

Industry Top Trends 2020

Building Materials

The cycle has peaked and business conditions are weakening



November 20, 2019

Authors

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

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

Pascal Segulier
Paris
+33 1 40752589
pascal.seguier
@spglobal.com

Alexandre Michel
Mexico City
+ 52155-5081420
alexandre.michel
@spglobal.com

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

What's changed?

Business confidence has weakened in most regions. Heightened geopolitical risks are feeding uncertainty and weighing on economic fundamentals, notwithstanding central banks' easing bias, which is helping companies' funding.

In the U.S. housing starts are flat. Remodeling has been a bright spot but is expected to ebb. Tariffs and a slowing global economy are creating caution and uncertainty despite still-healthy employment, wages growth, and increasing home values.

CO2 emissions cuts are moving to the forefront of the cement industry. This is evident in Europe, but we expect it to happen elsewhere too in the next few years.

What to look for in the sector in 2020?

In EMEA rating room will be limited if there's a downturn. Credit metrics have not fully recovered since the financial crisis. As companies usually show rapid EBITDA decline during downturns, tight credit metrics leave less room to maneuver when under stress.

North America, caution ahead! Will U.S consumer continue to buy homes and make repairs at the same rate in 2020 with employment and wage growth still healthy?

Overcapacity is not over. This is more relevant in LatAm and APAC, and may put pressure on prices and margins.

What are the key medium-term credit drivers?

Strict investment criteria is not reducing capital expenditure (capex). Most players have tightened discipline regarding growth projects. We expect capex to remain almost unchanged, sustained by compliance with more stringent environmental regulation.

Tariffs are a big unknown. New tariffs could end the building materials recovery. We expect companies to conserve cash, reduce leverage, and be cautious about increasing leverage for acquisitions or share repurchases in 2020.

Eased financial discipline remains a key risk. Companies may not be willing or able to adjust their financial discipline in case of a downturn.

Ratings trends and outlook

Global Building Materials

Chart 1

Ratings distribution

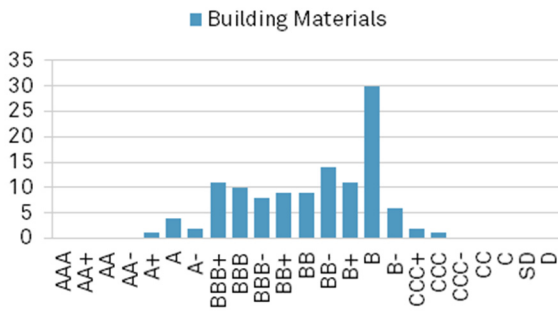


Chart 2

Ratings distribution by region

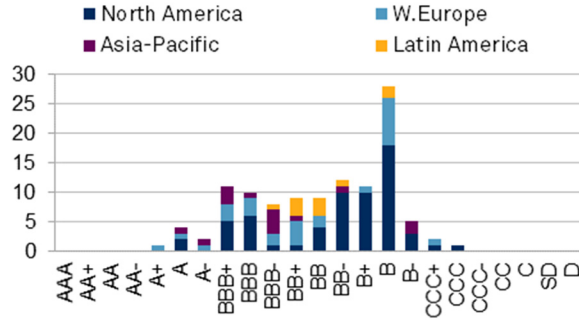


Chart 3

Ratings outlooks

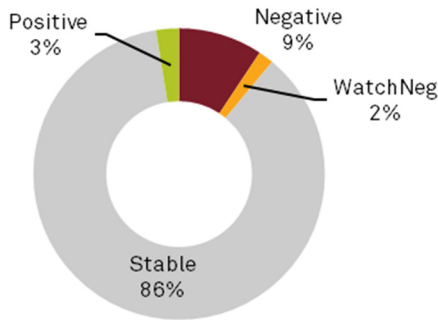


Chart 4

Ratings outlooks by region

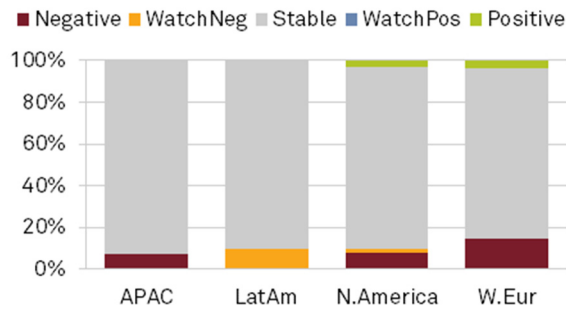


Chart 5

Ratings outlook net bias

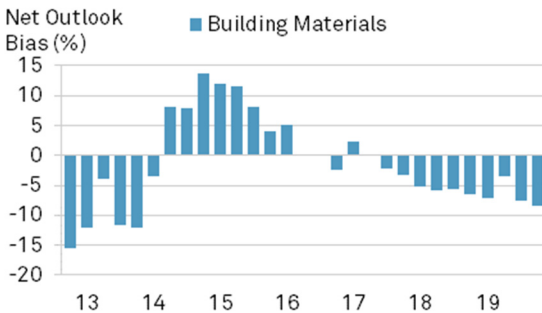
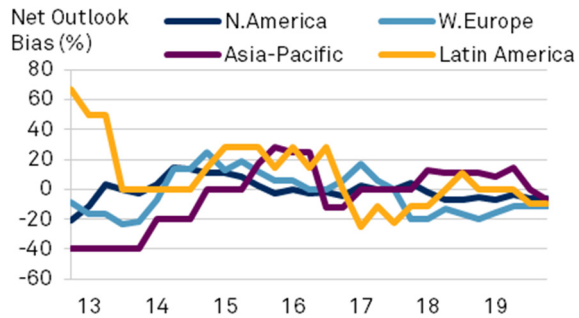


Chart 6

Ratings net outlook bias by region



Source: S&P Global Ratings. Ratings data measured at quarter end. Data for Q4 2019 is end October, 2019

There are a lot of ratings in the 'B' category due to there being many smaller and highly leveraged issuers owned by financial sponsors. 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 these regions. Ratings are predominantly stable, but negative outlooks have increased compared with 2018 due to slowdowns in most regions. We are seeing negative outlooks prevail in Europe, mainly due to relaxed financial discipline at some investment-grade companies, and the aggressive capital structures of a few highly leveraged players. The outlook bias is negative and has worsened compared with 2018, particularly in APAC and Latin America.

North America

Key assumptions

1. Housing starts are stuck at 1.3 million

Flat housing starts and a shift toward entry-level homes will likely challenge sales growth and margins. The housing cycle may have peaked, leading us to expect only marginal sales growth from new homes, mostly on price, not volume.

2. Repair/Remodeling (R/R) is expected to slow to 1%-3%

An economic slowdown will likely reduce R/R spending, previously a strong demand driver that has helped to augment demand, given flat housing starts. A weaker economy may also shift the sales mix to lower price/margin products.

3. Investment grade companies to use cash to modestly reduce debt leverage

After increasing debt on acquisitions, we expect companies like Vulcan Materials, Martin Marietta, Standard Industries, and Fortune Brands to use cash flow to reduce leverage.

