

Rio Tinto plc

FY23 solid. Dividend beats. Eyes on growth

Reiterate Rating: BUY | PO: 7,900 GBp | Price: 5,230 GBp

FY23 EBITDA in line, DPS +3% ahead. Guidance in line

FY23 EBITDA was \$23.9bn, -9% YoY, in line with consensus of \$24.0bn (BofA \$23.1bn). In the divisions, Iron Ore (84% of group EBITDA) was in line., Copper and Energy & Minerals were c. 5% below consensus. RIO declared a FY23 dividend of 435 UScps (60% payout), +3% vs. consensus of 423 UScps (BofA 430 UScps). Production guidance for 2024 is unchanged, as is capex guidance of \$10bn p.a. (including \$3bn p.a. for growth) in 2024-26. RIO also provided new 2024 unit cost guidance and sees Pilbara Iron Ore unit costs of \$21.75-\$23.5/t (BofAe \$22.3/t) and Copper C1 unit costs of 140-160 USc/lb. Net debt of \$4.2bn at year-end was broadly flat. We make small changes to our model to reflect updated guidance, with our new price objective GBp7900/US\$97 (was GBp8000/US\$98), now based on 1x our 2025E DCF-derived NPV (was 2024E). We reiterate our Buy rating.

Leverage to iron ore plus a little copper growth too

We are bullish iron ore into H1 on restocking and reacceleration of the Chinese economy and expect prices to be up to \$150/t (see our "Year Ahead" note: Four Dragons). We expect iron ore prices to average \$125/t in 2024, and BofA Global Research's Metals Strategist expects aluminium and copper prices to increase by +30% and +20%, respectively, in the next 12 months as both markets tighten. RIO is targeting +2% CuEq production growth in 2024 (vs. +3% in 2023), and we see further growth post 2024. Growth should be driven by Pilbara Iron Ore ramping to nameplate, Simandou Iron Ore (Guinea) commencing in 2026 and Oyu Tolgoi copper Mongolia reaching nameplate in 2028.

Decarbonization of PacAl key to broader decarb efforts

Rio's analyst conference call focused on its growth projects and decarbonisation plans. Interestingly, Rio also announced that it has signed Australia's largest renewable power purchase agreement (PPA) to date to supply its Gladstone operations in Queensland. The PPA will make Rio the biggest industrial buyer of renewable power in Australia and is another major step in the work to repower its Gladstone production assets from low carbon energy sources. These include the Boyne aluminium smelter, Yarwun alumina refinery and Queensland Alumina refinery. In our view, this PPA is a key step, as Rio is targeting a -50% decrease in equity Scope 1-2 GHG emissions by 2030.

Estimates (Dec) (USD)	2022A	2023A	2024E	2025E	2026E
EPS (Adjusted)	8.20	7.25	9.09	6.74	6.74
EPS Change (YoY)	-38.0%	-11.5%	25.4%	-25.8%	0%
Dividend / Share	4.92	4.35	5.00	3.71	3.71
ADR EPS (Adjusted - US\$)	8.20	7.25	9.09	6.74	6.74
ADR Dividend / Share (US\$)	4.92	4.35	5.00	3.71	3.71
Valuation (Dec)					
P/E	7.7x	9.2x	7.3x	9.8x	9.8x
Dividend Yield	7.4%	6.6%	7.6%	5.6%	5.6%
EV / EBITDA*	5.4x	5.7x	4.4x	5.4x	5.3x
Free Cash Flow Yield*	8.7%	7.5%	8.1%	4.9%	5.3%

* For full definitions of *IQmethod*SM measures, see page 12.

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Refer to important disclosures on page 13 to 16. Analyst Certification on page 11. Price Objective Basis/Risk on page 11.

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Timestamp: 21 February 2024 10:23AM EST

21 February 2024

Equity

Key Changes

(US\$)	Previous	Current
Price Obj.	8,000.00p	7,900.00p
2024E EPS	9.15	9.09
2025E EPS	6.89	6.74
2026E EPS	6.94	6.74
2024E DPS	5.03	5.00

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Stock Data

Price (Common / ADR)	5,230 GBp / 65.92 USD
Price Objective	7,900 GBp / 97.00 USD
Date Established	21-Feb-2024 / 21-Feb-2024
Investment Opinion	B-1-8 / B-1-8
52-Week Range	4,510 GBp-6,277 GBp
Market Value (mn)	84,590 GBP
Shares Outstanding (mn)	1,617.4 / 1,617.4
Average Daily Value (mn)	106.42 USD
Free Float	100.0%
BofA Ticker / Exchange	RTPPF / LSE
BofA Ticker / Exchange	RIO / NYS
Bloomberg / Reuters	RIO LN / RIO.L
ROE (2024E)	25.5%
Net Dbt to Eqty (Dec-2023A)	5.9%
ESGMeter™	High

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment ratings.

iQprofileSM Rio Tinto plc

Key Income Statement Data (Dec)	2022A	2023A	2024E	2025E	2026E
(US\$ Millions)					
Sales	55,554	54,041	57,357	50,717	53,146
EBITDA Adjusted	23,722	22,715	29,160	23,931	24,373
Depreciation & Amortization	(5,010)	(5,334)	(5,391)	(5,594)	(5,948)
EBIT Adjusted	18,712	17,381	23,769	18,336	18,425
Net Interest & Other Income	(1,846)	(1,713)	(416)	(439)	(484)
Tax Expense / Benefit	(5,586)	(3,832)	(6,801)	(5,057)	(5,181)
Net Income (Adjusted)	13,275	11,755	14,741	10,936	10,930
Average Fully Diluted Shares Outstanding	1,620	1,621	1,621	1,621	1,621

