Fitch Affirms Vale S.A. at 'BBB'; Outlook Stable

Fitch Ratings - New York - 17 Nov 2022: Fitch Ratings has affirmed Vale S.A.'s Long-Term Foreign and Local Currency Issuer Default Ratings at 'BBB'. In addition, Fitch has affirmed the senior unsecured debt ratings of Vale Overseas Limited and Vale Canada Limited at 'BBB', and has affirmed Vale's national scale rating at 'AAA (bra)'. The Rating Outlook for all ratings remains Stable.

Vale's ratings reflect its leading cost position and global production scale, but are constrained by its concentrated production in iron ore and exposure to Brazil (BB-/Stable), which represents 90% of its EBITDA. The Foreign Currency rating is not constrained by Brazil's country ceiling, as EBITDA generation from its North Atlantic business should continue to cover its consolidated hard-currency interest expense by 1.0x. Fitch expects Vale to maintain a low leverage profile and to generate strong cash flow, even as prices normalize.

Vale Overseas Limited and Vale Canada Limited are wholly owned subsidiaries of Vale. Due to the strong legal, operational and strategic linkage between these entities and Vale, their bonds are directly linked to Vale's rating per Fitch's "Parent and Subsidiary Rating Criteria."

Key Rating Drivers

**Solid Business Profile:** Vale is a leading producer of seaborne iron ore with one of the lowest industry cost positions. Its market position is considered sustainable due to its abundant reserves and the competitiveness of its Northern System. Vale's business strength as a low-cost producer is enhanced by the high grade of its iron ore, which allows the company to receive market premiums; these factors largely offset the transportation advantage Australian producers enjoy in delivering ore to China. Although more than 90% of the company's EBITDA comes from iron ore, Vale also has material operations in copper and nickel; these operations annually generate more than USD2.5 billion of EBITDA.

**Strong Capital Structure:** Vale's strong business position is matched by an equally strong capital structure. The company had USD5.6 billion of Fitch adjusted net debt at the end of September. Vale generated USD24 billion of EBITDA during the LTM ended Sept. 30, 2022. The company's total debt/EBITDA ratio was 0.4x while its net debt/EBITDA ratio was 0.2x. Fitch projects that Vale will end 2022 with a 0.2x net leverage ratio.

Fitch has revised its treatment of the USD2.7 billion participative shareholder debentures from debt to other liabilities, as it better reflects Vale's operating cost nature as part of royalties included in EBITDA. Despite dividends, share repurchases and payments of interest on capital, Fitch expects Vale's net debt to be above USD5 billion by the end of 2024, which would result in longer term net leverage ratios ranging between 0.3x and 0.5x depending on iron ore prices.
Robust Cash Flow Generation: A constrained supply, due to the Russian invasion of Ukraine, weather-related disruptions in Brazil and Australia, and still resilient Chinese demand, where infrastructure stimulus has largely offset the decline of the property sector, have kept iron ore prices relatively elevated. Cash Flow from Operations is expected to remain high in 2023 at around USD13.7 billion before capex and dividend distributions. This figure assumes iron ore prices average USD85 per ton, EBITDA is USD17 billion, and capital expenditures of USD6.0 billion, allowing for higher investments in new projects.

Brumadinho and Mariana: The Integral Reparations Agreement with the authorities of Minas Gerais for damages caused by the collapse of the company's tailings dam at Brumadinho is factored into the company's rating. Provisions remain at USD3.2 billion that reach USD6.7 billion when including de-characterization by Sept. 30 2022. About USD2.1 billion of disbursements, including provisions and incurred expenses related to Brumadinho are expected in 2023. In addition, almost USD1.8 billion of disbursements related to Samarco are expected in 2023, out of the USD3.1 billion provisioned by Sept. 30 2022. A definitive agreement remains under negotiation.

