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Fortescue Metals Group's Advantage: A Comparative Total Return Analysis Against BHP and Rio Tinto for 2025

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ABSTRACT
This paper examines BHP, Rio Tinto and Fortescue Metals Group(FMG) to determine which company is best positioned to achieve the highest total shareholder return by 31 December 2025. Over the past five years, mining sector was deeply influenced by the global economy significant volatility. iron ore prices moderated through 2024 due to inflation weaker Chinese demand(Reuters, 2024; Deloitte, 2024). However, steady infrastructure investment in emerging markets and cautious stimulus in China are expected to support demand into 2025(BDO, 2025; Mysteel, 2024). In this context, FMG's lean cost structure and strategic pivot toward clean energy enhance its return outlook(Fastmarkets, 2024; The New Daily, 2024).

KEYWORDS
FMG; BHP and rio tinto; Return outlook; Lean cost structure

1 Introduction

With this environment, the paper conducts a comparative assessment of business development and financial ratios such as ROE, P/E, WACC, dividend yield and beta across the three miners to evaluate relative value. FMG's investment case is then substantiated through four key lenses: firm competitiveness, macroeconomic positioning, growth options and governance quality. These factors collectively suggest FMG offers the most attractive risk-adjusted return potential among its peers in 2025.

2 Company overview of BHP and RIO(2020-2024)

This section briefly reviews BHP and RIO's operational and strategic developments from 2020-204 to provide benchmarking context. Their earnings trajectories, diversifications efforts and macro exposures help frame FMG's relative postioning. These insights support the subsequent financial ratio analysis, which more precisely compares return potential across the three miners heading into 2025.

2.1 BHP

BHP is the world's largest diversified miner, benefiting from resilient demand for iron ore and copper. Its earnings peaked at US$23.8 billion in FY2022 but declined to US$10.9 billion by FY2024 (Appendix 1) as iron ore prices fell amid China's property slowdown(BHP, 2022; Reuters, 2024). The company exited petroleum in 2022 and shifted focus to copper and nickel via the OZ Minerals acquisition(BHP, 2023). Backed by strong cash generation and a conservation balance sheet, BHP is well-positioned for long-term growth through exposure to future-facing commodities.

2.2 RIO tinto

RIO maintained near-zero net debt from 2022-2024, supporting financial resilience. Its earning peaked at US$22.6 billion in 2021 but declined as revenue fell to US$53.7 billion by 2024 (Appendix 2) due to rising cost and global tightening(Rio Tinto, 2022; Stock Analysis, 2025). The company upheld strong margins through low-cost operations and invested in future-facing commodities like copper and lithium. Governance reforms post- Juukan Gorge improved stakeholder confidence, while diversification beyond iron ore enhance RIO's long-term positioning.

ROE is based on reported fiscal data; P/E is derived from year-end market prices; Beta reflects 5-year monthly volatility; Dividend Yield is trailing yield at year-end; WACC is estimated.

This section assesses FMG's financial positioning across three key dimensions: profitability vs valuation, return on capital efficiency and risk-adjusted shareholder income.

2.3 ROE vs P/E

Throughout 2020 and 2024, FMG consistently maintained the highest Return on Equity(ROE) among the three miners, underscoring its superior shareholder value creation and stronger contribution to total return potential(Marketscreener, 2024; CompaniesMarketCap, 2021). Although commodity price normalized after 2022, FMG's ROE remained

Table 1 Financial ratio and analysis

Company	Year	ROE(%)	P/E	WACC(%)	Dividend Yield(%)	Beta (5Y)
BHP	2020	16.6	14.03	~8.4	6.16	0.78
	2021	22.1	14.54	~8.4	4.81	0.78
	2022	50.6	6.35	~8.4	12.36	0.78
	2023	29.0	11.76	~8.4	8.74	0.78
	2024	17.7	18.51	~8.4	5.25	0.78
Rio Tinto	2020	28.4	14.03	~7.9	4.92	0.68
	2021	42.8	3.61	~7.9	13.91	0.68
	2022	24.5	6.11	~7.9	10.03	0.68
	2023	19.1	4.57	~7.9	5.33	0.68
	2024	21.0	8.30	~7.9	7.32	0.68
FMG	2020	40	6.21	~9.6	7.51	0.96
	2021	66	5.23	~9.6	18.64	0.96
	2022	35.4	6.01	~9.6	10.09	0.96
	2023	31	9.46	~9.6	6.03	0.96
	2024	30	7.86	~9.6	~9.5	0.96

