

Rio Tinto Plc (ADR)

NYSE:RIO

Analyst: Patrick Donovan

Sector: Materials

BUY

Price Target: \$35.76

Key Statistics as of 03/05/16

Market Price:	\$30.32
Industry:	Metals and Mining
Market Cap:	\$55.4bil
52-Week Range:	\$21.88-47.37
Beta:	.77

Thesis Points:

- Rio Tinto is a leader in the mining industry.
- Above-average assets and variety of products allows profitability throughout commodity cycle.
- Trouble among peers and shifts in the Chinese market have cleared a path for significant growth in the 2016 fiscal year.

Company Description:

Rio Tinto is one of the largest mining companies in the world. The company has the majority of assets in Australia and North America, but performs operations all over the world. The company has a portfolio of assets with great variety in comparison to competitors. Rio's operations include, but are not limited to, the mining of aluminum, coal, diamonds, gold, iron ore and even uranium. The firm's operating costs have consistently been lower than the industry average allowing for greater margins. Rio has also proven over the past decade that it can support greater assets as a percentage of revenue than any of its competitors. Rio Tinto is a member of the New York Stock Exchange.



Thesis

Rio Tinto is a world leader in mining operations, and unlike many pure-play firms, Rio has an impressive diversification of assets. The company has its hands on virtually everything that can be extracted via mining. While Iron ore makes up the majority of the company's business, the cost to extract and sell the ore is the lowest in the industry for Rio. Changes in the market for iron are occurring rapidly as the Chinese boom appears to be peaking. Iron ore is forecasted to drop in price by up to 35% through 2020. Pure-play operators and miners with less diversified portfolios will likely suffer significant losses in the coming 5 years because of this. Rio's asset base and low-cost production of iron should allow them to maintain healthy profits even as the price of iron decreases. As competitors begin to fail Rio will continue to benefit from greater market share. Another significant challenge for pure-play miners is the cyclical nature of the commodity market. Rio avoids the downfalls associated with this because of its greatly diversified portfolio. Along with combatting cyclical trends Rio Tinto's portfolio will also allow it to take full advantage of the changes occurring the Chinese market in terms of both supply and demand, and shifts in the performance of competitors such as Vale. Chinese state-backed steel production has been cut significantly in the fourth quarter of 2015 and the trend is continuing in fiscal 2016. This, along with increased demand for other materials as the Chinese continue to develop industrially will help to increase the return on invested capital and improve shareholder value at Rio.

Industry Outlook

As a general rule the cyclical nature of the commodities market can make investing in mining firms a risky endeavor. In the last quarter of 2015 China began to experience a serious glut in their steel and coal industries. Over-saturated markets have led officials to announce a cut in crude steel production within the nation by 100-150 million tons. This announcement came in late January 2016, prompting investors and analysts alike to consider that the boom in China's market may be reaching its peak. With China showing no signs of slowing down its industrial construction and renovation projects, the country will likely remain a large consumer of many of the products Rio Tinto

brings to market. One of the major concerns for all mining companies in the coming year will be the estimated drop in value for iron ore. From the February 2016 average, analysts at Morningstar and BATS have estimated a decline in value by the end of 2020 of 35%. Pure-play operators and many of the low-volume, higher-cost miners will be unable to cope with the steep change in price. If not for Rio's extensively diverse portfolio of assets, the company too would be in a dangerous place. Thanks to investments in technology and distribution, Rio should be able to continue producing iron ore at the lowest cost in the industry and thus push through the price cuts this year, and steadily increase market share as competitors are forced to close their doors or sell.

Business Model

Rio's primary objective is to create and preserve value by investing in long-life, low-cost expandable operations. A commitment to a high standard of sustainable development helps Rio maintain value creating operations through each phase of the development cycle. From exploration all the way through to close-out and restoration, Rio prides itself on the lowest costs in the industry. The savings that Rio generates by performing business in this way are translated to the shareholder directly through the use of prudent balance sheet management and above-average dividends for the industry. Rio utilizes a highly diversified portfolio of assets with low operating costs in order to reduce risk and increase profit. The firm handles many facets of the production of finished goods not only the mining of resources, this increases value to the customer and the shareholder. Finally, Rio tends to promote from within when looking for new executive officers. Although they have looked to other talent pools in the past, employee job security and a true sense of opportunity for career growth are key elements of the business model.