Country Ceiling Assessment: Vale's Foreign Currency IDR is not constrained by a country ceiling. Fitch estimates the EBITDA generated from its nickel North Atlantic Division has and will continue to cover its consolidated hard-currency interest expense by at least 1.0x; therefore, per Fitch's "Non-Financial Corporates Exceeding the Country Ceiling Rating Criteria," its applicable country ceiling is that of Canada.

However, given the company's public announcement that it intends to sell a portion of its Canadian base metals business, the applicable country ceiling may shift from Canada (AAA) to Brazil (BB). That would occur if efforts to boost EBITDA generated from the North Atlantic Division fall short from the coverage of 1.0x of hard-currency consolidated interest expense on a sustainable basis. In that case, Vale's rating would be capped to three notches above Brazil's country ceiling, as the company is expected to maintain hard-currency cash balance abroad, 50% of EBITDA from exports, and committed credit lines that are greater than 1.5x its hard-currency external debt service for at least two years.

Vale has an ESG Relevance Score of '4' for Employee Wellbeing (SEW), given the remaining work required to improve dam monitoring and upstream dams de-characterization. By YE 2022, 18 de-characterization projects are expected to remain from the 30 identified since the Brumadinho event. Vale expects that none of the dams will be at a critical emergency level (Level 3) and to eliminate 60% of the dams by 2025. This has a negative impact on the credit profile, and is relevant to the ratings in conjunction with other factors.

Derivation Summary

Vale is the leading low-cost iron ore producer globally, and one of the top three global mining companies, along with BHP Plc (A/Stable) and Rio Tinto Plc (A/Stable). Vale is also comparable to Anglo American (BBB/Positive).

Vale's iron ore operations are consistently positioned in the first quartile of costs. Rio Tinto moves between first and second quartile of the iron ore cost curve. BHP's assets are placed in the first, second
(iron ore) and third (copper) quartile of the relevant business cost curves. The majority of Anglo American's assets sit in the second or third quartile of their relevant global business cost curves. Rio Tinto and BHP's iron ore businesses are located closer to China, which further differentiates the ratings from Vale's.

Vale is highly concentrated in iron ore (more than 90% of EBITDA), but also has significant contribution from copper, nickel and other minerals. BHP has more balanced product diversification than its peers with material earnings contributions from iron ore and copper and lower earnings contributions from coal and conventional petroleum assets over the medium term. In comparison, Rio Tinto derives more than two-thirds of its EBITDA from iron ore, including the Canadian pellets business, with the remainder primarily coming from aluminium and copper.

Anglo American's portfolio of copper, platinum group metals, diamonds, nickel, high-quality iron ore, and premium metallurgical coal, among others, addresses a broader range of end-markets and exhibits more balanced earnings contributions from individual commodities than those of major peers Vale, Rio Tinto and BHP Group.

Most of the iron ore and copper for Vale comes from Brazil and its nickel from Canada. BHP and Rio Tinto derive a large majority of earnings from assets in OECD countries. BHP and Rio Tinto source most of its iron ore from Australia, with Rio Tinto producing more lump. A large proportion of copper for both companies comes from the Escondida mine in Chile (BHP: 57.5% ownership; Rio Tinto: 30%). Mongolia, where Rio Tinto's large greenfield project Oyu Tolgoi is located, is a more challenging mining jurisdiction as would be Guinea where the Simandou project is located and is currently being considered for development by Rio Tinto and its consortium partners.

Similar to Vale, Anglo American has material exposure to more challenging operating environments than those of BHP and Rio Tinto, like Brazil (BB-/Stable), characterized by increased scrutiny of mining companies linked to governance of operating practices following the Mariana and Brumadinho dam disasters, and South Africa (BB-/Stable), characterized by an active, unionized workforce, comparatively high wage and electricity cost inflation, and electricity shortages.

Vale, Rio Tinto and BHP have similar financial-profile characteristics, with EBITDA gross leverage below 1.0x and EBITDA net leverage below 0.6x over the medium term. We expect these companies to continue to pay significant dividends while maintaining a conservative balance sheet. Anglo American has slightly higher leverage than these companies.

