

# South African Metals & Mining

## Marketing feedback: Bearish PGMs, (more) bullish bulks.

Industry Overview

### Bearish PGMs. Bullish bulks. Eyes on gold.

Last week we marketed our current EEMEA Metals & Mining view with investors in London. Investor sentiment cautious: Investors we spoke with are weighing weak macro (China, rates, inflation), rising geopolitical tensions and (some) secular headwinds vs. optically “cheap” valuation. Some of our covered companies (Northam Platinum, Anglo Platinum) are at “trough” valuation. That said, with platinum group metals (PGM) miners seeing mark-to-market downgrades, many investors remain cautious on the risk of a value trap. More positive on bulks and gold. Key charts & topics of discussion inside.

### PGMs: Secular headwinds. Timing of trade in question.

Many investors watching Platinum Group Metals (PGMs), albeit from a distance. Northam Platinum and Anglo Platinum are now trading well below historic average P/NPV. That said, many investors are cautious PGMs on weak macro and secular headwinds, at least for now. Key topics of discussion: (1) Projects “at risk” at spot prices. Investors expect capex cuts to follow. (2) Polarized views on rate of Electric Vehicle (EV) adoption in Europe & US. Some think EV penetration will surprise to the upside driven by growth in Chinese EV exports. Others see headwinds (pricing, raw material availability, infrastructure challenges) which could mean adoption is slow. (3) Timing trade = tricky. Some investors anticipating poor results come early-2024. Others very cautious on EV penetration in China: “You hear about it once it’s too late!”

### Iron ore views “mixed” on China steel. Bullish coking coal.

Iron ore views “mixed”. Bull case: Chinese iron ore inventories at ports are low. Steel restocking points to higher iron ore prices. Chinese government has shown willingness to stimulate property sector. Bear case: Chinese steel demand (still) challenged on weakness in the property sector. Production cuts “to come” = weaker iron ore prices, all else equal. Coking coal: Some clients “like” India growth story; India is looking to double steel production capacity to 300Mt by the end of the decade too. More than 90% of capacity expansions will be Blast Furnace (BF-BOF) = c. 80-90Mt incremental coking coal demand. With Chinese coking coal mines nearing end of life, this points to big supply deficits. Global equities exposed to coking coal: Anglo American (Buy), Teck Resources (No Rating), Whitehaven (Buy), Coronado (Buy).

### Gold: Balancing geopolitical tensions vs higher rates

Gold looms large in most investors thinking as geopolitical tensions continue to rise. Gold = uncertainty trade. That said, some are still cautious on the potential for rates to be higher for longer. Current real rates suggest gold should be much lower. On equities, most investors prefer Gold Fields on quality of underlying portfolio. Some clients “like” Centamin, but single asset risk deters many. Investors also not convinced that growth in Cote d’Ivoire lowers jurisdictional risk. Investors more cautious, relative, on AngloGold (turnaround in progress) and Harmony Gold (very high-cost assets).

07 November 2023

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12624024

Timestamp: 07 November 2023 12:30AM EST

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# Comparable company valuation

## Exhibit 1: Comparable company valuation

These are our latest published estimates and valuation metrics based on our house commodity price forecasts

