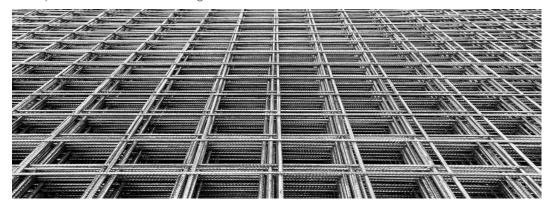
Building Materials

Stable credit quality despite high inflation and interest rates

January 23, 2023

This report does not constitute a rating action



What's changed?

Companies are navigating high inflation and volatile costs. Margins will likely be still under pressure in 2023, with persistent volatility on energy prices in Europe.

Volumes will likely decline after several years of growth. In Europe and North America, volumes should drop in most segments, apart from infrastructure. China should recover in 2023.

Increased interest rates in both the U.S. and Europe are a challenge for the sector. Reduced consumer discretionary spending fuels the slowdown in residential construction. Higher debt-service costs will dent cash flow in leverage finance.

What are the key assumptions for 2023?

Credit quality will remain largely stable. This will be supported by decent rating headroom, and balanced capital allocation.

Demand for home repairs will decrease. This will offset sustained infrastructure investment in low-carbon energy and renovation of existing infrastructure.

Climate transition risk will continue to drive capital allocation. This is particularly true for regions with carbon regulation.

What are the key risks around the baseline?

Shareholders might consume much of the credit buffer. Financial policy remains the main factor in negative rating actions, and more aggressive behavior than we are assuming would likely stress ratings.

The recession and volume decline could be worse than we expect. In that scenario, margin pressure could accelerate, particularly if cost inflation remained high.

Higher interest rates are a risk for speculative-grade issuers. However, refinancing risks will increase only in the medium term, as most of issuers' financial debt mature beyond 2025.

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Ratings Trends: Building Materials

Chart 1 Ratings distribution

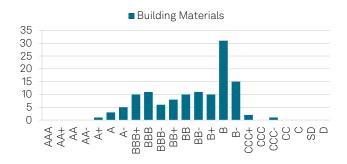
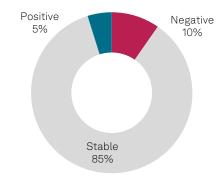
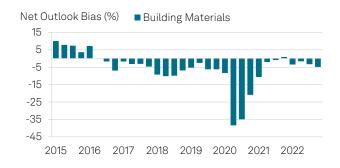


Chart 3 Ratings outlooks



Ratings outlook net bias



Source: S&P Global Ratings. Ratings data measured at quarter-end.

Chart 2 Ratings distribution by region

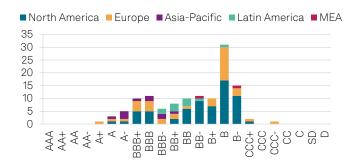
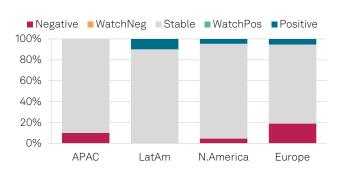
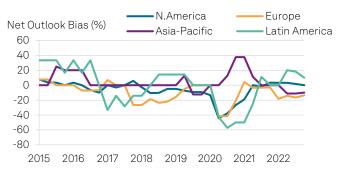


Chart 4
Ratings outlooks by region



Ratings net outlook bias by region



Industry Outlook: North America

Ratings trends and outlook

A shift toward a more negative outlook bias could arise in 2023, as the prolonged effect of inflation and elevated interest rates reduce consumer discretionary spending and pressure operating margins. However, we expect the credit quality for North American building materials companies should remain largely stable in 2023, with over 90% of issuers having stable outlooks. We anticipate companies with high debt levels or reduced liquidity following leveraged buyout transactions or dividend recapitalizations will face worsening credit metrics in the next 12-24 months. On the other hand, companies that can maintain pricing with lower-cost inventory despite declining demand volume will be better positioned to meet our profit and leverage forecasts for 2023.

Main assumptions about 2023 and beyond

1. Slowing demand for home repairs and construction could bite in 2023

We expect modest revenue declines in 2023 after a period of strong performance. The expectation of the U.S. falling into recession in early 2023 indicates further potential for reduced discretionary spending.