With builders focusing on entry level, materials used per new home will be reduced and there will be fewer premium products installed, meaning narrower margins for building materials companies. While R/R spending has been robust for the past two years we expect growth will slow, albeit staying slightly positive.

Some issuers have observed a “mix-down” effect as consumers, particularly millennials, have shifted spending habits away from premium building products toward mid-price choices. It remains to be seen if this is a long term trend but fewer premium floors, kitchens and baths, and so on mean less margin for producers.

Commercial and infrastructure construction is still healthy. Results have been good for aggregates, cement, and other heavy materials producers as states have increased spending on aging roads and bridges. We expect this will continue into 2020 and beyond given that much of this spending is committed and comes from dedicated sources (bonds, license fees, tolls) and not from general tax revenues.

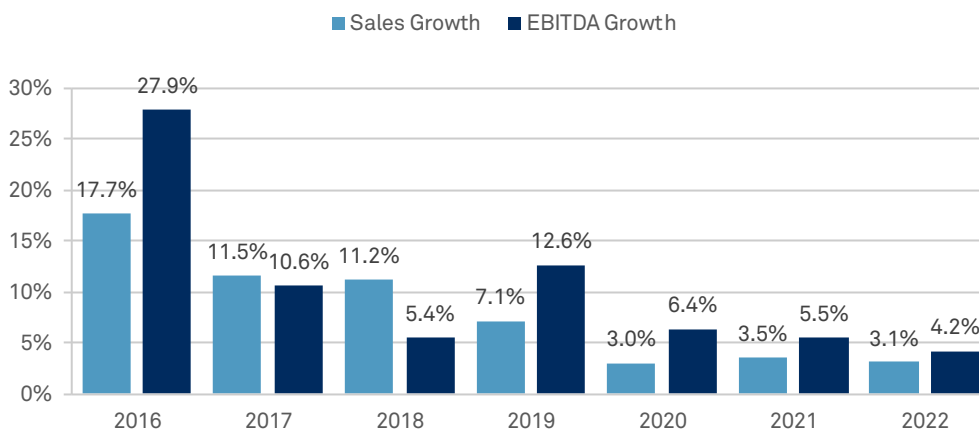
Private commercial construction, outside of mining and energy, has been healthy, particularly in the construction of large distribution centers. Commercial construction generally lags residential trends by 18-24 months because commercial property development follows new residential communities. We think the modestly positive trend in commercial construction still has some legs.

This all adds up to a low-growth, mediocre outlook for the sector at best and we anticipate companies will focus on shoring up balance sheets in case of a recession. We expect a number of investment-grade issuers to reduce debt from recent acquisitions to bring leverage more in line with their ratings in 2020. Vulcan Materials, Standard Industries, Owens Corning, Fortune Brands, Stanley Black & Decker, and Martin Marietta will likely dedicate more of their healthy cash flows to debt reduction. A number of speculative-grade issuers, including Builders FirstSource, BMC Stock and Gypsum Management Supply have already reduced debt leverage. We expect others (Beacon Roofing, Apex Tools, Cornerstone Building Brands, Forterra Inc) to focus on reducing high leverage, particularly in advance of the next downcycle.

We do not expect housing construction to boost the building materials sector in 2020 given that unit growth will be flat and focused on entry-level products.

Chart 7

North American rated building materials sales and EBITDA growth



Source: S&P Global Ratings

Key risks and opportunities

1. A weaker economic environment means declining demand for building materials, but we think any downturn would be mild and brief

Building material companies are not as leveraged as in the last downturn. New and existing housing inventory is tight and household formation should help home demand. Home values, access to equity lines of credit, still-low unemployment, and wage stability should minimize any downturn’s length and impact.

2. Acquisition activity is still muted

Acquisition multiples are still high and investment-grade issuers are focused on reducing leverage from recent deals. Speculative-grade and private-equity issuers have found high-yield debt markets skittish when it comes to financing leveraged deals.

3. Tariffs are the big wildcard for 2020

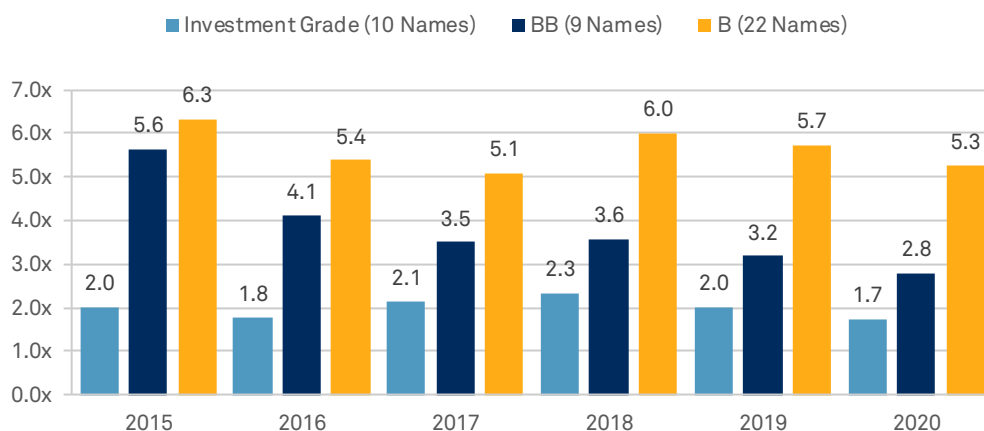
Most companies were able to offset tariff effects (with a lag) with prices and lower commodity costs in 2019. But any new or increased tariffs, amid ebbing demand, would be difficult to offset. Also, we don’t expect further relief from commodity prices in 2020.

Unlike the Great Recession, housing today is not in oversupply. Availability is limited: demand for new homes is greater than supply. Therefore, despite the affordability issue, we think any downturn in housing deliveries due to a recession will be short-lived because remaining new and existing homes for sale will be absorbed fairly quickly. Household formation, even at a reduced rate, will create the need to build new homes.

While the risk of recession has increased, consumers are still spending on homes and improvements although the peak may have passed

Chart 8

Average Debt to EBITDA of North American building companies



Source: S&P Global Ratings

Most investment-grade issuers in U.S. building materials have good capacity to handle a one- or two-year downturn, although a few have credit measures that are tight for the ratings and provide less cushion in a downturn. Our 'BB' category issuers are more likely to push the bounds of downgrade thresholds because weaker business characteristics make for a sharper earnings downside with less buffer. The 'B' rated category has the thinnest cushion against a downturn, with business integrations potentially complicating a cyclical downturn, as well as cost uncertainties and heavy debt loads. With many financial-sponsor-owned companies, the vintage of acquisition may be key for rating performance. The last series of LBOs in 2018 had high debt and EBITDA multiples, plus significant EBITDA adjustments, such that rating performance will depend on the rapid integration of acquired businesses to strengthen earnings and reduce debt.

Acquisitions have slowed compared to what we've seen over the last few years

Multiples have remained high and, for the most part, buyers have walked away from expensive deals. As most of our investment-grade issuers are still absorbing recent large acquisitions, we do not expect much further activity. Private-equity activity has slowed to a trickle as the “low hanging fruit” has all but gone (except for in roofing and distribution where companies like SRS Distribution and US LBM are still acquiring smaller peers). Companies are looking to get their balance sheets in order and are therefore focusing on leverage metrics prior to a fundamental slowdown in the space. With market uncertainty going into 2020, we believe that acquisitions will remain subdued and companies will focus on deleveraging and internal investments.

