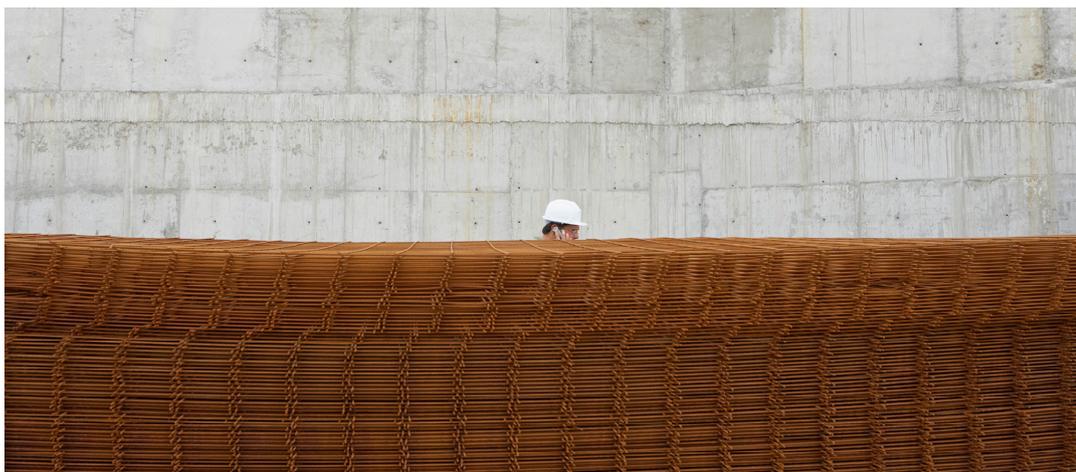


Industry Top Trends 2019

Building Materials

November 14, 2018



Key Takeaways

- **Ratings Outlook:** Rating trends across the industry are mostly stable, with an overall neutral bias. Europe shows a marginally negative bias mainly driven by relaxed financial discipline of some of the largest groups. Asia-Pacific (APAC) ratings trends improved during 2017 and 2018, and currently show a marginally positive bias. Following a period of rating changes in 2017 and 2018, in Latin America the outlook is generally stable.
- **Forecasts:** Credit ratios are likely to improve modestly overall. A rebound of energy inflation will likely limit any further progress in margins. In developed countries, we expect limited leverage improvement in 2019, as relaxed financial discipline should offset a still supportive economy. In developing regions, we expect companies to keep their commitment to gradually improve their leverage.
- **Assumptions:** We assume still supportive macroeconomic fundamentals in North America and continental Europe over 2019. We are more cautious regarding the U.K. In LatAm, we foresee sluggish sales growth and broadly stable margin. In APAC, we assume mild demand recovery and price stabilization.
- **Risks:** Relaxed financial discipline in developed markets and overcapacity and political risk in emerging markets are the main sector risks. Weakening political cohesion in continental Europe and the possibility of a hard Brexit could also impair business sentiment in those regions. We also believe that normalization of monetary policy in the U.S. and the eurozone may add volatility to financial markets, thus increasing refinancing risk.
- **Industry Trends:** In most healthy regions, namely the U.S. and Europe, we believe that companies will use cash flow to undertake growth opportunities or to return more funds to shareholders. We forecast continued market consolidation in developed markets, mainly involving small, regional manufacturers and distributors. In LatAm, overcapacity, expected sluggish volume growth, and some cost pressure will limit issuer growth prospects.

Authors

Renato Panichi
Milan
+39 02 7211 1215
renato.panichi
@spglobal.com

Thomas Nadramia
New York
+1 212 438 3944
thomas.nadramia
@spglobal.com

Alexandre Michel
Mexico City
+ 52155-50814520
alexandre.michel
@spglobal.com

Danny Huang
Hong Kong
+852 2532 8078
danny.huang
@spglobal.com

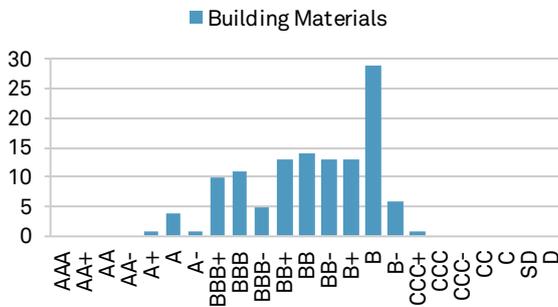
Pascal Segquier
Paris
+33 1 4075 2589
pascal.seguier
@spglobal.com

Ratings trends and outlook

Global Building Materials

Chart 1

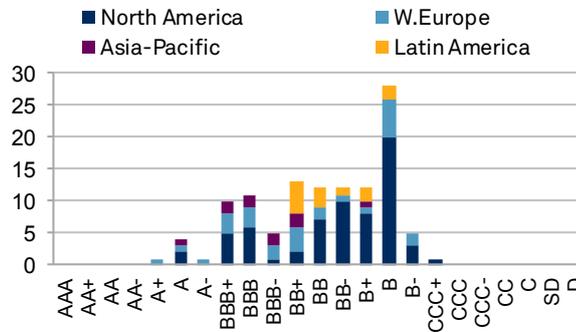
Ratings distribution



There are a high number of ratings in the 'B' category due to the large number of smaller highly leveraged issuers owned by financial sponsors.

Chart 2

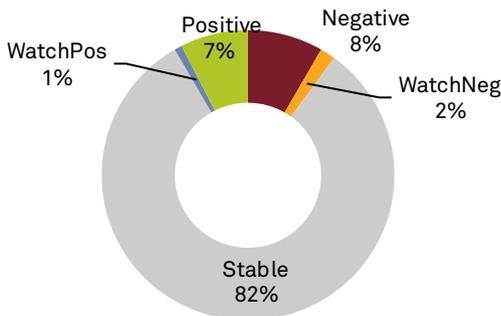
Ratings distribution by region



North America and, to some extent Western Europe, have the largest number of 'B' category ratings due to the prevalence of financial sponsors and private equity investment in the regions.

Chart 3

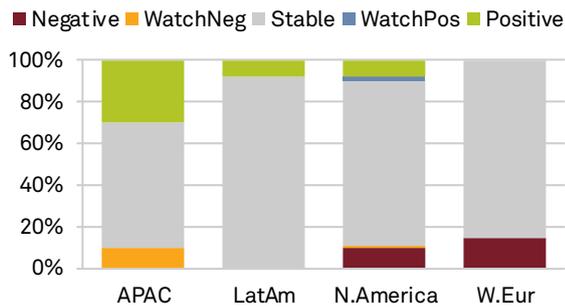
Ratings outlooks



Overall, ratings are predominantly stable, because the sector is in the expansion phase in both North America and Europe. Rating upside is limited, notwithstanding positive sector fundamentals in those regions, due to highly leveraged issuers owned by private equity.