2. Strong infrastructure and housing market fundamentals should mitigate margin pressure

Margins will be under pressure in 2023 as commodity, labor, and delivery costs remain constraining factors. Aging housing stock and federal investment in infrastructure should present some favorable demand expectations, but issuers will likely rely on pricing power to maintain margins.

3. Liquidity preservation will become more important as market growth slows

The North American building materials sector has been attractive for consolidation. We believe a recession in early 2023 will precipitate a shift in issuers' liquidity management to prioritize sheltering cash flow.

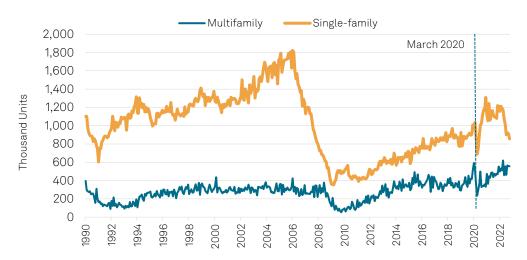
Overall, we expect repair- and remodel-exposed companies to be relatively less volatile than those exposed to new housing. However, discretionary consumer spending levels could affect demand for some building products such as cabinetry and bath fixtures. Revenue across the portfolio has been generally strong in recent years, but we expect flat to low-single-digit declines for the sector with commodity-based companies falling more sharply. Housing starts hit a decade high in December 2020 and nearly replicated unit creation by year-end 2021, although year-on-year growth for the 12 months ending October 2022 fell to pre-pandemic levels. We now expect total housing starts to be about 1.2 million units in 2023.

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Chart 7

U.S. Housing Starts



Source: Federal Reserve Economic Data. Note: Multifamily starts are housing starts of 5-unit structure. Data as of October 2022.

In contrast with residential end-markets, nonresidential construction has seen declines of 9.2% in 2022 but decelerating to about 5% in 2023 in private and public construction segments like lodging, education, manufacturing, and office. The Biden administration's \$1.2 trillion infrastructure bill from November 2021 includes investment in roads, bridges, water systems, electricity grids, broadband, and health care. We believe the bill will result in an uptick in nonresidential spending with the market reflecting federal investments modestly in 2024. However, forecasts for nonresidential construction are notably weaker because the sector is still hurting from the pandemic-related damage to commercial real estate and implementation designs are not indicating material short-term benefits.

Chart 8

U.S. Nonresidential and Residential Construction Forecast



Source: S&P Global Economics, Economic Outlooks U.S. Q1 2023: Tipping Toward Recession. Nov 28, 2022. f -- Forecast.

Credit metrics and financial policy

We anticipate deterioration of earnings and margins impairing the sector's credit quality. Tailwinds from increased home investment, heightened repair and remodel spending, and new homebuilding activity that began during second-half 2020 persisted into early 2023. Over 90% of the outlooks in the sector were stable at the end of 2022, reflecting these tailwinds tapering off, with fewer positive outlooks.

Chart 9

Rating Outlooks in U.S. Building Materials

2008 2009 2010 2011

Negative Stable Positive

Negative Stable Positive

Source: S&P Global Ratings

Key risks or opportunities around the baseline

1. Interest rates and cost inflation could strain consumer wallet and reduce earnings

We anticipate a recession in 2023 reducing discretionary spending with interest rate hikes attempting to moderate inflation. If these intensify, we believe issuers will both face reduced volume and be hard-pressed to maintain pricing.

2. Shareholders may consume much of the credit buffer with shortening maturity horizons

Financial policy remains the main factor in negative rating actions. Both private equity-owned and publicly listed companies have used cheap debt to expand shareholder returns through dividend recaps and leveraged buyout transactions. Some of these transactions yield credit benefits, but many have caused downgrades.

3. Easing cost pressures could help mitigate margin pressure

Many issuers have struggled to find labor, further exacerbating material input cost inflation and straining margins. The labor force exit has added to business costs and reduced productivity. Many companies have cut corporate costs to maintain margins, but further cuts seem unlikely.

