

# North American Precious Metals Weekly

## Q4'23 preview, our site visit to Jacobina and Q4'23 gold ETF flow data

Estimate Change

### Q4 reporting kicks off early February

The North American precious metal companies will begin reporting Q4'23 earnings in just a few short weeks (expected from early February). Q4 earnings are typically overshadowed by forward and multi-year operating outlooks, reserves and resource updates, and often, exploration and project updates. We expect the focus to be more on these items and accompanying management commentary. We provide our views on key expected themes from results and on pages 3-8 we provide key focus areas by company.

### Themes for the golds heading into Q4'23 results

In Q4'23, the price of gold averaged \$1,977 per ounce (/oz), up 2.6% QoQ. Silver averaged \$23.25/oz, down 1.3% QoQ. Gold prices have been remarkably strong since falling to a low of \$1,820/oz on 5-Oct-23, rallying sharply above the psychologically important \$2,000/oz level, and now sitting at \$2,049/oz. We expect the strong gold prices will push the market focus towards capital allocation priorities: with sector valuations historically low, share buybacks might make sense; M&A activity, which has historically been positively correlated to rising gold prices could be an option to drive production growth for some, while others might prefer investment in project pipelines. Geopolitical risk is also quite likely to be a focus (as it often is in the gold sector).

### Jacobina site visit: cornerstone gold asset for PAAS

Last week, we attended a site visit to the Jacobina gold mine in Bahia state, Brazil, owned and operated by Pan American Silver (PAAS). Attending from PAAS management was Chief Operating Officer, Steve Busby, Vice President of Business Development and Geology, Chris Emerson, and other key corporate and site management. Jacobina accounts for 19% of our estimated net asset value (NAV) and 16% of 2024E revenue for PAAS. With already a (long by gold standards) 15-year reserve life, Jacobina has excellent potential to materially extend mine life through exploration. Production is to be steady at around 200 thousand ounces (koz) annually for 2024E-25E as PAAS studies optimization and looks to a potential expansion beyond 2025. We continue to see PAAS as a preferred vehicle for liquid gold and silver equity exposure and reiterate our Buy rating. Please see our note: [Cornerstone gold mining asset in the Pan American portfolio, 10-Jan-24](#).

### Annual gold ETF outflows for a 3<sup>rd</sup> consecutive year

On January 9, 2024, the World Gold Council (WGC) released their gold ETF 2023 flow data. 2023 marked the second largest year for ETF outflows, totaling \$14.7bn (-244.4 tonnes), North America accounting for US\$4.5bn of total outflows, and Europe contributing US \$11.5bn. Global Q4 outflows were 56 tonnes (\$3.9bn). ETF flows are generally a function of interest rates with investors shifting their focus to higher yielding assets. See page 3 for charts on ETF flows.

**We make estimate changes for various companies (see page 2).**

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### Exhibit 1: Real metal prices

BofA sees gold at \$1,975 in 2024E

	2023A	2024E
Gold, real (\$/oz)	1,943	1,975
Silver, real (\$/oz)	23.40	23.26
Palladium (\$/oz)	1,340	750
Platinum (\$/oz)	968	1,050
Copper (\$/lb)	3.85	3.91

**Source:** Bloomberg, BofA Global Research  
BofA GLOBAL RESEARCH

NAV = net asset value

QoQ = quarter-over-quarter

WoW: week-over-week

YTD: year-to-date

ETF: exchange traded fund

NAV: net asset value

Cap: capitalization

PO: Price Objective

yoy: year-over-year

AMC: After market close

BMO: Before market open

mn: million

bn: billion

IRR = internal rate of return

**Exhibit 2: Gold Indices and Closing Prices**

Week-over-Week changes in key metals prices and indices

	12-Jan-24	5-Jan-24	Weekly	52 Week	
	Close		% Change	High	Low
<b>Gold Indices</b>					
Philadelphia Gold and Silver Index (XAU)	120.64	120.30	0.3%	145.15	102.39
NYSE Arca Exchange Gold Bugs Index (HUI)	233.22	232.98	0.1%	284.46	197.04
S&P/TSX Global Gold Index	274.88	275.61	-0.3%	345.05	244.14
FT Australasia Gold Index	10,223.52	10,948.27	-6.6%	12,259.24	8,765.00
FT Africa Gold Index	2,231.48	2,219.71	0.5%	3,075.09	1,765.76
FT North American Gold Index	1,320.57	1,346.98	-2.0%	1,584.24	1,134.17
FT All Gold Mines Index	1,785.52	1,810.34	-1.4%	2,163.38	1,512.48
<b>Precious Metal Prices</b>					
Gold Prices - US\$/oz	2,049.06	2,045.45	0.2%	2,135.39	1,804.92
Silver Price - US\$/oz	23.19	23.19	0.0%	26.14	19.90
Platinum Price - US\$/oz	911.64	964.18	-5.4%	1,134.95	843.10
Palladium Price - US\$/oz	977.83	1,030.56	-5.1%	1,811.96	925.11

Source: Bloomberg

BofA GLOBAL RESEARCH

**Gold marches on despite high US CPI print**

Last week, gold experienced a modest increase of 0.2%, ending the week at \$2,049 per ounce. Gold dipped mid-week following a high US CPI print (Jan-11) with YoY CPI at 3.4%, beating estimates at 3.2%. The resilience of the metal can be attributed to rising tensions in the Middle East. Dovish expectations of a FOMC rate cut as early as March, pushed real US real rates lower, with two-year TIPS falling 14.3%. The recent broadening of the Israeli-Gaza conflict to the Bab-el-Mandeb strait between the Gulf of Aden and the Red Sea presents a unique geopolitical and logistical challenge. Traditionally gold has served as a safe haven in times of uncertainty and tension. Gold equities were mixed last week with the S&P/TSX Global Gold Index down 0.3%, the Philadelphia Gold and Silver Index (XAU) up 0.3%, and the NYSE Arca Exchange Gold Bugs Index (HUI) up 0.1%.

**Estimate changes**

**B2Gold (BTG):** We tweak our estimates for Q4'23 and 2024 ahead of Q4 operational results and guidance expected in late January. We now model Q4'23 production of 281 thousand ounces (koz) at AISC of \$1,194/oz. For FY24, we now model production of 927koz at AISC of \$1,300/oz, lower than prior on expected lower production at Fekola. Overall, our 2023E EPS increases to \$0.29 (was \$0.28) and we model Q4'23 EPS of \$0.09. Our 2024E EPS declines to \$0.25 (from \$0.34). We also tweak our long-term estimates for all BTG's assets including end of mine life assumptions. Our 2025E EPS increases to \$0.36 (from \$0.22).

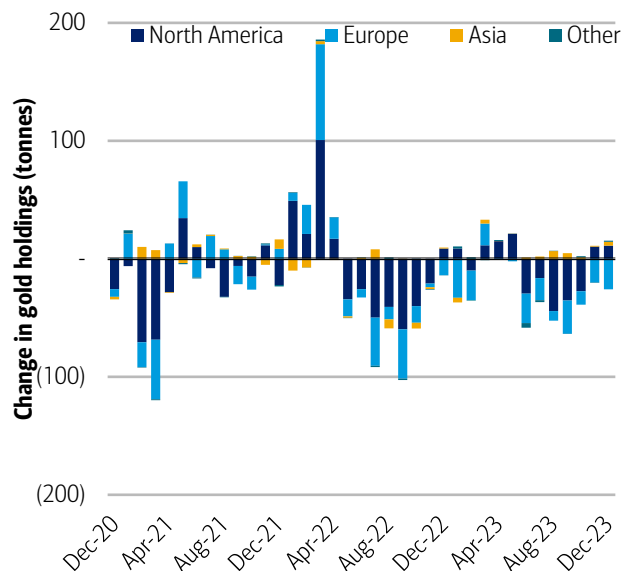
**Royal Gold (RGLD):** On 9-Jan-24, RGLD reported stream sales of 49,900 gold equivalent ounces (GEOs) below BofAe at 53,326 GEOs. We update our model for this and our 2023 EPS declines to \$3.43 (from \$3.52). We now model Q4'23 EPS of \$0.84 (was \$0.92).

**Newmont (NEM):** We update our model to adjust out certain one-time items from our Q4 EBITDA estimate relating to the acquisition of Newcrest. We now model Q4'23 adjusted EBITDA of \$925mn (was \$725mn).

## ETF trends

**Exhibit 3: Regional change in ETF gold holdings in tonnes (t)**

Outflows most pronounced in North America (-386t) and Europe (-213t)

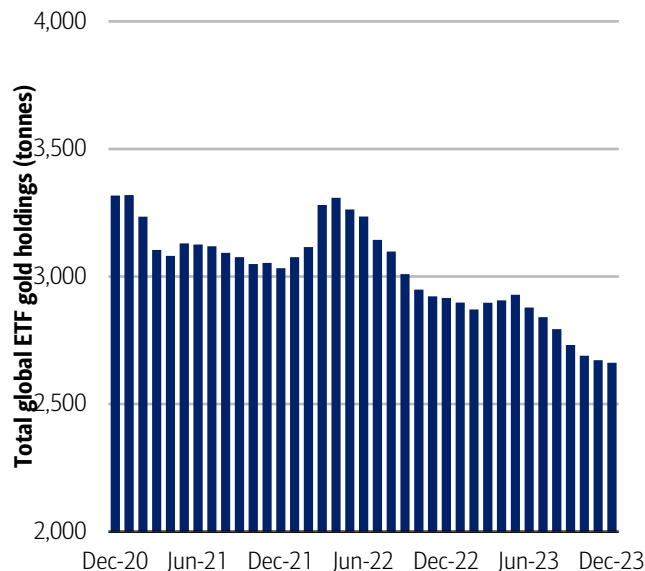


Source: World Gold Council, BofA Global Research

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**Exhibit 4: Total global ETF gold holdings (tonnes)**

Steady decline in global gold ETF holdings since Dec-20 to Dec-23



Source: Bloomberg, BofA Global Research

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## Precious metals focus areas

### SENIOR GOLD PRODUCERS

#### Agnico Eagle (AEM)

**(1) 2024 production and 3-year guidance:** AEM will release its 2024 and 3-year guidance with results, which we think will be of primary focus – we'll especially be focused on Detour Lake and Canadian Malartic given ongoing growth efforts at both projects. We'll also be paying close attention to cost guidance, as AEM is largely exposed to Canada where the labour market for mining remains very tight; **(2) Detour Lake:** At Detour Lake, is the asset on track to achieve 28 million tonnes (Mt) of annual throughput by 2025? AEM plans to update the market in H1'24 on the plans to bring annual production at Detour to 1Moz per annum, that broadly will involve a combination increased mill throughput and higher-grade underground ore, and this is to include the results in H1'24 of a Detour Underground expansion study; **(3) Abitibi optimization:** AEM has an ambitious program to consolidate the Abitibi, with a target to add several hundred thousand ounces to additional production. In particular, at the Canadian Malartic complex there is at least 40,000 tonnes per day (tpd) of excess milling capacity. The Odyssey underground is the linchpin of filling the Malartic mill, but there are many more options to drive higher production in the Abitibi. What are the most prominent options being contemplated, and how quickly could these come about? Amalgamated Kirkland and the upper zones at Macassa could add 20-40koz annually. Upper Beaver and Wasamac are much longer-term options for up to 150-200koz annually each. **(4)** Upon closing of the acquisition of Kirkland Lake on 8-Feb-22, AEM stated it would further explore the **Fosterville** mine in Australia in order to determine its strategic direction within or without AEM. We think AEM will likely "kick the can down the road" on making a decision given what appears to us to be an incomplete understanding of the potential geological upside. We wonder if the asset could be sold either way, if the right offer price were presented to AEM; **(5)** Exploration results from Q3'23 results indicated new high-grade zones at Hope Bay and previously unknown mineralization at Kittila: these, as

well as Odyssey should be a focus of the exploration update expected at the same time as Q4'23 results; **(6) Whether Meliadine is on track achieve mill expansion to 6000tpd by YE24 and on budget; and (7) additional detail on the potential to extend the mine life at Meadowbank to beyond 2027.**

### **Barrick Gold (GOLD)**

**(1) 2024 guidance:** GOLD will release its 2024 guidance alongside with financials which we believe will be of greatest importance. In 2023, GOLD faced some challenges operationally which impacted results from both a production and cost perspective relative to 2023 guidance, and we'll be paying attention as to whether 2024 guidance assumes some conservatism/baked in buffers in light of this; **(2) Porgera:** Only recently, GOLD announced it had satisfied the agreed conditions necessary for the restart of operations before year-end. GOLD expects first gold pour in Q1'24. We'll be seeking commentary on ramp-up expectations and while they will be baked into guidance, we'll want to know of any risks that could hinder ability to meet guidance. **(3) Pueblo Viejo:** the ramp-up of Pueblo Viejo is continuing and will the mine achieve annual production in excess of 800koz as suggested by GOLD on the Q4'23 call. **(4) Nevada Gold Mines (NGM) especially within R&R:** NGM is GOLD's most prospective operation with respect to exploration potential and resource expansion. Look for comments on exploration upside, and potential resource growth conversion. This will be of focus within the updated R&R statement that is also expected for release with financial results **(5) M&A:** A predominant theme this year so far has been industry consolidation, particularly in the gold space given the blockbuster deal between Newmont (NEM) and Newcrest (NCM). GOLD CEO, Bristow has stated is "building the business for the long-term", but we'll continue to watch how Barrick sees M&A fitting into this vision. **(6) Longer-term production guidance:** GOLD is also expect to provide indicative (i.e. charts not numbers) longer-term production guidance.