Chart 4

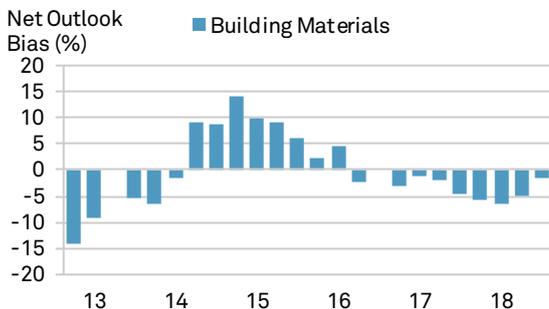
Ratings outlooks by region



We see a prevalence of negative outlooks in Europe, mainly due to relaxed financial discipline of some large investment-grade companies, and aggressive capital structure of few highly leveraged names.

Chart 5

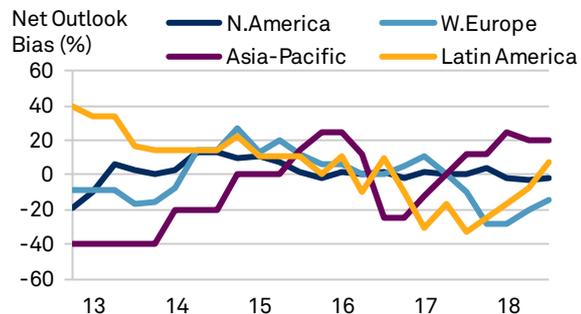
Ratings outlook net bias



Outlook bias improved in 2018 mainly due to better operating conditions and improved leverage metrics in both LatAm and APAC.

Chart 6

Ratings net outlook bias by region



In a context of improving outlook bias in 2018 compared to 2017, namely in LatAm and APAC, North America kept a neutral bias in a context of still supportive economic conditions while Europe displayed a worsening trend mainly due to relaxed financial discipline.

Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ending September 30, 2018

Industry forecasts

Global Building Materials

Chart 7

Revenue growth (local currency)

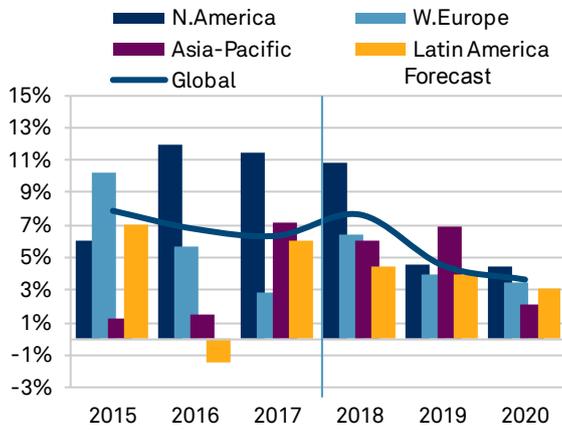
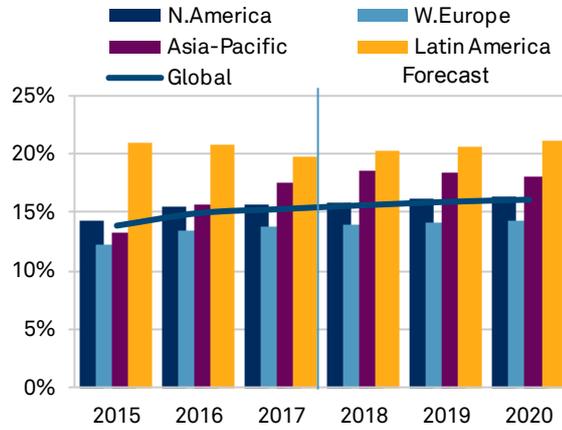


Chart 8

EBITDA margin (adjusted)



We expect mid-single-digit growth in most regions in 2019-2020, but with aWe foresee broadly stable profitability margins in all regions. softening trend.

Chart 9

Debt / EBITDA (median, adjusted)

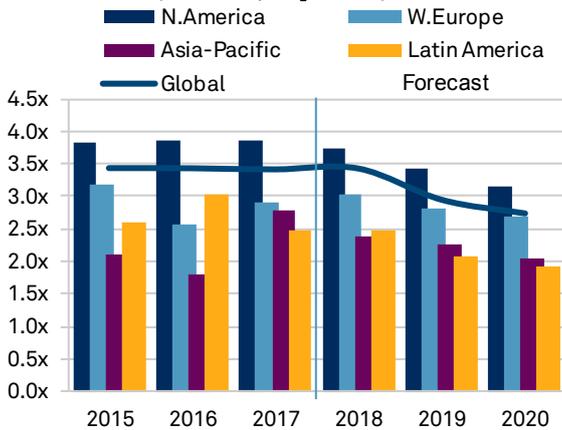
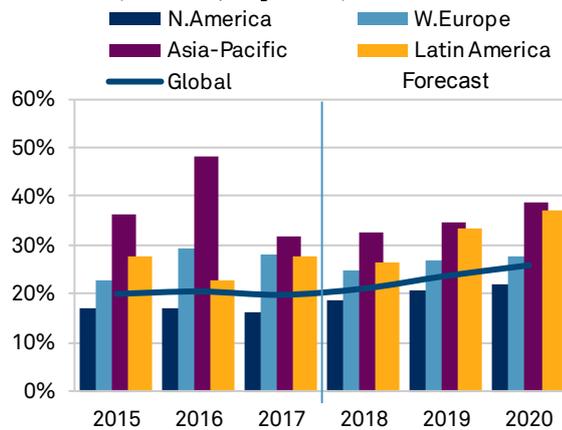


Chart 10

FFO / Debt (median, adjusted)



More pronounced improvement of leverage in North America compared with the other regions, driven by increased EBITDA and capital expenditure optimization. However, this forecast of lower leverage in 2019 and beyond could reverse to stable if companies undertake acquisitions or increase shareholder remuneration. For financial sponsor-owned companies, we expect little change or potentially some increase in leverage, because these companies should continue seeking out acquisitions or eventually pay dividends.

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO--Funds from operations.

Key assumptions

North America

1. Healthy macroeconomic fundamentals, but with increasing risk.

In the U.S. in 2019, we expect 2.3% real GDP growth, 3.6% unemployment, and 1.3 million housing starts. We further expect mid-single-digit growth in repair and remodeling activity, and only 2.8% growth in nonresidential construction, with infrastructure spending to be flat. These modestly positive fundamentals indicate another year of improved sales and earnings for building materials companies, but with much less growth than in 2016 and 2017 as the long slow recovery in housing appears to have plateaued. Recent housing data indicates a possibility that housing starts could actually retreat slightly in 2019, due to affordability issues and high price of new homes. However, we think builders will attempt to address this by offering more value-based entry-level housing.

