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Research Update:

Votorantim S.A. 'BB+' Global And 'brAA+' National Scale Ratings Affirmed; Outlook Negative On Sovereign Risk Influence

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Overview

- Brazil-based conglomerate Votorantim S.A. has been performing in accordance to our expectations, posting net debt to EBITDA at about 3.5x and maintaining a manageable maturity profile. This was possible given the group's efficient operations and business/geographic diversification, which tempers the effect of the weak cement operations in Brazil.
- We now expect the group's cash flow generation to benefit from lower investment needs, given the completion of its heavy capital expenditures (capex) cycle, and from favorable business conditions for zinc and cement in the U.S.
- We're affirming our 'BB+' global scale and 'brAA+' national scale corporate credit ratings on Votorantim. Given our view that Votorantim Cimentos S.A. is a core subsidiary of the group, we're also affirming the 'BB+'
- The negative outlook on Votorantim reflects the one on Brazil. The group's high sensitivity to domestic economy (mainly through its cement and aluminum units) and its exposure to the banking business, which may create a contingent liability of high severity under a sovereign default scenario, currently constrains Votorantim's ratings to one notch above the foreign currency rating on Brazil.

Rating Action

On March 27, 2017, S&P Global Ratings affirmed its 'BB+' global scale and its 'brAA+' Brazilian national scale corporate credit ratings on Votorantim S.A. (Votorantim). At the same time, we affirmed our 'BB+' global scale corporate credit rating on Votorantim Cimentos S.A. (VC) because we consider the cement division as the group's core subsidiary, with both entities bearing the same default risk. We also kept Votorantim's stand-alone credit profile (SACP) at 'bbb' and revised VC's SACP to 'bb' from 'bb+'. The outlook on the entities remains negative. In addition, we affirmed the issue-level ratings on the debt issued or guaranteed by Votorantim and VC. The recovery rating on this debt remains at '3', indicating our expectation that lenders would receive meaningful (65%) recovery of their principal in the event of a payment default.

Rationale

The ratings affirmation reflects the group's prudent risk management, sound operations, and business diversification, which allow it to maintain net leverage at about 3.5x and a solid liquidity position even amid Brazil's deep recession, the significant downturn in the domestic cement industry, and the completion of Votorantim's heavy investment cycle.

During the past two years, the group invested approximately R$3 billion in expansion efforts, about 80% of which was related to VC targeting projects in the US, Turkey, Bolivia and Brazil. The expansion at VC coincided with a sharp downturn in its operations, which resulted in a considerable increase in VC's idle capacity (utilization rate in Brazil of 50%-55% in 2016, compared with about 80% in 2014) and a significant drop in margins. We view VC's EBITDA in Brazil at less than R$1 billion in 2016, compared with R$1.9 billion in 2015 and R$2.7 billion in 2014. The weak cash flow generation in Brazil was, nevertheless, mitigated by stronger operations in the U.S. that we expect to contribute with about R$850 million in EBITDA, representing around 35% of VC's 2016 consolidated figures, up from R$700 million in 2015 and R$300 million in 2014.

Votorantim's metals division also helped mitigate the effect of Brazil's weak economy. Zinc prices have risen and the metals unit has been posting solid operationg results. Finally, the combination of Votorantim's long steel business in Brazil with that of ArcelorMittal Brasil (not rated) slightly improved the group's leverage because EBITDA contribution for this business has been negative recently and it represented about 5% of net debt.

For 2017 and 2018, we expect Votorantim to continue facing challenging conditions in Brazil, but a mild economic recovery and resilient metals prices should improve medium-term prospects. Reduced capital expenditures should also result in higher free cash flow generation. Our base-case scenario for the group for the next two years assumes the following factors:

- Although we expect some minor growth in Brazil's GDP (0.9%), we incorporate a 5%-7% drop in cement volumes in Brazil for 2017 (after the market contraction of about 21% during 2015 and 2016), given the still slow recovery in infrastructure projects and housing markets combined with a high unemployment rate for the year. With a 2% GDP growth in 2018, we're assuming that volumes could return to 2016 levels.
- We expect the company to struggle to increase prices in Brazil and surpass inflation costs. Also, given the high idle capacity, we're forecasting cement EBITDA margins in Brazil of 10%-15%, which would result in less than R$600 million in EBITDA for 2017 and R$800 million for 2018.
- Disappointing results from the Brazilian cement operations should be tempered by better results in the group's operations in North America, Africa, and Europe. We understand that North America operations could generate R$850 million in EBITDA in 2017 and more than R$900 million in

