

# Rio Tinto Limited RIO

\$131.71

2.03 | 1.57%

(5:35PM 07-May-2024)

Trading Status: Trading

Research Report

Research Snapshot

Company Profile

Morningstar Analyst Rating™

★★

(02:23PM 17-Apr-2024)

Last Price 131.71

★★★★★

★★★★

★★★

★★

★

\$

78.4

100.8

123.2

151.2

Style Box™

Morningstar Sector  
Basic Materials

Market Cap  
48,893 M

Fair Value  
\$112.00

Fair Value Uncertainty  
Medium

Economic Moat  
None

Capital Allocation  
Standard

Overview

Investment Outlook

Forecasts

Profile

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Other

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Analyst Report

## Business Strategy and Outlook

Updated: 04-Apr-2024

### Rio Tinto Fair Value Estimate Reduced by 3% on Lower Near-Term Iron Ore Prices

Rio Tinto is one of the world's largest miners with operations in iron ore, aluminum (including bauxite and alumina), copper, and minerals (mineral sands, borates, salt, diamonds). Commodity demand is tied to global economic growth, China's in particular. Rio Tinto benefited greatly from the China boom over the past two decades. The firm's largest customer by far is China, with about 60% of sales in 2023. We think the outlook is for earnings to materially decline with demand for many commodities likely to soften with the end of the China boom, particularly iron ore which has disproportionately benefited from the boom in infrastructure and real estate investment.

Rio Tinto has a large portfolio of long-lived assets with low operating costs, meaning it is one of few miners profitable through the commodity cycle. Most revenue comes from operations located in the relatively safe havens of Australia and North America. The invested capital base was inflated by substantial procyclical investment during the height of the China boom, including overpaying for Alcan. The subsequent iron ore expansion was also made when unit capital costs were high. These factors diluted returns to the point where we struggle to justify a moat. As a commodity producer, Rio Tinto is a price-taker, with the lack of pricing power reflecting in cyclical commodity prices.

The recent focus has been to run a strong balance sheet, tightly control investments, and return cash to shareholders. Rio Tinto is also focused on winning back the trust of investors and other stakeholders

such as regulators and the indigenous peoples on whose lands many of Rio's mines are located after the destruction of the caves at Juukan Gorge in 2020. The company's major expansion projects are the Oyu Tolgoi underground mine and the expansion of the Pilbara iron ore system's capacity from 330 million metric tons to between 345 and 360 million metric tons. Those projects are expected to complete in the next few years. Otherwise, the focus is on incremental expansions through productivity and debottlenecking initiatives. These will be small but capital-efficient and should modestly improve unit costs and returns.

#### Financial Strength

Updated: 04-Apr-2024

Rio Tinto's balance sheet is sound with minimal net debt of around USD 4.2 billion as of the end of December 2023 or about 0.2 times trailing 12 months EBITDA. We forecast net debt/EBITDA and net debt to remain at close to zero through our forecast period, in the absence of a large acquisition, which we don't expect. The strong balance sheet may allow the company to make targeted investments or acquisitions through the downturn, important flexibility, but it appears management is favoring distributions to shareholders.

Barring a major spending spree, which appears unlikely, Rio's balance sheet is likely to remain strong, with excess cash flows returned to shareholders.

#### Risk and Uncertainty

Our Morningstar Uncertainty Rating for Rio Tinto is Medium. Rio Tinto has an outside exposure to iron ore mining and demand is heavily reliant on China's continued outside investment in infrastructure and fixed assets. Rio Tinto has low operating costs and a strong balance sheet, with capital allocation significantly improved following a period of overinvestment through the China commodities boom. However, Rio still faces the cyclicity of commodity prices, operating leverage, high capital intensity and the risk of poor capital allocation.