Companies that import components or finished goods have dealt with several rounds of tariffs in 2019. They've faced these cost headwinds and have seen margins stagnate (despite higher sales) as a result. Recent reports indicate that the U.S. and China are considering at least a partial rollback of tariffs as part of any new agreement. Assuming no new tariffs are implemented, we expect margins will recover and expand in 2020 as offsetting price increases and cost cuts take full effect. However, another round of new tariffs in 2020 could raise prices to the point where the consumer finally pulls back and could bring the long tenured recovery in building materials to a halt. Conversely, a trade agreement with no new tariffs could extend the recovery.

We anticipate 2020 will be a year of caution for building materials companies, in which they will conserve cash and reduce leverage. This comes amid global markets slowing, housing construction plateauing, spending declining, and tariffs causing uncertainty. We foresee fewer acquisitions and share repurchases as a result.

EMEA

Key assumptions

1. Construction output growth is slowing in 2020-2021.

Heightened near-term risks are feeding uncertainty and weighing on economic fundamentals and the construction cycle, notwithstanding the ECB's easing bias that is helping companies' and families' funding conditions. As such, we expect construction output to grow by just 1.5% in 2020-2021.

2. We foresee no progress on margins.

Margins will remain almost stable in 2020, but we could observe a moderate decline for companies with significant energy cost consumption or that have exposure to markets with tough competition and excess production capacity.

3. Eased financial discipline and the economic slowdown will limit rating upside.

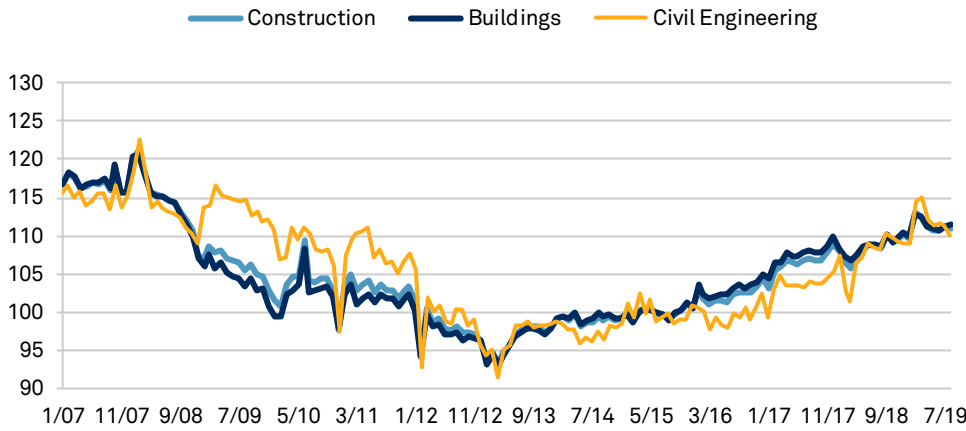
We anticipate limited rating upside in 2020-2021. This is because investment-grade companies are, on balance, not committed to higher ratings, and leverage related to financial-sponsor-owned companies remains high. The current economic slowdown does not offer much opportunity for better operating performance.

Most European markets have significantly decelerated in 2019

In parallel with lower GDP growth in Europe of 1.3% in 2019 and 1.8% in 2020-2021, compared with 2.2% in 2018. According to Euroconstruct, European construction output will grow 1.9% in 2019, down from 3.1% in 2018 and 4.2% in 2017. Growth will likely be even slower in 2020-2021, at 1.5%. We expect that the infrastructure segment will lead the European market in the next three years, with average annual growth of more than 3%--sustained by some infrastructure renovation programs announced in continental Europe--compared to the weaker performing building sector (1%). We expect Eastern Europe to post higher growth than Western Europe on average, reflecting better demographic fundamentals and lower market saturation. We anticipate very limited growth in Germany and France in particular in 2020-2021. We also foresee 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 2019-2020 compared with companies with local exposure.

Chart 9

Construction sector output



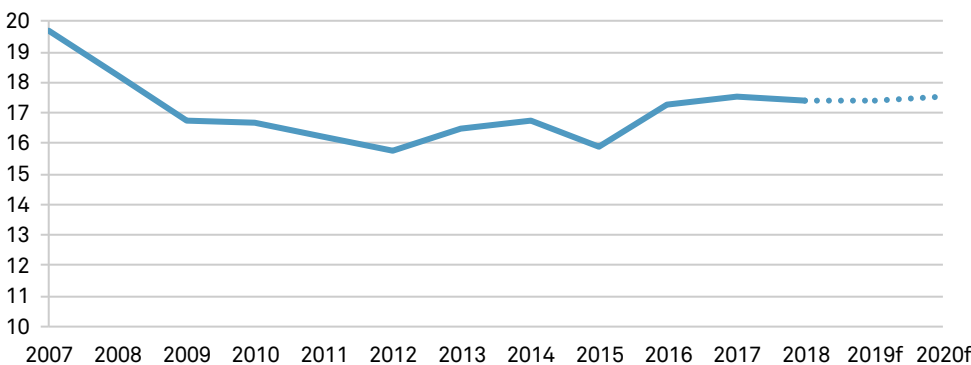
Source: Eurostats, S&P Global Ratings. Buildings and Civil Engineering are subsectors of Construction sector 2015=100, seasonally and calendar adjusted data, European Union - 28 countries

We doubt companies will be able to further improve margins in 2020-2021. In 2019, most large building material players in EMEA have benefit from fuel- and power-price tailwinds, which has limited cost inflation and helped companies preserve or slightly increase EBITDA margin by around 17.4% on average. Most of the benefits related to cost synergies from 2015-2016 M&As, and cost-cutting programs announced in the past few years, should have borne fruit. This means additional room for cost optimization will be fairly limited in the next couple of years. In our base case for 2020 we assume overall cost inflation of 3%-4%, which balances the much higher increase in costs in emerging markets and the U.S. compared with Europe. Some companies in certain more-commoditized segments, such as cement, may be unable to fully pass cost inflation through to end-consumers ahead of slowing volumes. As result, we forecast that margins will remain almost stable in 2020, but we could observe a moderate decline for companies with significant energy cost consumption or exposure to highly competitive markets with excess production capacity.

Chart 10

Evolution of large EMEA Building Materials issuers' profitability

EBITDA Margin (%)



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

Still-easing financial discipline and economic slowdown will limit rating upside

In 2019, more companies improved their rating headroom than saw it reduce, which improved the outlook distribution in the region. For example, we revised the outlooks to stable on LafargeHolcim, CRH, and Legrand, reflecting their supportive financial policies and resilient performances. We also revised to positive our outlook on HeidelbergCement on its better leverage metrics. However, we anticipate more-limited rating upside in 2020-2021. This is because investment-grade companies on the whole are not committed to higher ratings, and generous shareholder remunerations will absorb a significant part of operating cash flows. Furthermore, leverage related to financial sponsor-owned companies remains high, and the current economic slowdown does not create opportunities for better operating performance, particularly for those players with limited geographic exposure outside Europe.