					PER-																
					EPS		Calendar		NPV	P/NPV	ND/Eq	FCF Yield		EV/EBITDA		DY	MV	ND			
Big Miners	Symbol	BofA QRQ	Shr Price	Ccy	2023E	2024E	2023E	2024E	2023E	2023	2022A	2023E	2024E	2023E	2024E	2022A	\$bn	\$bn			
BHP Group Limited	BHPLF	BUY (B-1-8)	AUD 45.5	USD	2.58	2.91	11.0x	10.8x		#VALUE!	0.7%	7.8%	8.1%	5.6x	5.4x	11.0%	149.7	0.3			
Rio Tinto Plc	RTPPF	BUY (B-1-8)	GBP 5330	USD	7.78	7.36	8.5x	9.0x	7032	0.76x	8.1%	9.0%	5.7%	5.3x	5.2x	7.5%	106.7	4.3			
Rio Tinto Ltd	RTNTF	BUY (A-1-8)	AUD 122.6	USD	7.78	7.36	10.2x	10.8x	133	0.92x	8.1%	7.4%	4.7%	6.2x	6.2x	6.2%	129.0	4.3			
Anglo American	AAUKF	BUY (B-1-8)	GBP 2208	USD	2.56	3.00	10.7x	9.1x	2341	0.94x	17.5%	-3.4%	8.7%	4.7x	4.4x	7.4%	33.2	6.0			
Glencore Plc	GLCNF	BUY (B-1-7)	GBP 439.6	USD	0.43	0.54	12.8x	10.1x	493	0.89x	59.4%	9.3%	9.2%	5.3x	4.9x	4.8%	67.0	26.9			
Vale SA	VALE	NEUT (B-2-8)	USD 14.53	USD	2.18	2.19	6.7x	6.6x	18.3	0.79x	21.4%	14.7%	10.3%	5.7x	6.3x	10.1%	64.5	8.0			
South32 Ltd	SHTLF	BUY (B-1-8)	AUD 3.32	USD	-0.04	0.14	nm	13.0x	3.88	0.85x	-5.0%	9.6%	7.1%	5.0x	6.0x	11.3%	9.8	-0.5			
Fortescue Metals	FSUMF	UNDE (B-3-8)	AUD 23.23	USD	1.85	1.64	8.8x	12.8x	17.0	1.4x	5.1%	9.9%	7.2%	5.1x	5.5x	9.4%	46.5	0.9			
Teck Resources Ltd	TECK	NO R (-6-)	USD 37.23	CAD	5.39	9.13	9.4x	5.6x			22.1%	3.6%	18.7%	4.4x	3.0x	2.0%	19.1	4.3			
Maaden	XSDRF	UNDE (B-3-9)	SAR 36.45	SAR	0.75	1.29	48.8x	28.3x			44.2%	0.8%	2.7%	17.8x	14.2x	0.0%	35.9	6.6			
Mid cap																					
Eramet	ERMAF	BUY (C-1-9)	EUR 69.05	EUR	7.33	13.30	9.4x	5.2x	156	0.4x	15.3%	-28.1%	-8.9%	5.9x	3.6x	5.1%	2.1	0.4			
Ferrexpo	FEEXF	UNDE (C-3-8)	GBP 79.65	USD	0.03	0.06	29.9x	16.1x	123	0.6x	-8.5%	15.4%	-2.8%	3.8x	3.3x	13.6%	0.6	-0.1			
Ecora Resources	ECRAF	BUY (B-1-7)	GBP 89	USD	0.17	0.17	6.3x	6.3x	167	0.5x	7.2%	17.9%	18.7%	4.5x	4.2x	7.8%	0.3	0.0			
South Africa																					
Kumba	KUMBF	UNDE (C-3-8)	ZAR 543.5	ZAR	58.05	50.20	9.4x	10.8x	305	1.8x	-17.9%	11.5%	9.9%	4.6x	5.2x	8.3%	9.6	-0.6			
Exxaro	EXXAF	UNDE (B-3-8)	ZAR 201.55	ZAR	46.80	35.72	4.3x	5.6x	173	1.2x	-8.9%	34.2%	33.1%	5.3x	6.2x	13.5%	3.9	-0.3			
Pure plays																					
Antofagasta	ANFGF	NEUT (B-2-7)	GBP 1357.5	USD	0.74	1.31	22.6x	12.8x	1015	1.3x	7.6%	0.2%	0.4%	8.1x	5.5x	3.6%	16.6	0.9			
First Quantum	YFM	NEUT (C-2-7)	CAD 17.46	USD	0.86	1.39	14.9x	9.2x	23	0.8x	46.5%	7%	10.5%	5.4x	4.2x	0.8%	8.9	5.7			
KGHM	KGHPF	UNDE (C-3-8)	PLN 113.8	PLN	10.55	13.41	10.8x	8.5x	42	2.7x	16.3%	-10.0%	-6.2%	6.4x	6.1x	1.3%	5.5	1.2			
Atalaya Mining	XPGBF	BUY (B-1-8)	GBP 300	EUR	0.33	0.67	10.3x	5.2x	291	1.0x	-11.4%	5.8%	21.8%	4.7x	2.8x	2.1%	0.5	-0.1			