2018, and Europe/Africa/Asia operations about R$520 million in EBITDA in 2017 and R$650 million in 2018.
- We assume zinc prices at $2,400-$2,500 per metric ton and aluminum prices at $1,600-1,650 per metric ton.
- Average exchange rate of R$3.30 per $1.00 in 2017 and R$3.38 per $1.00 in 2018.
- The fact that the steel business will no longer be consolidated in Votorantim's financial statements, coupled with the temporary suspension of nickel operations, should contribute to about a 0.2x reduction in net leverage, given the EBITDA shortfall at these businesses. We expect a fairly stable performance in the group's Colombian and Argentinean steel operations due to each country's growth prospects and a relatively limited competition from imports in Argentina.
- A 2.5% decline for the group's consolidated revenue (in Brazilian reais) in 2017, and about 3% growth in 2018.
- Consolidated capex of R$3.5 billion in 2017 and R$2.9 billion in 2018, about R$2 billion of which is related to non-expansion needs. Expansion capital spending would go to the completion of the Charlevoix cement plant in the US, extension of the zinc mines work life, and the wind farms in Piuaí, Brazil.

As a result, we arrive at the following ratios for 2017 and 2018:
- VC's consolidated EBITDA margins of 17%-18% in 2017 and 19%-20% in 2018;
- Votorantim's consolidated EBITDA margins of 17%-18% in 2017 and 20%-21% in 2018;
- VC's net debt to EBITDA at 5.5x-6.0x in 2017 and 4.5x-5.0x in 2018;
- Votorantim's net debt to EBITDA at 3.0x-3.5x in 2017 and 2.5x-3.0x in 2018;
- VC's funds from operations (FFO) to net debt at 7%-10% in 2017 and 10%-13% in 2018; and
- Votorantim's FFO to net debt at 20%-23% in 2017 and 24%-27% in 2018.

We believe that the Votorantim group has efficient operations, which are in line with those of its global peers, sizable capacity, dominant position in several markets (mainly cement), high brand recognition, as well as a prudent risk management. The latter factor reflects the group's debt refinancing and sale of non-core assets to preserve its solid liquidity position. Also, in our view, Votorantim's revenue base is diverse by geography and segments, which should continue to mitigate the effect of the Brazilian market's downturn, especially the steep drop in cement sales.

VC accounts for about 50% of the group's EBITDA. During 2016, VC's margins were reduced due to its 45%-50% idle capacity and a heavier competition in the southern region and in the north by players with more aggressive pricing policies (aiming to maintain volumes despite lower profitability). All of these factors have led us to revise VC's SACP to 'bb' from 'bb+'.

Through its metals division (about 30% of the group's EBITDA), Votorantim is the fourth-largest zinc concentrate producer in the world, with a robust asset base in Peru and Brazil. Remaining cash flow generation comes from aluminum and energy sales in Brazil and steel operations in Colombia and Argentina. In addition, Votorantim holds a 29.4% equity stake in the pulp-producer Fibria Celulose S.A.. (BBB-/Negative/--), a 50% equity in the concentrated orange-juice producer Citrosuco (not rated), and a 50% equity in a bank in Banco Votorantim S.A. (BB/Negative/B). Those assets are not consolidated under Votorantim's financial statements and we understand they add financial flexibility to the group, as they could be monetized, if necessary, and bolster its financial risk profile. So in order to account for their value under our rating analysis (since they are not incorporated into our business or financial profiles), we assign the positive capital structure modifier.

When analyzing Votorantim, we incorporate in our financial analysis and forecast a potential contingent liability from Banco Votorantim (through Votorantim Finanças S.A.) that may spill over to the holding level. This results from our understanding of the Brazil's Law 9,447/1997, which states that the individuals or legal entities exercising control over financial institutions subject to intervention or liquidation are jointly and severally liable with the officers and managers of those entities for the amount of their unpaid liabilities.