Key risks and opportunities

1. Eased financial discipline is a key risk if there's a downturn

Although the vast majority of building material companies have stable outlooks, we believe that credit metrics could weaken rapidly in a downturn if companies are not able to adjust their currently eased financial policies.

2. High profit reliance on the U.S. market is a risk for large EMEA players

EMEA's larger companies have significantly increased their exposure to the U.S. market in recent years, enabling them to improve their results. However, this raises a concentration risk. A sudden downturn in the U.S. construction cycle could significantly impair results.

3. Capex is set to grow to comply with more stringent environmental regulations

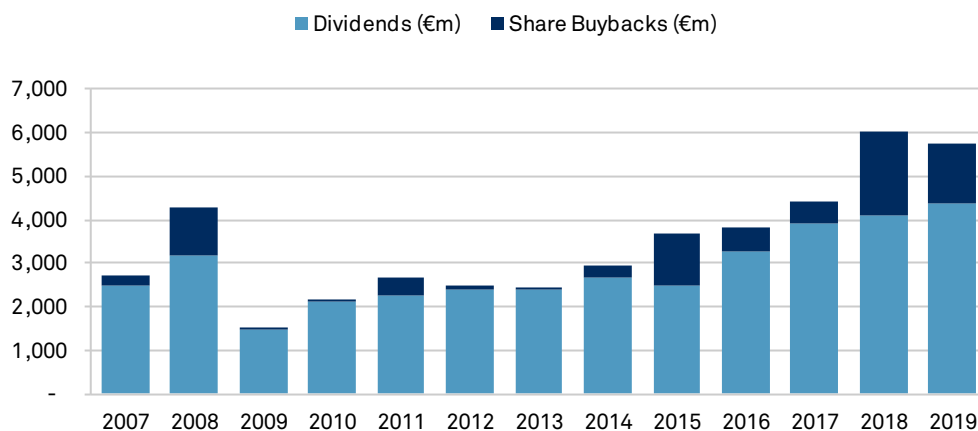
We estimate maintenance capex accounts for an average of 5%-7% of cement revenues in developed markets. In the next few years it will likely increase and could reach double digits, due to the search for energy efficiency and the need to comply with more stringent environmental regulations.

Eased financial discipline is a key risk if there's a downturn

Building materials issuers have previously seen rapid EBITDA declines when the market has taken a turn for the worse. High leverage, in turn, 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 gradually rising, particularly for some private-equity-owned issuers. This increased leverage has sometimes resulted in weaker credit metrics and lower ratings. We also note that most building materials players in the investment-grade category have increased shareholder remuneration in 2014-2019 through higher dividends and share buybacks (see chart below), or increased acquisition and capex, which does not leave much rating headroom in a downturn. Although the vast majority of outlooks is stable, we believe that companies' credit metrics could rapidly weaken in a downturn if they cannot shift their currently eased financial policy.

Chart 11

Large EMEA Building Materials Shareholder Remuneration



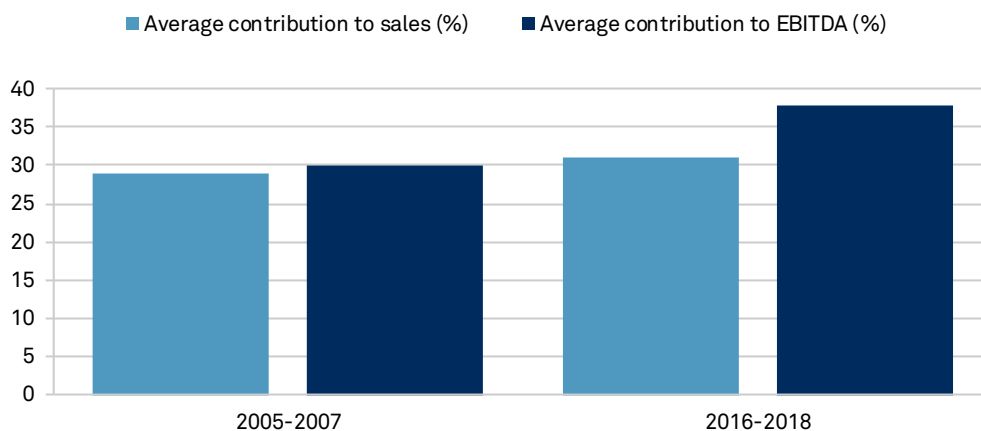
Source: S&P Global Ratings. Companies included are: Buzzi Unicem, Compagnie de Saint-Gobain, CRH, Geberit, HeidelbergCement, LafargeHolcim, Legrand, Rexel, Würth

There is increased profit concentration in the North American market

The U.S. share of the largest European building material companies’ profitability has increased in the past few years, and is significantly higher than in 2007. EBITDA generated in the U.S. made a sizable 40% of total profits in 2016-2018, while U.S. revenue share in the same period was 33%. This compares with 29% and 28%, respectively, in 2005-2007. This is not surprising: the U.S. building materials cycle started to recover in 2011, well before Europe which started recovering in 2014, and so is more advanced. Moreover, the U.S. cement cycle has significantly recovered since the U.S. recession--although still 25% below its 2006 peak--while the European cement cycle is still 40% below its 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. While increased exposure to the U.S. market has enabled EMEA companies to improve their results in recent years, this has also resulted in concentration risk. In our view, a sudden downturn in the U.S. construction cycle could significantly impair EMEA's large building materials companies.

Chart 12

EMEA Largest Building Materials Companies Exposure to North America Market



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

Capex is set to grow to comply with more stringent environmental regulations

During the past few years, most players have tightened discipline on growth projects by requesting a much higher internal rate of return or shortening target payback periods. Nevertheless, there has not been a significant decline in total capex; instead, we expect spending to remain at least unchanged or to grow over the next few years, sustained by the need to comply with more stringent environmental regulations. The recent rises in CO2 prices in Europe will likely make carbon-intensive fossil fuel generation more expensive for cement companies. This will likely create additional expenses when revamping cement plants. We estimate maintenance capex accounts for an average of 5% of cement revenues in developed markets, and in next few years will moderately increase when factoring in energy efficiency and compliance with environmental regulations. Over the medium term, cement players' commitment to carbon-neutrality may require much higher investments in new technologies, such as carbon capture utilization and storage, although it is bit premature to estimate any effects on margin and cash flow.

Latin America

Key assumptions

1. Slow cement volume recovery reflects sluggish macroeconomics

For 2020, we expect modest volume growth in Brazil, Peru, and Guatemala amid a slow economic recovery. On the other hand, in Mexico and Argentina a recovery in cement volumes is still at risk due to challenging business conditions, a lack of infrastructure projects, and an expected shortfall in housing starts in Mexico.

2. Cost pressures will limit margin progress in LatAm's major markets

Most cement players are struggling to protect their margins due to weak volumes, and energy and freight inflation costs. This is despite cost reduction initiatives, the use of alternative fuels, increased optimization of production and logistics supply models, and price increases.