HudBay Minerals	HBM	NEUT (C-2-8)	USD 4.67	USD	0.27	1.02	17.3x	4.6x	5	0.9x	61.0%	2.4%	22.7%	4.1x	2.5x	0.3%	1.6	1.0			
Freeport-McMoRan	FCX	NEUT (C-2-7)	USD 35.15	USD	1.50	1.51	23.4x	23.3x	30	1.2x	9.9%	1.8%	5.8%	9.4x	8.9x	1.7%	50.4	2.5			
Southern Copper	SCCO	UNDE (B-3-8)	USD 74.26	USD	3.30	4.44	22.5x	16.7x			51.3%	4.5%	4.8%	12.5x	9.4x	4.7%	57.4	4.2			
Norsk Hydro	NHYKF	BUY (B-1-7)	NOK 63.06	NOK	4.12	6.41	15.3x	9.8x	47	1.4x	-1.1%	-4.2%	0.8%	6.6x	5.0x	9.0%	11.7	-0.1			
Alcoa	AA	NEUT (C-2-7)	USD 26.53	USD	-2.81	4.04	nm	6.6x	67	0.4x	6.8%	-13.2%	13.9%	14.3x	3.7x	1.5%	4.7	0.4			
Imerys	IMYSF	NEUT (B-2-7)	EUR 26.14	EUR	1.92	2.94	13.6x	8.9x	55	0.5x	45.2%	-4.5%	4.8%	4.8x	4.1x	14.7%	2.4	1.6			
Boliden	BOLIF	UNDE (B-3-8)	SEK 284.2	SEK	22.69	26.08	12.5x	10.9x	292	1.0x	-2.0%	-5.1%	0.4%	6.2x	5.6x	9.3%	7.1	-0.1			
Aurubis	AIAGF	UNDE (B-3-8)	EUR 78.2	EUR	6.20	7.68	12.0x	9.8x	61	1.3x	-8.9%	14.2%	1.9%	6.3x	5.3x	2.3%	3.7	-0.4			
Befesa	BFSAF	BUY (B-1-8)	EUR 26.96	EUR	1.47	2.30	18.3x	11.7x	60	0.4x	67.0%	1.1%	-0.2%	9.9x	7.6x	4.6%	1.2	0.6			
Lundin Mining	YLUN	BUY (B-1-8)	CAD 8.86	USD	0.43	0.78	nm	8.3x	6	1.5x	0.1%	-1.2%	-3.7%	5.8x	3.8x	5.5%	5.0	0.0			
Kazatomprom	XWREF	BUY (B-1-7)	USD 38.5	KZT	1491	2377	nm	7.5x	43	0.9x	-1.8%	5.0%	8.3%	6.9x	4.5x	4.3%	10.0	-0.1			
Yellow Cake	YLLXF	BUY (B-1-9)	GBP 542	USD	-0.56	2.35	nm	nm	449	1.2x	-14.3%	-0.4%	-0.6%			0.0%	1.3	-0.2			
London Precious																					
Fresnillo plc	FNLPF	UNDE (B-3-8)	GBP 559	USD	0.16	0.11	43.4x	60.7x	254	2.2x	7.5%	-3.9%	1.2%	8.8x	7.6x	2.5%	5.1	0.3			
Centamin	CELTF	BUY (B-1-7)	GBP 86.5	USD	0.10	0.13	10.5x	8.4x	154	0.6x	-7.6%	0.1%	7.2%	3.1x	2.4x	4.7%	1.2	-0.1			
Hochschild	HCHDF	BUY (C-1-8)	GBP 99.9	USD	0.07	0.17	18.7x	7.1x	124	0.8x	24.2%	-14.7%	28.9%	4.6x	2.8x	1.6%	0.6	0.2			
S. Africa Precious																					
AngloGold Ashanti	AULGF	NEUT (C-2-8)	ZAR 337.77	USD	1.03	1.45	18.0x	12.7x	286	1.2x	21.2%	-0.5%	5.0%	5.9x	4.7x	2.5%	7.8	0.9			
Gold Fields	GFIOF	NEUT (C-2-7)	ZAR 248.72	USD	1.12	1.03	12.2x	13.2x	209	1.2x	16.2%	4.8%	9.8%	4.9x	4.7x	3.3%	12.2	0.7			
Sibanye-Stillwater	SBYSF	UNDE (C-3-8)	ZAR 24.44	ZAR	1.73	0.13	14.1x	183.4x	31	0.8x	-3.7%	-3.2%	-10.8%	3.3x	5.1x	10.6%	3.8	-0.2			
Harmony	HGMCF	UNDE (C-3-8)	ZAR 87.62	ZAR	7.80	10.72	9.7x	7.4x	66	1.3x	2.5%	5.4%	5.1%	5.2x	4.8x	0.7%	3.0	0.0			
Anglo Platinum	AGPPF	NEUT (C-2-8)	ZAR 655.39	ZAR	57.05	45.67	11.5x	14.4x	754	0.9x	-30.4%	-0.9%	-3.7%	6.0x	7.6x	17.5%	9.5	-1.7			
Northam Platinum	NPTLF	BUY (C-1-8)	ZAR 116.24	ZAR	23.76	13.28	6.8x	7.7x	84	1.4x	33.4%	18.6%	8.0%	3.4x	6.1x	0.0%	2.5	0.6			
Impala Platinum	IMPUF	UNDE (C-3-8)	ZAR 82.7	ZAR	22.02	2.63	17.6x	20.3x	63	1.3x	-21.2%	15.5%	-0.4%	1.3x	3.1x	19.0%	3.9	-1.5			