While the responsibility of a controlling shareholder to support the bank isn't equivalent to a financial guarantee (it does not guarantee timely payment), it's a legal obligation ultimately enforceable via a potential freeze on assets. In our view, this creates a very strong incentive to capitalize the bank when needed. So when a corporate group owns or controls a bank, we seek to assess the maximum risk that the latter could represent for the group, based on the bank's credit profile, size, and ownership profile. The size of such potential support would increase as the bank's SACP deteriorates. Our analysis considers Banco Votorantim's 'bb-' SACP and the Votorantim group's shared control of the bank with Banco do Brasil S.A. (BdB; BB/Negative/B).

Ratings above the sovereign

To assess the possibility for Votorantim to have a higher rating than the one on the sovereign, we apply a stress test to the group's industrial operations and include the increased potential liability that could spill over from the bank to its ultimate corporate parent. We calculate the potential loss stemming from the bank based on the hypothetical sovereign default scenario determined in our criteria. We then adjust this initial calculation of potential support from the corporate based on our expectation of regulatory forbearance that would, for example, relax regulatory capital requirements in times of stress. This reflects our understanding that the financial regulator is likely to permit banks to continue their operations as a going-concern after absorption of losses to prevent their failure.

Our main assumptions for the industrial business in a stress scenario include:
- A 10% contraction in Brazil's GDP;
- No price increases for cement, while metals and steel prices remain at

historical lows;
- No stress to the group's foreign operations, including cement operations in North America and mining in Peru, which would benefit from the Brazilian real's depreciation;
- A doubling of interest rates, raising borrowing expenses and floating-rate debt;
- A 50% depreciation of the real, which would double debt service costs of foreign currency-denominated debt, but would bolster the group's exports and international revenue;
- A 70% haircut in cash holdings and investments in Brazilian government securities;
- No access to capital markets or to domestic or international bank loans, except for committed lines that don't have "material adverse change" clauses; and
- A drop in capital spending to maintenance levels and no dividend payout from Votorantim, given sizable losses.

We believe that the group would have sufficient cash flow generation to cover its needs under our simulated sovereign stress scenario. Votorantim generates cash flow in hard-currency through foreign operations, holds cash position outside Brazil, and has availability under a $1.2 billion committed facility. In addition, our stress scenario incorporates the expectation of regulatory forbearance for the banking sector in Brazil which could reduce the magnitude of potential support to the banking operation.

Liquidity

We assess Votorantim's liquidity as strong because we expect liquidity sources to be more than 2.0x than its uses in the next two years. The group has managed to maintain healthy cash levels even during a heavy investment cycle and weaker operating results, particularly in the cement business stemming from Brazil's recession. We also view Votorantim as having a well-established relationship with banks and capital markets, and a prudent risk management, as seen in the planned debt refinancing activities and the sale of non-core assets to maintain a strong liquidity.

Principal Liquidity Sources:
- Cash and cash equivalents of R$8.7 billion at the end of September 2016;
- Full availability under Votorantim's revolving credit facility of $1.2 billion due 2020; and
- Our funds from operations (FFO) assumption of R$3.3 billion – R$3.5 billion in 2017 and R$4 billion - R$4.2 billion in 2018.

Principal Liquidity Uses:
- Manageable short-term debt maturities of R$1.5 billion as of September 2016;and
- Capital spending of R$3.5 billion in 2017 and R$2.9 billion in 2018, according to our assumptions.

Votorantim is currently subject to financial covenants on its BNDES loans (about R$2 billion), including net debt-to-EBITDA below 4x. In the event of a covenant breach, Votorantim may include real assets or a bank guarantee as collateral to the loans within 90 days; if the group is unable to pledge the guarantees, the debt payment might be accelerated. According to our forecast, Votorantim would have a cushion over the covenant calculation equivalent to 20% in 2017 and about 35% in 2018.