### **Kinross Gold (KGC)**

**(1) 2024 guidance:** with results, KGC will provide 2024 guidance, we'll be focused on how this compares to prior provided guidance (as KGC provides 3-year consolidated guidance), **(2) Great Bear:** also with results, KGC is to release updated reserves and resources as well as a Great Bear exploration update. We'll be focused on the exploration update and KGC's commentary on work towards starting construction of an underground exploration decline, as well as any commentary on next major milestones or catalysts such as a study; **(3) Phase S at Round Mountain:** with Q3'23 results, KGC approved mining of the Phase S open pit at Round Mountain and noted it is to provide an optimized phase S design with year-end results. We'll also seek further commentary on the synergy potential with Phase X and Gold Hill later in the mine life. **(4) Tasiast:** While Tasiast's expansion is complete now, we'll still be eyeing commentary on how the mine is performing versus expectations (i.e. outperformance or underperformance) and the consistency of operations **(5) Capital returns:** What will be KGC's focus with respect to capital returns in 2024, particularly how it views the current dividend versus buy-back opportunities and balancing that against key projects such as Great Bear and others.

### **Newmont Mining (NEM)**

**(1) 2024 guidance:** Our focus with results will primarily be on the company's outlook for 2024 following the close of acquisition with Newcrest Mining (NCM) and see how this compares to the projections provided in the circular associated with the deal. Note that longer-term guidance is to be provided in mid-2024. **(2) integration/synergies:** we'll seek commentary on how the integration Newcrest is progressing and updates on synergies being realized relative to prior provided targets; **(3) Portfolio of assets and metals mix:** How much copper exposure makes sense for NEM in the long-run? Which assets are key divestment candidates, and what would be a reasonable timeframe? NCM has noted >\$2bn in asset sales being targeted. Does NCM's sizable (32%) equity interest

in Lundin Gold (LUG) tempt NEM for a full acquisition? **(4) Key project progress:** With Q3'23 results, NEM disclosed Ahafo North and Tanami are tracking to previous timelines of H2'25 and on-budget. Do NEM remain confident in this view? **(5) Capital allocation priorities:** we'll be seeking NEM's commentary on the capital allocation priorities for the combined company – projects, dividends, M&A, amongst other elements, and the framework it will use to determine capital allocation. We think the dividend framework update is being watched very closely by investors.

## MID-TIER PRECIOUS METAL PRODUCERS

### B2Gold (BTG)

**(1) Updates or commentary on the ongoing construction of the Goose Project** particularly as it pertains to remaining capex, timelines (and any bottlenecks/critical path items) and also any further optimization opportunities BTG may pursue, **(2) updates on Fekola's growth plans and the impacts and further clarity on the Malian Mining Code** **(3) more color on BTG's plans and expectations for the now-consolidated Gramalote project** – such as potential size of a smaller but higher-grade resource, sizing of a smaller plant and ballpark capex, amongst other parameters, **(4) further commentary on M&A filters**, particularly as BTG noted interest in potentially acquiring producing assets that are being “undervalued by the market” – we're keen on knowing jurisdictions of interest, size of asset, metal mix (i.e. any interest in copper-gold assets), **(5) capital allocation priorities** – looking forward, what are key priorities for capital allocation, i.e. M&A vs internal growth pipeline, potential for buy-backs supplementing the dividend post-Goose project completion, etc).

### Centerra Gold (CG)

**(1) Operations at Mt. Milligan:** We'll be eyeing operations at Mount Milligan as usual after some challenges in 2023, and also we'll be seeking commentary on the optimization planning and strategy underway for 2024. **(2) Molybdenum assets:** we'll be seeking commentary ahead of the updated Thompson Creek FS in Q2'24, particularly around strategy for the asset and if the company has any other updates **(3) an update on the broader M&A strategy** that CG intends to focus in regions in which it currently has assets (Canada, Türkiye, USA); **(4) further detail on CG's Nevada strategy** that simply put, will focus on developing only-oxide, open-pit gold resources at or near the Gemfield property; **(6) Views on capital returns** which so far has focused on share buy-backs as opposed to increase in the base-level dividend.

### Eldorado (EGO)

**(1) the primary focus with respect to EGO are updates on the ongoing construction progress at Skouries** in Greece, **(2) we will also seek commentary on the turnaround progress at Olympias;** **(3) we're interested in commentary on EGO's pecking order or priority/focus areas with respect to its project pipeline** amongst Perama Hill in Greece, Ormaque at Lamaque and exploration within Türkiye, **(4) capital allocation priorities** – EGO is one of the few producers in the sector that lacks any capital returns (i.e. no dividends or active buy-backs), we'll want a sense for how this may evolve looking forward particularly after the Skouries project is complete.

### IAMGOLD (IAG)

**(1) Essakane:** IAG recently released a technical report for the asset which showed a mine life extension, yet the security situation in West Africa continues to remain a risk particularly given Essakane is located in the North where there have been more incidents. In light of this, we'll be seeking IAG views on the future for the Essakane mine, and whether it could potentially become a divestment candidate, potentially when the Côté project goes into production **(2) Côté project:** Côté project remains on track for an early 2024 start. We'll be seeking colour on more granular timing and ramp-up expectations. Are there any risks that remain to the guided budget or the start-up timeframe? Note that IAG could conceivably announce first production before Q4'23

results are released; **(3) Westwood:** IAMGOLD said it expects Westwood to potentially show a turnaround– we'll be looking for updates and eyeing the operational performance at the mine, **(4) Longer-term strategy:** after the start-up of Côte and once ramp-up is de-risked, what will IAG's focus turn towards? What is the company's ultimate long-term vision and strategy?

### Pan American Silver (PAAS)

**(1) All eyes on 2024 guidance:** particularly so as this will be the first full year of operations with the Yamana assets. We'll be focused on La Colorada Q4'23 production and 2024 guidance in particular given recent ventilation issues and constraints that lowered Q3'23 production; **(2) Jacobina study:** PAAS recently noted a study is underway to optimize the Jacobina mine and we'll seek commentary on what the strategy/thinking is with the asset. **(3) The latest in Guatemala:** At the giant Escobal silver mine, discussions appear to be constructive but "no date has been set for a potential restart of operations". Can PAAS provide any commentary or updates on how the consultation process is progressing? **(4) Further portfolio streamlining:** PAAS recently announced the divestiture of a number of non-core assets including its 56.25% stake in the MARA copper project; its 92.3% stake in the Morococha polymetallic-silver mine in Peru, and its 57.75% stake in the Agua de la Falda gold-copper project in Chile. What else in PAAS' portfolio remains a solid divestment candidate, and what is the timeframe for further streamlining of the portfolio? We think **La Arena** is an obvious divestiture given its future lies in copper production.

### SSR Mining (SSRM)

**(1) All eyes will be on 2024 and 3-year guidance:** With Q3'23 results, SSRM disappointed the market suggesting that it would see lower production and higher costs near-term versus prior provided guidance. Prior to financials, SSRM release guidance which will be highly anticipated to get a clearer outlook, **(2) In light of a number of technical reports upcoming for SSRM's assets,** we'll be looking for any commentary on what to expect in these technical reports, particularly the approach to processing the Çakmaktepe ore at **Çöpler**, and also SSRM's thinking around longer-term mine sequencing at **Marigold** **(3) Hod Maden in Türkiye:** In May 2023, SSRM acquired a 40% interest in the Hod Maden project. SSRM is targeting first production for the project in 2027, after a full construction decision in 2024. We'll be seeking SSRM's thinking for timing and other project parameters with respect to this asset, **(4) Capital allocation:** A hallmark of SSR is its capital allocation strategy, hiking dividends and buying back stock. On this front, we'll be seeking colour on what SSRM's strategy is looking into 2024 and onwards.

## JUNIOR/INTERMEDIATE GOLD PRODUCERS

### New Gold (NGD)

**(1)** prior to financial results, we expect NGD to release 2024 guidance but also 3-year guidance (inaugural) which we think investors will view as a catalyst as it will provide more clarity on the near-term production profile and free cash flow outlook near-term, **(2) C-Zone development progress** particularly with the ramp-up to commercial production which is more technically complex for a block cave mine given self-caving and ultimately takes more time than a regular underground mining operation **(3) Rainy River underground** development updates; **(4)** commentary on the company's **longer-term strategy** and the thinking on the future of the business (i.e. project pipeline, M&A, capital allocation priorities if any, etc).

### Alamos Gold (AGI)

**(1)** commentary or additional color on the upcoming development plan at **Puerto Del Aire (PDA)** – at GFA 2023, CEO John McCluskey noted that PDA continues to grow in size and the company sees potential for the resource to hit 2 million ounces (Moz)



longer-term, however, the latest drilling cut-off as per our understanding that will inform the development plan is 31-July-23; based on this, we'll be looking for AGI's messaging on the size of the new mill (previous messaging was around 1,500 tonnes per day (tpd)) and the capex associated with it (previous messaging was ballpark \$100mn+) and whether AGI will contemplate a more 'phased' expansion approach (or opportunities to expand over-time as the resource grows), **(2) updates on the ongoing expansion at Island**; based on our understanding the project continues to track well to its budgeted capex and timelines; and **(3) any commentary on the timing of the Lynn Lake project** with respect to next steps and broadly expectations around the timing of the capex spend.

## PRECIOUS METALS ROYALTY & STREAMING COMPANIES

### Franco Nevada (FNV):

**(1) Cobre Panama:** we'll be seeking FNV's thinking around Cobre Panama given the shutdown of operations and unclear future for the asset and how FNV views its own risks in that context; **(2) Capital returns:** With around \$2.3 billion of available liquidity, FNV has the ability to execute on substantial royalty and/or streaming transactions. But in the absence of sizeable deal opportunities, could a larger dividend increase be in the offing? **(2) Metal mix and exposure:** How does FNV view its metal mix and exposure in the current price environment, particularly with the recent strength in energy prices? Could lithium, uranium, and rare earths make sense in Franco's portfolio? **(3) Deal pipeline:** What does the current deal opportunity look like for FNV, in terms of \$-value range, primary metal of the mine (base metal vs. precious metal), asset stage (development vs. operating), streamed metals (gold, silver, or PGM's), and use of proceed (expansion, M&A, balance sheet repair), **(4) growth and project ramp-up:** We'll be seeking commentary on key growth and ramp-up assets pertaining to FNV: Argonaut Gold Magino (2% royalty, commercial production Q4'23 after first pour June 2023), Equinox's Greenstone project (first pour expected H1'24), amongst other smaller projects in the portfolio that can shape operations over the next year.

### Royal Gold (RGLD):

**(1)** What should we be looking for in terms of catalysts within the portfolio in the next 12-24 months? **(2) Deal pipeline:** What does the current deal opportunity look like for RGLD, in terms of \$-value range, primary metal of the mine (base metal vs. precious metal), asset stage (development vs. operating), streamed metals (gold, silver, or PGM's), and use of proceed (expansion, M&A, balance sheet repair), **(4) Mount Milligan:** operator Centerra Gold (CGAU) has noted it is reviewing optimization opportunities at the mine, we'll be seeking if RGLD has any colour or commentary; **(5) Pueblo Viejo:** commentary from Barrick (GOLD) on the plant expansion commissioning ramp-up will be key for RGLD's gold/silver stream.

### Triple Flag (TFPM):

**(1) M&A:** Given the success of the Maverix transaction to date, does it make sense for Triple Flag continue to pursue potential M&A with other royalty/streaming companies? Are there opportunities in M&A? **(2) Deal pipeline:** What does the current deal opportunity look like for TFPM, in terms of \$-value range, primary metal of the mine (base metal vs. precious metal), asset stage (development vs. operating), streamed metals (gold, silver, or PGM's), and use of proceed (expansion, M&A, balance sheet repair). **(3) New deal announcements:** In prior quarters, TFPM has announced new deals, thus we'll be eyeing potential announcements with results.

### Wheaton Precious Metals (WPM):

**(1) Deal pipeline:** What does the current deal opportunity look like for WPM, in terms of \$-value range, primary metal of the mine (base metal vs. precious metal), asset stage (development vs. operating), streamed metals (gold, silver, or PGM's), and use of proceed (expansion, M&A, balance sheet repair)? **(2) Salobo III mine expansion:** We'll be seeking commentary/colour on the ramp-up (full capacity is expected in Q4'24), **(3)**

**Voisey's Bay:** the underground mine extension at Voisey's Bay is ongoing and we'll be seeking colour on further progress **(4) Updates on other key organic growth drivers** that will drive WPM's impressive 5-year and 10-year growth including: Constancia, Stillwater, Marmato (all brownfield) as well as greenfield projects Blackwater, Goose, Curipamba, Marathon, Santo Domingo, Toroparu and Copper World; we note very positive commentary from WPM management on the Q3'23 conference call, with management telegraphing WPM could hit over a million GEOs per year shortly after 2027.

## Key commodity and currency prices

### Exhibit 5: Quarterly change in various commodities and currencies

Metal performance in Q4 was mixed: gold and silver strong, base metals mostly weak.