Increased inflation is a risk to our base-case assumption. So far, most building material companies have passed through raw material price increases, helped by robust demand, especially in the repair and remodel end-market. If high inflation persists, likely from supply chain constraints and global political volatility, issuers will find it more difficult to pass through costs. In

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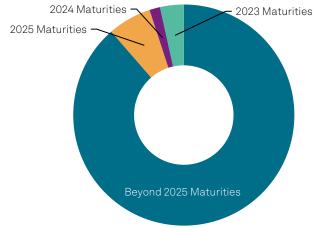
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2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

such a scenario, sales would most likely slow, and margins would drop compared with our base-case scenario. This could result in negative rating actions, especially for companies with significant exposure to discretionary consumer spending.

Aggressive financial policies remain among the main risks to ratings. Both private equity-owned and listed companies have demonstrated aggressive debt-funded activities. While these took advantage of cheap debt, many did not reap expected credit benefits, resulting in deteriorated credit ratings. Historically, deterioration has been concentrated in only low-rated, high-risk issuers. But our recent negative outlook revision on Stanley Black & Decker indicates a shift to include investment-grade issuers. The company's metrics were affected by waning consumer demand and persistent inflationary pressure coupled with recent acquisitions, share repurchases, and increased debt resulting in strained metrics. Expectations of a recession in 2023 generates the likelihood of additional issuers exhibiting similarly aggressive policies that could lead to credit deterioration. Exacerbating liquidity risk, total sector debt includes slightly over 10% of debt principal coming due by year-end 2025. We consider risk more severe for speculative-grade companies, whose at-risk debt composes over three-quarters of sector debt maturing by year-end 2025. Liquidity, therefore, represents a significant medium-term risk with climbing interest rates making refinancing costly and declining demand reducing capital on hand.

Chart 10
Building Materials Debt Principal Maturity Schedule



Source: S&P Global Ratings

Many factors have contributed to declining affordability and consumer demand. The alleviation of some of these factors may ease discretionary spending declines. High labor costs are a key factor affecting issuers' bottom lines and contributing to the depth of the expected 2023 recession. Despite aggressive countermeasures, the job market remains tight as overall inflation outpaces wage gains. If Fed intervention closes the gap between real disposable income and inflation, consumer demand might pick up and margin strain could lighten.

Factors contributing to slowing consumer demand and price increases might be resistant to external forces. U.S. inflation remains high on continued supply-chain disruptions emanating from the Russia-Ukraine conflict and China's zero-COVID policy. We could see supply chains stabilize sooner than expected, helped by easing measures in China or a faster resolution to the Russia-Ukraine conflict. If international relations supporting elevated price levels are alleviated, the Fed is likely to slow monetary tightening and we might see stressed issuers with more cushion than expected.

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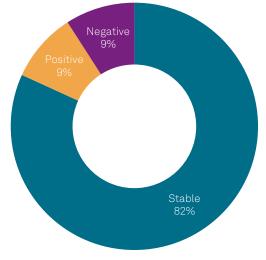
Industry Outlook: EMEA

Ratings trends and outlook

The European building materials sector faces significant indirect effects from the Russia-Ukraine war. In 2022, issuers saw unprecedented inflationary pressure and highly volatile costs. Most companies have passed through the rise in raw materials and energy costs to clients, leading to a dilution of companies' EBITDA margins and a rise in working capital needs. In addition, volumes have started to decline in Europe in the second half of the year. As recession risks are increasing and consumer confidence declining, volume and pricing pressure could intensify. Positively, most companies can leverage decent rating headroom built up in the recovery after the pandemic. In fact, about four-fifths of rated companies display a stable outlook. Still, negative outlooks increased to 18% in December 2022 from 11% in December 2021, and the current negative outlook bias indicates that negative rating actions should exceed positive ones in 2023. We believe speculative-grade companies are more exposed to downgrades, given their weaker business diversity and higher sensitivity to raising interest rates ahead of a high debt pile. Rating headroom for investment-grade companies remains broadly sound. We believe that financial policies will continue to determine companies' creditworthiness and our ratings, both in the investment-grade and speculative-grade category.

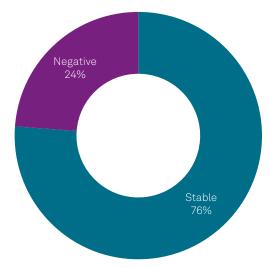
Chart 11 Chart 12

Ratings outlooks--European Investment Grade Issuers



Source: S&P Global Ratings

Ratings outlooks--European Speculative Grade Issuers



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Source: S&P Global Ratings

Main assumptions about 2023 and beyond

1. Volume drop or stagnation in most segments, apart from civil engineering

According to Euroconstruct, the European construction outlook will significantly worsen in 2023-2024 compared with 2021-2022. Most volume contraction is in new residential and residential renovation. Civil engineering should benefit from investment in low-carbon energy and renovation of infrastructure.