2. Commodity cost inflation and mix changes could pressure margins.

After two years of reasonable input costs, labor and commodity costs rose in 2018 as the economy reached full employment, tariffs set in, and demand for products increased. So far, most building materials companies have been able to offset the cost increases with higher pricing, but it remains to be seen if companies can continue to maintain higher prices in 2019. Some commodity costs should temper in 2019, particularly wood (which is coming off record high prices in 2018), steel and other metals, and oil and oil-based products. Still, labor remains expensive and companies are seeking to automate wherever possible. We are projecting about a 3% increase in materials costs in our forecasts. Also, as building products become more expensive, there is the possibility that users will shift down to less expensive mid- and low-priced items, particularly in finished building materials (e.g., faucets, kitchens, windows, carpet etc.) in order to maximize value. This could result in less favorable sales mix and slightly lower margins for some producers.

3. Credit metrics should be steady as share buybacks and acquisitions remain modest despite the recent uptick in debt for a few investment-grade companies.

A few investment-grade companies (Vulcan Materials, Martin Marietta, Owens Corning, and Standard Industries) have recently done moderate sized acquisitions that have raised leverage, but we expect all of these issuers to de-lever substantially over the next 12 months. Most companies in the sector are using their excess cash flow to invest internally in operations to improve efficiencies and reduce reliance on expensive labor. Companies are looking to make more acquisitions, but heightened purchase price multiples mean that only a few deals are getting done. Companies might spend more on share repurchases, particularly as stock prices retreat from current high levels.

EMEA

1. Construction output growth should slow in 2019-2020

Most European markets continue to gradually recover, but with a slowing pace, in parallel with lower GDP growth in Europe of 2.3% in 2018 and 1.7% in 2019-2020, compared with 2.8% in 2017. According to Euroconstruct, European construction output will grow 2.7% in 2018, down from 3.9% in 2017. Growth should continue in 2019 and 2020, but at a slower rate, below 2%, and construction should no longer be the European engine of growth. In particular, we expect a growth deceleration of new housing construction, and a shift to civil engineering construction, reflecting some infrastructure renovation programs announced in continental Europe. European construction growth is broad-based, but with significant differences at the country level. We expect Eastern Europe to post higher growth than Western Europe on average. Particularly, we expect very limited growth in Germany and the U.K. in 2019-2020. We also anticipate stable or moderately growing prices in the region, in line with CPI. Most building material companies that we rate benefit from diversified geographic exposure outside Europe, namely in the U.S. and APAC, and will likely continue posting better trading performance through 2018-2019 compared with companies with local exposure.

2. Energy inflation will likely limit margin progress in 2019-2020

In 2018, most EMEA building material players have managed to somewhat protect their margin from energy inflation cost at about 10%, thanks to the benefits of cost synergies coming from M&A made in 2015-2016, cost-cutting programs, and modest price increases. We anticipate an average EBITDA margin of 13.9% in 2018, up by a limited 20 basis points compared with 2017; however, we expect a modest decline for those companies with high energy consumption. In our base-case scenario for 2019 we assume energy inflation still at around 10% and an overall cost inflation between 3% and 4%. We believe that additional room for cost optimization measures is pretty limited in the next couple of years, and companies may be unable to fully pass cost inflation through to end consumers ahead of slowing volume. As result, we forecast that margins at best will remain stable in 2019, but, as with 2018, we could observe a moderate decline for companies with significant energy cost consumption, such as cement producers, or with exposure to emerging countries with excess production capacity.

3. Eased financial discipline limits leverage improvement in 2019-2020

In 2016-2018 building materials companies' credit metrics on average remained largely unchanged, as large debt-funded M&A and more generous shareholder remuneration offset increased cash flow generation ahead of a recovering cycle. We anticipate our adjusted funds from operations (FFO) to debt to stand at 24.9% in 2018, down from 25.6% in 2016-2017. In our view, it is unlikely that leverage metrics will post a significant improvement in 2019-2020, notwithstanding still supportive economic conditions. This is because we anticipate that most companies will continue pursuing aggressive shareholder remunerations. Currently, large players such as CRH and Compagnie de Saint-Gobain have in place share-buyback programs that will extend to 2019, and most listed players anticipate increasing dividend payout in 2019. Furthermore, several companies announced that they will increase the share of cash flow allocated to acquisitions or capex, mainly to outside Europe. In our base-case scenario, we anticipate that FFO to debt will improve to 27% in 2019-2020.

Latin America

1. Sluggish volume growth and overcapacity to persist through 2019

We expect mixed results across LatAm through 2019 with in general low- to mid-single-digit volume growth in most countries. In our view, still soft economic activity, political uncertainties, low public and private investment, and low utilization rates across the region will continue to weigh on volumes. In most countries, we expect residential activities to continue to offset still depressed infrastructure investment projects.

In **Brazil**, we have recently revised down our GDP growth expectation to 2.2% from 2.4% for 2019, in the context of the challenging political environment, and due to our concern about the new administration's ability to pass crucial reforms to boost the economy and attract fixed investments.

In **Mexico**, we expect GDP growth of 2.4% for 2019. Proposals by the new President elect Andrés Manuel López Obrador (commonly known as AMLO) aim to raise investment in public works and infrastructure as well as further develop the housing sector, which could support a better scenario for Mexico's cement volumes in the next few years. Moreover, if the United States–Mexico–Canada Agreement is approved, it would provide greater visibility with regard to trade activity among the three nations, which in turn could increase private investments in Mexico. In Peru, we expect GDP growth of 3.8% in 2018, and mid-single-digit volume growth supported by a pick-up in midsize infrastructure projects, reconstruction activities, and housing gap.

In **Argentina**, the building material sector will likely suffer from the current challenging macroeconomic environment. We expect its economy to contract by 2% in 2018, and no growth in 2019. Moreover, as we expect Argentina's central bank to keep interest rates elevated to contain inflation expectation, we anticipate limited public and private investments in infrastructure and housing projects. Finally, large players having presence in the U.S. should continue to post attractive growth based on the U.S. current market conditions, including favorable demand and pricing environment.

2. Focus on profitability despite cost pressure

As seen in 2018, we expect most issuers to continue to contain any cost pressure, particularly from the energy side, thanks to their capacity to pass through these effects to their end customers through healthy price adjustments. We also expect the utilization of alternative fuels, coupled with an increased optimization of production and logistics supply models to further protect profitability. For 2019, we anticipate only modest room for improvement in terms of EBITDA margin across LatAm given our expectation for the potential hike in energy and labor costs. In most LatAm countries, operating margins are higher than in other regions of the world. This is because of their ability to maintain competitive cost structures and pricing power.

3. Deleveraging trend and prudent financial policies to continue in 2019

We expect LatAm companies to keep their commitment to gradually reduce leverage during 2019, largely through the divestment of noncore assets, while they maintain their focus on profitability and cash flow generation. For 2019, we do not expect aggressive debt-financed M&A transactions in the region, but rather for issuers to maintain and modernize their productive assets to improve operating efficiencies. Overall, we expect issuers to maintain prudent financial policies, including low dividend payments and limited share-buyback activities, depending on their cash generation profile and investment plans.

Asia-Pacific

1. Stable economic gains driving demand growth

Since we expect stable growth for most Asian countries, the sector's credit conditions will continue to improve on the back of economic growth and construction activities. Infrastructure investment will continue to propel the growth, together with modest gains in the property industry.