3. Deleveraging supported by debt reduction and modest EBITDA growth

We foresee a slow but gradual deleveraging trend, mainly underpinned by debt reduction from ongoing loan amortizations and in some cases from non-core assets divestments. We anticipate modest EBITDA growth.

Sluggish economic fundamentals are slowing recovery in cement volumes

We expect trends in the building material sector to remain mixed across LatAm for the rest of 2019 and 2020.

In Brazil, the economy is struggling due to weak investments and still recovering labor market dynamics. Uncertainty about key reforms is delaying investment decisions, albeit pension reforms have recently been approved. In 2019, we expect slightly positive volume growth, mostly driven by retail cement (housing), particularly in the southeast, and the absence of a truck drivers' strike (this affected last year's cement consumption). For 2020, we expect the construction sector to show slow but continued recovery in volumes (by the low to mid-single digits) supported by a gradual recovery in labor market dynamics and fixed investments, including infrastructure projects that would boost cement volumes.

In Mexico, slow government spending on infrastructure projects and public works, a shortfall in housing starts, and an overall difficult business environment will continue to weigh on the construction industry for the rest of 2019, leading to a significant contraction in cement volumes. We estimate volumes will shrink by around 10%. For 2020, difficult business conditions will continue given the lack of infrastructure projects, and the fact that housing starts will likely be down again stemming from the government's proposal to reduce the housing subsidy budget by 14% from the historically low Mexican peso (MXN) 1.7 billion in 2019. These factors are denting our forecasts for cement volumes growth for 2020. We estimate they'll be broadly flat or even slightly negative versus 2019.

In Argentina, the economy is expected to contract by 3% in 2019 and 1% in 2020, which will maintain cement volumes at very low levels. As a result, we foresee flattish volume growth driven by the informal housing sector considering there are no infrastructure projects underway. In Peru, while political uncertainty remains, we forecast real GDP to expand 2.6% in 2019 and 3.0% in 2020, driven the service sector and an expected increase in infrastructure investments. Therefore, we expect low- to mid-single-digit

volume growth in cement in 2020. In Guatemala, we still expect modest GDP and cement growth prospects for 2020, mostly supported by the housing shortage and minor infrastructure projects.

Cost pressures will limit margin progress in LatAm's major markets

During 2019, most LatAm cement players have struggled to protect their margins due to weak volumes, and energy and freight inflation costs. Companies are undertaking cost reduction initiatives, using alternative fuels, increasing the optimization of production and logistics supply models, and increasing prices. For 2020, we expect margins to remain broadly stable with only modest improvements mostly driven by price increases and cost reductions. However, downside risks loom because if, contrary to our expectations, companies are unable to fully pass cost inflation through to end-consumers and volumes contract, this could further pressure margins.

Deleveraging will be supported by debt reduction and modest EBITDA growth

We still expect slow but gradual deleveraging at building material companies in LatAm, for the rest of 2019 and 2020. This will mostly stem from debt reduction from ongoing loan amortizations and in some cases from non-core asset divestments. We expect issuers to keep focusing on profitability and cash flow generation in 2020, with no aggressive M&A transactions and prudent overall financial policies. Nonetheless, EBITDA growth prospects will likely be limited due to weak volume expectations and increasing energy, freight, and labor costs. We think prices will only modestly increase in some markets.

Key risks and opportunities

1. Political uncertainty and economic risks persist in LatAm

Ongoing weak domestic demand, unfavorable domestic political dynamics, and volatile external conditions are weakening GDP growth prospects in the region. There are therefore several downside risks to our base case that could rapidly undermine the recovery in construction activities in the region.

2. Interest rates are low but the appetite for expansionary projects is limited

Financing conditions in LatAm have improved following the Federal Reserve's monetary easing but future issuances in the sector will remain oriented toward refinancing instead of corporate expansion or acquisition transactions throughout 2020.

3. Slow volume recovery and still high overcapacity could limit price increases

Low cement volume growth coupled with low utilization rates among most Brazilian and Mexican cement players will limit companies' ability to significantly increase prices without losing market share.

Political uncertainty and economic risks persist in LatAm

We recently lowered our growth outlook for the major economies in LatAm for the rest of 2019 and 2020. We now forecast aggregate GDP growth in the six largest economies at 0.7% in 2019 and 1.6% in 2020, below the 10-year average of about 2%. This is mostly due to ongoing weaknesses in domestic demand, unfavorable domestic political dynamics, and volatile external conditions.

Specifically, delays in key reforms in Brazil, lack of clarity and polemic decisions in Mexico, an uncertain political arena in Peru, and a recent shift in Argentina's administration pose some risk to GDP growth for the region.

We therefore believe there are many downside risks surrounding our base case scenario that could rapidly undermine the recovery in construction activities in the region, and therefore issuers' growth prospects in the short term.

Amid low interest rates there is limited appetite for expansionary projects

Financing conditions in LatAm have improved following the Federal Reserve's monetary easing. We expect that future issuances will remain oriented toward refinancing instead of corporate expansion or acquisition transactions throughout 2020. However, some speculative grade issuers might have difficulties tapping the international bond market, as investors are more selective and looking for LatAm issuers with more solid fundamentals amid sluggish regional economies and rising geopolitical risks. Moreover, we continue to expect most domestic central banks to maintain, and in some cases like Mexico, to reduce their reference rates in 2020. In Brazil, Mexico, and Peru we expect basic interest rates of 5.0%, 6.5%, and 2.25%, respectively at year-end 2020, which could also support local refinancing, as we have seen in Peru over the past two years. Nonetheless, most of LatAm's rated building material companies have well-laddered debt maturity profiles, with limited maturities in 2020. We therefore do not expect significant refinancing risk in 2020.

Slow volume recovery and still-high overcapacity could limit price increases

In light of the still highly uncertain political environment and sluggish macroeconomic fundamentals in LatAm's key markets, we expect low cement volume growth. As a result, we foresee low utilization rates among most Brazilian and Mexican cement players. In Brazil, we estimate utilization rates to remain at about 50%-60% in 2020, well below the 75% before the country's economic downturn. In Mexico, the second-largest market in the region, with about 62 million tons of cement installed capacity, we think utilization rates will hold at around 60%. In this context, we believe that market participants will have limited room to significantly increase prices without losing market shares and volume.

Asia-Pacific

Key assumptions

1. Slower yet resilient economic growth will support demand

As we now expect slower yet still-resilient economic growth (not a recession) in the region, this will support demand growth for building materials in 2020. Infrastructure and property development is moderating, yet we continue to see growth. The region's need for infrastructure and more housing will underpin long-term demand.

China's production rationalization of building materials is the key driver behind rising prices and the turnaround of Chinese companies in 2018 and 2019 in terms of financial performance. However, China's infrastructure 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 flows

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

3. Leverage will remain largely stable

We expect a moderation in demand growth leading to flattish operating cash flows in 2020. Although we expect companies to be restrained in their capex and M&A activities over the next two years, we believe APAC companies' leverage will stay largely stable, at an improved leverage level in 2019, compared to 2018.

Key risks and opportunities

1. Downside to economic growth

As there seems no short-term solution to the U.S.-China trade tension, the risk to global economic growth is to the downside. A slowdown in economic growth will increase competition in an industry that is already at overcapacity, especially in China. The downward pressure on both volume and prices from an economic slowdown will lead to weakening operating cash flows and companies' rising leverage.