Quarterly Average commodity prices	Q4'22A	Q3'23A	Q4'23A	QoQ	YoY	2022	2023	BofA '24E
AVG Gold PRICE (US\$/oz)	1,731	1,927	1,977	2.6%	14.2%	1,800	1,924	1,975
AVG Silver PRICE (US\$/oz)	21.29	23.56	23.25	-1.3%	9.2%	25.14	23.20	23.26
AVG Platinum PRICE (US\$/oz)	976	932	916	-1.7%	-6.2%	1,091	976	1,050
AVG Palladium PRICE (US\$/oz)	1,939	1,254	1,094	-12.8%	-43.6%	2,400	1,379	750
AVG Copper PRICE (US\$/lb)	3.64	3.80	3.70	-2.4%	1.8%	4.28	3.83	3.91
AVG Lead PRICE (US\$/lb)	0.95	0.98	0.96	-2.4%	0.8%	1.00	97.82	90.72
AVG Zinc PRICE (US\$/lb)	1.36	1.10	1.13	2.6%	-17.0%	1.36	1.20	1.08
AVG Nickel PRICE (US\$/lb)	11.55	9.25	7.84	-15.2%	-32.1%	8.38	9.88	8.51
AVG Metallurgical Coal Price (US\$/ton)	278	264	334	26.7%	20.0%			
AVG Uranium Price (US\$/lb)	49.49	59.07	77.52	31.2%	56.6%			
AVG Rare Earth NdPr Price (US\$/kg)	95	67	68	1.1%	-28.2%			
AVG C\$:US\$ Exchange Rate	0.74	0.75	0.73	-1.5%	-0.3%			
AVG Australian\$:US\$ Exchange Rate	0.66	0.65	0.65	-0.5%	-0.9%			
AVG Brazilian Real:US\$ Exchange Rate	0.19	0.20	0.20	-1.4%	6.2%			
AVG South African Rand:US\$ Exchange Rate	0.06	0.05	0.05	-0.4%	-6.0%			
AVG Peruvian Nuevo Sol:US\$ Exchange Rate	0.26	0.27	0.26	-2.8%	3.0%			
AVG Argentinian peso:US\$ Exchange Rate	0.61	0.32	0.22	-29.7%	-63.5%			
AVG Chilean peso:US\$ cents Exchange Rate	0.11	0.12	0.11	-4.8%	1.9%			
AVG Diesel spot price (\$USD/g)	3.37	2.97	2.67	-10.0%	-20.7%			
AVG WTI spot oil price (USD\$/bbl)	82.82	82.50	78.59	-4.7%	-5.1%			
AVG Euro: US\$ Exchange Ratio	1.02	1.09	1.08	-1.1%	5.3%			
AVG US\$:C\$ Exchange Rate	1.36	1.34	1.36	1.5%	0.3%			

**Source:** BofA Global Research estimates, Bloomberg

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## Q4'23 EPS estimates vs. consenses

### Exhibit 6: Fourth quarter 2023 earnings preview (Q4'23)

Q4'23 earnings kicks off in early February.

As of January 12, 2024	BofA Ticker	Share Price	Stock Rating	Report Date	EPS Q3'23A	EPS Q4'22A	BofA Q4'23E	QoQ Δ%	YoY Δ%	BBG Q4'23E	BofA 2023E	BBG 2023E	BofA 2024E	BBG 2024E
<b>Senior gold producers</b>														
Barrick Gold	GOLD	\$17.64	B-1-8	14-Feb	0.24	0.21	0.30	25%	43%	0.26	0.87	0.82	1.18	1.09
Agnico Eagle Mines	AEM	\$52.57	B-1-7	15-Feb	0.44	0.41	0.50	14%	22%	0.44	2.17	2.06	2.34	2.40
Kinross Gold	KGC	\$5.89	C-3-7		0.12	0.09	0.14	17%	56%	0.09	0.46	0.41	0.45	0.35
Newmont Corporation	NEM	\$37.64	B-1-8		0.36	0.44	0.29	-19%	-34%	0.50	1.37	1.60	1.88	2.34
<b>Mid-Tier gold producers</b>														
B2Gold	BTG	\$3.11	B-1-7		0.05	0.11	0.09	80%	-18%	0.08	0.29	0.29	0.25	0.28
Centerra Gold	YCG	C\$7.60	B-3-7		0.21	(0.06)	0.29	38%	nm	0.26	0.06	0.03	0.35	0.52
SSR Mining	SSRM	\$10.33	C-3-7		0.26	0.12	0.41	58%	242%	0.32	1.14	1.04	0.60	0.60
IAMGOLD	IAG	\$2.61	C-1-9		(0.01)	0.03	0.00	nm	nm	0.00	0.04	0.03	0.00	0.20
Endeavour Mining	YEDV	C\$25.25	B-1-7		0.28	0.26	0.38	36%	46%	0.30	1.16	1.04	1.99	1.53
Eldorado Gold	EGO	C\$12.72	C-3-9		0.17	0.14	0.15	-12%	7%	0.15	0.52	0.53	0.36	0.68
<b>Intermediate and junior gold producers</b>														
New Gold	NGD	\$1.40	C-3-9	13-Feb	0.00	(0.02)	0.03	nm	nm	0.02	(0.02)	0.09	0.12	0.16
Alamos Gold	AGI	\$12.86	B-2-7		0.14	0.09	0.12	-14%	33%	0.11	0.53	0.53	0.47	0.52
<b>Royalty/streaming companies</b>														
Royal Gold	RGLD	\$122.47	B-3-7	14-Feb	0.76	0.91	0.84	11%	-8%	0.83	4.29	3.46	4.29	4.35
Franco-Nevada	FNV	\$109.68	B-1-7	5-Mar	0.91	0.86	0.78	-14%	-9%	0.82	3.18	3.48	4.32	3.31
Triple Flag	YTFPM	C\$17.19	B-1-7		0.09	0.12	0.09	0%	-25%	0.09	0.63	0.33	0.63	0.45
Wheaton Precious Metals	WPM	\$48.51	B-1-7		0.27	0.23	0.32	19%	39%	0.30	1.37	1.11	1.37	1.31
<b>Silver producers</b>														
Pan American Silver	PAAS	\$15.49	C-1-8	21-Feb	0.01	(0.01)	0.07	nm	nm	0.13	0.20	0.23	0.48	0.73

Source: Company reports, BofA Global Research estimates Note: (1) Production reported (2) Cash costs reported (3) Financials reported

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### Exhibit 7: Fourth quarter 2023 earnings preview (Q4'23) – BofA vs. consensus

Below we compare BofA vs. consensus on various operational and financial metrics.

		Gold Production (oz)			Total Cash Costs (US\$/oz)			EBITDA (US\$m)			EPS (US\$m)		
		BofA	Consensus	% diff	BofA	Consensus	% diff	BofA	Consensus	% diff	BofA	Consensus	Abs diff
<u>Senior gold producers</u>													
Agnico Eagle Mines	AEM	894,839	855,532	4.6%	\$894	\$919	-2.8%	865	785	10.3%	0.50	0.44	+0.06
Barrick Gold	GOLD	1,073,408	1,087,226	-1.3%	\$894	\$866	3.2%	1,496	1,582	-5.5%	0.30	0.26	+0.04
Kinross Gold	KGC	562,431	523,644	7.4%	\$911	\$951	-4.2%	522	455	14.8%	0.14	0.09	+0.05
Newmont Corp.	NEM	1,758,755	1,636,821	7.4%	\$1,049	\$949	10.6%	925	1,188	-22.2%	0.29	0.50	-0.21
<u>Mid-tier gold producers</u>													
B2Gold	BTG	280,948	264,348	6.3%	\$796	NA	NM	301	267	12.6%	0.09	0.08	+0.01
Centerra Gold	YCG	128,215	129,788	-1.2%	\$655	\$589	11.2%	152	144	5.7%	0.29	0.26	+0.03
Endeavour Mining	YEDV	282,411	296,712	-4.8%	\$809	NA	NM	353	313	12.7%	0.38	0.32	+0.06
IAMGOLD	IAG	113,232	115,803	-2.2%	\$1,312	\$1,184	10.8%	70	71	-1.5%	0.00	0.00	-0.00
SSR Mining	SSRM	214,232	177,442	20.7%	\$1,009	NA	NM	186	160	16.5%	0.41	0.32	+0.09
Eldorado Gold	EGO	128,453	134,200	-4.3%	\$742	\$778	-4.6%	120	135	-10.9%	0.15	0.17	-0.02
<u>Intermediate and junior gold producers</u>													
Alamos Gold <sup>(1)</sup>	AGI	134,200	134,200	NM	\$874	\$861	1.5%	129	121	7.0%	0.12	0.11	+0.01
New Gold <sup>(1)</sup>	NGD	80,694	80,694	NM	\$1,176	\$1,005	17.0%	80	81	-0.6%	0.03	0.02	+0.01
Pan American Silver	PAAS	164,330	177,442	-7.4%	\$1,076	\$1,056	-1.9%	202	230	-12.3%	0.07	0.13	-0.06
<u>Silver producers</u>													
Pan American Silver	PAAS	5,522,176	5,651,794	-2.3%	\$14.49	\$14.37	-0.8%	202	230	-12.3%	0.07	0.13	-0.06
<u>Royalty/streaming companies</u>													
		Attr. Gold Equivalent Output (oz)			Total Cash Costs (US\$/oz)			EBITDA (US\$m)			EPS (US\$m)		
Franco-Nevada	FNV	175,308	NA	NM	NA	NA	NM	272	254	6.9%	0.78	0.82	-0.04
Royal Gold	RGLD	79,500	NA	NM	NA	NA	NM	110	114	-3.5%	0.84	0.83	+0.01
Triple Flag	YTFFM	25,428	NA	NM	NA	NA	NM	41	40	2.5%	0.09	0.09	+0.00
Wheaton Precious Metals	WPM	148,323	NA	NM	NA	NA	NM	223	205	8.9%	0.32	0.30	+0.02

Source: BofA Global Research estimates, Company Filings Note: (1) Production reported (2) Cash costs reported (3) Financials reported

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## Q4'23 op. estimates vs. other period

### Exhibit 8: QoQ and YoY Changes Expected on Operational Metrics

Below we outline our Q4'23 expectations on production volumes and cost metrics and provide the expected implied QoQ and YoY changes for each company based on our Q4'23 estimates.

		Annual Change						Sequential Change			
		Gold Production (oz)			Total Cash Costs (US\$/oz)			Gold Production (oz)		Total Cash Costs (US\$/oz)	
		Q4'22A	Q4'23E	YoY %	Q4'22A	Q4'23E	YoY %	Q3'23A	QoQ %	Q3'23A	QoQ %
<b>Senior Gold Producers</b>											
Agnico Eagle Mines	AEM	799,438	894,839	11.9%	\$863	\$894	3.5%	850,429	5.2%	\$919	-2.7%
Barrick Gold	GOLD	1,120,000	1,073,408	-4.2%	\$868	\$894	2.9%	1,039,000	3.3%	\$912	-2.0%
Kinross Gold	KGC	595,683	562,431	-5.6%	\$842	\$911	8.2%	585,449	-3.9%	\$911	0.0%
Newmont Corp.	NEM	1,565,000	1,758,755	12.4%	\$940	\$1,049	11.6%	1,291,000	36.2%	\$1,019	3.0%
<b>Mid-Tier Gold Producers</b>											
B2Gold	BTG	367,870	280,948	-23.6%	\$618	\$796	28.7%	241,526	16.3%	\$827	-3.8%
Centerra Gold	YCG	53,222	128,215	140.9%	\$790	\$655	-17.1%	126,221	1.6%	\$643	1.9%
Eldorado Gold	EGO	128,453	132,890	3.5%	\$741	\$742	0.2%	121,030	9.8%	\$698	6.3%
Endeavour Mining	YEDV	354,890	282,411	-20.4%	\$792	\$809	2.3%	280,893	0.5%	\$773	4.7%
IAMGOLD	IAG	185,000	113,232	-38.8%	\$1,126	\$1,312	16.5%	109,000	3.9%	\$1,400	-6.3%
SSR Mining	SSRM	182,655	214,232	17.3%	\$1,019	\$1,009	-1.0%	159,863	34.0%	\$1,045	-3.4%
Eldorado Gold	EGO	128,453	132,890	3.5%	\$741	\$742	0.2%	121,030	9.8%	\$698	6.3%
<b>Intermediate/Junior Gold Producers</b>											
Alamos Gold <sup>(1)</sup>	AGI	134,200	129,500	-3.5%	\$810	\$874	7.9%	135,400	-4.4%	\$835	4.7%
New Gold <sup>(1)</sup>	NGD	80,694	79,187	-1.9%	\$1,035	\$1,176	21.70%	82,225	33.80%	\$744	58.1%
Pan American Silver	PAAS	164,330	257,366	56.6%	\$1,077	\$1,076	-0.1%	244,300	5.3%	\$1,187	-9.3%
		<b>Silver Production (oz)</b>			<b>Total Cash Costs (US\$/oz)</b>			<b>Silver Production (oz)</b>		<b>Total Cash Costs (US\$/oz)</b>	
Pan American Silver	PAAS	4,763,000	5,522,176	15.9%	\$14.41	\$14.49	0.5%	244,300	2160.4%	\$13.13	10.3%
		<b>Attr. Gold Equivalent Output (oz)</b>			<b>Total Cash Costs (US\$/oz)</b>			<b>Attrib. GEO (oz)</b>		<b>Total Cash Costs (US\$/oz)</b>	
Franco-Nevada	FNV	183,886	175,308	-4.7%	NA	NA	NM	160,848	9.0%	NA	NM
Royal Gold	RGLD	79,500	75,560	-5.0%	NA	NA	NM	71,900	5.1%	NA	NM
Triple Flag	YTFPM	25,428	26,981	6.1%	NA	NA	NM	25,629	5.3%	NA	NM
Wheaton Precious Metals	WPM	148,323	163,455	10.2%	NA	NA	NM	154,800	5.6%	NA	NM