Source: BofA Global Research estimates

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# Mark-to-market

## Exhibit 2: Mark-to-market

These are our published estimates at spot commodity prices. We then compare this to consensus estimates.

			Base Case 2024E						Spot scenario								Consensus				
Company	Rec	Price															BofA				
			EPS	EBITDA	PER	EV/ EBITDA	FCF	FCF yield	EPS	Chg	EBITDA	Chg	PER	EV/ EBITDA	FCF	Chg	FCF yield	EBITDA	EV/ EBITDA	vs. Cons	Spot vs.Cons
BHP	BUY (B-1-8)	AUD 45	2.74	28164	10.7x	5.4x	12135	8%	3.48	27%	33187	18%	8.4x	4.6x	15174	25%	10%	28254	5.4x	0%	17%
Rio Tinto	BUY (B-1-8)	GBP 5330	7.36	24464	8.9x	5.1x	6116	6%	9.35	27%	29339	20%	6.8x	4.2x	9138	49%	9%	23542	5.3x	4%	25%
Anglo American	BUY (B-1-8)	GBP 2208	3.00	11692	7.9x	4.3x	2827	9%	3.75	25%	13196	13%	7.0x	3.8x	3748	33%	12%	11758	4.3x	-1%	12%
Glencore	BUY (B-1-7)	GBP 439	0.54	18838	10.0x	4.8x	6140	9%	0.32	-41%	16045	-15%	17.0x	5.7x	5480	-11%	8%	18516	4.9x	2%	-13%
Vale	NEUT (B-2-8)	USD 1453	2.19	16182	6.6x	6.0x	6637	11%	3.69	68%	23989	48%	3.7x	4.1x	13448	103%	23%	18229	5.3x	-11%	32%
Fortescue	UNDE (B-3-8)	AUD 23.23	1.28	7755	12.6x	6.4x	2108	5%	2.18	70%	11721	51%	7.0x	4.2x	4891	132%	11%	8097	6.1x	-4%	45%
South32	BUY (B-1-8)	AUD 33.2	0.17	2308	12.8x	5.2x	833	9%	0.13	-21%	2058	-11%	15.8x	5.9x	682	-18%	7%	2396	5.0x	-4%	-14%
Alumina	UNDE (B-3-8)	AUD 0.8	0.02	87	20.8x	22.4x	81	5%	0.01	-41%	58	-33%	38.6x	33.6x	58	nm	4%	112	17.4x	-22%	-48%
Whitehaven	BUY (B-1-8)	AUD 7.15	1.52	2624	6.3x	3.0x	-1465	-24%	0.94	-38%	2012	-23%	10.4x	3.9x	-1886	nm	-31%	1723	4.6x	52%	17%
Coronado	BUY (C-1-8)	AUD 1755	0.11	509	99x	3.8x	156	8%	0.29	155%	911	79%	3.8x	2.1x	441	183%	23%	578	3.3x	-12%	58%
Teck Resources	NO R (-6-)	USD 37.23	9.13	10366	5.6x	3.2x	4874	17%	11.26	23%	11874	15%	5.0x	2.8x	5587	15%	19%	7865	4.3x	32%	51%
Ferrexpo	UNDE (C-3-8)	GBP 79	0.06	141	15.3x	nm	-16	-3%	0.27	344%	294	108%	3.3x	nm	78	nm	15%	148	nm	-5%	98%
Antofagasta	NEUT (B-2-7)	GBP 1357	1.31	4253	12.6x	5.5x	60	0%	0.88	-33%	3343	-21%	18.8x	7.0x	-307	-608%	-2%	3426	6.8x	24%	-2%
First Quantum Min	NEUT (C-2-7)	CAD 17.46	1.39	3549	8.2x	4.0x	928	12%	0.69	-51%	2787	-21%	16.9x	5.1x	377	-59%	5%	3298	4.3x	8%	-15%
Eramet	BUY (C-1-9)	EUR 6905	13.30	780	5.1x	3.3x	-176	-10%	11.79	-11%	726	-7%	5.2x	3.5x	-240	nm	-14%	712	3.6x	10%	2%
Norsk Hydro	BUY (B-1-7)	NOK 63	6.41	29142	9.8x	4.7x	1049	1%	2.42	-62%	17453	-40%	24.6x	7.9x	-3097	-395%	-3%	27530	5.0x	6%	-37%
Boliden	UNDE (B-3-8)	SEK 284	26.08	15956	11.0x	5.7x	339	0%	24.13	-7%	15288	-4%	12.0x	6.0x	236	-30%	0%	15914	5.8x	0%	-4%
Lundin Mining	BUY (B-1-8)	CAD 8.86	0.78	2045	8.4x	3.7x	-187	-4%	0.60	-23%	1810	-11%	10.5x	4.2x	-343	nm	-7%	1724	4.4x	19%	5%
Freeport-McMoRan	NEUT (C-2-7)	USD 35.15	1	9115	23.2x	7.0x	2557	5%	0.72	-46%	7377	-19%	47.0x	8.6x	1293	-49%	3%	10003	6.3x	-9%	-26%
Anglo Platinum	NEUT (C-2-8)	ZAR 655	45.67	19078	14.0x	7.3x	-6329	-4%	26.44	-42%	12668	-34%	24.1x	11.1x	-10595	nm	-6%	33476	4.2x	-43%	-62%
Northam Platinum	BUY (C-1-8)	ZAR 116	15.36	10055	7.5x	6.2x	3882	8%	9.58	-38%	7072	-30%	13.6x	8.8x	1834	-53%	4%	8765	7.1x	15%	-19%
Fresnillo plc	UNDE (B-3-8)	GBP 559	0.11	776	58.3x	7.1x	61	1%	0.07	-41%	716	-8%	nm	7.7x	11	-82%	0%	1046	5.3x	-26%	-32%
Centamin	BUY (B-1-7)	GBP 86	0.13	481	8.1x	2.3x	89	7%	0.14	12%	517	7%	7.3x	2.1x	111	25%	9%	426	2.6x	13%	21%
Hochschild	BUY (C-1-8)	GBP 99	0.17	363	7.0x	2.5x	184	35%	0.21	18%	388	7%	5.0x	2.3x	206	12%	39%	321	2.8x	13%	21%
Kumba	UNDE (C-3-8)	ZAR 543	50.20	34197	9.9x	4.9x	17311	10%	82.65	65%	52934	55%	6.2x	3.2x	29686	71%	18%	38149	4.4x	-10%	39%
Sibanye-Stillwater	UNDE (C-3-8)	ZAR 24	0.13	13573	171.6x	4.8x	-7441	-11%	-1.18	nm	7807	-42%	nm	8.3x	-9981	nm	-15%	25796	2.5x	-47%	-70%
AngoGold Ashanti	NEUT (C-2-8)	ZAR 337	1.45	1869	11.8x	4.9x	391	5%	1.71	17%	2031	9%	11.3x	4.5x	495	27%	6%	1925	4.8x	-3%	6%
Gold Fields	NEUT (C-2-7)	ZAR 248	1.03	2551	12.5x	4.9x	1194	9%	1.14	11%	2691	6%	12.4x	4.6x	1384	16%	11%	2965	4.2x	-14%	-9%
Median - industrial					9.9x	5.0x		5%		-11%		-7%	10.4x	4.4x		2%	7%		5.0x	0%	5%
Median - precious					12.2x	4.9x		6%		-14%		-1%	11.9x	6.2x		14%	5%		4.2x	-8%	-14%
Median - SA					11.8x	4.9x		0%		0%		0%	8.8x	4.5x		16%	0%		4.2x	-10%	0%

Source: BofA Global Research estimates

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# Commodity prices

## Exhibit 3: Commodity prices

Our commodities team now expect platinum to average US\$1050/oz in 2024E

	Unit	Spot	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	LT 2023\$
Platinum	US\$/oz	910	886	1,093	964	976	1,050	1,250	1,322	1,394	1,466	1,295
Palladium	US\$/oz	1160	2201	2399	2110	1379	1100	1000	1155	1310	1466	1295
Rhodium	US\$/oz	5250	11206	20145	15477	6505	4000	4000	3888	3776	3664	3238
Gold - Real	US\$/oz	1924	1,771	1,799	1,803	1,924	1,927	2,046	1,961	1,879	1,800	
Currencies												
USD:ZAR	vs. USD	18.83	16.96	15.02	16.50	18.65	19.39	20.10	20.90	21.74	22.61	
ZAR Basket Price		25464	36033	45393	41021	29055	25565	28355	31140	34105	37258	

Source: BofA Global Research estimates. Note: ZAR Basket calculated basis 60%/30%/8%/2% Pt, Pd, Rh, Au respectively.

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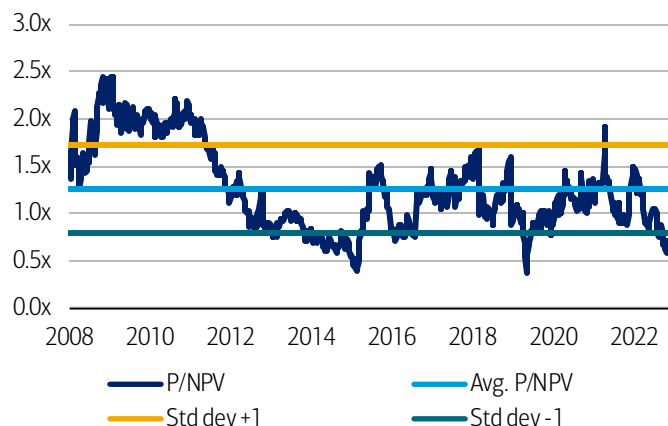