Rio Tinto's environmental, social, and governance, or ESG, risks are relatively small, relating to carbon emissions, water resource dependency, land disturbance, labor strikes and disputes, and community relations. Emissions can carry carbon-related costs, though we think demand for steel is relatively price inelastic and any carbon price is likely to be passed on to steel consumers. There is also potential for Rio's higher-grade iron ore to attract a premium for lower emissions incurred in the steelmaking process due to lower fuel use (usually coal). Mining operations are water intensive where scarcity can limit production capacity and require costly workarounds such as desalination plants installed in Rio's part-owned Escondida. Mining developments and operations have a significant environmental footprint requiring good relations with local communities and labor unions. To the extent that relations can limit industry supply, this factor can also work in favor of the incumbent producers. Community opposition may challenge Rio's social license to operate and future developments. Poor construction and failures can lead to major remediation and reparation costs. We see the likelihood of such occurrences as low where Rio Tinto operates, especially after the recent tailings dam failures by other industry participants and the destruction of the caves at Juukan Gorge.

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## Economic Moat

As a commodity producer, Rio is a price taker and needs low-cost mines with long lives and a low installed capital base to support the longer-term excess returns needed to justify an economic moat. We forecast midcycle returns on invested capital, or ROIC, slightly above its WACC driven by its moaty iron ore business. Our forecasts are based on an assumed iron ore price of USD 70 per metric ton (which we note is materially less than the average price of around USD 100 per metric ton over the past decade), aluminum price of about USD 0.80 per pound and copper price of USD 3.65 per pound. Our midcycle assumed prices are based on our estimates of the marginal costs of production. As we think Rio's midcycle ROIC isn't sufficiently above its WACC to justify assigning a narrow moat, we don't assign a moat to Rio.

In calculating ROIC, we have added back to invested capital around USD 8.3 billion in asset and goodwill writedowns taken over the past decade on the basis that these amounts relate to assets developed or acquired in the ordinary course of business and so should be included when calculating ROIC. Some of the more material amounts include USD 2.7 billion in relation to its copper business, USD 2 billion in relation to aluminum and USD 1.4 billion in relation to diamonds. However, we have not added back USD 21.1 billion in relation to aluminum assets purchased in 2007 nor USD 3.3 billion in relation to coal assets purchased in 2011 on the basis that management was subsequently replaced (in 2013) and that Rio has shown much improved investment discipline since then, as evidenced by relatively small writedowns subsequent. If we did also add back these USD 24.4 billion in aluminum and coal writedowns, Rio's midcycle ROIC would be modestly below its WACC of 9%. Alternatively, if we instead chose not to add back any writedowns, Rio's midcycle ROIC in 2028 would be in the low-double digits compared with its WACC of 9%.

Looking at each of Rio's segments in turn:

**Iron ore (narrow moat):** Rio's Pilbara iron ore assets have cash costs in or around the lowest quartile of the cost curve and in line with BHP's. Like Vale, however, Rio expanded much more aggressively during the last iron ore boom than peer BHP. Even so, its port, rail, and mine assets are fully integrated, benefit

from scale, and are favorably located to key Asian markets. New mines are periodically developed to continue to feed and utilize the installed infrastructure base, with incremental capacity able to be added for very low capital costs through incremental expansions and efficiencies, including innovative technology such as automated haulage. We estimate that iron ore will generate a midcycle ROIC of about 30%, materially above Rio's WACC of 9%. As such, we consider Rio's iron ore business moatworthy.

**Copper (no moat):** The majority of Rio's current copper operations are represented by its 30% stake in the Escondida mine in Chile, the world's largest copper mine. At full capacity, Escondida sits around the 25th percentile in the cost curve, with Rio's smaller, 100% owned Kennecott (KUC) copper mine near the middle of the cost curve. The existing open cut mine at Oyu Tolgoi is much higher cost but we think that once the underground expansion at Oyu Tolgoi ramps up, this mine will move toward the lowest quartile on the cost curve. However, the inflated capital base of the copper segment means we think the copper segment is unlikely to generate ROIC above Rio's WACC for at least 10 years. As such, we don't deem the copper segment moatworthy.

**Aluminum including bauxite and alumina (no moat):** While the company's bauxite mines are in the bottom half of the cost curve, its aluminum smelters sit at various points on their cost curve. Rio's eight smelters in Canada are all located in the bottom decile but its remaining smelters are higher cost. Rio Tinto paid USD 44 billion (including assumed debt) for Alcan, a Canadian based bauxite, alumina and aluminum producer, in 2007 but ultimately incurred writedowns of more than USD 23 billion on this investment. Even if we don't add back these writedowns to the segment's invested capital base, it generates a midcycle ROIC similar to Rio's WACC of 9%. Accordingly, we don't deem the aluminum business as moatworthy.