Key Cash Flow Statement Data	2022A	2023A	2024E	2025E	2026E
Net Income (Reported)	12,420	10,058	14,741	10,936	10,930
Depreciation & Amortization	5,010	5,334	5,391	5,594	5,948
Change in Working Capital	(465)	(926)	(152)	368	(142)
Deferred Taxation Charge	0	0	0	0	0
Other CFO	(831)	694	(1,471)	(1,514)	(1,489)
Cash Flow from Operations	16,134	15,160	18,510	15,384	15,248
Capital Expenditure	(6,750)	(7,086)	(9,803)	(10,096)	(9,558)
(Acquisition) / Disposal of Investments	NA	NA	NA	NA	NA
Other CFI	43.0	124	0	0	0
Cash Flow from Investing	(6,707)	(6,962)	(9,803)	(10,096)	(9,558)
Share Issue / (Repurchase)	0	0	0	0	0
Cost of Dividends Paid	(11,727)	(6,470)	(8,278)	(6,659)	(6,095)
Increase (decrease) debt	(3,098)	1,930	0	0	0
Other CFF	(633)	(760)	0	0	0
Cash Flow from Financing	(15,458)	(5,300)	(8,278)	(6,659)	(6,095)
Total Cash Flow (CFO + CFI + CFF)	(6,031)	2,898	428	(1,371)	(406)
FX and other changes to cash	(2,544)	0	(1.00)	0	0
Change in Cash	(8,575)	2,898	427	(1,371)	(406)
Change in Net Debt	5,477	(968)	(427)	1,371	406
Net Debt	4,296	3,328	2,901	4,272	4,677

Key Balance Sheet Data	2022A	2023A	2024E	2025E	2026E
Property, Plant & Equipment	64,734	66,468	70,880	75,382	78,991
Goodwill	826	797	797	797	797
Other Intangibles	3,645	4,389	4,389	4,389	4,389
Other Non-Current Assets	8,596	10,385	10,470	10,597	10,700
Trade Receivables	3,478	3,945	4,181	3,767	3,911
Cash & Equivalents	6,775	9,673	10,100	8,729	8,324
Other Current Assets	8,720	7,892	8,301	7,482	7,782
Total Assets	96,774	103,549	109,117	111,144	114,894
Long-Term Debt	10,148	12,177	12,177	12,177	12,177
Other Non-Current Liabilities	22,282	22,288	20,902	19,516	18,130
Short-Term Debt	923	824	824	824	824
Other Current Liabilities	10,680	11,919	12,411	11,547	11,848
Total Liabilities	44,033	47,208	46,314	44,064	42,979
Total Equity	52,741	56,341	62,804	67,080	71,916
Total Equity & Liabilities	96,774	103,549	109,118	111,145	114,895

Business Performance*	2022A	2023A	2024E	2025E	2026E
Return On Capital Employed	15.0%	14.7%	18.1%	13.5%	13.0%
Return On Equity	26.0%	22.3%	25.5%	17.3%	16.1%
Operating Margin	36.9%	28.7%	39.6%	33.7%	32.4%
Free Cash Flow (MM)	9,384	8,074	8,706	5,289	5,689

Quality of Earnings*	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	1.22x	1.29x	1.26x	1.41x	1.39x
Asset Replacement Ratio	1.35x	1.33x	1.82x	1.80x	1.61x
Tax Rate	29.9%	27.8%	30.5%	30.4%	30.9%
Net Debt/Equity	8.15%	5.91%	4.62%	6.37%	6.50%
Interest Cover	NM	18.0x	26.1x	20.1x	20.2x

* For full definitions of iQmethodSM measures, see page 12.

Company Sector

Non-Ferrous-Mining

Company Description

Rio Tinto is the world's second-largest mining company, with operations in Australia, Africa, the Americas, Europe and Central/SE Asia. Rio Tinto is the world's largest producer of aluminium, second largest producer of iron ore and a top 5 producer of alumina, uranium, mined copper, export thermal & coking coal, and diamonds.

Investment Rationale

RIO is positioning itself as the diversified miner with the highest ROCE and cash distributions to shareholders, pointing to its record to date and a strategy that demands limited incremental capital to drive modest production growth. We see RIO broadly as a 'Blue Chip' and steward of capital as it has solid cash flows from T1 assets and a dependable dividend yield. We are less negative iron ore on lower Brazilian supply and higher Chinese steel production, hence our Buy rating.

Stock Data

Shares / ADR	1.00
Price to Book Value	1.8x

Half-yearly Earnings Estimates

	2023	2024
H1	3.53A	5.05E
H2	3.72A	4.04E

Key Changes

(US\$)	Previous	Current
Price Obj.	98.00	97.00
2024E EPS	9.15	9.09
2025E EPS	6.89	6.74
2026E EPS	6.94	6.74
2024E DPS	5.03	5.00

Changes to earnings

Exhibit 1: Changes to earnings

We make minor changes to our copper and aluminium earnings in line with the results.