Mine of the Future

Launched in 2008, the Mine of the Future project is an extensive company-wide initiative to expand operations, reduce costs, and improve safety as well as environmental impact. The project includes new additions to the already impressive suite of assets Rio has established in the past 10 years. Since 2006 the

company has tripled its asset base. State of the art command centers, like the one already built in Perth, Australia, are allowing Rio to control dozens of mines and all of their operations from one location. The Mine of the Future project boasts impressive control over the rail systems, automated mining equipment, transportation methods and even the port loading mechanisms. The technology being developed by Rio is impressive to say the least, and unlike their competitors Rio has proven that it can remain consistent in delivering the most relevant technology to the field, faster and at lower cost than most operators. The benefit to the shareholder can be derived from multiple facets of the MOF project. Rio continues to cut costs as effectively as possible, this is reflected in the company's financials. The improvement of extraction machinery and automation allows the company to more rapidly meet demand and prepare for changes in the market place. The updated control capabilities of one central command location are allowing Rio to greatly improve the distribution system and reduce costs further. It is important to note that Australia is only one of the testing grounds for new technology within the firm. Rio plans on unveiling and rolling out new technology along with these improvements in the next 5 years as a part of both the MOF project and their social responsibility initiative.

Product Differentiation

As discussed above the company provides investors with the most varied portfolio of any mining operator. Rio Tinto uses a low-cost, high differentiation strategy to reduce risk and maximize exposure to as many markets as possible. By doing business in this way for an extended period of time, Rio has been able to build a corporate structure that extends to the furthest reaches of the planet and allows the firm to benefit from the relationships and experience that come along.

Financials

Rio Tinto has one of the most effective management teams in business let alone the mining industry. Analysts from many institutions regard the management of Rio as top-notch. The balance sheet and cost control methods utilized by the firm have proven over the past decade to benefit shareholder value. In comparison to industry averages Rio has been

able to maintain net property, plant, and equipment assets as a percentage of revenues far above levels anywhere else in the industry. Last year Rio had 1.75 times revenue in assets, most of which are operated at the lowest cost in the industry. The company has also consistently delivered value to the shareholders with the highest dividend payouts in the industry over the past decade. In the first quarter of 2016 Rio announced a cut in dividends, the amount has yet to be disclosed, however this is likely a response to the sudden shift in the Chinese market. The benefits of an impressive management team, below-average costs, and above-average assets will allow Rio to continue to provide increased value to the shareholder in the coming year.

Conclusion

To summarize, the changes in the marketplace occurring at the end of 2015 and spilling into 2016 will vastly reshape the mining business. With China downsizing its production of steel the country will have to look elsewhere for building materials in the coming months. Troubles such as the legal battle competitor Vale is facing in Brazil will also allow Rio to increase market share and potentially further cut costs by expanding operations. Since the beginning of 2015 RIO has rallied past its 50 day moving average with surprising pace and looks to be steadily moving toward to the 200-day moving average. This can be attributed to the firms' impressive and diverse asset base, which has tripled since 2006, along with other factors. Low-cost, high-differentiation has allowed the firm to reduce the cyclical risk of the commodity market and spread the reach of its operations all around the globe. New technology, along with industry leading safety and automation measures are allowing the company to continue to reduce costs to levels no competitor can match. Based on the analysis performed and the valuation using the CAPM model, I am recommending a BUY on RIO.