**Minerals (no moat):** Comprising various operations in mineral sands, borates, salt, and diamonds, these businesses generally lack a cost advantage. As such, we think it unlikely that the minerals segment will generate above-WACC returns.

**Exploration projects:** These are an immaterial part of Rio and way too early in their potential development to assign any of them a moat.

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## Fair Value and Profit Driver

Updated: 04-Apr-2024

We lower our fair value estimate for Rio Tinto to AUD 112 per share, down from AUD 116, driven by lower near-term iron ore prices, which more than offset higher copper prices.

We now assume iron ore averages about USD 100 per metric ton from 2024 to 2026 based on the futures curve, down from roughly USD 120. However, we raise our assumed midcycle iron ore price to roughly USD 70 per metric ton from 2028, up from around USD 63 previously. This is based on our updated estimate of the marginal cost of production, driven by inflation pushing up and steepening the industry cost curve. Strong demand from China, which accounts for around 70% of the seaborne iron ore trade, is supportive of near-term prices. However, longer term we expect demand from China to

moderate as steel production peaks and starts to decline as its economy moves away from one reliant on fixed-asset investment to a more consumption-based economy. China's falling population along with rising scrap-based production also contribute to reduced demand for iron ore, in our view. We also think additional supply is likely, led by Simandou and Vale. Hence we expect a long-term price substantially below the current spot around USD 100 per metric ton.

Based on the futures curve, our assumed average copper prices from 2024 to 2026 are now around USD 4.10 per pound, up from roughly USD 3.90, reverting to our assumed midcycle copper price of roughly USD 3.65 per pound from 2028. This is based on our estimate of the marginal cost of production.

Our assumed average aluminium price is about USD 1.10 per pound from 2024 to 2026 and we assume alumina averages about USD 360 per metric ton.

We assume gold averages around USD 2,320 per ounce from 2024 to 2026 based on the futures curve. Our assumed midcycle gold price is USD 1,780 per ounce from 2028, reflecting our estimate of the marginal cost of production.

Our other midcycle price forecasts are about USD 0.80 per pound for aluminium and USD 330 per metric ton for alumina from 2028.

Our fair value estimate employs an 11% cost of equity, reflecting high cyclical and operating leverage, coupled with moderate financial leverage. Our assumed 9% weighted average cost of capital reflects a long-run 30/70 debt/equity split, appropriate for a major mining company such as Rio. Our fair value estimate equates to an enterprise value/EBITDA exit multiple in 2027 of 7.5 times.

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## Capital Allocation

Updated: 04-Apr-2024

We assign a Standard Capital Allocation Rating to Rio Tinto. The key considerations for our rating are balance sheet, investments, and shareholder distributions. Of the three, investment is likely most important for Rio Tinto's future shareholder returns. Exposure to cyclical commodity prices presents a risk of materially value-destructive investment, such as the acquisition of Alcan in the past. And high capital intensity means future investments are likely to be the primary long-run driver, along with commodity prices, of total shareholder returns.

We think Rio Tinto's investment is likely to remain relatively disciplined in the near to medium term. If we thought Rio Tinto's new investments would reliably be above the firm's cost of capital, support and improve the competitive position and add shareholder value, then an Exemplary capital allocation rating would be appropriate. However, mining is a cyclical and capital-intensive business where significant capital can be misallocated. In the long term, we lack sufficient confidence that the firm will remain disciplined, consistently invest to add value and avoid value destructive mistakes. A return to loose expenditure in future, though we don't think this likely, could even justify a Poor rating.

Rio Tinto's balance sheet is sound, with minimal net debt as of the end of December 2023, and we expect the company to run a relatively conservative balance sheet for the foreseeable future. This reflects painful lessons from the global financial crisis when the company undertook a value-destructive discounted equity issue after taking on too much debt for acquisitions during the preceding boom. We like the focus on returning excess cash to shareholders and think the company's approach to shareholder distributions is appropriate.

Given we think Rio's recent capital discipline will continue, the balance sheet will remain sound and shareholder distributions will be appropriate, the Standard capital allocation rating is appropriate.

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