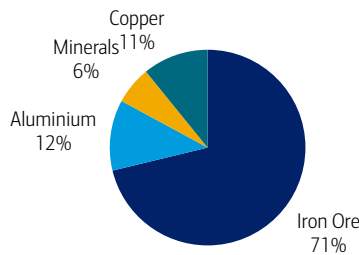
US\$m	2024E			2025E			2026E		
	Current	Prior	% change	Current	Prior	% change	Current	Prior	% change
Financials estimates									
Consolidated Revenue	57,357	60,045	-4.5%	50,717	53,875	-5.9%	53,146	56,647	-6.2%
Profit before finance items and taxation (P&L EBIT)	22,740	22,903	-0.7%	17,099	17,524	-2.4%	17,244	17,821	-3.2%
EBITDA "Underlying"	29,160	29,317	-0.5%	23,931	24,218	-1.2%	24,373	24,669	-1.2%
Iron Ore	21,576	21,579	0.0%	13,228	13,232	0.0%	13,181	13,186	0.0%
Aluminium	3,590	3,655	-1.8%	4,865	4,933	-1.4%	5,798	5,869	-1.2%
Copper	3,333	3,315	0.5%	5,832	5,947	-1.9%	5,458	5,576	-2.1%
Minerals	1,921	2,029	-5.3%	1,299	1,398	-7.1%	1,261	1,363	-7.5%
Other	-1,261	-1,261	0.0%	-1,293	-1,293	0.0%	-1,325	-1,325	0.0%
Net Profit adjusted	14,741	14,832	-0.6%	10,936	11,177	-2.2%	10,930	11,254	-2.9%
EPS (basic) adjusted	9.09	9.15	-0.6%	6.74	6.89	-2.2%	6.74	6.94	-2.9%
DPS	5.00	5.03	-0.6%	3.71	3.79	-2.2%	3.71	3.82	-2.9%
Net Debt (cash)	2,901	2,707	7.1%	4,272	4,246	0.6%	4,677	4,261	9.8%

Source: BofA Global Research estimates, company report, VisibleAlpha

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Exhibit 2: FY24E EBITDA by commodity (%)

We expect Copper and Aluminium EBITDA share to increase in FY24E.

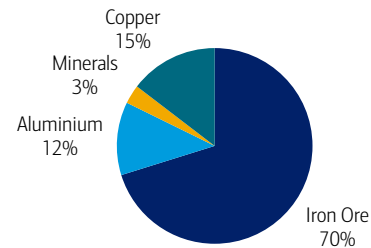


Source: BofA Global Research estimates

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Exhibit 3: NPV by commodity (US\$m)

Iron ore is c. 70% of RIO NPV.



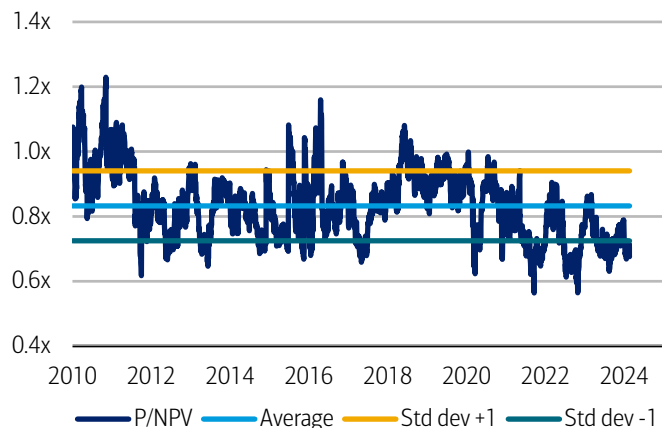
Source: BofA Global Research estimates

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Valuation

Exhibit 4: Rio Tinto P/NPV history

Average P/NPV 0.83x with a standard deviation of 0.11x

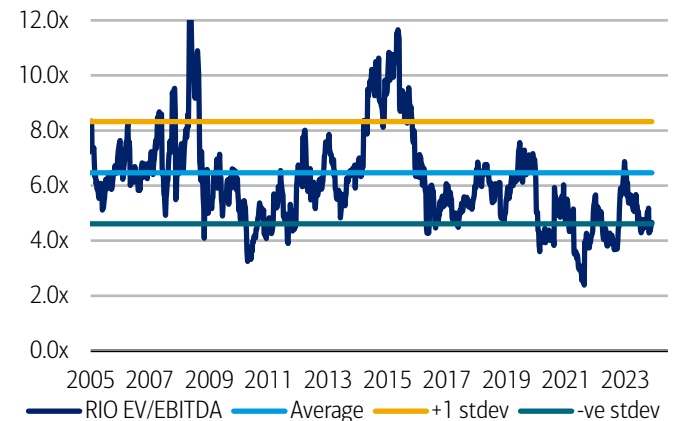


Source: BofA Global Research estimates. Note: Shown for Rio Tinto Plc

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Exhibit 5: Rio Tinto EV/EBITDA multiple history

Average EV/EBITDA c. 6.5x since 2005



Source: BofA Global Research estimates. Note: Shown for Rio Tinto Plc

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2023 result highlights

Exhibit 6: Results summary

FY23 underlying EBITDA of \$23.9bn (-9% vs FY22) was in line with consensus of \$24.0bn.

FY23 results	Unit	2022A	2023A	% Change	FY23 BofAe	% Dif	Consensus	% Dif
Underlying EBITDA	US\$m	26,222	23,892	-9%	23,090	3%	24,024	-1%
Iron Ore	US\$m	18,608	19,974	7%	20,297	-2%	20,035	0%
Aluminium	US\$m	3,780	2,282	-40%	2,737	-17%	2,391	-5%
Copper	US\$m	2,456	1,904	-22%	1,536	24%	2,019	-6%
Minerals	US\$m	2,444	1,414	-42%	1,631	-13%	1,480	-4%
Underlying Profit	US\$m	13,175	11,755	-11%	11,613	1%	11,638	1%
Underlying EPS (Basic)	US Cents	816	725	-11%	716	1%	721	1%
Dividends per share	US Cents	492	435	-12%	430	1%	423	3%
Net Debt	US\$m	4,212	4,231	0%	3,193	33%	3,132	35%

Source: BofA Global Research estimates, company report, VisibleAlpha. Dif = difference

