers															
Centamin	CEY	TB	SP	\$0.13	\$0.13	\$0.04	\$0.03	\$1.41	\$1.41	442	442	400	400	459	459
Dacian Gold Ltd	DCN	PK	SP - Spec	(\$0.02)	(\$0.04)	\$0.08	\$0.05	\$0.18	\$0.16	125	125	107	107	105	105
Eldorado Gold	EGO	JW	SP	\$1.30	\$1.30	\$0.37	\$0.24	(\$1.04)	(\$1.04)	529	529	466	466	474	474
Gold Road Resources	GOR	PK	O	A\$0.11	A\$0.10	A\$0.17	A\$0.14	A\$0.14	A\$0.13	130	130	152	152	138	138
New Gold	NGD	JW	U	(\$0.06)	(\$0.06)	\$0.15	\$0.16	\$0.22	\$0.22	291	291	346	346	400	400
OceanaGold	OGC	PK	O	\$0.03	\$0.02	\$0.06	\$0.03	\$0.35	\$0.35	291	291	402	402	488	488
Ramellus Resources	RMS	PK	SP	\$0.24	\$0.23	\$0.22	\$0.19	\$0.23	\$0.21	233	233	276	276	260	260
Regis Resources	RRL	PK	SP	\$0.28	\$0.25	\$0.61	\$0.53	\$0.65	\$0.60	342	342	386	386	375	375
Resolute Mining	RSG	PK	SP	(\$0.03)	(\$0.03)	\$0.14	\$0.13	\$0.15	\$0.15	399	399	363	363	333	333
Roxgold	ROXG	WL	SP - Spec	\$0.02	\$0.02	(\$0.06)	(\$0.07)	\$0.27	\$0.24	117	117	112	112	158	158
Silver Lake Resources	SLR	PK	O	\$0.21	\$0.20	\$0.30	\$0.26	\$0.39	\$0.36	265	265	255	255	264	264
St. Barbara	SBM	PK	SP	\$0.35	\$0.32	\$0.45	\$0.37	\$0.54	\$0.48	365	365	388	388	397	397
Royalty Companies															
Franco-Nevada	FNV	JW	SP	\$3.10	\$3.09	\$4.50	\$4.34	\$4.46	\$4.43	512	511	577	580	558	554
Osisko Gold Royalties	OR	JW	O	(C\$0.25)	(C\$0.25)	C\$0.96	C\$0.90	C\$0.87	C\$0.87	65	66	82	84	92	92
Royal Gold**	RGLD	JW	O	\$4.00	\$4.00	\$6.56	\$6.59	\$6.75	\$6.75	311	311	335	351	343	343
Sandstorm Gold Royalties	SAND	JW	SP	\$0.33	\$0.33	\$0.37	\$0.37	\$0.13	\$0.14	52	52	58	61	59	60
Wheaton Precious Metals	WPM	JW	SP	\$1.34	\$1.34	\$1.86	\$1.83	\$1.94	\$1.94	662	662	711	730	769	769
Silver Producers															
Fresnillo	FRES	TB	SP	\$0.45	\$0.43	\$0.77	\$0.73	\$1.20	\$1.74	117.1	116.4	136.0	133.3	1,705.4	1,806.5
Hochschild Mining	HOC	TB	O	\$0.13	\$0.13	\$0.27	\$0.23	\$0.45	\$0.47	24.7	24.8	36.3	31.8	37.1	37.1

*Attributable gold equivalent production for royalty/streaming companies, silver equivalent production for silver producers, and gold production for emerging companies.