2. Margin pressure will stay, with pockets of initial recovery if energy costs pressure eases

So far, most companies have passed through these costs to clients, though with some lag. Still, we expect 2022-2023 margins to be well below 2021 levels. While weakened demand in 2023 could stress margins, those segments where cost inflation pressure has eased could benefit from margin recovery. Similarly, if natural gas wholesale spot prices remain at current level, heavy side building material companies' margins could benefit.

3. Financial policy is key to rating protection

It is unlikely that a mild recession we anticipate in 2023 would alone drive significant negative rating actions. Instead, we believe that financial policy will be the key factor behind any rating action. If investment-grade companies do not moderate shareholder remuneration, rating headroom could quicky disappear. In turn, if private equity-owned companies do not adapt their capital structure to increased interest rates, weaker cash flow would translate into lower ratings.

In 2022, significant changes in Europe worsened the economic and operating environment in the construction sector. The Russia-Ukraine conflict has further intensified inflation and highly volatile costs. Furthermore, rising interest rates and the problems with construction material and skilled workers availability resulted in slowing volumes and weakened business confidence. As such, we anticipate the construction sector will grow much less in 2023-2024. According to Euroconstruct, cumulative growth in 2023-2024 will be just 0.2%, compared with 8.8% in 2021-2022. Most of the contraction relates to the new residential and residential renovation sectors. Higher interest rates could significantly scale down the boom in new housing across Europe from the past five years. Mitigating the risk, civil engineering should continue benefiting from investments in low-carbon energy and renovation of existing infrastructure, following the Next Generation EU plan's implementation.

Chart 13
Construction Output By Sector (EC -19, Index, 2022=100)

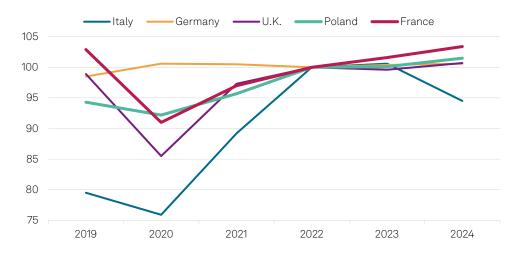


Source: Euroconstruct

At a country level, the picture is more homogeneous in 2023-2024 when compared with 2021-

2022. According to Euroconstruct, Italy, which has been the best performer in 2021-2022 with an expected cumulative growth of about 30% thanks to the support of subsidies to the residential renovation segment, should post no growth in 2023 and a 5% decline in 2024. Similarly, the U.K. construction sector, which has significantly rebounded in 2021-2022 largely thanks to a positive contribution from the infrastructure segment, should post stable construction volume in 2023-2024. Most other countries should post almost-stable growth in 2023 and a modest recovery in 2024. Germany should continue posting stagnating growth in 2023-2024.

Chart 14
Construction Output By Country (Index, 2022=100)



Source: Euroconstruct

In this context, it is not surprising that the building material sector should significantly moderate its solid performance posted after the pandemic, with a likely volume drop in 2023 and volume stagnation in 2024. Still, companies should continue to pass through cost inflation to

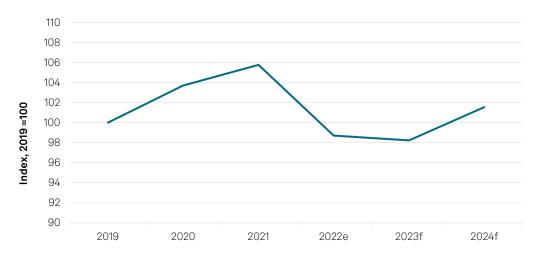
Industry Top Trends 2023: Building Materials

clients, though with more lag in segments where the volume drop is more pronounced. As a result, we anticipate stable revenue in 2023 and moderate growth in 2024. We also believe average EBITDA margin should broadly stabilize in 2023 after the abrupt decline in 2022, and then progressively recover from 2024. EBITDA margin related to heavy-side building material companies, such as cement, will likely continue to suffer if energy prices will remain elevated or further increase, given the comparatively higher weight of energy bills in their cost base.