Source: BofA Global Research estimates, Company Filings Note: (1) Production reported (2) Cash costs reported (3) Financials reported

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## Conference call details

### Exhibit 9: North American Metals & Mining Earnings calendar

Earnings release dates, conference call dates/times, and dial-in information

Ticker	Period	Date	Tzone (ET)	Call Date	Call Time (ET)	Primary Call-In Number	Replay Number
<b>Senior gold producers</b>							
GOLD	Q4'23	14-Feb	BMO	14-Feb	11:00 AM	800-319-4610 / 416-915-3239 / UK 08081012791	855-669-9658 / 604-674-8052 pc: 0603 Barrick Gold
AEM	Q4'23	15-Feb	AMC	16-Feb	11:00 AM	888--664-6392 / 416-764-8659	888-390-0541 / 416-764-8677 pc: 178426# Agnico Eagle Mines
KGC	Q4'23						
NEM	Q4'23						
<b>Mid-tier gold producers</b>							
BTG	Q4'23						
YCG	Q4'23						
SSRM	Q4'23						
IAG	Q4'23						
YEDV	Q4'23						
EGO	Q4'23						
<b>Intermediate and junior gold producers</b>							
NGD	Q4'23	13-Feb	AMC	14-Feb	8:30 AM	888-664-6383 / 416-764-8650 pc: 03373344	888-390-0541 / 416-764-8677 pc: 373344 New Gold
AGI	Q4'23						
<b>Royalty/streaming companies</b>							
RGLD	Q4'23	14-Feb	AMC	15-Feb	12:00 PM	US 833-470-1428 / CDA 833-950-0062 / INT 929-526-1599 pc: 565180	Royal Gold
FNV	Q4'23	5-Mar	AMC	6-Mar			
YTFPM	Q4'23						
WPM	Q4'23						
<b>Silver producers</b>							
PAAS	Q4'23	21-Feb	AMC	22-Feb	11:00 AM		

Source: Company Reports

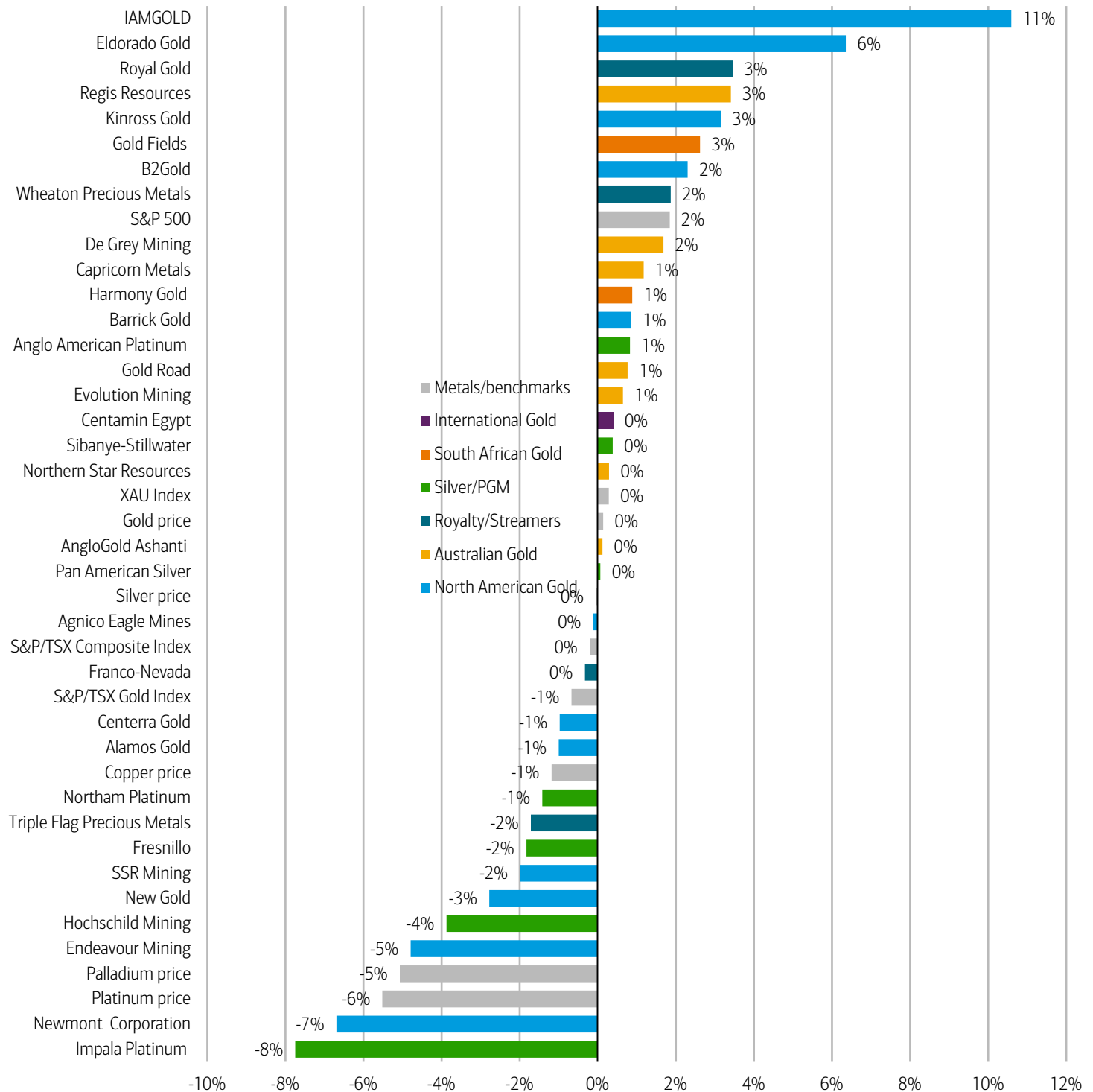
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# WoW returns for the gold sector

## Exhibit 10: WoW returns for the global gold sector and key metals/benchmarks

Gold equities were mixed. IAMGOLD was the best performer, up 11%



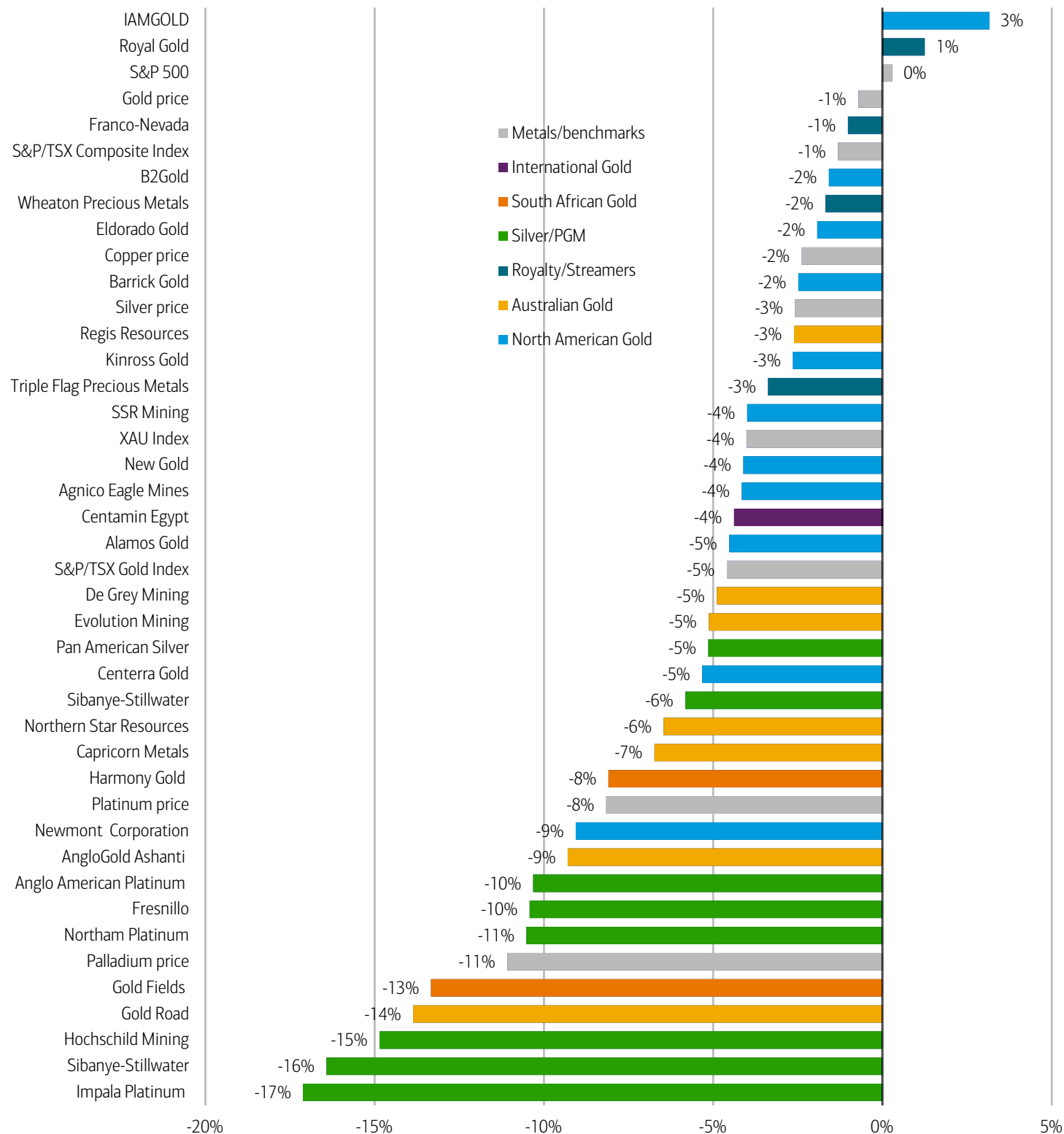
Source: Bloomberg. Note: this is not an exhaustive list of global precious metal equities

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# YTD returns for the gold sector (2024)

## Exhibit 11: Year to date returns for the global gold sector and key metals/benchmarks

IAMGOLD is the best performer in our global coverage year-to-date, up 3%



Source: Bloomberg. Note: this is not an exhaustive list of global precious metal equities

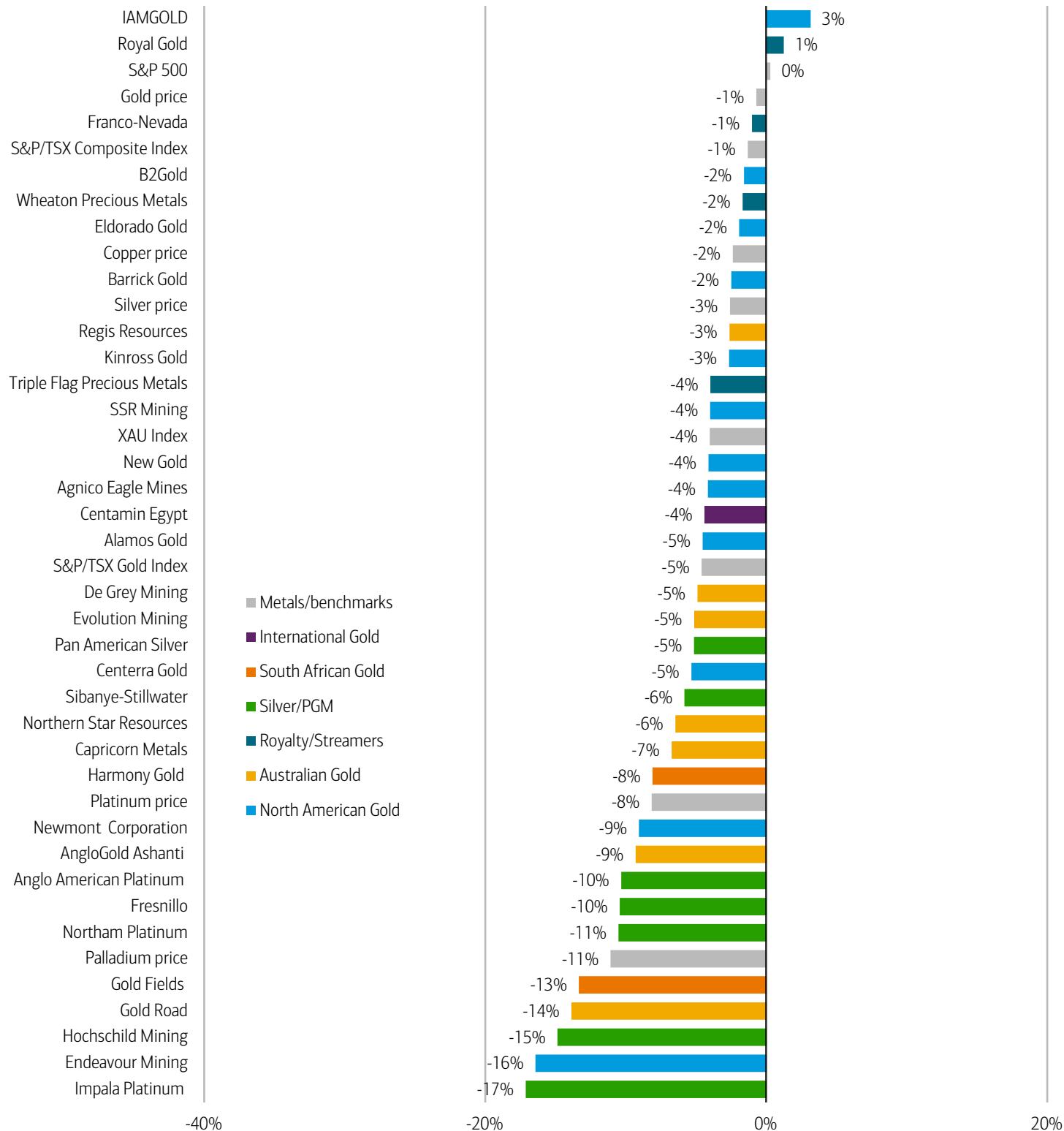
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# QTD returns for the gold sector