In addition, we believe China is likely to stick to its deleveraging initiative and is unlikely to pour money into infrastructure and property investment to support the economy.

2. Liquidity and refinancing risks

Global interest rates have been on a declining trend because of concerns about an economic slowdown. However, the market is more wary of weaker companies in such an environment. Companies facing operating cash flow squeezes will see tighter liquidity and increasing difficulty in refinancing.

In China, despite the government's initiative to encourage more bank borrowings and to help private companies issue bonds, financial institutions and investors remain concerned about risk at these companies. They are more inclined to lend to or invest in state-owned companies, which they believe have better prospects of debt repayment, especially during an industry downturn.

In addition, we believe the Chinese government's goal to deleverage the economy remains unchanged. The government will still let inefficient or uncompetitive companies fail. The bottom line is to avoid any systemic risk at a regional level.

3. Overcapacity

Building materials generally still face overcapacity, especially in China. The price recovery in 2017-2019 was primarily from the 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 flows. Therefore overcapacity remains an overhang for the building materials industry in the region.

Industry Focus – European Cement

CO2 emissions cuts are moving to the forefront

- As of today, CO2 emissions reduction remains a challenge for cement companies. In 2014-2017, cement's global CO2 intensity increased by 0.3% per year, and production is set to increase up to 23% by 2050, from 2014, according to the International Energy Agency, to meet growth in population and urbanization.
- Therefore, reduction of CO2 emissions is becoming a key topic on cement companies' agendas, particularly in Europe. Companies that can reduce emissions at least to the COP24 target may achieve a competitive edge, both in developed and emerging markets.
- In our view, European cement companies will continue investing in currently available technologies to reduce CO2 emissions, such as plant upgrades through thermal energy efficiency, using alternative raw materials and fuels, or reducing the clinker ratio. We believe that the associated additional capex should be contained, and not exceed 2% of revenues.
- A more substantial reduction of CO2 and potential carbon neutrality would instead require concrete recycling on a large scale, and the adoption of breakthrough technologies to both capture CO2 and re-carbonize recycled concrete. Currently this technology is nascent and not economically viable. However, research and development may change this picture in the next five years.
- So far, European companies have been rather successful in passing higher CO2 prices to final clients, and so protecting their margins. However, if CO2 prices increase further and well exceed €30, it may be difficult for cement companies to fully protect their margins.

Cement makers are responsible for about 7%-8% of the world's CO2 emissions. The industry's huge carbon footprint partly stems from its high fuel requirements. While large companies have started implementing measures to limit CO2 emissions, global demand for cement is increasing. From 2014 to 2017, the direct CO2 intensity of cement production increased 0.3% per year, according to the International Energy Agency, and cement production could rise by as much as 23% by 2050 as the global population grows.

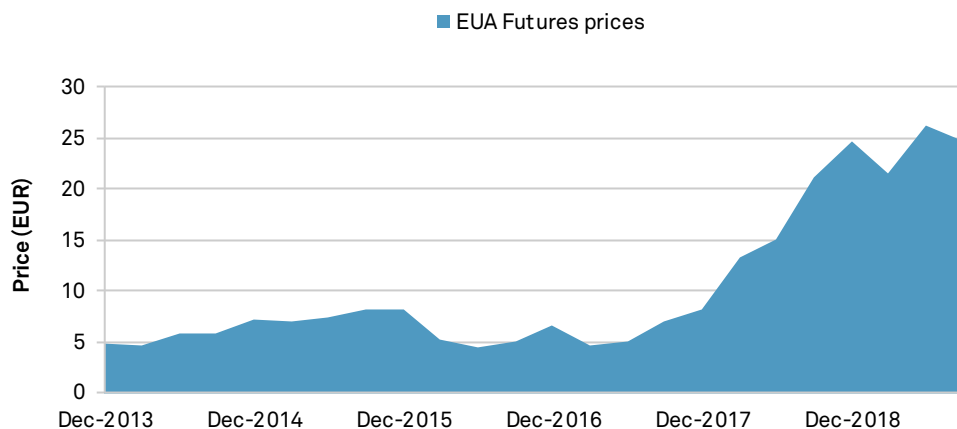
Reduction of CO2 emissions will therefore be on the cement companies' agenda for next few years, particularly in the European Union where an ETS has been in place for a few decades. Almost all companies have set targets for CO2 emission reduction by 2030 and identified key KPIs such as increasing the share of alternative raw materials and alternative fuels in cement production, reducing the clinker ratio, or improving the efficiency of the thermal process (see table below).

In our view, companies that can achieve a more pronounced reduction of CO2 will likely gain a competitive edge over other players. This is because they will improve their ESG standing, not only related to environmental risks but also to social and governance, by enhancing their relationship with stakeholders, such as regulators, governments, investors, and clients. Furthermore, lower emissions can also result in lower operating costs for cement production. For example, by using alternative fuels, companies may reduce their dependence on volatile fossil fuel costs and lower their energy bills. Vertical integration with waste management can help cement companies plan optimal use of alternative fuels and alternative raw materials, and contribute to a circular economy. In those countries with an ETS framework, such as the European Union, companies with lower CO2 emissions will likely need to buy fewer allowances or may sell those that are in excess, which can be a source of cost efficiency, particularly if the rising CO2 price trend is going to continue (see chart below).

CO2 emissions reduction could become a key source of competitive advantage

Chart 13

European Emission Allowances (EUA)



Source: ICE, S&P Global Ratings.

In our view, over the next few years European cement companies will continue investing in currently tested technologies to reduce CO2 emissions, such as plant upgrades, using alternative raw materials and fuels, or reducing the clinker ratio. (Clinker is the result of sintering limestone and alumina-silicate materials such as clay at a temperature of about 1400 °C-1500 °C during the cement kiln stage). These approaches have all proved economically viable and, in most instances, will reduce operating costs. We believe that the associated additional capex should be contained, and not exceed 2% of revenues. Those companies more advanced in this matter could easily achieve the 2030 CO2 emission target by applying the above approaches to their cement plants on a wide scale.

For example, LafargeHolcim, one of the biggest cement companies, has lowered its net carbon emissions by reducing its clinker-to-cement ratio (at 73% in 2018), and by using alternative fuels and improving process efficiencies. The company currently gets 18% of the fuel it uses to heat the cement kilns from waste, biomass, and other low-carbon sources, and wants to increase it significantly. LafargeHolcim is therefore investing in digitalization of waste management and in standardizing the recycling rate through ashes from alternative fuels. To reduce net CO2 emissions, LafargeHolcim is spending Swiss francs (CHF) 160 million on 80 projects across Europe.

Similarly, Heidelberg aims to invest 80% of its research and development budget in the development of sustainable products by 2030. In 2018, HeidelbergCement spent €145.7 million on research and technology, or 0.8% of the company’s revenue. HeidelbergCement is also gradually increasing its use of alternative fuels and decreasing its clinker ratio to reduce its CO2 emissions. In 2018, the proportion of alternative fuels in the fuel mix was a high 22%, and the group intends to increase it to 30% by 2030.