China's production rationalization of building materials is the key driver for rising prices and the turnaround of Chinese companies in 2018 and 2019 in terms of financial performance. Infrastructure investment growth remains a driver for demand. However, China's fixed-asset investment growth has been on a declining trend this year. In Japan, infrastructure needs and a modest recovery in the property market are favorable for building materials producers while Korea's property slowdown caps companies' growth. Improving home construction and repair needs underpin stable prospects for Australian companies.

2. Resilient prices support operating cash flow

In most of APAC, we see a stabilizing price trend due to a recovery in demand. In China's case, a production rationalization between suppliers, e.g. cement, has been a major factor to support prices. However, the overall overcapacity in the industry is likely to constrain pricing upside in some regions, like China. We did not see a large capacity retirement in the past few years; however, self-disciplined production control between regional players helped maintain prices.

3. Deleveraging trend to continue in general

We expect companies to restrain their capital spending over the next two years, and we do not expect aggressive M&A in the region. Most of the companies are deleveraging through asset sales and debt repayment, while improving their profitability amid economic growth.

Key risks and opportunities

North America

1. High home prices and reduced affordability of existing homes could bring the building materials recovery to a halt

For the three months ended Aug. 31, 2018, housing sales and permits moderated in the U.S. because of low inventory and high home prices. This, along with higher interest rates, may be pushing marginally qualified buyers out of the market. If this trend continues, we could see housing starts decline below the 1.3 million units assumed for 2019. Existing home sales (a big driver of repair and remodel activity) could also slow if values remain high and available inventory low. This would have a ripple effect on building materials and 2019 could be the year the decade-long, slow-charging recovery from the 2007 housing crash actually stalls.

2. Higher interest rates

Higher interest rates will not only squeeze some marginal buyers out of the new home market (mortgage rates assumed to go to 5.1% in 2019), but may also crimp consumers borrowing on home equity lines for major repairs and renovations. While we believe full employment and wage growth may blunt the impact of higher rates, the higher overall cost of new homes and renovations may cause consumers to trade down—to buy more modest homes, forgo upgrades, and make less expensive renovations. This would likely have a negative mixed effect on building materials' product margins, as a shift occurs from higher margin premium products to mid-range offerings with less profit.

3. A shift to more aggressive financial policies could come at the worst time

Even though North American building materials companies have seen their balance sheets and profit margins fully recover from 2007's Great Recession, for the most part their financial policies have remained conservative even in light of increasing cash balances. Issuers have preferred to reinvest their excess cash in internal operational improvements or to hold the cash on the balance sheet, rather than make large scale share repurchases or pay elevated multiples for acquisitions. However, if U.S. construction markets do slow and issuers' stock prices drop, companies may be tempted to use their excess cash to repurchase shares, or to make acquisitions if multiples fall. This could add to the risk of re-leveraging, particularly if large repurchases are made just prior to a turn in the cycle.

EMEA

1. Eased financial discipline tightens rating room in case of a downturn in 2019

Building materials issuers have in the past exhibited a rapid EBITDA decline when the market has taken a downturn, meaning that high leverage leaves less room for building materials issuers to maneuver when under stress. Virtually all of our speculative-grade building materials issuers now have fairly aggressive, covenant-lite debt structures in place, and we have noticed leverage levels gradually rising across this section of the portfolio, particularly for some private equity-owned issuers. This increased leverage has sometimes resulted in a weakening of credit metrics and lower rating level. At the same time, we note that most building materials players in the investment-grade category have increased shareholder remuneration through higher dividends and share buybacks, or increased acquisition spending, which does not leave too much rating headroom in case of downturn. In a few instances, such as with CRH, LafargeHolcim, and Legrand, we assign a negative outlook to signal very limited rating headroom.

2. Political uncertainty and Brexit

Political uncertainty continues to be a major theme for issuers we rate and is partly responsible for driving the foreign exchange volatility that has been affecting their financial results. In particular, the uncertainty from political volatility in countries where some issuers have material exposure, such as Algeria, Egypt, and Turkey, may drive further foreign exchange volatility through 2019. The exchange rate fluctuation between the U.S. dollar and the euro that we have observed in 2017-2018 also adds volatility to company results, given the significant exposure on average to the U.S. market. We believe that most of our issuers with exposure to the U.K. will not face cross-border servicing or logistics issues in case of a disruptive Brexit in March 2019; however, local demand for building products will likely remain weak ahead of poor consumer sentiment. This could result in pressure on some issuers with a high concentration to the U.K. construction sector, namely HSS Hire Group PLC and Travis Perkins PLC.

3. The prospect of increasing interest rates raises refinancing risk

During 2017 and to a limited extent in 2018, almost all of the EMEA building materials issuers we rate refinanced either part or all of their debt, at historically low interest rates. In our opinion, it is likely that interest rates will begin rising at the end of 2019, ahead of a progressive normalization of the European Central Bank monetary policy. On top of it, we already observed a repricing of risk at speculative-grade level, particularly in those riskier segments such as construction. This means that issuers could face a higher interest cost when they next look to tap the markets. The monetary policy normalization may also bring some market volatility, as we are currently observing in the U.S. market. As result, we believe that refinancing risk will likely increase over the next two to three years, when most of the structures put in place mature.

Latin America

1. Political risks prevail in several LatAm countries

Political risks have been diminishing in certain LatAm countries like Chile, Colombia, Peru, and to some extent in Mexico. However, political risks are more significant in Argentina and Brazil. These risks will continue to weigh on issuers' growth prospects in the short term.

In **Argentina**, GDP is likely to be hurt by the fiscal austerity and monetary tightening policies implemented by the government in order to contain inflation, stabilize foreign exchange rate, and reestablish investor confidence and the long-term trajectory of the economy. The Presidential election is coming in late 2019, which coupled with the current difficult macroeconomic environment, provides, limited growth prospects for building material companies in Argentina in the short term.

In **Brazil**, there are still concerns surrounding the next administration's ability to pass crucial reforms and when its economy will recover. These factors hold back public and private investment, and therefore weigh on Brazilian building material companies' top-line growth trajectory.

In **Mexico**, the new government has been quite explicit about reinvigorating the construction sector, through greater support of the deployment of infrastructure projects and incentives to increase the number of housing starts. However, Mexico's President-elect Andres Manuel Lopez Obrador recently announced that it plans to cancel the construction of the New Mexico City Airport, following a public consultation launched by the incoming administration. In our view, this announcement will trigger a period of volatility and uncertainty that could undermine investment confidence and affect consumer decisions, which may very well hinder the sector's short and medium-term growth prospects.