## Exhibit 12: Quarter to date returns for the global gold sector and key metals/benchmarks

IAMGOLD is the best performer in our global coverage quarter-to-date, up 3%



Source: Bloomberg. Note: this is not an exhaustive list of global precious metal equities

# Valuation overview

## Exhibit 13: Valuation Comparables for North American Gold and Precious Metals Producers and Royalty Companies

North American precious metal stocks are trading at 1.32x NAV (market value weighted), vs. the 10-year range of 1.0-2.0x NAV

Priced as of 12-Jan-2024				Market Cap		EPS		P/E (x)		CFPS		P/CFPS (x)			
	BofA Sym	Share Price	Shares O/S	(USDmn)	Rating	2023E	2024E	2023E	2024E	2023E	2024E	2023E	2024E	NAV	P/NAV
Senior Gold Producers															
	AEM	52.57	497	26,103	BUY	2.17	2.34	24.2	22.5	5.42	5.72	9.7	9.2	36.75	1.43
	GOLD	17.64	1,756	30,967	BUY	0.87	1.18	20.3	14.9	2.42	2.47	7.3	7.1	19.90	0.89
	KGC	5.89	1,228	7,232	UNDE	0.46	0.45	12.8	13.1	1.22	1.21	4.8	4.9	5.25	1.12
	NEM	37.64	1,152	43,380	BUY	1.37	1.88	27.5	20.0	3.28	4.09	11.5	9.2	37.80	1.00
Market Cap Weighted Average								23.6	18.7			9.4	8.3		1.08
Mid-Tier Gold Producers															
	BTG	3.11	1,300	4,044	BUY	0.29	0.25	10.7	12.4	0.65	0.50	4.8	6.2	3.25	0.96
	YCG	7.60	216	1,223	UNDE	0.06	0.35	94.5	16.2	0.65	1.01	8.7	5.6	14.05	0.54
	EGO	12.72	205	2,603	UNDE	0.52	0.36	24.5	35.3	1.65	1.69	7.7	7.5	14.25	0.89
	YEDV	25.25	248	4,667	BUY	1.16	1.99	16.2	9.5	2.87	4.56	6.6	4.1	35.21	0.72
	IAG	2.61	481	1,256	BUY	0.04	0.00	65.3	NA	0.68	0.45	3.8	5.8	4.90	0.53
	SSRM	10.33	204	2,106	UNDE	1.14	0.60	9.1	17.2	2.20	1.57	4.7	6.6	12.55	0.82
Market Cap Weighted Average								25.1	16.6			6.0	5.8		0.79
Intermediate/Junior Gold Producers															
	AGI	12.86	397	5,103	NEUT	0.53	0.47	24.3	27.4	1.34	1.09	9.6	11.8	10.15	1.27
	NGD	1.40	687	961	UNDE	(0.02)	0.12	NA	11.7	0.43	0.49	3.3	2.9	2.50	0.56
Market Cap Weighted Average								24.3	24.9			8.6	10.4		1.15
Royalty Companies															
	FNV	109.68	192	21,072	BUY	3.44	3.18	31.9	34.5	4.93	4.91	22.2	22.3	55.50	1.98
	RGLD	122.47	66	8,045	UNDE	3.43	4.29	35.7	28.5	6.05	7.72	20.2	15.9	60.00	2.04
	TFPM	12.86	202	2,592	BUY	0.34	0.63	37.8	20.4	0.77	0.97	16.8	13.2	9.65	1.33
	WPM	48.51	453	21,975	BUY	1.14	1.37	42.6	35.4	1.61	2.15	30.1	22.5	22.80	2.13
Market Cap Weighted Average								37.1	33.3			24.9	21.0		2.02
Primary Silver Producers															
	PAAS	15.49	364	5,645	BUY	0.20	0.48	77.5	32.3	1.49	1.96	10.4	7.9	14.90	1.04
Market Cap Weighted Average								77.5	32.3			10.4	7.9		1.04
Gold producer only:								23.8	18.7			8.9	8.1		1.05
Overall average:								29.2	23.3			13.5	11.8		1.32

Source: Bloomberg, Company reports, BofA Global Research estimates (1) stock price in CAD; EPS, CFPS, NAV in USD (2) CAD (3) stock price in AUD (4) 2021 metrics actual

Note: (1) stock price in CAD\$, EPS, CFPS, NAV in USD\$; (2) CAD\$ (3) AUD\$ (4) ZAR (5) stock price, NAV in pence; market cap in GBP, EPS, CFPS in USD; (6) stock price, market cap and NAV in CAD\$; EPS and CFPS in USD\$; (7) share price and NAV in HKD; EPS and CFPS in CNY, market cap in USD; (8) stock price, NAV in pence; market cap in USD EPS, CFPS in GBP; (9) stock price, market cap, NAV in AUD, EPS, and CFPS in USD; (10) stock price and market cap in CAD; NAV in GBP, EPS and CFPS in USD; (11) stock price, market cap, EPS, CFPS and NAV in TRY; (12) Estimates are based on Bloomberg consensus; (13) stock price, market cap and NAV in ZAR; EPS and CFPS in USD, (14) stock price, market cap in ZAR; NAV, EPS and CFPS in AUD (15) stock price and market cap in ZAR; EPS and CFPS in USD, NAV in GBP (16) stock price and market cap in ZAR; EPS, CFPS and NAV in CAD; (17) June 30th year end; (18) Adjusted P/NAV = (share price - net cash and investments) / DCF of mining assets using a 5% discount rate. (21) stock price listed in RUB

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**Exhibit 14: Valuation Comparables for Global Gold and Precious Metals Producers and Royalty Companies**

Global precious metal stocks are trading at 1.20x NAV (market value weighted)

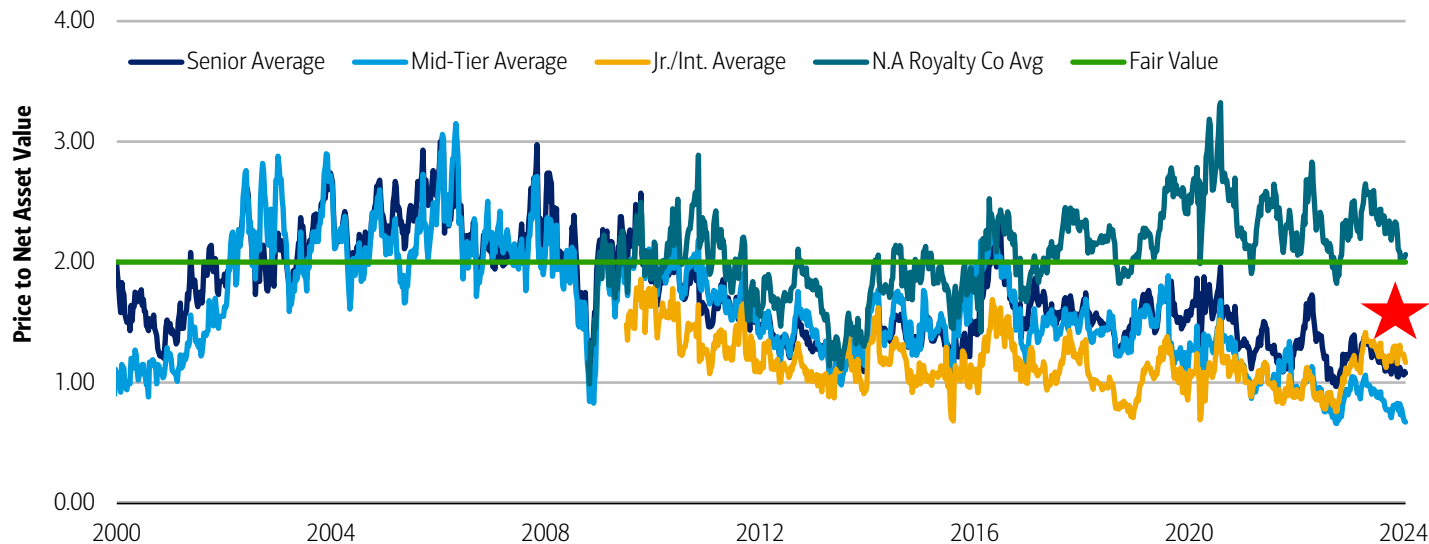
Priced as of 12-Jan-2024	BofA Sym	Share Price	Shares Outstanding	MC (USDmn)	Rating	EPS		P/E (x)		CFPS		P/CFPS (x)		DCF	NC	NAV	P/NAV
						2024	2025	2024	2025	2024	2025	2024	2025				
<b>Australian Gold Producers<sup>(9)</sup></b>																	
Capricorn Metals	CRNLF	4.49	377	1,133	NEUT	0.29	0.25	15.5	17.7	0.44	0.34	10.3	13.1	4.33	0.00	4.33	1.04
De Grey Mining	DGMLF	1.22	1,851	1,510	BUY	(0.01)	(0.02)	NA	NA	(0.01)	(0.02)	NA	NA	1.54	0.00	1.54	0.79
Evolution Mining	CAHPF	3.84	1,976	5,073	NEUT	0.28	0.47	13.8	8.2	0.59	0.78	6.5	5.0	3.69	0.00	3.69	1.04
Gold Road	ELKMF	1.73	1,081	1,251	BUY	0.13	0.17	8.6	6.8	0.25	0.29	4.6	4.0	2.13	0.00	2.13	0.81
Northern Star Resources	NESRF	13.05	1,149	10,029	BUY	0.58	1.03	22.7	12.7	1.79	2.12	7.3	6.2	12.97	0.00	12.97	1.01
Regis Resources	RGRNF	2.17	755	1,096	BUY	(0.03)	0.28	NA	5.1	0.66	0.72	2.2	2.0	2.15	0.00	2.15	1.01
<b>Market Cap Weighted Average</b>								<b>17.6</b>	<b>10.9</b>			<b>6.8</b>	<b>5.9</b>				<b>0.99</b>
<b>South African Gold Producers<sup>(19)</sup></b>																	
Gold Fields <sup>(13)</sup>	GFIOf	245.97	894	11,782	NEUT	1.14	2.02	11.5	6.5	2.16	n/a	6.1	NA	235.06	0.00	235.06	1.05
Harmony Gold <sup>(14,18)</sup>	HGMCF	112.30	620	3,732	UNDE	12.19	16.22	9.2	6.9	16.12	15.29	7.0	7.3	79.94	0.00	79.94	1.40
<b>Market Cap Weighted Average</b>								<b>11.0</b>	<b>6.6</b>			<b>6.8</b>	<b>8.2</b>				<b>1.16</b>
<b>International Gold Producers</b>																	
AngloGold Ashanti	AULGF	327.52	420	7,369	NEUT	1.35	2.46	13.0	7.2	3.13	4.19	5.6	4.2	310.60	0.00	310.60	1.05
Centamin Egypt <sup>(5,18)</sup>	CELTf	95.50	1,158	1,410	BUY	0.14	0.18	8.8	6.7	0.26	0.31	4.6	3.9	130.78	0.00	130.78	0.73
<b>Market Cap Weighted Average</b>								<b>12.4</b>	<b>7.1</b>			<b>5.5</b>	<b>4.1</b>				<b>1.00</b>
<b>South African PGM Producers<sup>(5)</sup></b>																	
Anglo American Platinum	AGPPF	883.32	265	12,562	NEUT	29.50	23.50	29.9	37.6	48.03	43.80	18.4	20.2	665.71	0.00	665.71	1.33
Impala Platinum	IMPUF	77.29	904	3,747	UNDE	(0.67)	2.21	NA	34.9	11.07	13.98	7.0	5.5	59.58	0.00	59.58	1.30
Northam Platinum	NPTLF	128.39	396	2,727	BUY	8.65	7.38	14.8	17.4	16.85	12.10	7.6	10.6	62.97	0.00	62.97	2.04
Sibanye-Stillwater	SBYSF	23.96	2,831	3,636	UNDE	(1.02)	(0.97)	NA	NA	2.78	2.62	8.6	9.1	18.40	0.00	18.40	1.30
<b>Market Cap Weighted Average</b>								<b>27.2</b>	<b>34.2</b>			<b>16.3</b>	<b>17.7</b>				
<b>International Silver Producers</b>																	
Fresnillo	FNLPF	533.40	737	5,011	UNDE	0.16	0.24	42.8	27.9	109.52	126.98	4.9	4.2	272.85	0.00	272.85	2.49
Hochschild	HCHDF	91.35	514	599	BUY	0.11	0.27	10.8	4.2	56.91	77.89	1.6	1.2	98.83	0.00	98.83	1.18
<b>Market Cap Weighted Average</b>								<b>39.4</b>	<b>25.4</b>			<b>4.5</b>	<b>3.9</b>				<b>2.35</b>
<b>Global average</b>								<b>10.6</b>									<b>1.20</b>
<b>Global average ex-royalty</b>																	<b>1.07</b>