As for CRH, cement represents a limited 10% of group revenues, but, together with lime, it accounts for 93% of the group's direct CO2 emissions. In 2018 CRH spent €154 million on environmental projects such as carbon reduction projects, resource efficiency, and water management equipment. The proportion of alternative fuels in the fuel mix was a leading 30% in 2018, which also reflects the group's proportionally higher share of cement business in Europe when compared with peers. On the other hand, its clinker to cement ratio stood at 78% in 2018, which provides the group room to reduce it.

Companies will continue reducing CO2 emissions by investing in current available technologies

In our view, there is ample room to reduce the CO2 emissions by continuing to apply, at wider scale, alternative raw materials and fuels, improving thermal efficiency, and lowering the clinker ratio. As of today, large cement players are concentrating their efforts largely in Europe. However, we believe that the number of countries putting a price on carbon, either through taxes or emission trading systems, will increase in the next few years, which means that cement players will extend CO2 reduction efforts outside Europe.

Table 1

European Cement Companies' Environmental KPIs

Company	Buzzi Unicem	Cemex	CRH	Heidelberg Cement	Lafarge-Holcim
Net CO2 emissions (kg per ton of cementitious material)					
2016	705	642	578	610.5	585
2017	696	636	572	607.6	582
2018	690	630	595	599.2	576
Target (date of target)	662 (2022)	570 (2030)	580 (2020)	525 (2030)*	520 (2030)
Clinker to cement ratio (%)					
2016	80.9	78.4	76.5	75.2	73.0
2017	80.2	78.4	77.5	75.3	72.0
2018	80.0	78.6	78.3	74.7	72.0
Thermal substitution rate (%)					
2016	27.0	23.3	33.4	19.7	17.0
2017	26.0	26.2	38.6	20.8	18.0
2018	27.1	27.1	30.3	21.7	18.0

Source: Companies' Sustainability Report. *Based on 29% targeted reduction in CO2 emissions by 2030 compared with 1990.

**Based on 30% targeted reduction in CO2 emissions by 2030 compared with 1990.

A more substantial reduction of CO2, well beyond companies' 2030 targets, and potential carbon neutrality would instead require concrete recycling at large scale, and the adoption of breakthrough technologies to both capture CO2 and re-carbonize recycled concrete. However, wide availability of recycled concrete requires a change in the building construction value-chain, which may need significant time. Furthermore, as of today, carbon capture and storage is at too early a stage, technologically, and is not a viable solution because it is much too expensive. However, this picture may change in the longer term.

Carbon capture storage (CCS) could be a mitigation option for cement companies, given their process emissions have a high CO2 concentration. However, CCS is not a mature technology, and no large-scale plant operates at industrial sites. Based on McKinsey research, total costs for CCS range from €22 to €164 per ton, but in our view in the cement process it would likely exceed €90, which is well above the current cost of CO2 allowances in the EU. Costs could be reduced where there are no associated co-benefits such as energy savings or purity of products. This is the case with the LEILAC (low emission intensity lime and cement) project currently under development in the EU and supported by the EU's Horizon 2020 research and innovation program. A 240 tons/day pilot is being built at HeidelbergCement's plant in Lixhe, Belgium. The project aims to significantly cut CO2 emissions from the cement and lime industry by applying direct separation calcining technology, which will capture over 95% of the calcination process CO2 emissions (which is 60% of total CO2 emissions) without significant energy or capital penalty. If combined with alternative fuels, this technology could even achieve negative CO2 emissions. The proposed technology could enable both Europe's cement and lime industries to significantly reduce their carbon emissions while retaining, or even increasing, international competitiveness. This is because the plant reactor would have comparable capital costs and potentially lower operating and maintenance costs than

CO2 neutrality implies concrete recycling at large scale and the adoption of breakthrough technologies to capture carbon. This is not economically viable today, but the picture may change in the next five years.

conventional kilns. However, as of today, direct separation has some problems, mainly related to the durability of the steel reactor structure. As such, further research and testing is necessary for wide-scale application.

Since the past decade, the Emissions Trading System (ETS) has been a cornerstone of the EU's policy to face climate change. The ETS works on the "cap and trade" principle. Within the cap, companies receive or buy emission allowances, which they can trade with one another as needed. After each year, a company must surrender enough allowances to cover its emissions. Currently, we are in Phase III of the EU-ETS, which runs from 2013-2020. Phase IV of the EU-ETS will apply post-2020 and is being structured to achieve the EU's 2030 emission reduction target, as part of the EU's contribution to the 2015 Paris Agreement. We understand that its framework could be significantly more demanding for cement companies, with many fewer allowances granted. As such, it is likely that European cement companies will face increasing costs for CO2 allowances over next few years.

In 2018-2019 the cost of European emission allowances has increased significantly and exceeded €20, up from an average of €5 as of 2017. The cement industry has been successful in passing the higher associated costs to final clients, thereby protecting its margins. In our view, European cement players could pass further increases in CO2 allowances of up to €30 to clients, without a significant margin sacrifice. This gives them some flexibility based on current price of CO2 allowances. However, a rise in CO2 costs well above those levels may lead to significantly higher cement prices, which companies will unlikely be able to pass to clients, thus pressuring margins.

We also believe that larger players, which typically display high investment capabilities to reduce CO2 emissions, are better positioned to withstand such challenges compared with small players. This may result in further supply consolidation, particularly in those countries with an excess of capacity. Furthermore, large players would also benefit from wider geographical diversification in regions with less stringent environmental regulation

Related Research

- ESG Industry Report Card: Building Materials And Engineering And Construction, Jun 03, 2019
- Economic Research: Will Trade Be The Fumble That Ends The U.S.'s Record Run? Sep 27, 2019

In the EU, a moderate rise in CO2 prices should not significantly affect companies' margins

This report does not constitute a rating action.

Industry forecasts

Global Building Materials

Chart 14

Revenue growth (local currency)

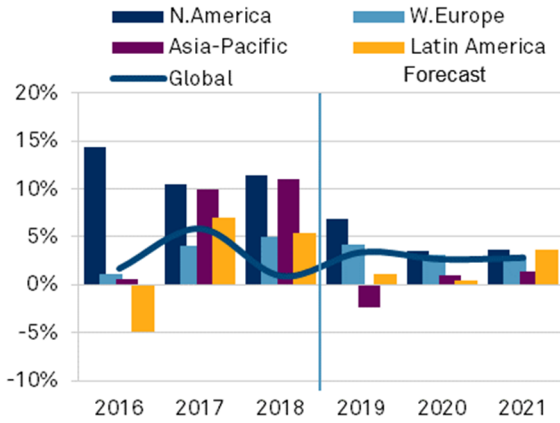


Chart 15

EBITDA margin (adjusted)