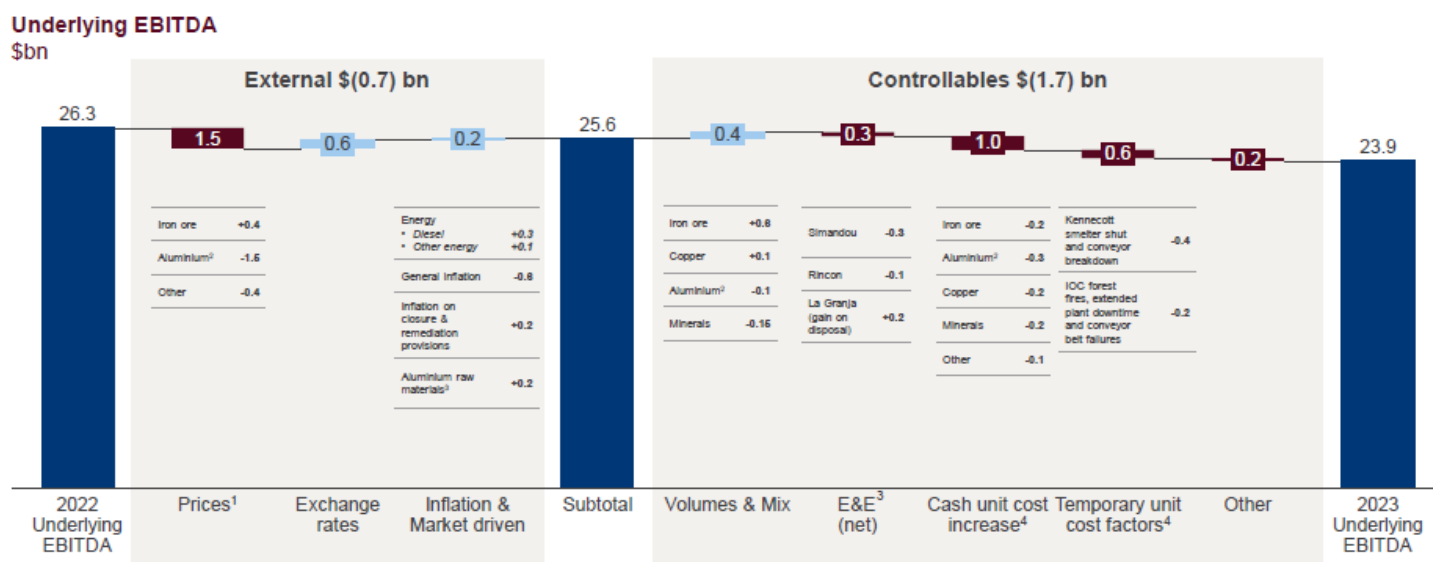
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- RIO reported FY23 underlying EBITDA of \$23.9bn (-9% vs. FY22), in line with consensus of \$24.0bn (BofA \$23.1bn).
- At the segment level, Iron Ore (84% of FY23 group EBITDA) was in line, while Aluminium, Copper and Energy & Minerals were around 5% below consensus.
- RIO declared a FY23 dividend of 435 UScps (60% payout), 3% ahead of consensus of 423 UScps (BofA 430 UScps).
- Free cash flow of \$7.7bn declined 15% vs. 2022 due to 6% lower operating cash flow and 5% higher capex of \$7.1bn. Net debt of \$4.2bn at 31 December 2023 was flat vs. 2022.
- 2024 production guidance is unchanged, as is capex guidance of \$10bn p.a. for 2024-26.
- RIO also provided new 2024 unit cost guidance and expects Pilbara Iron Ore unit costs of \$21.75 - \$23.5/t (BofAe \$22.0/t) and Copper C1 unit costs of 140-160 USc/lb.

EBITDA bridge

Exhibit 7: RIO EBITDA earnings bridge

Weaker prices offset volume gains – cost inflation gradually abating



Source: Rio Tinto

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Key segmental drivers & metrics

Exhibit 8: Rio Tinto 2023 segment summary

Iron Ore EBITDA rose 7% in 2023 and contributed 84% to group EBITDA

\$bn, except where stated	Iron Ore		Aluminium		Copper		Minerals	
	Second highest shipment year on record	vs 2022	Kitimat returned to full capacity	vs 2022	Ramp-up at Oyu Tolgoi underground on track	vs 2022	Lower production rates and challenging market conditions	vs 2022
Production (mt)	331.5 ¹	+2%	3.3 ²	+9%	0.6 ³	+2%	1.1 ⁴	-7%
Underlying EBITDA ⁵	20.0	+7%	2.3	-38%	1.9	-26%	1.4	-42%
EBITDA margin ^{5,6}	69%	+1pp	21%	-8pp	42%	-7pp	30%	-10pp
Capex	2.6	-12%	1.3	-3%	2.0	+22%	0.7	+10%
Free cash flow	11.4	+3%	0.6	-63%	(1.4)		(0.2)	
ROCE ⁶	64%	+3pp	3%	-7pp	3%	-3pp	13%	-9pp
Performance	<ul style="list-style-type: none"> Gudai-Darri at nameplate capacity Realised pricing up 2% year on year Continued focus on controllable costs Healthy inventory levels 		<ul style="list-style-type: none"> Improved production after return to full capacity at Kitimat and recovery at Boyne Compressed EBITDA with a 17% year on year reduction in LME price Some moderation in key raw material costs in the second half 		<ul style="list-style-type: none"> Oyu Tolgoi benefited from first sustainable production Kennecott ramping up following completion of the largest smelter and refinery rebuild in its history Lower unit costs in 2024 as production ramps up 		<ul style="list-style-type: none"> Lower volumes due to two furnaces at our RTIT Quebec Operations remaining offline following process safety incidents IOC impacted by wildfires and equipment downtime Challenging market conditions 	

Source: Rio Tinto

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Production guidance

Exhibit 9: Production guidance

Production guidance is unchanged.