Outlook

The negative outlook on Votorantim reflects the one on Brazil. The group's high sensitivity to domestic economy (mainly through its cement and aluminum units) and its exposure to the banking business, which may create a contingent liability of high severity under a sovereign default scenario, currently constrains the ratings on Votorantim to one notch higher than the foreign currency rating on Brazil (BB/Negative/B). Our ratings on VC mirror those on its parent, because we consider the cement division as the group's core subsidiary, with both entities bearing the same default risk.

Downside scenario

Considering no changes to Votorantim's portfolio of assets, a downgrade will occur if we were to downgrade Brazil. Furthermore, we may lower the ratings in the next 12-18 months if the group's liquidity weakens sharply, particularly from a lower availability on the outstanding committed credit line and cash held abroad or as a result of a further slowdown in the Brazilian economy, reducing domestic sales volumes and increasing price pressures through lower utilization rates. Weaker liquidity may impair the group's ability to pass our hypothetical stress scenario of a sovereign default. Downside risks may also come from unexpected obligations from the bank.

In terms of Votorantim's stand-alone credit profile (SACP), we believe the main driver for a downside case over the next 12-18 months would be related to the group's leverage. If we observe that the net debt-to-EBITDA ratio is consistently above 4x, we could revise down the SACP. VC's SACP movements would also be related to financial risk, especially if we don't see the company adopting countercyclical measures and/or posting operational improvements to reach the net debt-to-EBITDA ratio below 5x.

Upside scenario

At this point, an upgrade of Votorantim is dependent on the same rating action on Brazil, given the current cap at one notch above sovereign's. An upgrade would also require the group to maintain its strong liquidity, prudent risk management, and a disciplined financial policy to reach its debt reduction goals after a significant expansion cycle. Any upside could also follow a lower exposure to the banking business, which could prompt us to increase the maximum rating differential from the sovereign to two notches from one.

Any upside to Votorantim's SACP is also somewhat limited today. Nevertheless, it could follow a sustained free operating cash flow generation (higher than 15% of net debt), net debt-to-EBITDA consistently at about 2.5x, and FFO to net debt above 30%. An upward revision in VC's SACP would reflect the subsidiary's net debt-to-EBITDA ratio consistently below 4.0x and FFO to net debt above 20%.

Ratings Score Snapshot

Votorantim S.A.
Corporate Credit Rating
 Global Scale BB+/Negative/--
 National Scale brAA+/Negative/--

Business risk: Satisfactory
- Country risk: Intermediate
- Industry risk: Intermediate
- Competitive position: Satisfactory

Financial risk: Significant
- Cash flow/Leverage: Significant

Anchor: bbb-

Modifiers
- Diversification/Portfolio effect: Neutral (no impact)
- Capital structure: Positive (+1 notch)
- Liquidity: Strong (no impact)
- Financial policy: Neutral (no impact)
- Management and governance: Satisfactory (no impact)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: bbb

Votorantim Cimentos S.A.
Corporate Credit Rating
 Global Scale BB+/Negative/--

Business risk: Satisfactory
- Country risk: Intermediate
- Industry risk: Intermediate
- Competitive position: Satisfactory
- Financial risk: Aggressive
- Cash flow/Leverage: Aggressive
- Anchor: bb

Modifiers
- Diversification/Portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)

- Liquidity: Strong (no impact)
- Financial policy: Neutral (no impact)
- Management and governance: Satisfactory (no impact)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: bb
Group credit profile: bb+
Group status: core

Recovery Analysis

Key analytical factors

S&P Global Ratings has recovery ratings on Votorantim group's senior unsecured notes. Our hypothetical scenario assumes a default to occur in 2022 after persistently weaker economic conditions in Brazil, which would deteriorate the company's ability to meet its financial obligations. This scenario would reduce revenue and EBITDA to such degree that Votorantim would be unable to service its debt and access capital markets to refinance debt maturities.

In a default, we expect Votorantim to reorganize rather than liquidate because of its leading position in various markets. We applied a 5x EBITDA multiple to an estimated distressed emergence EBITDA of R$1.4 billion, as well as a 50% haircut over the market capitalization of Votorantim's stake on Fibria, to derive our estimate of gross recovery value of about R$9.2 billion. We don't believe that such a precipitous decline in EBITDA is likely in the near term, based on the group's current exposure to risks. However, under our simulated default scenario, such a significant decline would likely stem from a sharp decline in demand for cement, considerably weaker metals prices, and weak working capital management. We then discount 5% of the gross value to account for administrative expenses to arrive at a net enterprise value (EV) of R$8.8 billion, which is finally distributed among each debt instrument, according to the structure of guarantees and subordination.