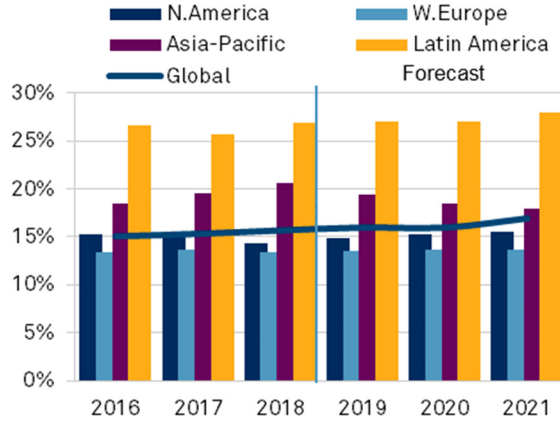


Chart 16

Debt / EBITDA (median, adjusted)

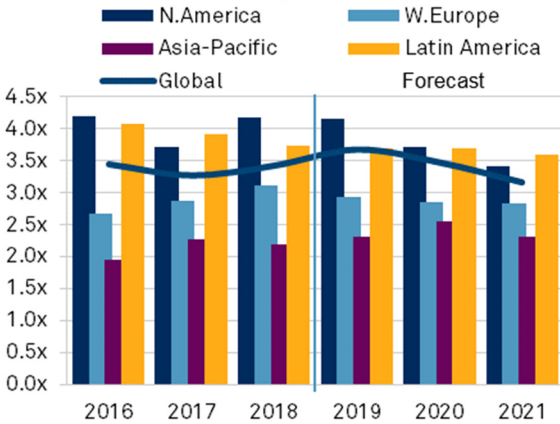
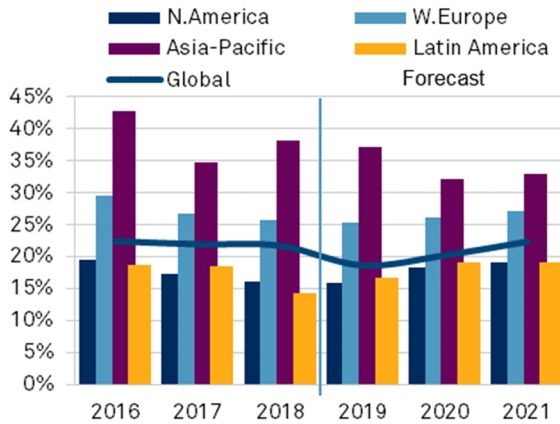


Chart 17

FFO / Debt (median, adjusted)



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.

Cash, debt, and returns

Global Building Materials

Chart 18

Cash flow and primary uses

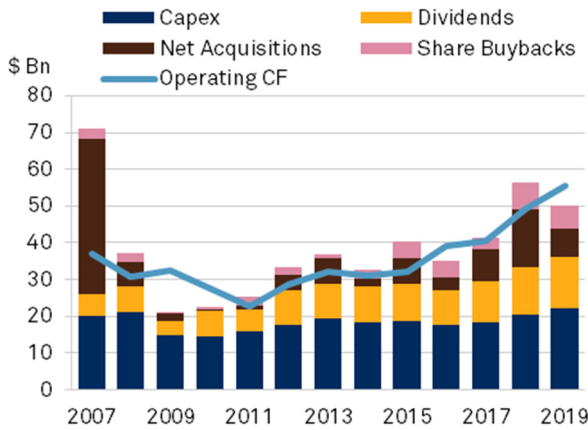


Chart 19

Return on capital employed

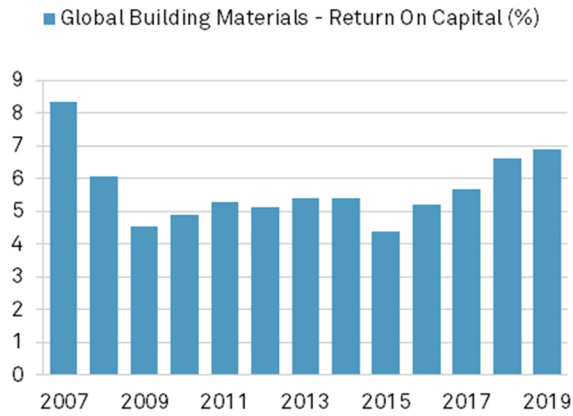


Chart 20

Fixed versus variable rate exposure

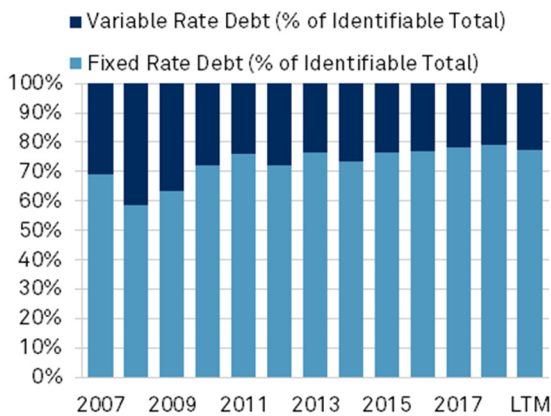


Chart 21

Long term debt term structure

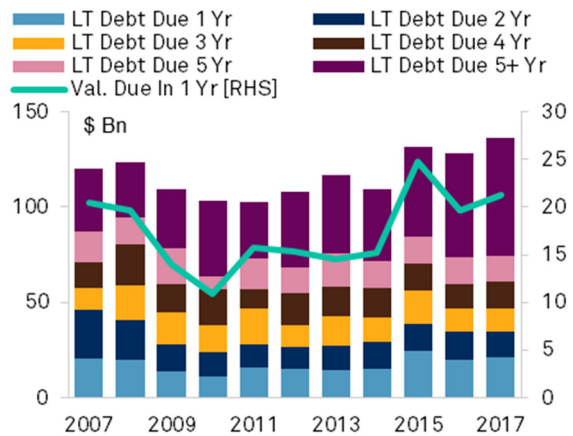


Chart 22

Cash and equivalents / Total assets

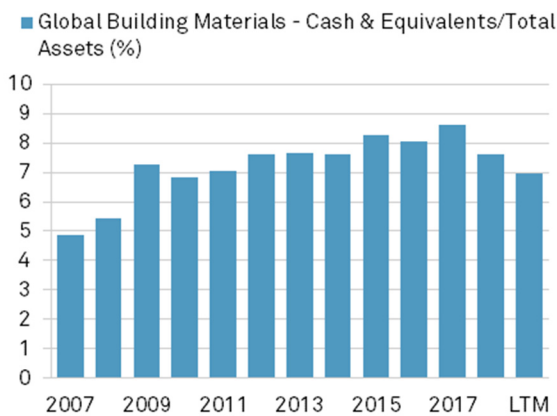
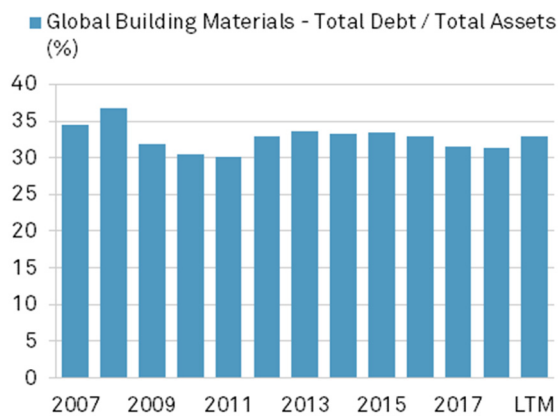


Chart 23

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 © 2019 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