Production Guidance for FY24	Unit	New	BofAe	Consensus	% vs. Consensus
Pilbara iron ore shipments (100% basis)	Mt	323-338	335	334	1%
Bauxite	Mt	53-56	54	56	2%
Aluminium	Mt	3.2-3.4	3.3	3.3	1%
Alumina	Mt	7.6-7.9	7.8	7.8	0%
Mined copper	Kt	660-720	716	744	8%
Refined copper	Kt	230-260	247	238	-3%
IOC	Mt	9.8-11.5	10.3	9.8	-8%
Borates	Mt	0.5	0.5	0	0%
Titanium Dioxide Slag	Mt	0.9-1.1	1.1	1.2	23%

Source: BofA Global Research estimates, company report, Visible Alpha

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Cost guidance

Exhibit 10: Cost guidance

Copper C1 unit costs of 140-160 US\$/lb lower as Oyu Tolgoi underground continues to ramp up.

Unit cost guidance for FY23	Unit	FY23a	FY24	FY24e BofA	% vs. BofAe
Pilbara Iron ore	US\$/t	21.5	21.75-23.5	22.1	3%
Copper C1	US\$/t	195.0	140-160	124	21%

Source: BofA Global Research estimates, company report

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Analyst conference call Q&A session

Pathway to get to unit cost target at Pilbara? Target is not stretchy. But Tom Price is 65 years old, and we are fundamentally making the plant better to get back to nameplate. Asset management, spending money in the right way with internal resources, will get us to medium term target. Guidance for 2024 was based on 2H 2023. Despite tight labour markets and more material movements and maintenance, productivity is key... but we have momentum.

TiO₂, small cap arena, any inorganic opportunities? It's the business where we highest global market share but has it issues. Need sufficient feed from mining, 1.1mt of CO₂ emissions, there is a way to fundamentally decarb that. Challenges in terms of customer landscape, need to be sure that the business fits need for customer. Inorganic growth is not necessarily needed, we are looking at exploration.

Capital allocation, balance sheet strong, where is the buyback? Committing to Simandou, any selling into a buyback? There has been a decade where Rio didn't grow. But now we're growing at 2-3%, and we are paying 60% of our net income stream. Growing income stream may require a little more capex ...where capex used to be sustainable, now we have a bigger growth component, plus need to put capital towards decarb to future proof our business. We are \$100b+ company with a few billion of debt, so we could pay more back. We will take up the challenge.

Copper growth, Chile, BHP deferring concentrator for heap leach options..

What's your view? BHP and RIO have improved both Resolution and Escondida projects, and we think BHP is taking sound decisions. We've been extracting from Escondida over the last 20-30 years, and we still need to get the value out, but a low capital intensity is needed, and if leaching works at scale its cheaper than the concentrator route.

Are RIO getting preferential terms for low carbon products i.e., Aluminium? We do get a premium, but it's not high enough... in the teens of \$/t but it needs to be in the hundreds of \$/t.

OT underground volumes been flat, but development been progressing. Next stage of volumes? When the conveyor is complete? It's going well compared to schedule. Will continue to ramp up to 500kt by 2028. Infrastructure development on track, i.e., secondary crusher in late 2025. Challenges are there but we're impressed with the development.

Lithium, prices down 85%. Some people say opportunity for inorganic growth, can RIO use its balance sheet to acquire? It takes us back to our mantra. We're not excited about the product, but we are when getting into the best orebodies, we like to operate at the left side of the cost curve. We believe the some of the best orebodies are in Serbia... but we need to get social license. Lithium prices will likely be volatile. Difficult to predict, but lithium will be there in batteries for the long term.

Inorganic, would give you scale, not organic Serbia and Argentina? The market is 98Mt for aluminium, 32Mt for copper and only 0.8Mt for lithium.

Why capping growth capex at 3bn? We don't want to take on too many projects. We're happy we're doing Simandou with 3 partners. We're also happy we took in First Quantum (La Granja) to drive the development. We don't want to stretch our technical capability.

What about Resolution? What are the projects competing for that technical capability? Resolution is not in our hands; we need to see the land swap happening first.

Simandou, sustaining capex is 1\$/t mine and 2\$/t infrastructure; compared to Pilbara and Fortescue, it seems a lot higher? These are new assets, and we are

talking life of mine averages. Nothing to point to here, but those are the numbers and we are comfortable with them.

RIO assume \$1bn/year on closure costs. Elaborate on scope of work? It's a big amount in the annual report, but that what happens with mining. These are some of the largest closure projects going on, Argyle, Energy Resources of Australia (ERA) and the Gove alumina refinery. At the end of the day, it has to get done.

Aluminium assets, still losing money. Will new power announcement today alleviate any costs? It's a tough business, and we are the largest western producer. The western world is structurally short. We are building a stronger business which is not bad to do while profitability is low. Next steps need to come from government to offer competitive power prices. It's an export business that competes with aluminium everywhere, so it needs to be competitive. Biggest manufacturing assets remaining in Australia, and we need a viable pathway.

Simandou timing of capex payment and when RIO get reimbursed? When approvals in place we will get paid.

Any update on the Ltd and Plc collapse of dual listed company (DLC) debate? It's a small issue, it's not bad to have a headquarters in London.

First Quantum repair balance sheet, Zambian copper assets, would RIO like to be minority owner of this? We do a lot in Africa, but what would we really be bringing to the table? Don't want to rule it out, but if we can't get an answer to that, then we won't invest.