Data sources: Company annual reports (2020–2024), Yahoo Finance, GuruFocus, MarketScreener, CompaniesMarketCap, WiseSheets, and ValueInvesting.io. All figures are in USD.

comparatively resilient at 30% by 2024, while BHP and RIO stabilized at appraximately 18% and 22%(Wisesheets, 2024). Simultaneously, FMG's Price-to-Earning(P/E) ratio consistently traded at 5-9x range, whereas BHP's P/E expanded sharply to ~18.5x in 2024 despite weaker profitability. This persistent valuation gap suggests that the market may have systematically underpriced FMG’s earnings capacity, offering a potential revaluation upside. Such a combination of high profitability and attractive valuation supports FMG’s relative outperformance potential through 2025.

2.4 ROE vs WACC

Across 2020-2024, all three miners consistently achieved ROEs above their estimated WACC, indicating positive value creation(Wisesheets, 2024). While FMG's WACC was relatively higher (~9.6%) due to its pure-play iron ore profile exposure and higher equity risk premium. it also delivered the widest ROE-WACC spread. In 2021, FMG achieved 66% ROE against 9.6%WACC, compared to BHP's 22% vs 8.1% and RIO's 43% vs 8.3%(Marketscreener, 2021; ValueInvesting.io, 2021; BHP, 2022; Rio Tinto, 2022). This superior return on capital underscores FMG's efficient use of equity and supports its potential to continue delivering excess shareholder value through 2025.

3 Dividend yield and beta

From 2020 to 2024, FMG consistently delivered the highest dividend yield among the three miners, which reached nearly 18%-19% in 2021 and maintained ~9-10% in 2024, significantly above BHP(~5-6%) and RIO (~6-7%) (WiseSheets; GuruFocus, 2024). Although FMG's beta(~0.96) suggests higher volatility relative to BHP(~0.78) and RIO(~0.68) (Yahoo Finance, 2024), its high payout ratio provided strong cash-baesd returms, reducing reliance on share price growth. Combined with its consistently low P/E ratio(5-9x), FMG offers an attractive risk-return trade- off: investors accept greater price fluctuation in exchange for superior income and potential upside revaluation. This profile supports FMG's outperformance potential in 2025, especially if iron price remain stable or recover.

4 Justification for FMG

In FY2024, FMG recorded revenue growth of US $18.22 billion (+8.0%) and earnings of US $5.68 billion(+18.5%) (Appendix 3), reflecting resilient iron ore sales and disciplined cost control despite price volatility(Stocks Down Under, 2024; Discovery Alert, 2024b). Its strong free cash flow and low leverage (Net Debt/EBITDA ~0.8) provide a solid base for value creation(Discovery Alert, 2024a). Looking ahead, FMG's fundamental attractiveness lies in improving cash flow visibility and a potential reduction in discount rate, supported by governance reforms, ESG credibility and active risk management(Fastmarkets, 2024; Lloyd ' s List, 2024).

5 Firm competitiveness

FMG demonstrates strong competitive advantages in cost leardship, operational efficiency and strategic product upgrades, which directly support its robust cash flow generation. FMG's FY2024 production cost of US$17-18 per tonne are significantly below RIO's US $21.75-23.50 and comparable to BHP's US $17.40-18.90(Fastmarkets, 2024), allowing sustained profitability even amid softer iron ore prices and evidenced by a net profit of US $5.7 billions(Stocks Down Under, 2024). Additionally, FMG's annual shipments of around 190 millions tonnes reflect a five-year CAGR of 4.3%, significantly outpacing peers' average of ~1.7%(Discovery Alert, 2024a).