**Source:** Bloomberg, Company reports, BofA Global Research estimates (1) stock price in CAD; EPS, CFPS, NAV in USD (2) CAD (3) stock price in AUD (4) 2021 metrics actual

Note: (1) stock price in CAD; EPS, CFPS, NAV in USD; (2) CAD (3) AUD (4) ZAR (5) stock price, NAV in pence; market cap in GBP, EPS, CFPS in USD; (6) stock price, market cap and NAV in CAD; EPS and CFPS in USD; (7) share price and NAV in HKD; EPS and CFPS in CNY, market cap in USD; (8) stock price, NAV in pence; market cap in USD, EPS, CFPS in GBP; (9) stock price, market cap, NAV in AUD, EPS, and CFPS in USD; (10) stock price and market cap in CAD; NAV in GBP, EPS and CFPS in USD; (11) stock price, market cap, EPS, CFPS and NAV in TRY; (12) Estimates are based on Bloomberg consensus; (13) stock price, market cap and NAV in ZAR; EPS and CFPS in USD; (14) stock price, market cap in ZAR; NAV, EPS and CFPS in AUD (15) stock price and market cap in ZAR; EPS and CFPS in USD, NAV in GBP (16) stock price and market cap in ZAR; EPS, CFPS and NAV in CAD; (17) June 30th year end; (18) Adjusted P/NAV = (share price - net cash and investments) / DCF of mining assets using a 5% discount rate. (21) stock price listed in RUB

**Exhibit 15: North American gold producer and royalty & streamer P/NAV history**

Historical P/NAV multiples for the North American sector. Sector trading at 1.32x NAV, between the 1.0-2.0x historical range

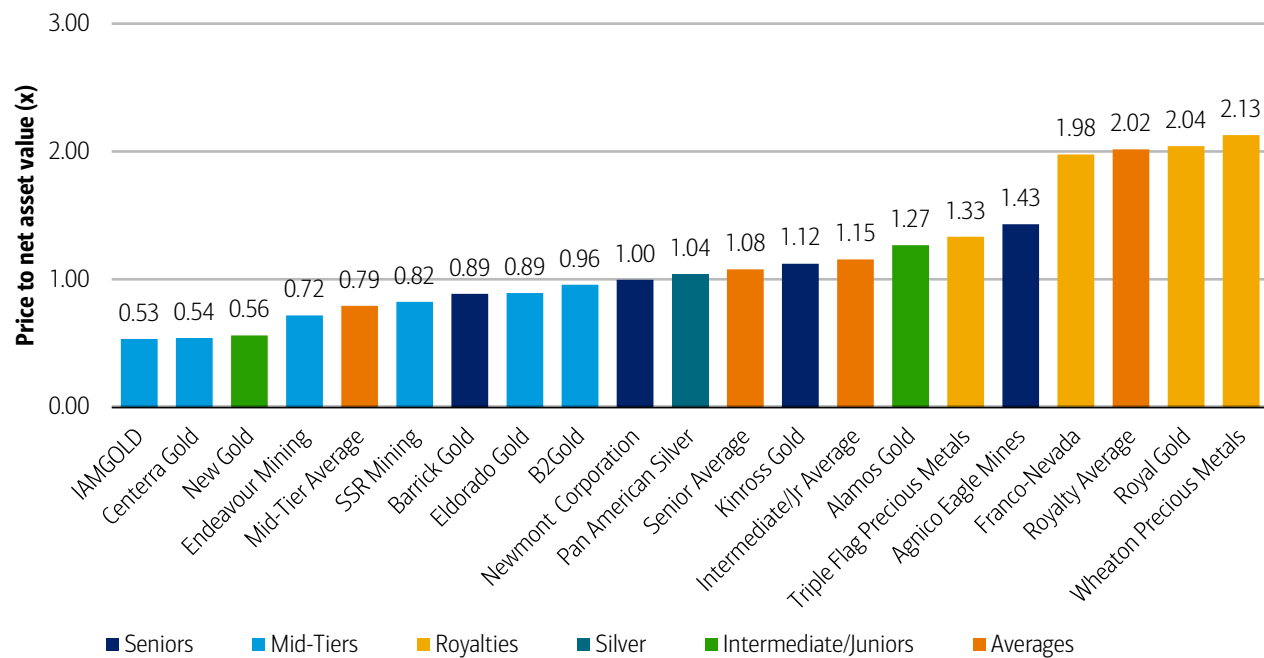


Source: Bloomberg

BofA GLOBAL RESEARCH

**Exhibit 16: Price to Net Asset Value (P/NAV) for North American Gold and Precious Metals Producers and Royalty Companies**

P/NAV multiples for our North American Precious metals coverage. Royalty & Streamers most expensive



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

## Exhibit 17: Net asset value, reserves and resources

### North American precious metals coverage universe, ratings and NAV's

Priced as of 12-Jan-2024	BofA Sym	Share Price	Shares O/S	Market Cap	NAV	P/NAV	Primary Metal Reserves	Primary Metal Resources
<b>Senior Gold Producers</b>							<b>Moz</b>	<b>Moz</b>
Agnico Eagle Mines	AEM	52.57	497	26,103	36.75	1.43	44.6	114.8
Barrick Gold	GOLD	17.64	1,756	30,967	19.90	0.89	69.0	271.0
Kinross Gold	KGC	5.89	1,228	7,232	5.25	1.12	32.6	70.3
Newmont Corporation	NEM	37.64	1,152	43,380	37.80	1.00	95.5	208.0
<b>Market Cap Weighted Average</b>						<b>1.08</b>		
<b>Mid-Tier Gold Producers</b>								
B2Gold	BTG	3.11	1,300	4,044	3.25	0.96	6.3	22.0
Centerra Gold <sup>(1)</sup>	YCG	7.60	216	1,223	14.05	0.40	4.8	13.0
Eldorado Gold	EGO	12.72	205	2,603	14.25	0.89	17.7	57.9
Endeavour Mining	YEDV	25.25	248	6,255	35.21	0.54	17.8	53.8
IAMGOLD	IAG	2.61	481	1,256	4.90	0.53	12.4	45.6
SSR Mining	SSRM	10.33	204	2,106	12.55	0.82	9.2	21.1
<b>Market Cap Weighted Average</b>						<b>0.79</b>		
<b>Intermediate/Junior Gold Producers</b>								
Alamos Gold <sup>(6)</sup>	AGI	12.86	397	5,103	10.11	1.27	10.3	21.8
New Gold	NGD	1.40	687	961	2.50	0.56	3.7	6.8
<b>Market Cap Weighted Average</b>						<b>1.15</b>		
<b>Royalty Companies</b>								
Franco-Nevada	FNV	109.68	192	21,072	55.50	1.98	NA	NA
Royal Gold	RGLD	122.47	66	8,045	60.00	2.04	NA	NA
Triple Flag Precious Metals	YTFPM	17.19	202	3,465	9.65	1.78	NA	NA
Wheaton Precious Metals	WPM	48.51	453	21,975	22.80	2.13	NA	NA
<b>Market Cap Weighted Average</b>						<b>2.02</b>		
<b>Primary Silver Producers</b>								
Pan American Silver	PAAS	15.49	364	5,645	14.90	1.04	529.3	1,807.6
<b>Market Cap Weighted Average</b>						<b>1.04</b>		

Source Bloomberg, Company reports, BofA Global Research estimates

Note: (1) stock price in CAD\$, EPS, CFPS, NAV in USD\$; (2) CAD\$ (3) AUD\$ (4) ZAR (5) stock price, NAV in pence; market cap in GBP, EPS, CFPS in USD; (6) stock price, market cap and NAV in CAD\$; EPS and CFPS in USD\$; (7) share price and NAV in HKD; EPS and CFPS in CNY, market cap in USD; (8) stock price, NAV in pence; market cap in USD EPS, CFPS in GBP; (9) stock price, market cap, NAV in AUD, EPS, and CFPS in USD; (10) stock price and market cap in CAD; NAV in GBP, EPS and CFPS in USD; (11) stock price, market cap, EPS, CFPS and NAV in TRY; (12) Estimates are based on Bloomberg consensus; (13) stock price, market cap and NAV in ZAR; EPS and CFPS in USD, (14) stock price, market cap in ZAR; NAV, EPS and CFPS in AUD (15) stock price and market cap in ZAR; EPS and CFPS in USD, NAV in GBP (16) stock price and market cap in ZAR; EPS, CFPS and NAV in CAD; (17) June 30th year end; (18) Adjusted P/NAV = (share price - net cash and investments) / DCF of mining assets using a 5% discount rate. (21) stock price listed in RUB

BofA GLOBAL RESEARCH

**Exhibit 18: Net asset value, reserves and resources**  
**Global precious metals coverage universe, ratings and NAV's**

<b>Priced as of 12-Jan-2024</b>	<b>BofA Sym</b>	<b>Share Price</b>	<b>Shares O/S</b>	<b>MC</b>	<b>NAV</b>	<b>P/NAV</b>	<b>P&amp;P Primary Metal Reserves (million oz)</b>	<b>Total Primary Metal Resources incl'd'g P&amp;P (mln oz)</b>
<b>Australian Gold Producers<sup>(3,12)</sup></b>								
Capricorn Metals	CRNLF	4.49	377	1,135	4.33	1.04	1.3	3.6
De Grey Mining	DGMLF	1.22	1,851	1,513	1.54	0.79	5.1	15.7
Evolution Mining	CAHPF	3.84	1,976	5,082	3.69	1.04	10.0	40.3
Gold Road	ELKMF	1.73	1,081	1,253	2.13	0.81	4.1	8.9
Northern Star	NESRF	13.05	1,149	10,047	12.97	1.01	20.2	77.6
Regis Resources	RGRNF	2.17	755	1,098	2.15	1.01	3.6	10.6
<b>Market Cap Weighted Average</b>						<b>0.99</b>		
<b>South African Gold Producers<sup>(4)</sup></b>								
Gold Fields	GFIOF	245.97	894	11,782	235.06	1.05	52.1	96.9
Harmony Gold <sup>(12)</sup>	HGMCF	112.30	620	3,732	79.94	1.40	42.5	66.9
<b>Market Cap Weighted Average</b>						<b>1.16</b>		
<b>International Gold Producers</b>								
AngloGold Ashanti	AULGF	327.52	420	7,701	310.60	1.05	29.7	154.2
Centamin Egypt <sup>(5)</sup>	CELTF	95.50	1,158	1,410	130.78	0.73	5.0	14.8
<b>Market Cap Weighted Average</b>						<b>1.00</b>		
<b>South African PGM Producers<sup>(16)</sup></b>								
Anglo American Platinum <sup>(5)</sup>	AGPPF	883.32	265	12,562	665.71	1.33	177.2	847.4
Impala Platinum <sup>(5)</sup>	IMPUF	77.29	850	3,747	59.58	1.30	34.1	250.0
Northam Platinum <sup>(5)</sup>	NPTLF	128.39	397	2,727	62.97	2.04	14.0	195.9
Sibanye-Stillwater	SBYSF	23.96	2,853	3,636	18.40	1.30	57.7	373.3
<b>Market Cap Weighted Average</b>						<b>2.35</b>		
<b>International Silver Producers</b>								
Fresnillo <sup>(5)</sup>	FNLPF	533.40	737	5,011	272.85	2.49	397.8	1,265.5
Hochschild Mining <sup>(5)</sup>	HCHDF	91.35	514	599	99	1.18	41.2	288.8
<b>Market Cap Weighted Average</b>						<b>0.00</b>		

**Source:** Bloomberg, Company reports, BofA Global Research estimates

All tickers represent BofA Global Research covered companies. (1) stock price in CAD; NAV in USD (2) CAD (3) AUD (4)ZAR (5) stock price in pence; NAV in USD, (6) NAV in CAD; (7) silver reserves, silver resources and silver mined in model (8) palladium reserves, palladium resources and palladium mined in model; (9) Reserves and resources on a GEO basis; (10) stock price in CAD, NAV in GBP, (11) stock price and NAV in TRY; (12) June 30th year end; (13) Forecasts based on management guidance; (14) Reserves and resources on an SEO basis (15) Reserves and resources on a Platinum Equivalent (4E->Platinum + Palladium + Rhodium + Gold) basis; (16) stock price in ZAR, NAV in GBP; (17) stock price in ZAR, NAV in CAD; (18) stock price and NAV in HKD; (19) stock price and NAV in GBpAdjusted P/NAV = (share price - net cash and investments) / DCF of mining assets using a 5% discount rate. (20) stock price in RUB

BofA GLOBAL RESEARCH

**Exhibit 19: EV/EBIT and EV/EBITDA ratios for North American Gold and Precious Metal Producers and Royalty/Streaming Companies**