** RGLD financial estimates represent fiscal years ending June 30. Source: BC Capital Markets estimates

Appendix III: Summary of estimate and multiple revisions

Exhibit 5: Price target multiples

Company	Ticker	Analyst	NAV Multiple		EBITDA/CF Multiple ⁽¹⁾		Price Target Multiple Change Rationale
			Prev.	New	Prev.	New	
Senior Producers							
Agnico-Eagle	AEM	JW	2.00x	2.20x	28.0x	28.0x	To reflect optionality post-Hope Bay acquisition
AngloGold Ashanti	AU US	TB	1.60x	1.40x	6.0x	6.0x	We move our target P/NAV multiple from 1.6x to 1.4x to harmonize with AU's peer group valuation
Barrick Gold	GOLD	JW	1.80x	1.80x	25.0x	24.0x	Decreased to be in line with senior peers
Gold Fields	GFI	TB	1.40x	1.40x	6.0x	6.0x	-
Kinross Gold	KGC	JW	1.50x	1.50x	15.0x	15.0x	-
Kirkland Lake Gold	KL	JW	1.80x	1.80x	21.0x	21.0x	-
Newcrest Mining	NCM	PK	1.50x	1.30x	15.0x	15.0x	We adjust our NAV multiple to better align with peers and standardise this across our AUS precious coverage.
Newmont	NEM	JW	1.80x	1.80x	23.0x	24.0x	Increased to be in line with senior peers
Northern Star	NST	PK	1.30x	1.30x	10.0x	10.0x	-
Polymetal	POLY	TB	1.70x	1.70x	9.0x	9.0x	-
Average			1.64x	1.62x	15.80x	15.80x	
Intermediate Producers							
Alamos Gold	AGI	JW	1.60x	1.60x	27.0x	27.0x	-
B2Gold	BTG	JW	1.50x	1.50x	16.0x	18.0x	Improved financial positioning
Endeavour Mining	EDV	WL	1.50x	1.50x	6.0x	6.0x	-
Evolution Mining	EVN	PK	1.30x	1.30x	10.0x	10.0x	-
IAMGOLD	IAG	JW	0.80x	0.80x	12.0x	12.0x	-
Sibanye-Stillwater	SBSW	TB	1.30x	1.30x	7.0x	7.0x	-
Yamana Gold	AUY	JW	1.60x	1.60x	18.0x	20.0x	Improved financial positioning
Average			1.37x	1.37x	13.7x	14.3x	
Growth Producers							
Centamin	CEY	TB	1.50x	1.50x	5.0x	5.0x	-
Dacian Gold Ltd	DCN	PK	1.00x	1.00x	4.0x	4.0x	-
Eldorado Gold	EGO	JW	0.90x	0.90x	16.0x	16.0x	-
Gold Road Resources	GOR	PK	1.00x	1.00x	10.0x	10.0x	-
New Gold	NGD	JW	0.90x	0.90x	17.0x	14.0x	Decreased to be in line with growth peers
OceanaGold	OGC	PK	1.00x	1.00x	10.0x	10.0x	-
Ramelius Resources	RMS	PK	1.00x	1.00x	6.00x	6.00x	-
Regis Resources	RRL	PK	1.00x	1.00x	6.0x	6.0x	-
Resolute Mining	RSG	PK	1.00x	1.00x	7.0x	7.0x	-
Roxgold	ROXG	WL	0.90x	0.90x	4.0x	4.0x	-
St. Barbara	SBM	PK	1.00x	1.00x	7.0x	7.0x	-
Silver Lake Resources	SLR	PK	1.10x	1.10x	6.0x	6.0x	-
Teranga Gold	TGZ	WL	1.10x	1.10x	5.0x	5.0x	-
Average			0.99x	0.99x	8.2x	7.9x	

Source: RBC Capital Markets

Continued...

Appendix III: Summary of estimate and multiple revisions

Exhibit 6: Price target multiples (cont'd)

Company	Ticker	Analyst	NAV Multiple		EBITDA/CF Multiple ⁽¹⁾		Price Target Multiple Change Rationale
			Prev.	New	Prev.	New	
Royalty Companies							
Franco-Nevada	FNV	JW	3.00x	2.70x	32.0x	32.0x	Reflects risks of lower transaction availability and increased competition
Osisko Gold Royalties	OR	JW	1.60x	1.50x	23.0x	23.0x	Reflects risks of lower transaction availability and increased competition
Royal Gold	RGLD	JW	2.50x	2.30x	25.0x	25.0x	Reflects risks of lower transaction availability and increased competition
Sandstorm Gold Royalties	SAND	JW	1.70x	1.50x	23.0x	23.0x	Reflects risks of lower transaction availability and increased competition
Wheaton Precious Metals	WPM	JW	2.80x	2.60x	28.0x	28.0x	Reflects risks of lower transaction availability and increased competition
Average			2.32x	2.12x	26.2x	26.2x	
Silver Companies							
Fresnillo	FRES	TB	1.70x	1.70x	7.0x	7.0x	-
Hochschild Mining	HOC	TB	1.50x	1.30x	6.0x	5.0x	We move our P/NAV target multiple from 1.5x to 1.3x to and our EV/EBITDA multiple from 6x to 5x to reflect life of mine uncertainty
Average			1.60x	1.50x	6.5x	6.0x	

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