FMG has proactively improved product quality with the iron Bridge magnetite project, adding 22 million tonnes per year of premium-grade 67% De concentrate by 2025-2026. This upgrade is projected to increase realized priced by approximately US$15 per tonne, further enhancing profitability(Discovery Alert, 2024c).

FMG's early automation technology boosted productivity by 22% and cut costs by 18%, largely contributing to superior ROE of 28%(Discovery Alert, 2024d). For the demand factors, strong Chinese iron ore demand(1.24Bt in 2024) and infrastructure growth in emerging markets support robust sales volumes(Reuters, 2024). Its ESG initiative like A $5bn indigenous contracts enhance FMG's social license and may lower equity risk(Fortescue, 2024; Sustainalytics, 2024), reinforcing its 2025 outperformance potetial.

6 Macro-economic settings

FMG's macroeconomic outlook through 2025 is shaped by iron ore demand, commodity pricing and global trade tensions, presenting underappreciated upside potential. Despite trade disputes, particularly U.S.-China tariff conflicts indirectly affecting Chinese steel exports and iron ore demand(The Australian, 2025), FMG's has maintained relatively stable demand by strategic resilience via market diversification and partnerships, such as its green steel collaboration with China's Baowu Group(Kitco, 2025).

To further mitigate macro uncertainty, FMG has actively managed financial risk. For exanple, its hedging strategies covered approximately 30% of production in 2024, reducing cash flow volatility relative to unhedged peers(Discovery Alert, 2024c). Moreover, global fundamentals remain favorable - The World Steel Association projected a 3.2% increase in global steel demand in 2025, largely driven by infrastructure growth in India and Southeast Asia (Discovery Alert, 2024d), which may offest China's deceleration demand in iron ore(Discovery Alert, 2024a).

These macro and strategic factors help reduce FMG's perceived risk and cash flow uncertainty, potentially contributing to lower cost of equity and supporting valuation upside.

7 Growth options

FMG possesses several distinct growth options that enhance its prospects to outperform in 2025. One of the most important is its Iron Bridge magnetite project, its a strategic expansion growth option that will deliver around 22 million tonnes per annum of premium and grade 67% Fe concentrate by 2025-2026, which significantly increasing profitability via higher realized prices(Discovery Alert, 2024b).

Additionally, FMG is pursuing critical mineral diversification growth option, including targeted exploration for lithium in Canada and copper-gold projects across Australia, positioning itself to benefit from increasing global demand for energy-transition metals(Stockhead, 2024). Furthermore, FMG has established a green energy growth option through its subsidiary Fortescue Future industries(FFI) which have already committed over US$1.2 billion towards green hydrogen production and renewable energy initiatives and captured potential high-growth revemue streams aligned with global decarbonization trends (The New Daily, 2024).

FInally, FMG maintains strong financial flexibility supported by low leverage(net debt/EBITDA~0.8x) and robust free cash flow(~14% yield), which is a crucial strategic acquisition growth option as it allows opportunistic acquisitions that could further accelerate earnings growth(Discovery Alert, 2024c). Collectively, these clear and well-defined growth options provide FMG with considerable upside and make its current valuation potentially attractive and underscoring its ability to deliver superior returns through 2025.

8 Quality of corporate governance

FMG robust corporate governance framework significantly enhances its potential to outperform in 2025 by reducing investor risk and optimizing capital allocation efficiency. Founder Andrew Forrest's substantial equity stake(around 36%) ensures management incentives are closely aligned with shareholder interests and promotes strategic clarity and long-term value creation(The New Daily, 2024). Otherwise, FMG's aggressive ESG goals, such as achieving a ~90% reduction in Scope emission by 2030 and linking executive remuneration directly to these targets, improve investor trust and potentially lowering the company's equity risk premium(Fastmarkets, 2024; Lloyd ' s List, 2024).

Additionally, FMG demonstrates disciplined capital management by consistently returning 5080% of net profit as dividends and maintaining low debt levels, which shield shareholders from excessive financial risk(AFR, 2023; Fitch Ratings, 2024). Its swift governance responses such as promptly addressing executive turnover due to strategic misalignment, highlight its effective accountability measures along with minimizing operational risks(The New Daily, 2024).