2. Weakening financing conditions expected in 2019

Financing conditions are deteriorating in LatAm. Despite the high levels of liquidity in the markets, investors are asking higher risk premiums and are skittish about emerging markets. In our opinion, access to the global debt capital market is likely to be limited particularly for Argentine and Brazilian issuers during the rest of 2018, although in Brazil issuers have access to the domestic debt capital market, so there could be a rebound in 2019. However, even considering our expectation of increasing interest rate in the global debt market, most rated LatAm building material companies have proactively refinanced large debt maturities ahead of the 2018 presidential election cycles, so we don't expect significant refinancing risk before 2020 and 2021. With the exception of only a few issuers in the sector, most companies have maintained relatively low leverage level and adequate liquidity position with solid cash balance, undrawn available committed credit lines, and extended debt maturities. Therefore, we are not expecting significant refinancing risk in 2019 for the sector.

3. Some asset sales and M&A expected through 2019

We expect various cement players in LatAm to divest noncore assets, particularly in the domestic market for Brazilian issuers, and outside the local market in other LatAm countries such as Mexico. Issuers aiming to divest assets are seeking to reduce leverage or simply to scale back operations in markets with sluggish growth prospects, such as in Brazil, where cement usage has dropped significantly to about 53.8 million tons in 2017 from 71.7 million tons in 2014. Buzzi Unicem's announced 50% stake acquisition in Grupo Ricardo Brennand is a type of transaction that we could continue to see in the market during 2019.

Asia-Pacific

1. U.S.-China trade war

There is no sign of easing of the U.S.-China trade war. Its impact is not yet evident in economic data or company performance. However, as the trade war starts to affect economic growth and market sentiment, there could in turn be a dampening of demand and prices for building materials.

In addition, if China sticks to its initiative of deleveraging the whole economy, it will not have the ability to use increased investment to buffer any decrease in demand.

2. Liquidity and refinancing risks

Given the rising interest rate environment and the heightened uncertainty of economic growth, the financial market has been increasingly volatile. In China, the tightening of the credit market has been exacerbated by the government's policy to deleverage. As a result, interest rate has been rising, refinancing has becoming more difficult, and default cases have risen significantly in China. The environment is particularly difficult for private companies as banks generally prefer to lend to state-owned companies.

The Chinese government has loosened the credit tightening policy a bit recently to avoid a widespread financial crisis. However, we believe the goal to deleverage the economy remains unchanged. The government will still let inefficient or uncompetitive companies fail, but the government does not want to see healthy companies face a liquidity crunch due to market tightening.

3. Overcapacity

Building materials generally still face overcapacity, especially in China. The recovery in prices in 2017 and 2018 was primarily from rationalization of production between producers, for example, cement producers in China, without shutting down excess capacity.

So far the rationalization has been functioning well. However, if demand growth slows and the market turns, also resulting in a price drop, companies may not necessarily adhere to the rationalization plan and may start to raise production to increase cash flow. Therefore overcapacity remains an overhang for the building materials industry in the region.

Industry themes

A decade after the financial crisis: large building materials companies' credit metrics have not fully recovered

Ten years since the failure of Lehman Brothers and the start of the Great Recession, which is among the heaviest recessions that the building materials sector suffered, we are looking at how large building materials companies have recovered and how they stand now compared to 2007. The main conclusion we draw is that building materials companies have not fully recovered since the financial crisis, on average. Although we do not expect any recession of a magnitude similar to 2008, we cannot rule out the cycle turning in the next few years, particularly in those regions such as the U.S. where expansion is enduring since 2011. Building materials is a cyclical industry, and companies have usually exhibited a rapid EBITDA decline when the market has taken a downturn, meaning that tight credit metrics leave less room for building materials issuers to maneuver when under stress.

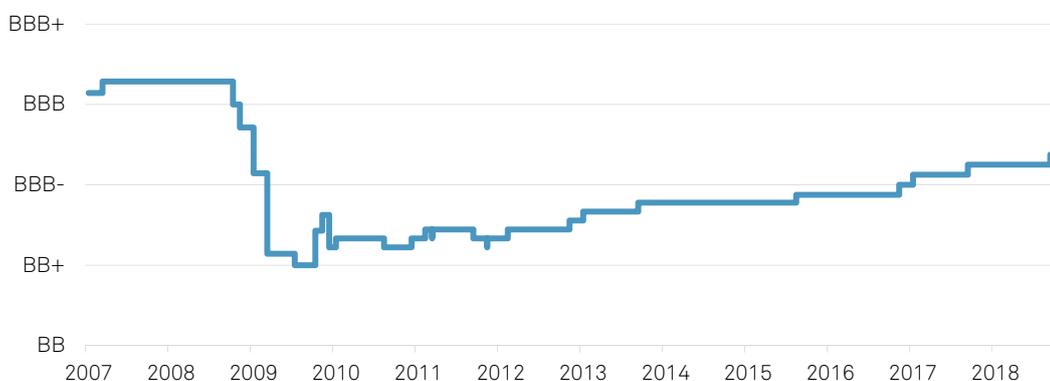
We analyzed metrics of eight large companies: Buzzi Unicem SpA (BBB-/Stable/A-3), Cemex S.A.B. de C.V.(BB/Stable/--), Compagnie de Saint-Gobain S.A. (BBB/Stable/A-2), CRH plc (BBB+/Negative/A-2), HeidelbergCement AG (BBB-/Stable/A-3), LafargeHolcim Ltd (BBB/Negative/A-2), Legrand S.A (A-/Negative/A-2) and Rexel S.A. (BB/Stable/B). Most of those companies went through transformative events, including large mergers, such as Holcim's with Lafarge, large acquisition, such as Heidelberg's of Italcementi, and significant business portfolio changes, as in the case of CRH, Legrand, and Compagnie de Saint-Gobain. We believe that this sample of companies exemplifies the most notable trends in the building materials sector over the past 10 years, both in terms of business development and financial risk. These companies also display solid geographic diversification as they typically operate in Europe, North America, LatAm, and APAC.

The average rating is still below that of 2007

Ratings have not fully rebounded from the financial crisis. In 2017, the average rating was just above 'BBB-' while in 2007 it was marginally above 'BBB' (see chart 11). In our view, this is because the building materials sector in some European countries, such as Italy, still lags behind its 2007 level. It also reflects our view that some emerging markets still hold excess production capacity, following significant investments made in the decade, which impairs profitability. Lastly, increased spending on acquisitions and shareholder remuneration in the past three years prevented full recovery of credit metrics.

Chart 11

Average Rating Transition 2007-2017



Source: S&P Global Ratings. Note: average calculated assigning a number from 1 (D) to 22 (AAA) to each rating level. Companies included are: CEMEX, Buzzi Unicem, CRH, Compagnie de Saint-Gobain, HeidelbergCement, LafargeHolcim, Legrand, Rexel.

Out of the eight companies in our peer group, six currently carry a stable outlook and two, LafargeHolcim and CRH, have a negative outlook. This means that over the next one or two years we do not anticipate further rating improvement, on average. Instead, we could lower the rating on CRH if the group continues to make sizable acquisitions or if it further increases its shareholder remuneration, while suddenly experiencing weaker-than-expected end-market conditions. We could lower the ratings on LafargeHolcim if the group were to post continued weak metrics in some of its key countries in Asia and Africa, or if its operating performance were to deteriorate suddenly in those regions currently supporting the group's profitability, such as the U.S. and India.