Share of SP10 is rising in the Pilbara, how does it shift over next few years? That's an important question. We have reinstated a good understanding of our ore bodies. The way we work with traditional owners and working with volume. Considering absolute volume vs share of SP10 we need to do what is best served to the market, more volume at elevated SP10 or something else. We work in harmony with traditional owners. We have learned lessons, there is difficulty in meeting Pilbara blend as we'd hoped. So expect elevated levels in the near-term.

Pac Aluminum and firming. What technologies are shaping up? Do you need to impute a carbon price? A question for the Australian Government. We've learned a lot on new energy systems, which are inherently less stable and more complex to firm up. Firming is accessing the grid. What I focus is lowest possible carbon footprint with firm power.

Any differentiated pricing terms with CMR (China iron ore procurement company)? Two sides of the same coin, major customer is China working through CMR. We have to listen very carefully to find mutually acceptable solutions.

In Guinea, any risk on dissolution of government? Project delayed? Major risks? President and the government want to progress Simandou. We're awaiting approvals in China, which is progressing according to schedule. Shouldn't lead to delay, but I can't give you guarantee.

What about a closed border? Border restrictions? Not aware of anything like that.

Closure costs, are you planning to exclude them from underlying earnings? No, ongoing assets we do exclude, but for closed assets we exclude if material. Provisioned for it hence we can exclude it. For every 1t of iron ore we sell, we take a few cents and provide it for a rainy day.

Lithium, want strong orebodies where RIO can use technology. Lithium upstream, downstream, where do you think value lies in the industry now? Most countries have lithium in the ground and will only accept extraction if processing

happens there. So, both mining and processing is our preference. LiOH and carbonate, we won't go into cathode production.

Price formation is key. How do you think lithium given the bubble? We took final investment decision (FID) on Rincon before the bubble. We are a big company, we can take the volatility, and lithium is bound to be volatile in the future. What is the average price in the next decade? It's a good question. There could be a good business opportunity there.

Is the strength of the China economy a concern? It's the Year of the Dragon, should be a good indicator for the year to come. The physical part of the Chinese economy is growing, infrastructure and automotives are outpacing other sectors (property), but net, the economy is growing.

Iron ore 345 - 360Mt, value over volume, market move into surplus, how to manage Pilbara production with marginal SP10 volumes and so on? We are here to serve customers, but we should be disciplined. We're lucky as we've had high iron ore prices whilst production has come from higher cost areas, so there will be cost curve support.

Will a change in government catalyst for Resolution copper? Resolution will happen. We're making progress with first nations. We have to respect the process, we are arguing our case, but it's very important as US needs 2Mt copper, but only produces 1Mt, with 2 smelters left in the US. It's a critical mineral and US demand for copper goes from 2 to 4Mt, so its of national importance to develop, I just can't give timeline.

Iron Ore Company of Canada (IOC) better volumes after a challenging Q2. Infrastructure constrained? Provide update on projects in terms of value add, hot briquetted iron (HBI), etc. ?

It's been a tough year; they lost a month's production due to wildfires. There are haulage constraints. They are really focused on safe production system, asset integrity and driving productivity.

Model summary

Exhibit 11: Model summary

These are our published estimates based on BofA Global Research commodity price forecasts

Key Commodity Price Assumptions	2018A	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E
Copper price \$/lb	2.96	2.73	2.83	4.24	4.02	3.88	3.91	4.76	4.31	4.33
Aluminium price \$/lb	0.96	0.81	0.88	1.31	1.23	1.02	1.16	1.36	1.47	1.37
Iron ore spot price CFR China \$/t	69.5	92.70	108.5	159.9	120.5	119.7	125.0	90	90	94
Other Key Drivers										
USD/AUD	0.75	0.70	0.74	0.74	0.69	0.66	0.64	0.64	0.64	0.67
Tax rate - Notional	30.0%	30.0%	30.0%	30.0%	31.0%	30.0%	30.0%	30.0%	30.0%	30.0%
Tax rate - "Effective" (from P&L)	23.4%	37.3%	32.4%	26.8%	29.9%	27.8%	30.5%	30.4%	30.9%	29.7%
PROFIT & LOSS (US\$m) - continuing ops	2018A	2019A	2020A	2021A	2022A	2023A	2024E	2025E	2026E	2027E
Gross Sales (inc share of equity Accounted units)	42835	45367	46766	66771	58404	57057	60466	54482	56567	60117
Equity accounted units	-2313	-2202	-2155	-3276	-2850	-3016	-3109	-3765	-3421	-3273
Consolidated Revenue	40522	43165	44611	63495	55554	54041	57357	50717	53146	56844
Cash Costs inc. exploration costs	-23588	-23547	-22600	-28719	-30656	-32948	-30117	-29361	-31038	-32361
Depreciation	-4015	-4384	-4279	-4697	-5010	-5334	-5391	-5594	-5948	-6341
Impairments	-132	-3487	-904	-269	150	-936	0	0	0	0
Other profit / loss	4900	-281	1	7	-105	0	0	0	0	0
Operating Profit	17687	11466	16829	29817	19933	14823	21849	15762	16160	18143
Associate income / loss after tax	513	301	313	1042	575	675	891	1338	1084	993
Profit before finance items and taxation (P&L EBIT)	18200	11767	17142	30859	20508	15498	22740	17099	17244	19136
Interest income	249	300	141	64	179	536	494	471	426	521
Interest expense	-552	-554	-268	-243	-335	-967	-910	-910	-910	-910
Net Interest	-303	-254	-127	-179	-156	-431	-416	-439	-484	-389
Other Finance charges	270	-394	-1624	153	-1690	-1282				
Total Financials	-33	-648	-1751	-26	-1846	-1713	-416	-439	-484	-389
Profit Before Tax	18167	11119	15391	30833	18662	13785	22324	16660	16760	18746
Tax	-4242	-4147	-4991	-8258	-5586	-3832	-6801	-5057	-5181	-5576
Profit after Tax	13925	6972	10400	22575	13076	9953	15523	11603	11579	13170
Other										
Minority interest	-287	1038	-631	-1481	-656	105	-782	-667	-648	-774
Net Profit Reported	13638	8010	9769	21094	12420	10058	14741	10936	10930	12396
Dividends declared	-4422	-10649	-6295	-15580	-12077	-6515	-8278	-6659	-6095	-6368
Retained Profit										
EBITDA "Underlying"	18147	21197	23786	37681	23722	22715	29160	23931	24373	26674
Adjustments to Profit	-4830	2363	2679	286	855	1697	0	0	0	0
Net Profit adjusted	8808	10373	12448	21380	13275	11755	14741	10936	10930	12396