# Valuation charts

## PGMs

### Exhibit 4: AMS P/NPV chart

Historical average c. 1.3x P/NPV

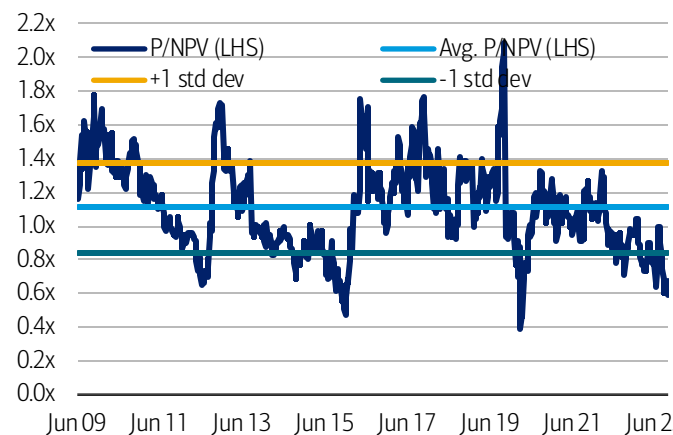


Source: BofA Global Research estimates, Bloomberg

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### Exhibit 5: NPH P/NPV chart

Northam historical average c. 1.1x P/NPV

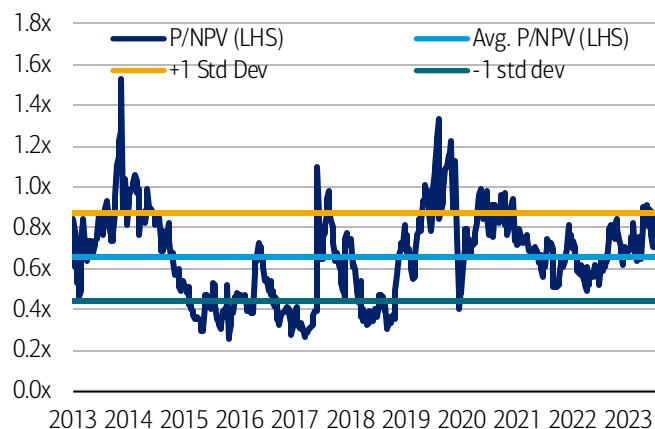


Source: BofA Global Research estimates, Bloomberg. **Note:** We interpolate our NPV estimate for the time in which our coverage was suspended during attempted RBP takeover.

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### Exhibit 6: SSW P/NPV chart

Historical average c. 0.7x P/NPV

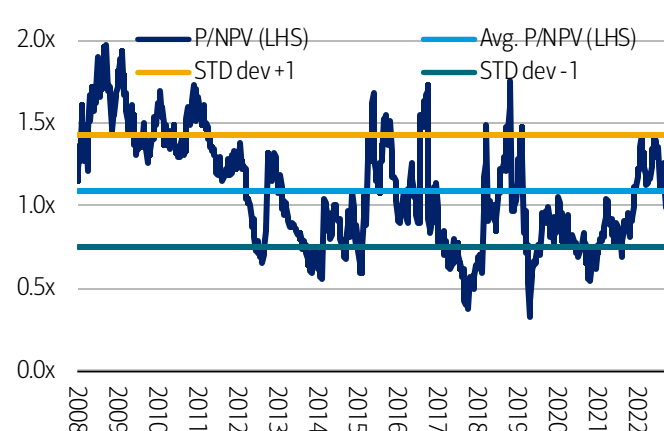


Source: BofA Global Research estimates, Bloomberg.

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### Exhibit 7: IMP P/NPV chart

Historical average c. 1.1x P/NPV



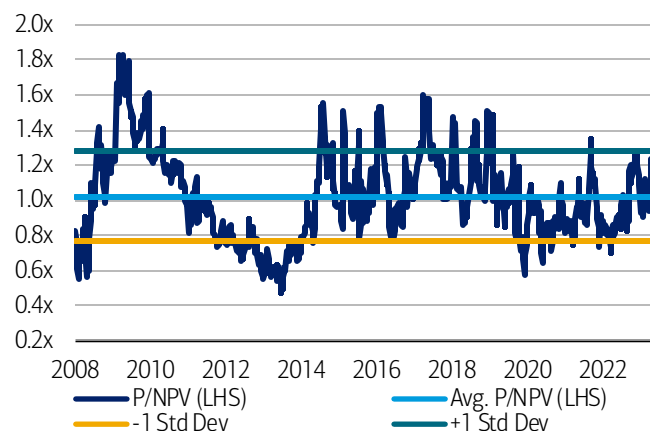
Source: BofA Global Research estimates, Bloomberg

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## Gold

### Exhibit 8: Gold Fields P/NPV chart

Historical average c. 1x

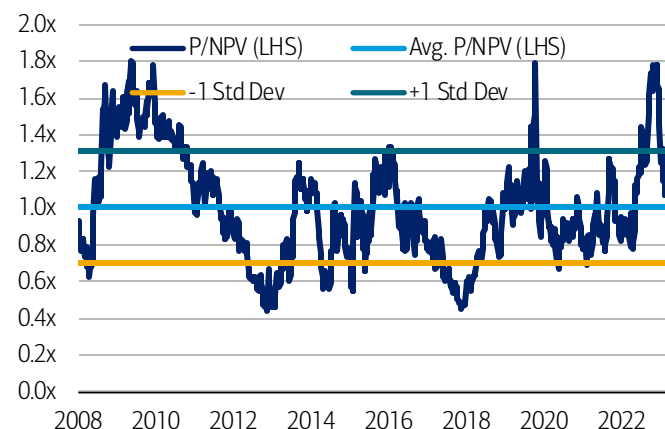


Source: BofA Global Research estimates, Bloomberg

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### Exhibit 9: AngloGold P/NPV chart