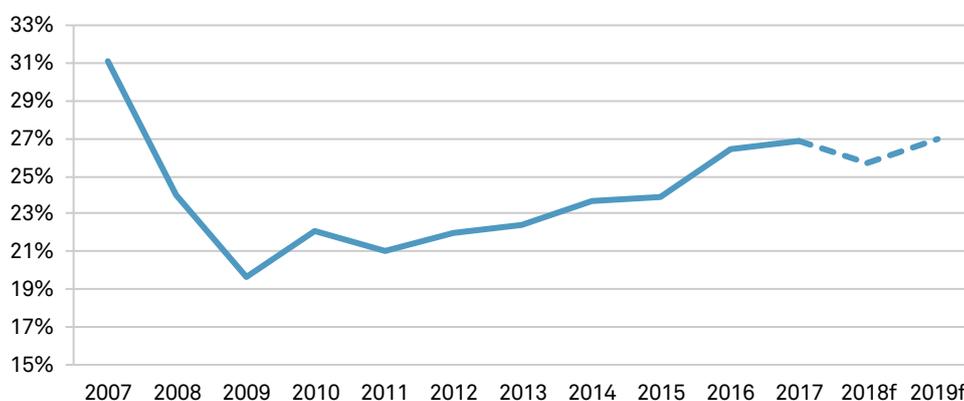
On average, the peer group credit rating has fallen by two notches in the 2007-2017 period. Some companies experienced a limited one-notch downgrade, such as Saint-Gobain and LafargeHolcim (formerly Holcim). At the same time, Cemex and HeidelbergCement had more pronounced downgrades to the 'B' category, as, on top of weakened performance, leverage metrics also underwent significant acquisitions made just before or during the financial crisis. Remarkably, CRH is the only company with an unchanged rating during the period, which reflects its solid commitment to maintain the rating.

Core credit metric FFO to debt has not fully recovered since 2007

The average FFO to debt related to our peer companies stood at 26.8% in 2017. Although the metric has significantly improved since the low of 19.6% reached in 2009, it is still below 31.1% of 2007. We don't expect improvement in 2018-2019; on the contrary, we expect some worsening in 2018, followed by a modest increase in 2019 back to the 2017 level (see chart 12).

Chart 12

Average Adjusted FFO To Debt



Source: S&P Global Ratings. Companies included are: CEMEX, Buzzi Unicem, CRH, Compagnie de Saint-Gobain, HeidelbergCement, LafargeHolcim, Legrand, Rexel.

Similar to the rating trend, the gap between the 2017 and 2007 FFO-to-debt ratio reflects the lack of full recovery of the building materials sector in some European and emerging countries, and still subdued operating cash flow generation. Supporting our view, the average adjusted EBITDA margin stood at 17.5% in 2017, still below 2007 when it was at 20.2%. Furthermore, average adjusted cash conversion, which is the ratio between adjusted operating cash flow and EBITDA, stood at 66% in 2015-2017, below 71% in 2005-2007. The hole in the cash conversion mainly reflects poor working capital management in few notable cases, such as LafargeHolcim. The gap between 2017 and 2007 FFO to debt is also because of increased spending on acquisitions and shareholder remuneration in past few years.

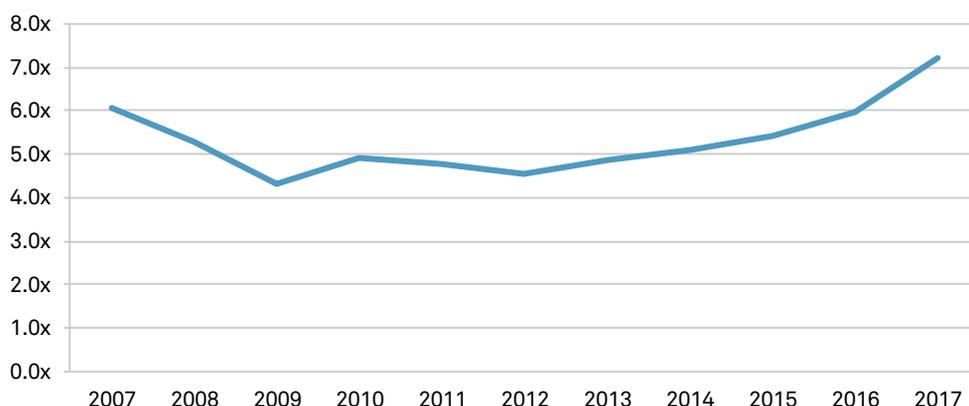
In our view, FFO to debt will not further improve in 2018-2019, as most companies should continue their sustained spending on acquisitions and shareholder remuneration, which we expect to more than offset the rebound in the operating cash flow generation ahead of the still supportive credit cycle.

Currently low interest rates pump up interest coverage

In contrast, EBITDA interest coverage related to our peer group is much higher in 2017 than in 2007. This mainly reflects companies’ sustained debt refinancing in the past few years in a context of exceptionally low interest rates. In our view, it is likely that interest coverage will gradually worsen in the next few years along with the progressive normalization of the ECB and Federal Reserve’s monetary policies. As such, we do not believe that current high interest coverage indicates better creditworthiness when compared with 2007.

Chart 13

Average Adjusted EBITDA Interest Coverage



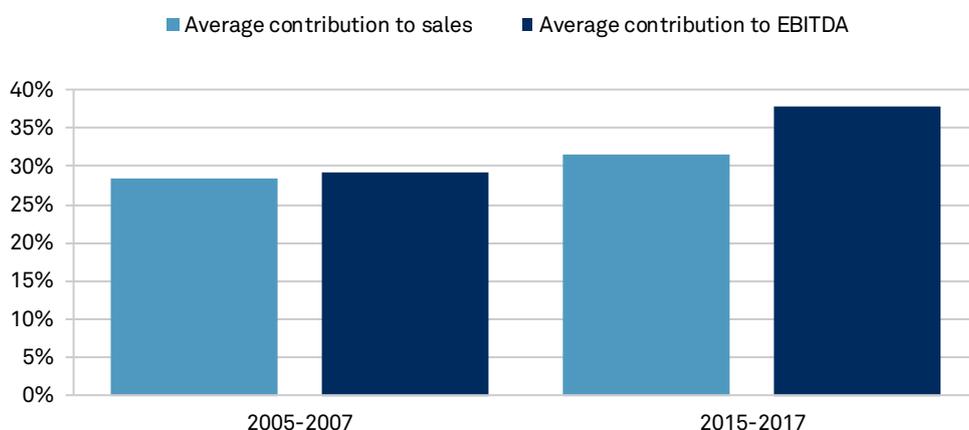
Source: S&P Global Ratings. Companies included are: CEMEX, Buzzi Unicem, CRH, Compagnie de Saint-Gobain, HeidelbergCement, LafargeHolcim, Legrand, Rexel.