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Glossary

c.: circa
 cps: cents per share
 CuEq: copper equivalent
 DCF: discounted cash flow
 decarb: decarbonisation
 kt: thousand tonnes
 lb: pound
 Mt: million tonnes
 NPV: net present value
 p.a.: per annum
 PacAl: Pacific Aluminium
 PO: price objective
 Std dev: standard deviation
 t: tonnes
 vs.: versus
 WACC: weighted-average cost of capital

Price objective basis & risk

Rio Tinto Plc (RTPPF / RIO)

Our price objective of GBp 7900 (ADR: US\$97) is based on c.1.0x our NPV estimate. Our NPV uses 9% WACC and 2% terminal growth rate. Diversified miners have historically traded in a range of 0.7-1.4x NPV.

Downside risks :1) commodity prices, which could be lower than our forecasts, resulting in lower-than-forecast earnings, 2) unsuccessful project execution, and 3) operational problems at mines and smelters.

Upside risks: 1) China growth is higher vs. our expectations, 2) Iron ore price surprises to the upside.

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I, Jason Fairclough, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

EMEA - Metals & Mining, Steel, Paper Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Acerinox	ANIOF	ACX SQ	Patrick Mann, CFA
	Alleima AB	SAMHF	ALLEI SS	Patrick Mann, CFA
	Anglo American	AAUKF	AAL LN	Jason Fairclough
	Anglo American plc	NGLOY	NGLOY US	Jason Fairclough
	Antofagasta	ANFGF	ANTO LN	Jason Fairclough
	Atalaya Mining Plc	XPGBF	ATYM LN	Jason Fairclough
	Befesa	BFSAF	BFSA GY	Cameron Needham
	Centamin Plc	CELTF	CEY LN	Jason Fairclough
	Centamin Plc	YCEE	CEE CN	Jason Fairclough
	Ecora Resources Plc	ECRAF	ECOR LN	Cameron Needham
	Eramet	ERMAF	ERA FP	Jason Fairclough
	Glencore	GLCNF	GLEN LN	Jason Fairclough
	Glencore Plc	GLNCY	GLNCY US	Jason Fairclough
	Hochschild Mining plc	HCHDF	HOC LN	Jason Fairclough
	Norsk Hydro	NHYDY	NHYDY US	Jason Fairclough
	Norsk Hydro	NHYKF	NHY NO	Jason Fairclough
	Rio Tinto Plc	RIO	RIO US	Jason Fairclough
	Rio Tinto Plc	RTPPF	RIO LN	Jason Fairclough
	SCA	SVCBF	SCAB SS	Patrick Mann, CFA
	SIG Group	SCBGF	SIGN SW	Patrick Mann, CFA
	Smurfit Kappa	SMFTF	SKG ID	Patrick Mann, CFA
	Smurfit Kappa	XNKFF	SKG LN	Patrick Mann, CFA
	Smurfit Kappa	SMFKY	SMFKY US	Patrick Mann, CFA
	Stora Enso	SEOJF	STERV FH	Patrick Mann, CFA
	Stora Enso	SEOAY	SEOAY US	Patrick Mann, CFA
	Thyssenkrupp	TYEKF	TKA GY	Jason Fairclough
	Verallia	VRLAF	VRLA FP	Patrick Mann, CFA
	Yellow Cake Plc	YLLXF	YCA LN	Jason Fairclough
NEUTRAL				
	ArcelorMittal	AMSYF	MT NA	Patrick Mann, CFA
	ArcelorMittal	MT	MT US	Patrick Mann, CFA
	Imerys	IMYSF	NK FP	Jason Fairclough
	Salzgitter	SZGPF	SZG GY	Patrick Mann, CFA
	Voestalpine	VLPNF	VOE AV	Patrick Mann, CFA
UNDERPERFORM				
	Aperam	XASPF	APAM NA	Patrick Mann, CFA
	Aurubis	AIAGF	NDA GY	Jason Fairclough