Valuation metrics for the North American precious metal sector

Priced as of 12-Jan-2024		Share	Shares	MC	Enterprise	EBIT (\$mn)		EV/EBIT (x)		EBITDA (\$mn)		EV/EBITDA (x)	
	BofA Sym	Price	Outstanding	(USDmn)	Value (EV) (USDmn)	2024E	2025E	2024E	2025E	2023E	2025E	2024E	2025E
<b>Senior Gold Producers</b>													
Agnico Eagle Mines	AEM	52.57	497	26,103	27,856	1,903	2,552	14.6	10.9	4,744	4,115	5.9	6.8
Barrick Gold	GOLD	17.64	1,756	30,967	40,159	4,713	6,050	8.5	6.6	5,147	7,991	7.8	5.0
Kinross Gold	KGC	5.89	1,228	7,232	9,311	898	1,365	10.4	6.8	1,841	2,211	5.1	4.2
Newmont Corporation	NEM	37.64	1,152	43,380	46,418	3,165	5,684	14.7	8.2	3,261	8,184	14.2	5.7
<b>Market Cap Weighted Average</b>								<b>12.3</b>	<b>8.2</b>			<b>9.6</b>	<b>5.6</b>
<b>Mid-Tier Gold Producers</b>													
B2Gold	BTG	3.11	1,300	4,044	3,905	786	519	5.0	7.5	936	727	4.2	5.4
Centerra Gold <sup>(1)</sup>	YCG	7.60	216	1,223	731	178	189	4.1	3.9	243	317	3.0	2.3
Eldorado Gold	EGO	12.72	205	2,603	2,737	206	167	13.3	16.4	401	473	6.8	5.8
Endeavour Mining <sup>(1)</sup>	YEDV	25.25	248	6,255	5,484	925	1,149	5.9	4.8	929	1,747	5.9	3.1
IAMGOLD	IAG	2.61	481	1,256	1,717	82	352	21.0	4.9	215	715	8.0	2.4
SSR Mining	SSRM	10.33	204	2,106	2,948	188	266	15.6	11.1	501	447	5.9	6.6
<b>Market Cap Weighted Average</b>								<b>9.3</b>	<b>6.7</b>			<b>5.5</b>	<b>4.3</b>
<b>Intermediate/Junior Gold Producers</b>													
Alamos Gold	AGI	12.86	397	5,103	4,873	300	445	16.2	11.0	515	622	9.5	7.8
New Gold	NGD	1.40	687	961	1,174	140	237	8.4	5.0	310	563	3.8	2.1
<b>Market Cap Weighted Average</b>								<b>14.7</b>	<b>9.8</b>			<b>8.4</b>	<b>6.7</b>
<b>Royalty Companies</b>													
Franco-Nevada	FNV	109.68	192	21,072	19,775	745	1,044	26.5	18.9	1,037	1,367	19.1	14.5
Royal Gold	RGLD	122.47	66	8,045	8,276	361	396	23.0	20.9	467	625	17.7	13.2
Triple Flag Precious Metals	TFPM	12.86	202	1,888	1,916	142	165	13.5	11.6	116	232	16.5	8.3
Wheaton Precious Metals	WPM	48.51	453	21,975	21,147	654	750	32.3	28.2	715	1,103	29.6	19.2
<b>Market Cap Weighted Average</b>								<b>27.4</b>	<b>22.4</b>			<b>22.5</b>	<b>15.7</b>
<b>Primary Silver Producers</b>													
Pan American Silver	PAAS	15.49	364	5,645	6,870	319	637	21.5	10.8	598	1,097	11.5	6.3
<b>Market Cap Weighted Average</b>								<b>21.5</b>	<b>10.8</b>			<b>11.5</b>	<b>6.3</b>

Source: BofA Global Research estimates. Company reports

Note: 1) stock price in CAD\$, EPS, CFPS, NAV in USD\$; (2) CAD\$ (3) AUD\$ (4) ZAR (5) stock price, NAV in pence; market cap in GBP, EPS, CFPS in USD; (6) stock price, market cap and NAV in CAD\$; EPS and CFPS in USD\$; (7) share price and NAV in HKD; EPS and CFPS in CNY, market cap in USD; (8) stock price, NAV in pence; market cap in USD, EPS, CFPS in GBP; (9) stock price, market cap, NAV in AUD, EPS, and CFPS in USD; (10) stock price and market cap in CAD; NAV in GBP, EPS and CFPS in USD; (11) stock price, market cap, EPS, CFPS and NAV in TRY; (12) Estimates are based on Bloomberg consensus; (13) stock price, market cap and NAV in ZAR; EPS and CFPS in USD; (14) stock price, market cap in ZAR; NAV, EPS and CFPS in AUD (15) stock price and market cap in ZAR; EPS and CFPS in USD, NAV in GBP (16) stock price and market cap in ZAR; EPS, CFPS and NAV in CAD; (17) June 30th year end; (18) Adjusted P/NAV = (share price - net cash and investments) / DCF of mining assets using a 5% discount rate. (21) stock price listed in RUB

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**Exhibit 20: EV/EBIT and EV/EBITDA ratios for Global Gold and Precious Metal Producers and Royalty/Streaming Companies**

Valuation metrics for the global precious metal sector

Priced as of 12-Jan-2024		Share	Shares	MC	Enterprise	EBIT (\$mn)		EV/EBIT (x)		EBITDA		EV/EBITDA (x)	
	BofA Sym	Price	Outstanding	(USDmn)	Value (EV) (USDmn)	2023E	2024E	2023E	2024E	2023E	2024E	2023E	2024E
<b>Australian Gold Producers<sup>(4,12,18)</sup></b>													
Capricorn Metals	CRNLF	4.49	377	1,133	1,119	159	141	10.5	11.9	162	174	10.3	9.6
De Grey Mining	DGMLF	1.22	1,851	1,510	1,436	(16)	(16)	NA	NA	(21)	(14)	NA	NA
Evolution Mining	CAHPF	3.84	1,976	5,073	6,257	891	1,389	10.5	6.7	886	1,974	10.6	4.7
Gold Road	ELKMF	1.73	1,081	1,251	1,229	205	251	9.0	7.3	259	346	7.1	5.3
Northern Star Resources	NESRF	13.05	1,149	10,029	10,155	1,021	1,742	9.9	5.8	1,537	2,987	6.6	3.4
Regis Resources	RGRNF	2.17	755	1,096	1,401	83	317	25.2	6.6	401	645	5.2	3.3
<b>Market Cap Weighted Average</b>								<b>9.4</b>	<b>6.1</b>			<b>7.6</b>	<b>4.0</b>
<b>South African Gold Producers<sup>(16)</sup></b>													
Gold Fields <sup>(4)</sup>	GFIOF	246	894	11,781	12,155	1,651	2,691	7.4	4.5	2,480	3,879	4.9	3.1
Harmony Gold	HGMCF	112	620	3,732	3,871	8,591	11,151	8.4	6.5	610	867	6.3	4.5
<b>Market Cap Weighted Average</b>								<b>7.6</b>	<b>5.0</b>			<b>4.3</b>	<b>2.9</b>
<b>International Gold Producers</b>													
AngloGold Ashanti	AULGF	328	420	7,368	8,754	1,041	1,729	8.4	5.1	1,419	2,566	6.2	3.4
Centamin Egypt	CELTf	95.50	1,158	1,410	1,308	342	478	3.8	2.7	367	648	3.6	2.0
<b>Market Cap Weighted Average</b>								<b>7.8</b>	<b>4.8</b>			<b>5.8</b>	<b>3.2</b>
<b>South African PGM Producers</b>													
Anglo American Platinum	AGPPF	883.32	265	12,561	9,955	10,142	8,520	18.3	21.8	26,459	14,825	7.0	12.5
Impala Platinum <sup>(4)</sup>	IMPUF	77.29	904	3,747	2,828	472	4,709	NA	11.2	30,074	13,477	1.8	3.9
Northam Platinum <sup>(4)</sup>	NPTLF	128.39	396	2,727	3,252	5,753	4,496	10.5	13.5	16,594	5,771	3.7	10.5
Sibanye-Stillwater	SBYSF	23.96	2,831	3,635	3,460	1,421	2,647	45.4	24.4	24,290	12,471	2.7	5.2
<b>Market Cap Weighted Average</b>								<b>22.4</b>	<b>19.3</b>			<b>4.2</b>	<b>9.6</b>
<b>International Silver Producers</b>													
Fresnillo	FNLPF	533.40	737	5,011	5,682	338	452	16.8	12.6	634	997	9.0	5.7
Hochschild Mining	HCHDF	91.35	514	599	774	122	270	6.3	2.9	150	410	5.1	1.9
<b>Market Cap Weighted Average</b>								<b>15.5</b>	<b>11.4</b>			<b>8.5</b>	<b>5.2</b>

**Source:** BofA Global Research estimates. Company reports

Note: 1) stock price in CAD\$, EPS, CFPS, NAV in USD\$; (2) CAD\$ (3) AUD\$ (4) ZAR (5) stock price, NAV in pence; market cap in GBP, EPS, CFPS in USD; (6) stock price, market cap and NAV in CAD\$; EPS and CFPS in USD\$; (7) share price and NAV in HKD; EPS and CFPS in CNY, market cap in USD; (8) stock price, NAV in pence; market cap in USD EPS, CFPS in GBP; (9) stock price, market cap, NAV in AUD, EPS, and CFPS in USD; (10) stock price and market cap in CAD; NAV in GBP, EPS and CFPS in USD; (11) stock price, market cap, EPS, CFPS and NAV in TRY; (12) Estimates are based on Bloomberg consensus; (13) stock price, market cap and NAV in ZAR; EPS and CFPS in USD, (14) stock price, market cap in ZAR; NAV, EPS and CFPS in AUD (15) stock price and market cap in ZAR; EPS and CFPS in USD, NAV in GBP (16) stock price and market cap in ZAR; EPS, CFPS and NAV in CAD; (17) June 30th year end; (18) Adjusted P/NAV = (share price - net cash and investments) / DCF of mining assets using a 5% discount rate. (21) stock price listed in RUB

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# Operating Comparables

## Exhibit 21: Operating Forecasts for Global Gold and Precious Metal Producers

Senior golds have 2+ Moz of annual output. Mid-tiers are between 0.5-1.5 Moz of annual output. Intermediates have <0.5 Moz of annual output

Priced as of 12-Jan-2024

	BofA Sym	Share Price	Shares O/S	Market Cap	Enterprise Value	P&P Gold Reserves	Total Gold Resources including P&P	Production		EV Per Oz of Prod. (USD)	
								2024E	2025E	2024E	2025E
						(moz)	(mn oz)	('000 oz)	('000 oz)		
<b>Senior Gold Producers</b>											
Agnico-Eagle Mines	AEM	52.57	497	26,103	27,856	44.6	114.8	3,497	3,528	7,966	7,895
Barrick Gold	GOLD	17.64	1,756	30,967	40,159	69.0	271.0	4,189	4,445	9,586	9,036
Kinross Gold	KGC	5.89	1,228	7,232	9,311	32.6	70.3	2,085	1,978	4,467	4,708
Newmont Corporation	NEM	37.64	1,152	43,380	46,418	95.5	208.0	7,482	8,066	6,204	5,755
<b>Market Cap Weighted Average</b>										<b>7,567</b>	<b>7,223</b>
<b>Mid-Tier Gold Producers</b>											
B2Gold	BTG	3.11	1,300	4,044	3,905	6.3	22.0	1,013	952	3,856	4,101
Centerra Gold <sup>(1)</sup>	YCG	7.60	216	1,223	731	4.8	13.0	372	290	1,967	2,523
Eldorado Gold	EGO	12.72	205	2,603	2,737	17.7	57.9	538	547	5,083	5,001
Endeavour Mining <sup>(1)</sup>	YEDV	25.25	248	6,255	5,484	17.8	53.8	1,241	1,333	4,420	4,114
IAMGOLD	IAG	2.61	481	1,256	1,717	12.4	45.6	497	757	3,455	2,267
SSR Mining	SSRM	10.33	204	2,106	2,948	9.2	21.1	508	526	5,802	5,605
<b>Market Cap Weighted Average</b>										<b>4,433</b>	<b>4,253</b>
<b>Intermediate/Junior Gold Producers</b>											
Alamos Gold	AGI	12.86	397	5,103	4,873	10.3	21.8	505	496	9,658	9,834
New Gold	NGD	1.40	687	961	1,174	3.7	6.8	372	372	3,158	3,158
<b>Market Cap Weighted Average</b>										<b>8,396</b>	<b>8,538</b>
<b>Royalty Companies</b>											
								Attributable Production			
Franco-Nevada	FNV	109.68	192	21,072	19,775	NA	NA	620	767	31,904	25,778
Royal Gold	RGLD	122.47	66	8,045	8,276	NA	NA	363	376	22,796	22,035
Triple Flag Precious Metals	yTFPM	17.19	202	3,465	2,624	NA	NA	130	143	20,200	18,342
Wheaton Precious Metals	WPM	48.51	453	21,975	21,147	NA	NA	731	754	28,920	28,028
<b>Market Cap Weighted Average</b>										<b>28,639</b>	<b>25,722</b>
<b>Primary Silver Producers</b>											
Pan American Silver	PAAS	15.49	364	5,645	6,870	529.3	1,807.6	21,033	21,047	327	326
<b>Market Cap Weighted Average</b>										<b>327</b>	<b>326</b>

Source: BofA Global Research estimates. Company reports.