Profitability reliance on the U.S. market has increased in the period, which raises concentration risk

The U.S. share of our peer companies’ profitability has increased in the past few years, and it is significantly higher when compared with 2007. EBITDA generated in the U.S. made a sizable 38% of the total in 2015-2017, while U.S. revenue share in the same period stood at 32%. This compares with 29% and 28%, respectively, in 2005-2007. Notably, Buzzi Unicem increased its share of EBITDA produced in the U.S. to 69% in 2015-2017, well up from 33% in 2005-2007. CRH and Legrand also displayed significant increase of U.S. share of EBITDA in the same period.

Chart 14

Average Exposure To U.S. Market



Source: S&P Global Ratings. Companies included are: CEMEX, Buzzi Unicem, CRH, Compagnie de Saint-Gobain, HeidelbergCement, LafargeHolcim, Legrand, Rexel.

The increased share of the U.S. market profitability in 2015-2017 is not surprising: the U.S. building materials cycle has started its recovery path in 2011, well before Europe, which started recovering in 2014, and so is in a more advanced stage. Moreover, the U.S. cement cycle has significantly recovered since the U.S. recession, though it is still 25% below its 2006 peak, while the European cement cycle is far from getting back since the recession, and it is still 40% below the 2007 peak. This is why European building materials companies have invested significantly in the U.S. market in the past decade, both through capex and acquisitions. Notably, Legrand S.A. made significant acquisitions in the U.S., such as Milestones and Raritan, and increased its U.S. sales to 33% in 2017 from 15% in 2007.

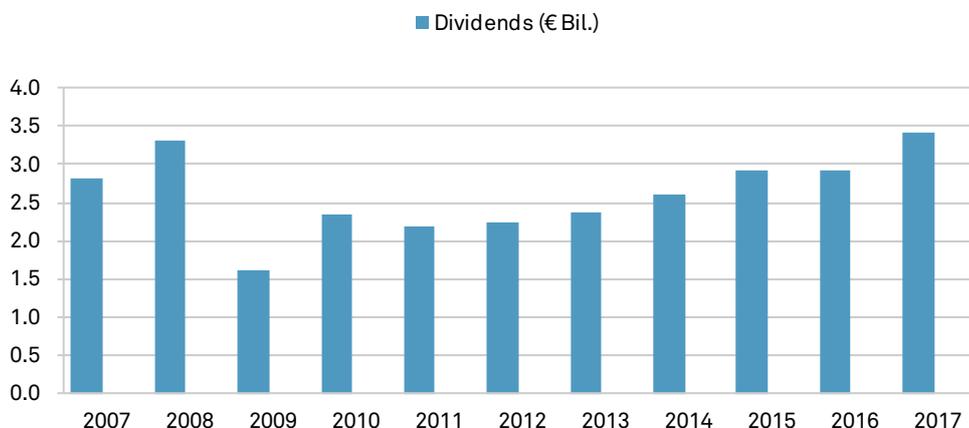
While the increased exposure to the U.S. market has enabled EMEA companies to improve their results in the recent years, this also resulted into concentration risk. In our view, a sudden downturn of the U.S. construction cycle could significantly impair EMEA large building materials companies if it is not offset by continuation of recovery in Europe and/or a broad improvement in both APAC and Africa.

Eased financial discipline tightens rating room in case of a downturn

In our view, large building materials issuers' financial discipline has somewhat eroded in the past couple of years. Companies have considerably increased shareholder remuneration, both through higher dividends and share buybacks, or have enlarged acquisition spending. Notably, we observed a substantial surge of distributed dividends to about €3.4 billion in 2017, which is marginally higher than the levels we observed before the financial crisis (see chart 15). We expect dividend distribution to further moderately increase in 2018-2019, based on companies' public announcement on dividend pay-out ratio.

Chart 15

Dividends Distributed



Source: S&P Global Ratings. Companies included are: CEMEX, Buzzi Unicem, CRH, Compagnie de Saint-Gobain, HeidelbergCement, LafargeHolcim, Legrand, Rexel.

On top of dividend distributions, large players such as CRH and Compagnie de Saint-Gobain announced share buyback programs that will extend to 2019. We believe that shareholder-friendly distribution will stay at least till the cycle turns. As result, on average we do not expect leverage metrics to improve in next couple of years. This may leave limited headroom to ratings in case of downturn.

U.S. Building Materials issuers are well-positioned to absorb a moderate downturn

We reviewed the credit ratings and metrics of 11 investment-grade and five ‘BB’ category issuers that we rated in 2007 and compared them to their pre-Great Recession levels. Earlier this year, we also analyzed how our rated ‘B’ category private equity owned building products companies may fare in a downturn. (See “Financial Sponsors Pave the Way Into the U.S. Building Materials Sector,” published April 18, 2018). Our findings show that that most companies we rated back in 2005 are performing better now than they did at the last peak.

Our analysis also shows that most of our ‘B’ category private equity owned companies are better positioned to absorb a 30% decline in EBITDA than they were in 2008, mostly because, on average, they are not as excessively leveraged as they were in 2007

Key takeaways from our analysis (see table below) are as follows:

- Our investment grade and ‘BB’ category companies have increased in size and scale, due to acquisitions, industry consolidation, and organic growth, despite fewer housing starts and demand for materials than in 2007.
- By focusing on internal operations and cutting costs in the downturn, companies are producing more EBITDA at 1.3 million starts than they did at the last peak, when housing starts exceeded 2 million.
- EBITDA margins have improved an average of 200 basis points compared to 2007.
- Debt profiles show that the companies reviewed were less leveraged at year-end 2017 than at year-end 2007, with average new leverage for our investment grade rated issuers at 1.6x at year-end 2017 compared to 1.9x at year-end 2007.
- In the first half of 2018, several companies, including Martin Marietta, Vulcan Materials, Stanley Black and Decker and Owens Corning, all increased debt to fund acquisitions and build normal seasonal working capital. However, overall debt

Industry Top Trends 2019: Building Materials

leverage is in line with 2007 levels and we expect the companies mentioned will reduce debt leverage back within the next 12 months.

- Also, compared to 2007, companies are benefiting from long-dated debt maturities, minimal or no financial covenants, and still historically low interest rates.

Given that we assume any near-term economic downturn would be milder than the decline in housing starts (75%) and general construction activity in the Great Recession, we believe that the investment-grade and ‘BB’ category building materials issuers are well positioned to maintain credit quality and ratings in a mild downturn, particularly when we consider how the ratings performed through the Great Recession.