Historical average c. 1x

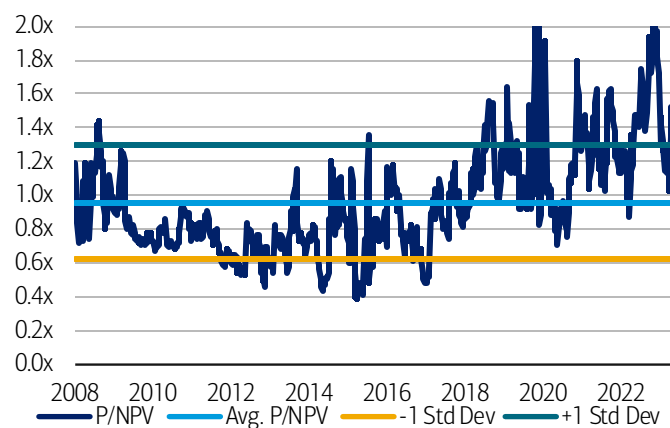


Source: BofA Global Research estimates, Bloomberg

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### Exhibit 10: HAR P/NPV chart

Historical average c. 0.95x

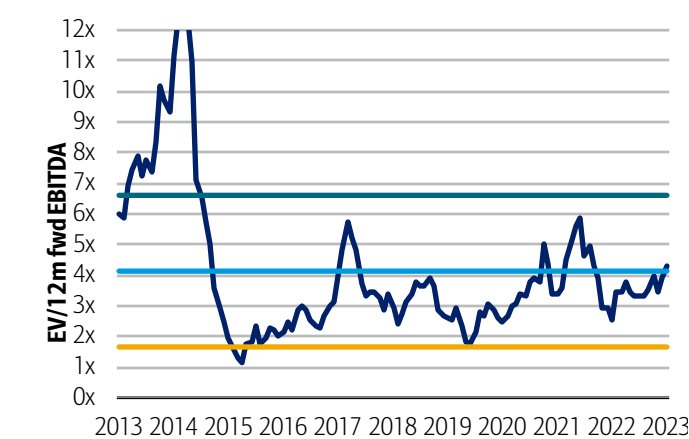


Source: BofA Global Research estimates, Bloomberg

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Bulks

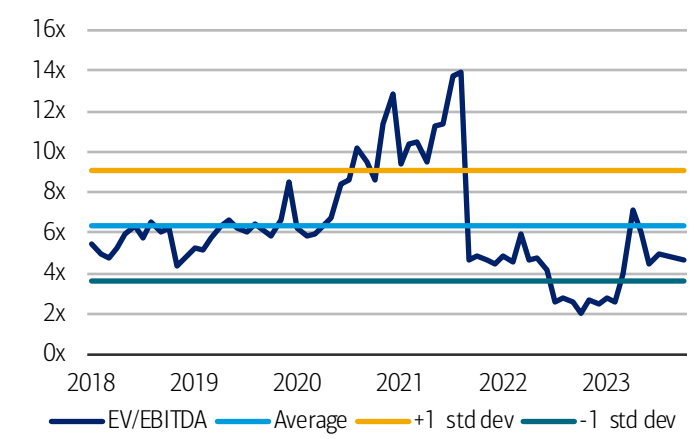
**Exhibit 11: Kumba Iron Ore EV/EBITDA**  
Historical average c. 4.1x



Source: BofA Global Research estimates, Bloomberg

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**Exhibit 12: Exxaro EV/EBITDA chart**  
Historical average c. 6.4x



Source: BofA Global Research estimates, Bloomberg

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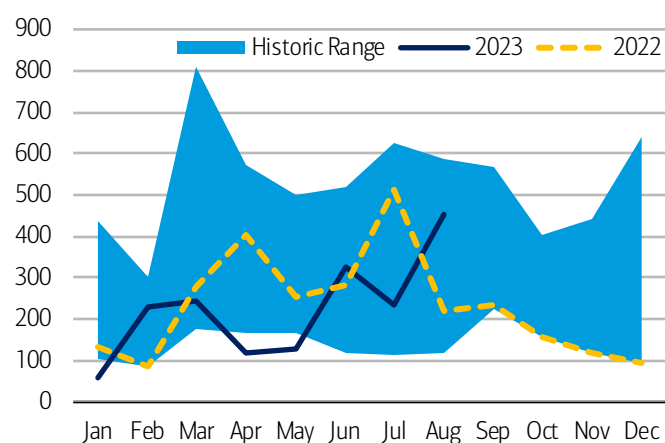
## 5 key topics & charts

### Key topic #1: PGM inflection, if/when?

Some investors are reluctant to buy PGM equities on secular headwinds; the consumer continues to transition from Internal Combustion Engine (ICE) vehicles (PGM-intensive) to Electric Vehicles (EVs) (not PGM-intensive). “Catching a falling knife”. Sizeable minority also very concerned on strength in Chinese EV market and potential for rapid penetration, both domestically and (possibly) in Europe; re: China - “you hear about it once it’s too late!” Whilst we do think that this makes for a tricky overlay for PGMs, we think that supply cuts could re-balance the market. We expect (1) typical de-stocking from miners/refiners ahead of year-end as companies look to reduce inventories, (2) weak FY23 results that evidence cash burn in several PGM miners at spot prices and (3) Russian metal to continue to flow onto the market near-term. Coupled with our European Strategist expectation of trough PMIs in early 2024 (see the team’s note: A world of a thousand puzzles), could 1H24 be inflection/“peak” pessimism?