Note: All tickers represent BofA Global Research covered companies. (1) stock price in CAD; NAV in USD (2) CAD (3) AUD (4) ZAR (5) stock price in pence; NAV in USD, (6) NAV in CAD; (7) silver reserves, silver resources and silver mined in model (8) palladium reserves, palladium resources and palladium mined in model; (9) Reserves and resources on a GEO basis; (10) stock price in CAD, NAV in GBP, (11) stock price and NAV in TRY; (12) June 30th year end; (13) Forecasts based on management guidance; (14) Reserves and resources on an SEO basis (15) Reserves and resources on a Platinum Equivalent (4E->Platinum + Palladium + Rhodium + Gold) basis; (16) stock price in ZAR, NAV in GBP; (17) stock price in ZAR, NAV in CAD; (18) stock price and NAV in HKD; (19) stock price and NAV in GBP. Adjusted P/NAV = (share price - net cash and investments) / DCF of mining assets using a 5% discount rate. (20) stock price in RUB

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**Exhibit 22: Operating Forecasts for Global Gold and Precious Metal Producers (Cont'd)**

International gold producers operating forecasts

Priced as of 12-Jan-2024

	BofA Sym	Share Price	Shares O/S	Market Cap	Enterprise Value	P&P Gold Reserves	Total Gold Resources including P&P	Production		EV Per Oz of Prod. (USD)	
						(million oz)	(mn oz)	2024 (‘000 oz)	2025 (‘000 oz)	2024E	2025E
<b>Australian Gold Producers<sup>(3)</sup></b>											
Capricorn Metals	CRNLF	4.49	377	1,135	1,119	1.3	3.6	NA	NA	NA	NA
De Grey Mining	DGMLF	1.22	1,851	1,513	1,436	5.1	15.7	NA	NA	NA	NA
Evolution Mining	CAHPF	3.84	1,976	5,082	6,257	10.0	40.3	775	858	8,070	7,294
Gold Road	ELKMF	1.73	1,081	1,253	1,229	4.1	8.9	183	185	6,716	6,649
Northern Star	NESRF	13.05	1,149	10,047	10,155	20.2	77.6	1,676	1,873	6,058	5,421
Regis Resources	RGRNF	2.17	755	1,098	1,401	3.6	10.6	438	415	3,200	3,377
<b>Market Cap Weighted Average</b>										<b>6,817</b>	<b>6,171</b>
<b>South African Gold Producers<sup>(4)</sup></b>											
Gold Fields	GFIOF	245.97	894	11,832	12,155	52.1	96.9	2,572	2,927	4,726	4,152
Harmony Gold <sup>(12)</sup>	HGMCF	112.30	620	3,748	3,871	42.5	66.9	1,464	1,425	2,644	2,717
<b>Market Cap Weighted Average</b>										<b>4,673</b>	<b>4,115</b>
<b>International Gold Producers</b>											
AngloGold Ashanti	AULGF	327.52	420	7,400	8,754	29.7	154.2	2,617	2,822	3,345	3,102
Centamin Egypt <sup>(5)</sup>	CELTf	95.50	1,158	1,412	1,308	5.0	14.8	488	511	2,679	2,561
<b>Market Cap Weighted Average</b>										<b>3,258</b>	<b>3,031</b>
<b>South African PGM Producers</b>											
Anglo American Platinum <sup>(5)</sup>	AGPPF	883.32	265	12,616	9,955	177.2	847.4	NA	NA	NA	NA
Impala Platinum <sup>(5)</sup>	IMPUF	77.29	850	3,538	2,828	34.1	250.0	NA	NA	NA	NA
Northam Platinum <sup>(5)</sup>	NPTLF	128.39	397	2,741	3,252	14.0	195.9	NA	NA	NA	NA
Sibanye-Stillwater	SBYSF	23.96	2,853	3,681	3,460	57.7	373.3	NA	NA	NA	NA
<b>Market Cap Weighted Average</b>										<b>NA</b>	<b>NA</b>
<b>Primary Silver Producers</b>											
Fresnillo <sup>(5,7)</sup>	FNLPF	533.40	737	5,011	5,682	397.8	1,265.5	58,669	59,339	97	96
Hochschild Mining <sup>(5,7)</sup>	HCHDF	91.35	514	599	774	41.2	288.8	30,532	29,935	25	26
<b>Market Cap Weighted Average</b>										<b>88</b>	<b>87</b>

Source: : BofA Global Research estimates. Company reports.

Note: All tickers represent BofA Global Research covered companies. (1) stock price in CAD; NAV in USD (2) CAD (3) AUD (4)ZAR (5) stock price in pence; NAV in USD, (6) NAV in CAD; (7) silver reserves, silver resources and silver mined in model (8) palladium reserves, palladium resources and palladium mined in model; (9) Reserves and resources on a GEO basis; (10) stock price in CAD, NAV in GBP, (11) stock price and NAV in TRY; (12) June 30th year end; (13) Forecasts based on management guidance; (14) Reserves and resources on an SEO basis (15) Reserves and resources on a Platinum Equivalent (4E->Platinum + Palladium + Rhodium + Gold) basis; (16) stock price in ZAR, NAV in GBP; (17) stock price in ZAR, NAV in CAD; (18) stock price and NAV in HKD; (19) stock price and NAV in GBpAdjusted P/NAV = (share price - net cash and investments) / DCF of mining assets using a 5% discount rate. (20) stock price in RUB

BofA GLOBAL RESEARCH

**Stocks mentioned**

Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
BTG	BTG US	B2Gold	US\$ 3.11	B-1-7
YBTO	BTO CN	B2Gold	C\$ 4.15	B-1-7
NEM	NEM US	Newmont	US\$ 37.64	B-1-8
XNCRF	NEM AU	Newmont	A\$ 55.5	C-1-8
PAAS	PAAS US	Pan American	US\$ 15.49	C-1-8
RGLD	RGLD US	Royal Gold Inc	US\$ 122.47	B-3-7

Source: BofA Global Research

**Price objective basis & risk****B2Gold Corp (YBTO / BTG)**

Our price objective for B2Gold (BTG/YBTO) is US\$4.00/C\$5.60 based on the stock trading at 1.25x our estimated net asset value (NAV). Historically, North American precious metal stocks have traded between 1.0x and 3.0x NAV and between 1.0x and 2.0x more recently with a median of 1.25-1.50 times, with unhedged, growth-oriented producers occupying the upper end of the range. We use a 1.35x NAV multiple for BTG vs. mid-tier gold producer peers' target multiples at 0.65x-1.75x due to its superior free cash flow generation, partly offset by low production growth.

While our gold price forecast is a key driver of our rating, it is also a risk to our BTG valuation/forecasts. Other downside risks to our BTG valuation are: 1) political risk from Mali 2) mine plan estimates in excess of BTG reserves, 3) lack of commodity diversification, 4) mine plans that are based on outstanding permits or approvals, 5) unfavorable changes in currencies, 6) unforeseen increases in input costs such as the price of oil and labor and 7) the possibility it could lose its social license to operate at any of its mines or projects. Upside risks are a higher gold price, the possibility for BTG to be acquired and unexpected exploration success.

### **Newmont Corporation (NEM / XNCRF)**

Our price objective for Newmont is \$48.00 (A\$73.00) per share, and is based on the stock trading at 1.25 times our estimated net asset value (NAV). We assume a USDAUD exchange rate of 0.66. Our NAV is based on a 5 percent discount rate and a long-term gold price of \$1,800/oz. Historically, North American precious metal stocks have traded between 1 and 3 times NAV, with a median of 1.50 times over the past three years (2.00 times longer-term), and with unhedged, growth-oriented producers with solid balance sheets occupying the upper end of the range. In the great gold rally of 2011, NEM's multiple peaked at 2.50x. Upside risks to our price objective are stronger-than-forecast commodity prices, better than expected success at reducing costs and positive regulatory, permitting or operating developments. Downside risks to our price objective for Newmont are the inability to secure financing for expansion or development projects, unforeseen operating problems, political, legal or permitting challenges in the regions in which the company operates, rising capital and operating costs and delays in the development of its growth projects.

### **Pan American Silver (PAAS)**

Our price objective for Pan American Silver is \$18.75, and is based on the stock trading at 1.25x our estimated net asset value (NAV) on a net investments-adjusted basis (i.e. the 1.25x multiple is applied to the asset value and then the value of the equity investments is added to that with an effective 1.0x multiple applied). Our NAV is based on a 5% discount rate for all assets, except Escobal for which we use 7.5%. Historically, North American precious metal stocks have traded between 1 and 3 times NAV, with silver producers generally trading at a discount to gold producers.

Upside risks to our price objective are higher than expected commodity price forecasts, a change in the regulatory/permitting environment in the Chubut province of Argentina where Pan American's dormant Navidad project is located, operating results that exceed expectations and lower than expected capital costs. Downside risks to our price objective are unforeseen operating issues, realized commodity prices that are below our forecast, regulatory issues (including tax, environmental and permitting) that cause financial results to differ from our forecast, and higher than expected capital costs.

### **Royal Gold (RGLD)**

Our price objective for Royal Gold is \$120 per share, which is based on the stock trading at 2.00 times our adjusted net asset value (NAV), valuing net cash cost 1:1. Our net asset value (NAV) is based on a 5% discount rate. Historically, North American precious metal stocks have traded between 1 and 3 times NAV, with unhedged, growth-oriented producers occupying the upper end of the range. Given Royal Gold's status as a royalty company as opposed to an operator, our target valuation multiple reflects its good cash

flow-generating ability.

Upside risks to our PO are substantially higher commodity prices, higher-than-expected output at the royalty assets, and/or higher reserves at the royalty assets. Downside risks are a weaker gold price, problems at the operations, and no exploration success.

## Analyst Certification

We, Lawson Winder, CFA and Harmen Puri, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

### North America - Metals and Mining Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	Agnico Eagle Mines	AEM	AEM US	Lawson Winder, CFA
	B2Gold Corp	YBTO	BTO CN	Harmen Puri
	B2Gold Corp	BTG	BTG US	Harmen Puri
	Barrick Gold	GOLD	GOLD US	Lawson Winder, CFA
	Cameco Corporation	YCCO	CCO CN	Lawson Winder, CFA
	Cameco Corporation	CCJ	CCJ US	Lawson Winder, CFA
	Commercial Metals	CMC	CMC US	Lawson Winder, CFA
	Endeavour Mining	YEDV	EDV CN	Harmen Puri
	Endeavour Mining	EDVMF	EDVMF US	Harmen Puri
	Endeavour Mining PLC	XEDVF	EDV LN	Harmen Puri
	Franco-Nevada	YFNV	FNV CN	Lawson Winder, CFA
	Franco-Nevada	FNV	FNV US	Lawson Winder, CFA
	IAMGOLD	YIMG	IMG CN	Lawson Winder, CFA
	IAMGOLD Corp.	IAG	IAG US	Lawson Winder, CFA
	Ivanhoe Mines	YIVN	IVN CN	Lawson Winder, CFA
	Ivanhoe Mines	IVPAF	IVPAF US	Lawson Winder, CFA
	Lundin Mining	XLPRF	LUMI SS	Lawson Winder, CFA
	Lundin Mining Corp	YLUN	LUN CN	Lawson Winder, CFA
	Lundin Mining Corp	LUNMF	LUNMF US	Lawson Winder, CFA
	MP Materials	MP	MP US	Lawson Winder, CFA
	Newmont Corporation	NEM	NEM US	Lawson Winder, CFA
	Newmont Corporation	XNCRF	NEM AU	Lawson Winder, CFA
	Nucor	NUE	NUE US	Lawson Winder, CFA
	Pan American Silver	PAAS	PAAS US	Lawson Winder, CFA
	Teck Resources	YTECK	TECK/B CN	Lawson Winder, CFA
	Teck Resources Ltd	TECK	TECK US	Lawson Winder, CFA
	Triple Flag Precious Metals Corp.	YTFPM	TFPM CN	Lawson Winder, CFA
	Triple Flag Precious Metals Corp.	TFPM	TFPM US	Lawson Winder, CFA
	Wheaton Precious Metals	WPM	WPM US	Lawson Winder, CFA
<b>NEUTRAL</b>				
	Alamos Gold	YAGI	AGI CN	Harmen Puri
	Alamos Gold	AGI	AGI US	Harmen Puri
	Alcoa Corporation	AA	AA US	Lawson Winder, CFA
	Cleveland-Cliffs	CLF	CLF US	Lawson Winder, CFA
	First Quantum	FQVLF	FQVLF US	Lawson Winder, CFA
	First Quantum Minerals	YFM	FM CN	Lawson Winder, CFA
	Freeport-McMoRan	FCX	FCX US	Lawson Winder, CFA
	Hudbay Minerals	YHBM	HBM CN	Lawson Winder, CFA
	HudBay Minerals	HBM	HBM US	Lawson Winder, CFA
	Reliance Steel & Aluminum	RS	RS US	Lawson Winder, CFA
	Steel Dynamics	STLD	STLD US	Lawson Winder, CFA
<b>UNDERPERFORM</b>				
	Centerra Gold	YCG	CG CN	Lawson Winder, CFA
	Centerra Gold	CGAU	CGAU US	Lawson Winder, CFA

**North America - Metals and Mining Coverage Cluster**

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Eldorado Gold	EGO	EGO US	Harmen Puri
	Eldorado Gold	YELD	ELD CN	Harmen Puri
	Kinross Gold	KGC	KGC US	Lawson Winder, CFA
	New Gold Inc.	YNGD	NGD CN	Harmen Puri
	New Gold Inc.	NGD	NGD US	Harmen Puri
	Nexa Resources	NEXA	NEXA US	Lawson Winder, CFA
	Royal Gold	RGLD	RGLD US	Lawson Winder, CFA
	SSR Mining Inc.	SSRM	SSRM US	Lawson Winder, CFA
	SSR Mining Inc.	YSSRM	SSRM CN	Lawson Winder, CFA

## Disclosures

### Important Disclosures

**Equity Investment Rating Distribution: Non-Ferrous Metals/Mining & Minerals Group (as of 31 Dec 2023)**

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	58	53.70%	Buy	26	44.83%
Hold	24	22.22%	Hold	10	41.67%
Sell	26	24.07%	Sell	13	50.00%

**Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)**

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

<sup>R1</sup> Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

**FUNDAMENTAL EQUITY OPINION KEY:** Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS**, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. **INVESTMENT RATINGS** reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster <sup>R2</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R2</sup> Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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