Raw material and energy products' cost inflation initiated in fourth-quarter 2021 further intensified over 2022 in Europe, reaching unprecedented levels. This has been a key issue for the building material sector. As example, natural gas, a key energy source in some building materials segments, had displayed a monthly spot price in the TTF market of about 7x higher in July than in the same period of 2021. Positively, most Europe-based building material companies have significant operations outside the continent, where the pressure on energy bills is comparatively less. Furthermore, for high energy consuming companies, the energy mix in Europe includes a significant contribution from alternative fuels, whose price has not followed the same trend as fossil fuels. Still, we estimate that building material companies' energy bills in 2022 has doubled on average compared with 2021, notwithstanding the mitigation of hedging policies. Although most companies have passed through these costs to clients, this happened with some lag, reflecting resilient-if-slowing demand. As a result, average EBITDA margin dropped by 150-200 basis points (bps) from 2021's record high. With slowing global demand, most raw material cost inflation significantly retraced in second-half 2022. For example, in November 2022, both aluminum and copper spot prices at the London Metal Exchange were about 20% lower than the prewar level, although they remained higher than the average 2020-2021. In addition, energy prices, particularly electricity and natural gas, have partially retraced from their third-quarter 2022 peak and trend toward prewar levels. most European building materials companies passed through increases in energy costs in 2022, so companies can temporarily enjoy some positive margin impact from the price decrease if they are not hedged. That is particularly relevant for energy-intensive businesses such as cement. Despite the contraction in prices, in January 2023 natural gas spot price at the TTF market was €60-€80, 2x higher than the 2021 average. Those segments where cost inflation pressure has eased and exposure to energy saving megatrend might support demand, could benefit from some margin recovery.

Chart 15

Adjusted EBITDA Margin (Index, 2019=100)

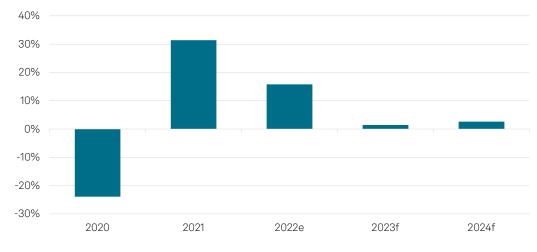


Source: S&P Global Ratings. e-Estimate. f-Forecast

Notwithstanding weakened business confidence, most companies kept unchanged or even increased their capex in 2022. We anticipate that capex will have grown about 15% in 2022, following a 31% increase in 2021. Most building material companies prioritize investment in those business segments with higher growth potential and less climate transition risk.

Chart 16

Capex Trend (% Change Year On Year)



Source: S&P Global Ratings. e—Estimate. f—Forecast

Climate transition risk is particularly at the core of cement companies' capital allocation as these companies assign an increasing share of their maintenance capex to improve plants' thermal efficiency while cutting carbon dioxide (CO2) emissions. Investment relates to increasing the use of alternative fuels or biomass, decreasing clinker content, and accelerating process innovation. On average, we estimate that investments associated with reaching 2030 targets CO2 reduction represent about 20% of large European cement companies' yearly maintenance capex. Some companies are switching to other building products, which is helping

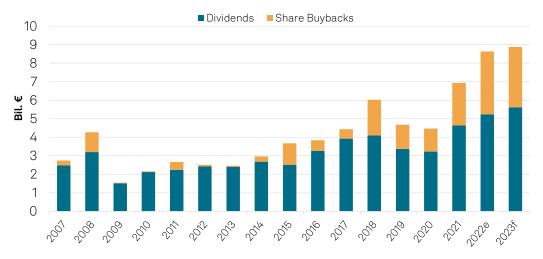
Industry Top Trends 2023: Building Materials

reduce their consolidated carbon intensity. The most tangible example is Holcim, whose growth strategy focuses on increasing its share of value-added products and strengthening its environmental credentials by refocusing away from the core cement business. As part of this portfolio transformation, in 2021, Holcim acquired Firestone Building Products for \$3.40 billion, and more recently Malarkey Roofing Products for \$1.35 billion, both to strengthen Holcim's presence in the U.S. residential roofing market. The company also executed its strategy to reduce exposure to cement in emerging markets. A key step in this move, in May 2022, Holcim announced the divestment of its India businesses for net cash proceeds of Swiss franc 6.4 billion. We believe the company will reinvest these funds to accelerate the transformation of its portfolio, expanding its solutions and products segment to the targeted 30% of group sales by 2025.