Overall, FMG's transparent governance, disciplined capital allocation and active ESG pratices enhance investor confidence and support a valuation premium, driving its potential to outperform in 2025.

With improving governance signals, FMG's intrinsic value may become more visible to the market, supporting a potential convergence toward fair value.

9 Why didn't select BHP and RIO(Conclusion)

In summary, FMG is best placed to outperform its peers by the end of 2025 with fundamentals that align closely with the core drivers of company value. Its cost advantage and concentrated focus on iron ore have supported strong sales volumes and high profit margins, which has been reflected in a top-tier ROE and consistently low P/E ratio(~7.9x)(Stocks Down Under, 2024; The Motley Fool, 2024). These attributes enhance its intrinsic value as captured by the sales multiplied margin component of the valuation framework.

Moreover, FMG offers a superior risk-adjusted return profile. While macroeconomic conditions like stable or recovering iron ore demand support all three miners, FMG's greater operational leverage provides stronger earnings torque in an upcycle. With limited debt and high dividend, its perceived risk premium may be overstated and contributed to undervaluation in the denominator of the valuation formula. As a result, its current share price may not fully reflect the company's long-run fundamentals(Discovery Alert, 2024b).

Unlike BHP and RIO, whose growth projects may take years to scale, FMG's Iron Bridge and critical minerals investments are already delivering value(Discovery Alert, 2024c). Its agile governance and bold ESG pivot further align incentives and reduce downside risk, which attracts forward-looking capital(Fastmarkets, 2024).

Altogether, FMG demonstrates strength across all four valuation pillars such as volume, margin, macro resilience and growth, contributing the most compelling investment opportunity for 2025.

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Appendices

Appendix 1

Scource: Stock Analysis, 2025

Financial Performance

In 2024, BHP Group's revenue was $56.03 billion, an increase of 3.40% compared to the previous year's $54.18 billion. Earnings were $7.90 billion, a decrease of -38.88%.

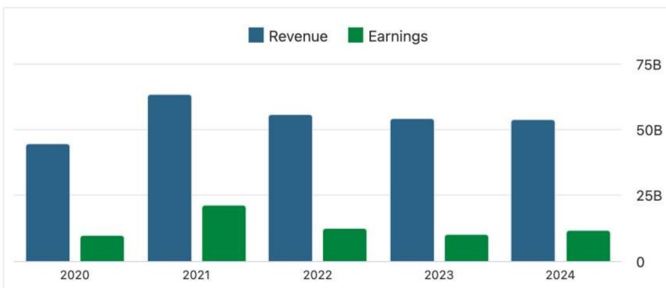
Financial numbers in USD

Appendix 2

Scource: Stock Analysis, 2025

Financial Performance

In 2024, Rio Tinto Group's revenue was $53.66 billion, a decrease of -0.71% compared to the previous year's $54.04 billion. Earnings were $11.55 billion, an increase of 14.85%.



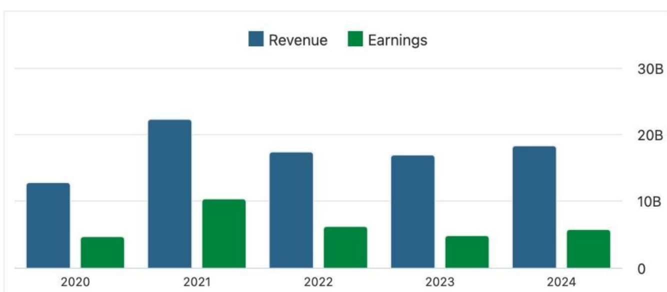
Financial numbers in USD

Appendix 3

Scource: Stock Analysis, 2025

Financial Performance

In 2024, Fortescue's revenue was $18.22 billion, an increase of 8.00% compared to the previous year's $16.87 billion. Earnings were $5.68 billion, an increase of 18.45%.



Financial numbers in USD