#### Exhibit 13: China platinum imports (koz)

China platinum imports have picked up following a weak start to the year

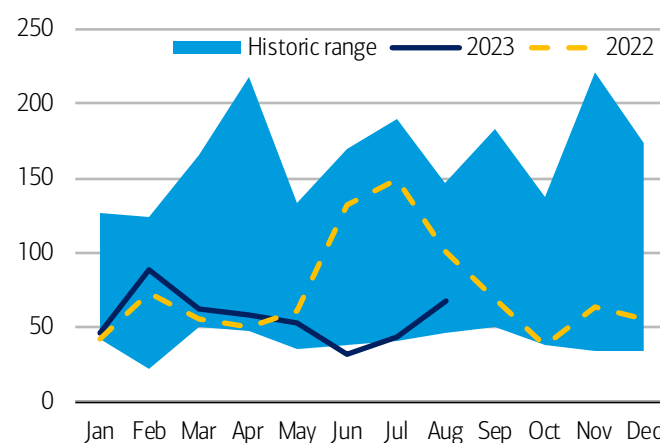


Source: Bloomberg

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#### Exhibit 14: China palladium imports (koz)

Chinese palladium imports have remained weak throughout 2023



Source: Bloomberg

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### Key topic #2: PGMs: Signposts to the bottom

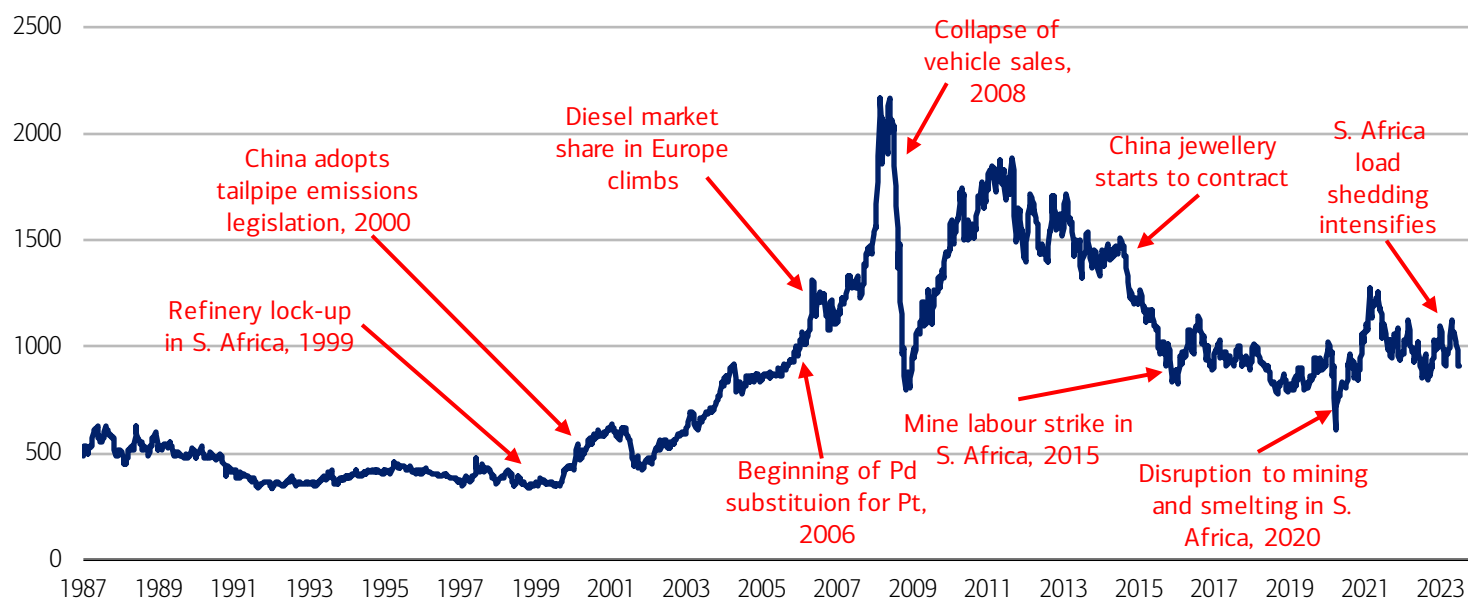
We think that weak macro and secular headwinds makes for a tricky overlay for PGMs; several investors trying to weigh inflation, higher rates, rhodium destocking and Pt/Pd substitution. We think that ultimately, demand is a rates story and until Fed cuts begin, demand (and hence prices) should remain relatively weak. Separately, we do think that the bulk of rhodium destocking in China is “done”. Companies are saying: China continues to take (most) of its rhodium from Russia. Whilst we acknowledge that while prices have pulled back vs 2022 highs, prices are still relatively strong versus “pre-EV, pre-Russia/Ukraine” times.



## Platinum

### Exhibit 15: Platinum prices through history

S. African supply disruptions have been key drivers of price rallies, both in 1999 (refinery lock up) and 2020 (disruptions, Eskom outages)



Source: BofA Global Research

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## Palladium

### Exhibit 16: Palladium price through history

Russia supply disruptions (or perceived heightened risk) have been a key driver of price rallies historically, both in 1999 and more recently from Russia-Ukraine conflict



Source: BofA Global Research

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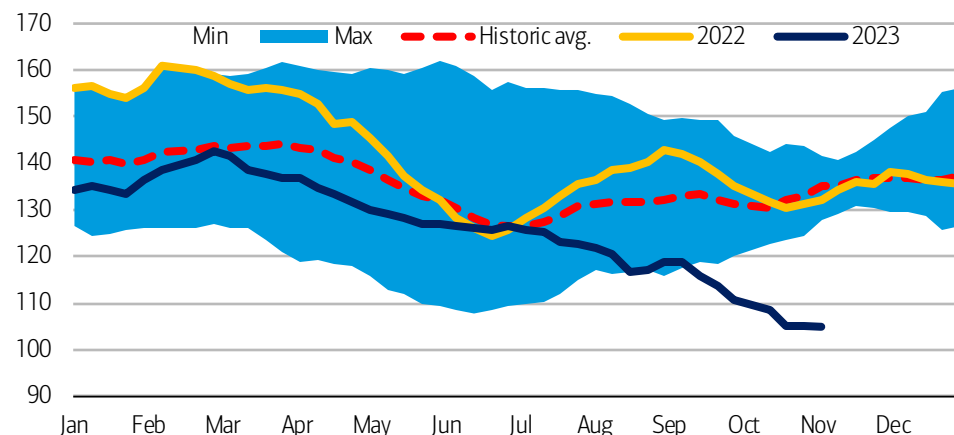
## Key topic #3: Iron ore views “mixed”

Investors views “mixed” on iron ore. Iron ore rallied over the summer, hitting \$126/t in September, driven by restocking at China’s steel mills after inventories fell to record lows (see our commodities team’s note: [Bountiful iron ore supply](#)). **Bull case:** Iron ore inventories at ports remain very low (see below). Inventories at the steel mills are similarly low (typical 20-35 days, today 15 days). If there is stabilisation in the property sector, we think that iron ore prices should be on firmer footing. **Bear case:** Steel mills

are not profitable = production cuts to come and with that, weaker iron ore demand.  
Hard landing on property is a real risk. Let's discuss?