**Key Assumptions**

**Fitch's Key Assumptions Within the Rating Case for the Issuer:**

--Benchmark iron ore prices average USD115/ton in 2022, USD85/ton in 2023, USD75/ton in 2024;

--Iron ore fines and pellets volumes sold of 310 million tons in 2022, 360 million tons in 2023 and 400 million tons in 2024;

--Copper prices of USD8,700/ton in 2022, USD8,000/ton in 2023 and USD7,500/ton in 2024;
Capex of USD5.7 billion in 2022, USD6.0 billion in 2023 and USD6.5 billion in 2024;

Dividend distribution at Vale's policy of 30% of EBITDA less sustaining capex. Forecast also includes USD4 billion discretionary special dividend in 2023;

No debt funded acquisitions;

Participative shareholder debentures are considered an operating cost and part of other liabilities instead of debt.

RATING SENSITIVITIES

Additional progress in dam decommissioning;

Increased output of iron ore from dry processing;

Consistent net debt/EBITDA ratio below 1.0x.

Factors that could, individually or collectively, lead to negative rating action/downgrade:

Cash flow from its North Atlantic business fails to cover its annual consolidated hard-currency interest expense by 1.0x and a downgrade of Brazil's country ceiling.

Net debt/EBITDA above 2.0x on a sustained basis.

Best/Worst Case Rating Scenario

International scale credit ratings of Non-Financial Corporate issuers have a best-case rating upgrade scenario (defined as the 99th percentile of rating transitions, measured in a positive direction) of three notches over a three-year rating horizon; and a worst-case rating downgrade scenario (defined as the 99th percentile of rating transitions, measured in a negative direction) of four notches over three years. The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Best- and worst-case scenario credit ratings are based on historical performance. For more information about the methodology used to determine sector-specific best- and worst-case scenario credit ratings, visit https://www.fitchratings.com/site/re/10111579.

Liquidity and Debt Structure

Ample Liquidity: Vale ended Sept. 30, 2022 with USD5.2 billion of cash and marketable securities, USD5.0 billion of credit lines and only USD11 billion of Fitch adjusted total debt and equity credit, including USD550 million of short-term debt payments till 2023. The company further enhanced its liquidity and debt maturity profile in June when it repurchased USD1.3 billion of its bonds. More than half of the company's debt matures in 2030 or later.

Issuer Profile

Vale is one of the world's leading mining companies, along with Rio Tinto and BHP Billiton. It is the
world’s largest producer of iron ore and iron ore pellets and one of the largest producers of nickel. The company is present in approximately 30 countries.

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

ESG Considerations

Vale S.A. has an ESG Relevance Score of ‘4’ for Employee Wellbeing due to the remaining work required to improve dam monitoring and upstream dams de-characterization. By YE 2022, 18 de-characterization projects are expected to remain from the 30 identified in 2019. Dams at critical levels are expected to be de-characterized by 2025. This has a negative impact on the credit profile, and is relevant to the rating[s] in conjunction with other factors.

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of ‘3’. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch’s ESG Relevance Scores, visit www.fitchratings.com/esg.

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Applicable Criteria

Corporate Rating Criteria (pub.28 Oct 2022) (including rating assumption sensitivity)
National Scale Rating Criteria (pub.22 Dec 2020)
Non-Financial Corporates Exceeding the Country Ceiling Rating Criteria (pub.08 Jan 2021)
Parent and Subsidiary Linkage Rating Criteria (pub.01 Dec 2021)
Sector Navigators: Addendum to the Corporate Rating Criteria (pub.28 Oct 2022)

Applicable Models

Numbers in parentheses accompanying applicable model(s) contain hyperlinks to criteria providing description of model(s).

Corporate Monitoring & Forecasting Model (COMFORT Model), v8.1.0 (1)

Additional Disclosures

Solicitation Status

Endorsement Status

Vale Canada Limited EU Endorsed, UK Endorsed
Vale Overseas Limited EU Endorsed, UK Endorsed
Vale S.A. EU Endorsed, UK Endorsed

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