Simulated default assumptions

- Simulated year of default: 2022
- Jurisdiction: Brazil
- EBITDA at emergence for the group: R$1.4 billion (sum of assumed maintenance capex, interest and debt payments at the year of default)
- Implied EV multiple: 5x
- Estimated gross EV at default of R$9.2 billion, out of which R$2.1 billion is related to the sale of equity investments in listed companies (after application of a 50% haircut over current market capitalization).
- Pari-passu ranking of the group's existing and future senior unsecured debt
- We assume that most debt will be refinanced until the year of default

Simplified waterfall

- Gross EV: R$9.2 billion (out of which R$2.1 billion would come from the sale of Fibria's stake);
- Administrative expenses: 5%;
- Net value available to creditors: R$8.8 billion;
- Secured debt claims totaling R$940 million;
- Unsecured debt claims totaling R$5.8 billion;
- Recovery expectation: 65%
- We also acknowledge that the recovery expectation would be substantially lower if we were to assume that the bank subsidiary would also need to be recapitalized under a default scenario of Votorantim. So if we were to consider at least the level of the bank's current regulatory capital as a liability to the holding, ranking pari passu to its senior unsecured debt, we would still arrive at a recovery of '3', but with a lower percentage prospect.

*All debt amounts include six months of prepetition interest.

Related Criteria

- Criteria - Corporates - General: Recovery Rating Criteria For Speculative-Grade Corporate Issuers, Dec. 7, 2016
- General Criteria: S&P Global Ratings' National And Regional Scale Mapping Tables, June 01, 2016
- Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- General Criteria: National And Regional Scale Credit Ratings, Sept. 22, 2014
- Criteria - Corporates - Industrials: Key Credit Factors For The Metals And Mining Upstream Industry, Dec. 20, 2013
- Criteria - Corporates - Industrials: Key Credit Factors For The Building Materials Industry, Dec. 19, 2013
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- General Criteria: Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Methodology For Linking Short-Term And Long-Term Ratings For Corporate, Insurance, And Sovereign Issuers, May 07, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Criteria - Corporates - General: 2008 Corporate Criteria: Rating Each Issue, April 15, 2008

Ratings List

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Ratings Affirmed

Votorantim S.A.
 Corporate Credit Rating BB+/Negative/--
 Brazil National Scale brAA+/Negative/--
 Analytical Factors
 Local Currency bbb

Votorantim Cimentos S.A.
 Corporate Credit Rating BB+/Negative/--

Votorantim S.A.
 Senior Unsecured BB+

Companhia Brasileira de Aluminio
 Senior Unsecured BB+

St. Marys Cement Inc. (Canada)
 Senior Unsecured BB+

Votorantim Cimentos S.A.
 Senior Unsecured BB+


 To From
Votorantim Cimentos S.A.
 Analytical Factors
 Local Currency bb bb+

Ratings Affirmed

Votorantim S.A.
 Senior Unsecured
 Local Currency BB+
 Recovery Rating 3(65%)

Companhia Brasileira de Aluminio
 Senior Unsecured
 US$400 mil 4.75% sr unsecd nts due BB+
 06/17/2024
 Recovery Rating 3(65%)
 US$750 mil 6.75% sr nts due BB+
 04/05/2021
 Recovery Rating 3(65%)

St. Marys Cement Inc. (Canada)
 Senior Unsecured
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Local Currency BB+
Recovery Rating 3(60%)

Votorantim Cimentos S.A.
Senior Unsecured
EUR500 mil 3.50% nts due 07/13/2022 BB+
Recovery Rating 3(60%)
EUR650 mil 3.25% nts due 04/25/2021 BB+
Recovery Rating 3(60%)
US$1.25 bil 7.25% bnds due BB+
04/05/2041
Recovery Rating 3(60%)

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.globalcreditportal.com and at www.spcapitaliq.com. All ratings affected by this rating action can be found on the S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.