EMEA - Metals & Mining, Steel, Paper Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Billerud AB	BLRDF	BILL SS	Patrick Mann, CFA
	Billerud AB	BLRDY	BLRDY US	Patrick Mann, CFA
	Boliden	BOLIF	BOL SS	Jason Fairclough
	Ferrexpo plc	FEEXF	FXPO LN	Jason Fairclough
	Fresnillo plc	FNLPF	FRES LN	Jason Fairclough
	Outokumpu	OUTFF	OUT1V FH	Patrick Mann, CFA
	Sappi Limited	SPPJF	SAP SJ	Patrick Mann, CFA
	Sappi Limited	SPPJY	SPPJY US	Patrick Mann, CFA
	SSAB	SSAAF	SSABA SS	Patrick Mann, CFA
	UPM-Kymmene	UPMKF	UPM FH	Patrick Mann, CFA
RSTR				
	DS Smith plc	DITHF	SMDS LN	Patrick Mann, CFA
	Mondi plc	MONDD	MONDD US	Patrick Mann, CFA
	Mondi Plc	MONDF	MNDI LN	Patrick Mann, CFA
	Mondi Plc	XDPMF	MNP SJ	Patrick Mann, CFA
RVW				
	Horizonte Minerals	HZMMF	HZM LN	Jason Fairclough

iQmethodSM Measures Definitions**Business Performance**

Return On Capital Employed

Return On Equity

Operating Margin

Earnings Growth

Free Cash Flow

Numerator

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income

Operating Profit

Expected 5 Year CAGR From Latest Actual

Cash Flow From Operations – Total Capex

Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill Amortization

Shareholders' Equity

Sales

N/A

N/A

Quality of Earnings

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

Numerator

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash & Equivalents

EBIT

Denominator

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

Valuation Toolkit

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

Numerator

Current Share Price

Current Share Price

Annualised Declared Cash Dividend

Cash Flow From Operations – Total Capex

EV = Current Share Price × Current Shares + Minority Equity + Net Debt +

Other LT Liabilities

Enterprise Value

Denominator

Diluted Earnings Per Share (Basis As Specified)

Shareholders' Equity / Current Basic Shares

Current Share Price

Market Cap = Current Share Price × Current Basic Shares

Sales

EV / EBITDA

Basic EBIT + Depreciation + Amortization

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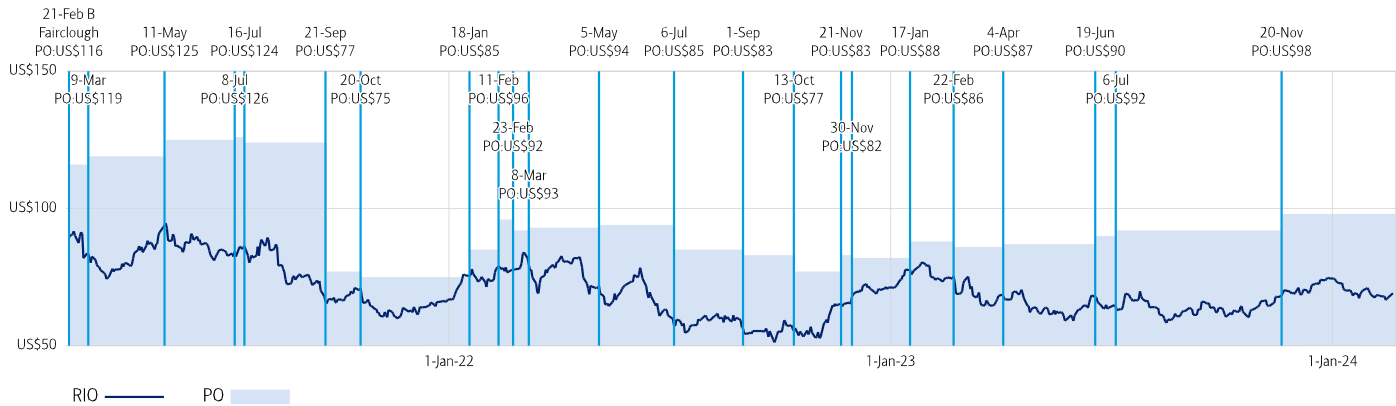
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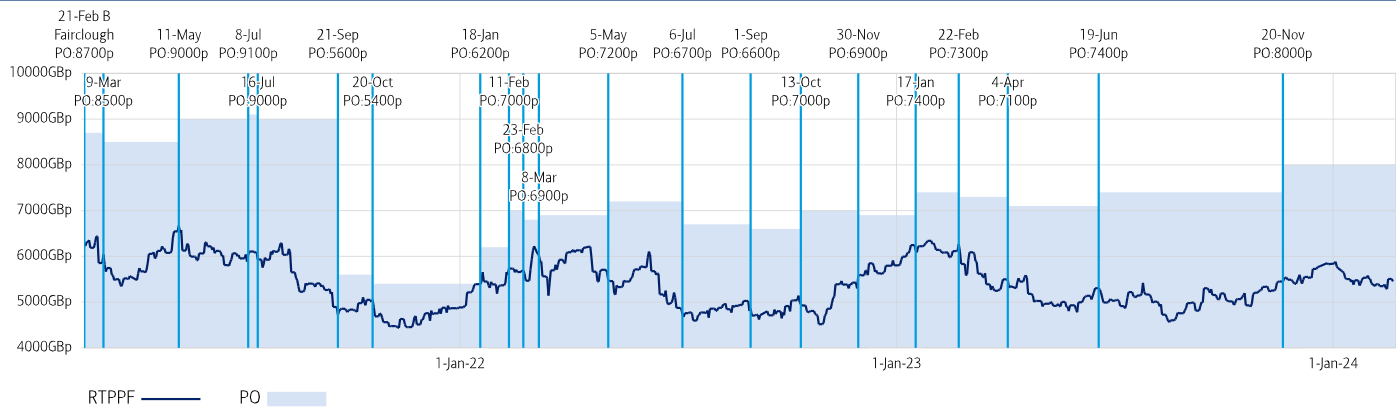
Rio Tinto Plc (RIO) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Rio Tinto Plc (RTPPF) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

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

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	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 ^{R1}	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%

^{R1} 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.

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

^{R2}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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