Rio Tinto plc (RIO)

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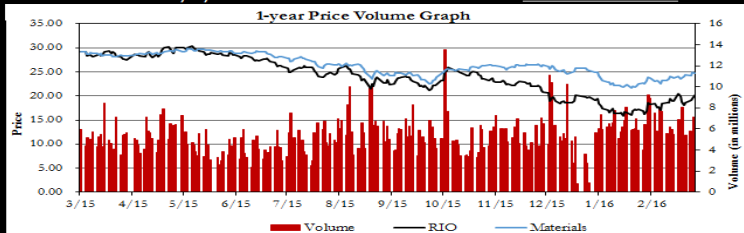
BULLISH

Analysis by Patrick Donovan
3/6/2016

Current Price: **\$30.32**
Divident Yield: **7.5%**

Intrinsic Value: **\$29.43**
Target Price: **\$35.76**

Target 1 year Return: **25.43%**
Probability of Price Increase: **89.2%**

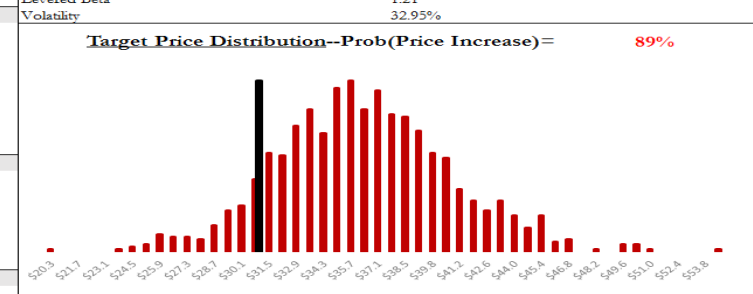


Description	
Rio Tinto plc, a mining and metals company, finds, mines, and processes mineral resources.	
General Information	
Sector	Materials
Industry	Metals and Mining
Last Guidance	November 3, 2015
Next earnings date	April 19, 2016
Estimated Country Risk Premium	7.37%
Effective Tax rate	27%
Effective Operating Tax rate	28%

Market Data	
Market Capitalization	\$38,308.38
Daily volume (mil)	7.32
Shares outstanding (mil)	1798.52
Diluted shares outstanding (mil)	1824.70
% shares held by institutions	58%
% shares held by investments Managers	52%
% shares held by hedge funds	-1%
% shares held by insiders	0.02%
Short interest	0.00%
Days to cover short interest	0.00
52 week high	\$30.72
52-week low	\$15.57
Levered Beta	1.21
Volatility	32.95%

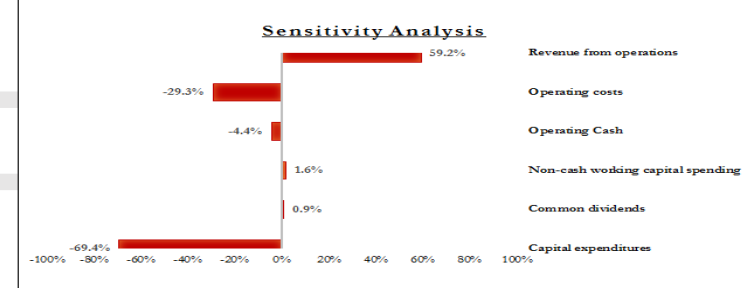
Past Earning Surprises		
Quarter ending	Revenue	EBITDA
12/31/2014	N/A	-55.98%
3/31/2015	N/A	N/A
6/30/2015	N/A	N/A
9/30/2015	N/A	N/A
12/31/2015	N/A	N/A
Mean	#DIV/0!	-55.98%
Standard error	#DIV/0!	#DIV/0!

Peers	
Freeport-McMoRan Inc.	



Management	
Walsh, Sam	Chief Executive Officer, Exe
Lynch, Christopher	Chief Financial Officer, Exe
Valentine, Debra	Group Executive of Legal & R
Harding, Andrew	Chief Executive of Iron Ore
Davies, Alan	Chief Executive of Diamonds
Jacques, Jean-Sebastien	Chief Executive Officer of C