Table 1

Building Materials Ratings Through The Downturn

Investment Grade	Dec. 31, 2017	Lowest Rating 2007-2017	Current Rating
Eagle Materials Inc.	N.R.	BBB	BBB
Lennox International Inc.	BB	BB	BBB
Martin Marietta Materials, Inc.	BBB+	BBB	BBB+
Masco Corporation	BBB+	BBB-	BBB
Mohawk Industries, Inc.	BBB-	BB+	BBB+
Owens Corning	BBB-	BBB-	BBB
Stanley Black & Decker, Inc.	A	A	A
Valmont Industries, Inc.	BB	BB	BBB+
Vulcan Materials Company	A-	BB	BBB
BB Category			
Armstrong World Industries	BB	BB-	BB
Builder's FirstSource	B+	SD	BB-
Generac Holdings Inc.*	N.R.	B+	BB-
Gibraltar Corp.	BB	B+	BB-
USG Corp	BB+	B	BB+

Source: S&P Global Ratings

Table 2

Building Materials EBITDA Margin And Debt Leverage

	EBITDA Margin			Net Debt/EBITDA		
	2007	2017	TTM 6/30/2018	2007	2017	TTM 6/30/2018
Investment Grade						
Eagle Materials Inc.	29.3%	30.1%	29.7%	1.5	1.3	1.5
Lennox International Inc.	6.9%	14.3%	14.9%	0.1	1.7	2.2
Martin Marietta Materials, Inc.	24.4%	26.9%	27.3%	1.9	1.6	3.1
Masco Corporation	16.4%	17.0%	16.0%	2.2	1.4	2.0
Mohawk Industries, Inc.	10.8%	19.6%	19.2%	2.1	1.4	1.3
Owens Corning	14.6%	17.8%	15.5%	3.1	1.9	3.3
Stanley Black & Decker, Inc.	11.0%	16.3%	16.0%	1.8	1.6	2.1
Valmont Industries, Inc.	8.2%	12.7%	12.4%	0.7	0.8	0.8
Vulcan Materials Company	20.8%	24.5%	24.3%	3.9	2.9	3.1
Average	15.8%	19.9%	19.5%	1.9	1.6	2.2
BB Category						
Armstrong World Industries	11.4%	39.2%	46.5%	1.3	2.3	2.4
Builder's FirstSource	3.0%	6.6%	6.6%	6.4	4.4	4.6
Generac Holdings Inc.	26.8%	23.6%	21.8%	8.3	2.6	2.3
Gibraltar Corp.	9.1%	14.1%	14.7%	4.5	0.6	0.7
USG Corp	9.8%	18.6%	16.5%	2.25	1.97	2.5
Average	12.0%	20.4%	21.2%	4.6	2.4	2.5

Source: S&P Global Ratings

We believe most 'B' category speculative-grade issuers, most of which are owned by private equity financial sponsors, could withstand a 30% decline in EBITDA and still maintain viable credit metrics (debt leverage less than 8x and interest coverage greater than 1:1). Our analysis shows that average debt leverage for 'B' category issuers would deteriorate to about 7.5x from about 5.6x in a scenario where EBITDA declined 30% from 2018 levels and 40% of surplus cash was used to pay down debt. In that same scenario, average interest coverage would fall to about 2.2x from 3.2x.

This report does not constitute a rating action.

Cash, debt, and returns

Global Building Materials

Chart 16

Cash flow and primary uses

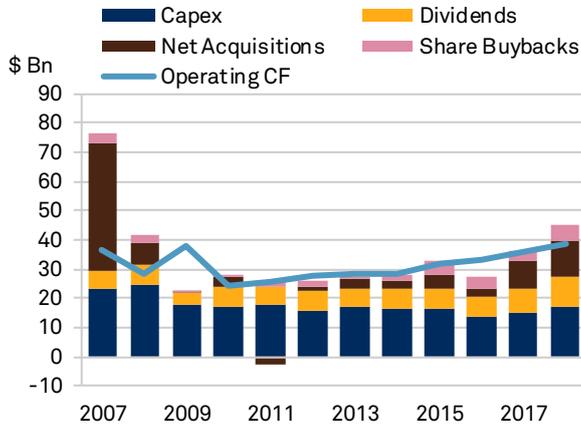


Chart 17

Return on capital employed



Chart 18

Fixed versus variable rate exposure

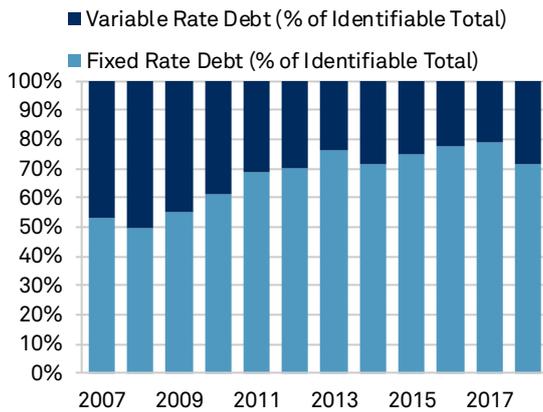


Chart 19

Long term debt term structure

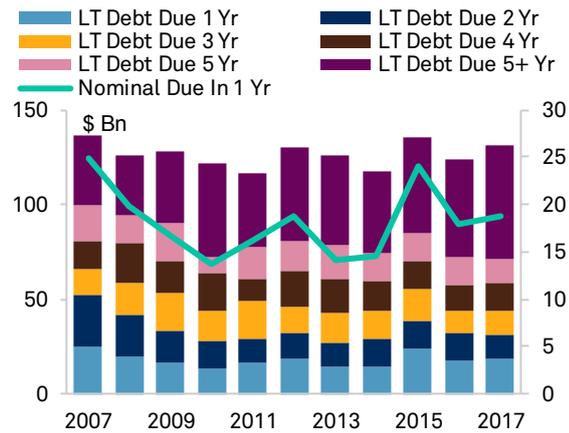


Chart 20

Cash and equivalents / Total assets

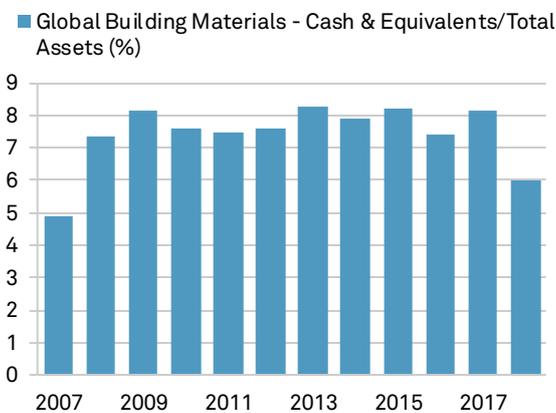
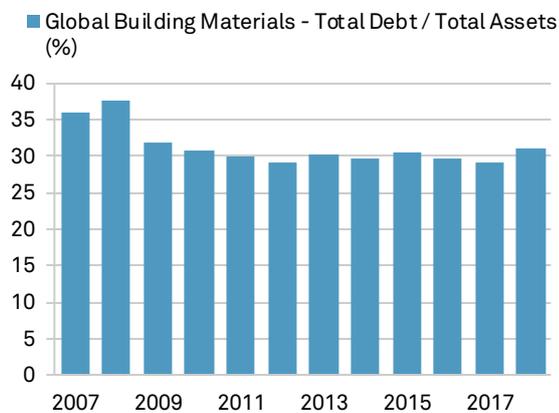


Chart 21

Total debt / Total assets



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis.

S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED, OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription) and www.spcapitaliq.com (subscription) and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at

Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.

spglobal.com/ratings