#### Exhibit 17: Chinese iron ore inventories at port (Mt)

Chinese iron ore inventories at ports are low versus historic norms



Source: BofA Global Research, Bloomberg

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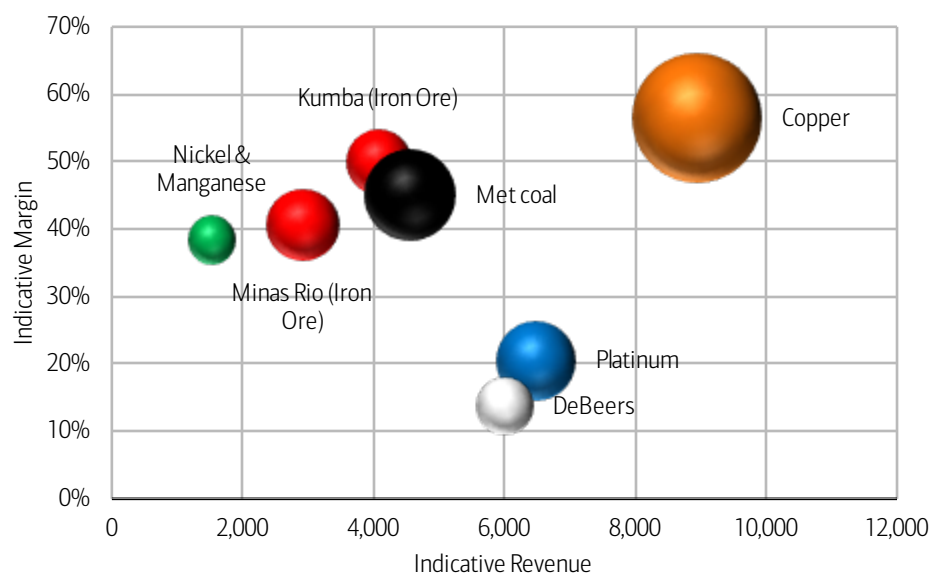
### Key topic #4: Anglo American & met coal

We think India could double steel production capacity to 300Mt by the end of the decade too. With more than 90% of the announced capacity expansions coming via the BF-BOF route (this requires iron ore and coal), we see India's iron ore demand topping 300Mt in 2030. All else equal, this points to c. 80-90Mt incremental coking coal demand.

Key question from investors: Where will this supply come from? Equities we like with met coal exposure: BHP (Buy), Anglo American (Buy), Whitehaven (Buy), Coronado (Buy). See our recent note: Dissecting for value: There is a world-class copper business in here. Somewhere...

#### Exhibit 18: Anglo's copper business is world class and a key driver of value in the portfolio

Met coal is an important part of Anglo's business



Source: BofA Global Research estimates. Revenue = Consolidated revenue average 2023E-2025E. Margin = average EBITDA margin 2023E-2025E. Bubble size = implied value for business in our sum-of-parts

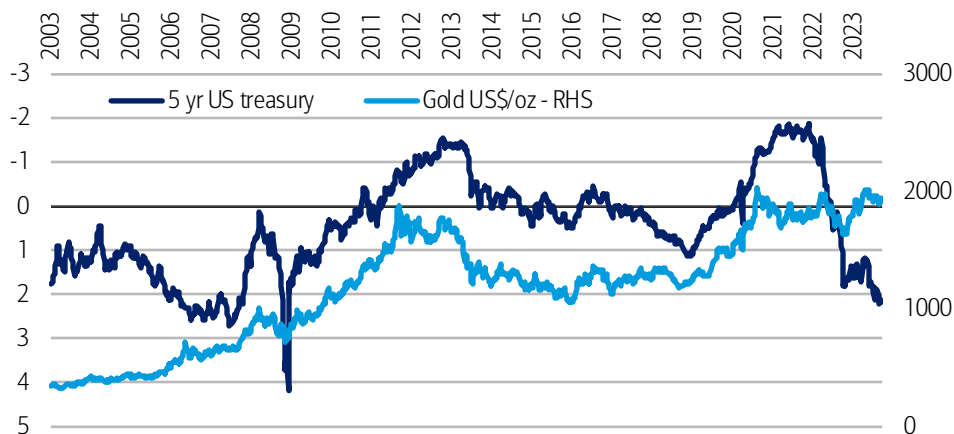
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## Key topic #5: Gold: Real rates vs geopolitical uncertainty

Gold was a common topic of discussion with investors as geopolitical tensions continue to rise. Gold = uncertainty trade. That said, some still cautious on potential for rates to be higher for longer. On equities, most investors prefer Gold Fields on quality of underlying portfolio. Some clients “like” Centamin, but single asset risk and liquidity deters many – investors not convinced growth in Cote d’Ivoire lowers jurisdictional risk. Investors more cautious, relative, on AngloGold (turnaround in progress) and Harmony Gold (very high-cost assets).

### Exhibit 19: 5-year US treasury real yield rate (% , LHS) and gold price (US\$/oz, RHS)

Gold = rates story. However, we have also seen rising geopolitical tensions bring gold into investors thinking once again.



Source: BofA Global Research, Bloomberg

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster <sup>R1</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R1</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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