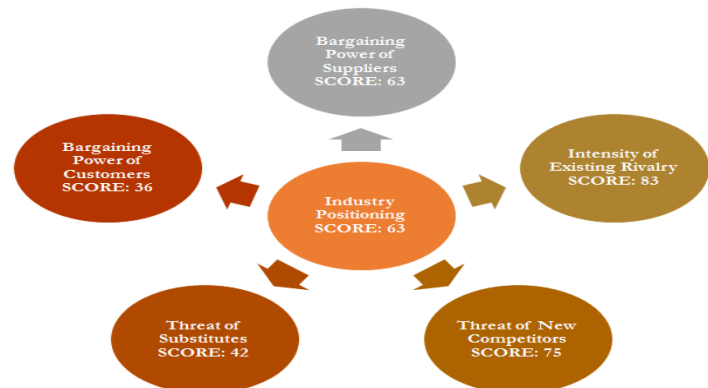
Total compensations growth		Total return to shareholders	
Walsh, Sam	4.32% per annum over 6y	Freeport-McMoRan Inc.	3.89% per annum over 6y
Lynch, Christopher	91.14% per annum over 4y		1.74% per annum over 4y
Valentine, Debra	6.3% per annum over 6y		3.89% per annum over 6y
Harding, Andrew	13.82% per annum over 6y		3.89% per annum over 6y
Davies, Alan	38.4% per annum over 4y		1.74% per annum over 4y
Jacques, Jean-Sebastien	38.27% per annum over 2y		-19.68% per annum over 2y



Profitability		ROIC		NOPAT Margin		Revenue/Invested Capital		ROE		Adjusted net margin		Revenue/Adjusted Book Value	
RIO (LTM)	3.6%	RIO (5 years historical average)	15.89%	Industry (LTM)	4.77%		0.29		17.76%		11%		0.32
ROIC	13%		22.32%		6.9%		0.71		5.67%		0.71		0.82
NOPAT Margin	13%		22.32%		6.9%		0.71		5.67%		0.71		0.82
Revenue/Invested Capital	0.29		0.71		0.70		0.29		5.2%		11%		0.32
ROE	3.5%		17.76%		5.67%		0.71		5.2%		0.71		0.82
Adjusted net margin	11%		21.67%		5.2%		0.71		5.2%		0.71		0.82
Revenue/Adjusted Book Value	0.32		0.82		1.09		0.32		1.09		0.32		0.82

Invested Funds		Capital Structure	
Total Cash/Total Capital	8.8%	Total Debt/Common Equity (LTM)	0.61
Estimated Operating Cash/Total Capital	6.0%	Cost of Existing Debt	5.25%
Non-cash working Capital/Total Capital	-1.6%	Estimated Cost of new Borrowing	1.32%
Invested Capital/Total Capital	98.2%	CGFS Risk Rating	5.25%
		Unlevered Beta (LTM)	3.08%
		WACC	5.25%

Porter's 5 forces (scores are out of 100)



Revenue growth	
Period	Revenue growth
Base Year	-26.9%
12/31/2016	3.0%
12/31/2017	3.0%
12/31/2018	3.0%
12/31/2019	3.0%
12/31/2020	3.0%
12/31/2021	3.0%
12/31/2022	3.0%
12/31/2023	3.0%
12/31/2024	3.0%
12/31/2025	3.0%
Continuing Period	3.0%

Valuation	
NOPAT margin	12.5%
ROIC/WACC	0.38
	0.58
	0.59
	0.61
	0.64
	0.66
	0.69
	0.73
	0.77
	0.80
	0.84
	0.88

Invested Capital		Net Claims	
Period	Invested Capital		Price per share
Base Year	\$71,727.84		\$28.84
1/0/1900	\$86,955.06		\$35.55
1/0/1900	\$119,560.52		\$40.09
1/0/1900	\$123,661.96		\$44.65
1/0/1900	\$120,473.41		\$49.22
1/0/1900	\$106,916.70		\$53.80
1/0/1900	\$112,299.00		\$58.40
1/0/1900	\$117,334.13		\$63.01
1/0/1900	\$122,022.52		\$67.66
1/0/1900	\$126,364.56		\$72.27
1/0/1900	\$130,360.63		\$76.79

Valuation	
Net Claims	\$19,802.63
	\$13,891.85
	\$11,732.38
	\$9,241.65
	\$6,401.48
	\$3,192.84
	-\$460.89
	-\$4,638.70
	-\$9,407.51
	-\$14,714.06
	-\$20,558.76