Credit metrics and financial policy

The military conflict in Ukraine and energy crisis left investment-grade companies with lower free operating cash flow (FOCF), but leaving room for mergers and acquisitions (M&A) and shareholder distributions in 2023. The building materials sector recovered swiftly from the COVID-19 pandemic, benefiting from very strong end-markets demand, and started 2022 with strong rating headroom. However, the war brought uncertainty surrounding inflation, energy availability, and demand. The inflationary pressure on working capital impaired companies' free cash flow and net adjusted debt. Overall, we forecast that average adjusted leverage of investment-grade issuers will increase to 1.4x in 2022 from 1.2x in 2021. Still, we believe the increase is manageable for companies, and adjusted leverage was at record lows in 2021. Dividends and share buybacks increased in 2022, based on the strong results of the previous year. We expect that shareholder remuneration will slightly increase in 2023. Several investment-grade companies have solid rating headroom at end-2022, such as CRH and Holcim, which will likely translate into higher M&A activity or shareholder remuneration. While companies could use their rating headroom, we believe they remain generally committed to the rating, and we do not anticipate negative rating actions.

Chart 17
Largest European Building Materials Companies' Shareholder Remuneration



Source: S&P Global Ratings. e—Estimate. f—Forecast. Companies include Buzzi Unicem, Compagnie de Saint-Gobain, CRH, Geberit, HeidelbergCement, Holcim, Legrand, Rexel, and Wuerth.

Chart 18
Rating Headroom of Main Rated Investment-Grade Issuers



Source: S&P Global Ratings Downside threshold for Saint-Gobain is for the stable outlook.

After a pause in 2022, we expect debt-funded acquisitions or dividend recap to resume for speculative-grade companies, which could result in higher financial leverage. The military conflict and economic stresses pushed issuers to concentrate on their operations and cash flows. The raw materials and energy costs inflation diluted the companies' EBITDA margin, although most companies have passed through costs to customers. However, cost inflation and supply chain tensions absorbed a lot of cash in companies' working capital needs, which lead to a drop in their FOCF. In some cases, speculative-grade companies drew on revolving credit facilities and local lines to fund working capital and saw their adjusted leverage increasing. In our view, if the working capital trend does not reverse or if the European economy turns into a prolonged recession, there could be negative rating actions in 2023. The debt market was also muted for most of the year. As a result, we only saw a handful of leveraged buyout transactions and bolt-on acquisitions at the beginning of the year. In 2023, we anticipate that debt-refinancing activities, which have been postponed, will resume. Some private equity-owned companies report low leverage levels. However, private equity-driven financial policies continue to constrain companies' financial risk profiles, through dividend recapitalization or acquisitions. Our base-case scenario behind the ratings does not encompass dividends or transformational M&A for private equity-owned companies because they are generally uncertain in size and timing.

Key risks or opportunities around the baseline

1. Prolonged recession and weaker demand would impair credit metrics

We anticipate that volumes will broadly stagnate in 2023, with volume drops in some endmarkets. In our view, companies could struggle passing through any additional inflation costs to clients. In this situation, we would expect a weakening in margins and cash flows.

2. Energy prices and shortages could constrain companies' production and profitability

Building materials is an energy intensive sector, and companies face an elevated rise in their energy bills. As recession risk increases, companies may struggle to pass through further increases in energy prices in 2023. Positively, energy consumption in Europe has reduced on the back of a mild winter, leading to a decrease in energy prices.

3. Hikes in interest rates will increase refinancing risks for speculative-grade issuers

Many rated speculative-grade issuers have debt that is priced at historic low interest rates. As central banks increase their benchmark rates, we expect that issuers will face an increase in their interest expenses which would reduce their FOCF. Mitigating this, most issuers do not have large debt maturity before 2025.

Contraction in demand will test issuers' pricing power and cost flexibility. End-markets demand started to decline in 2022, and we believe this will continue in 2023. We anticipate a drop in volumes in the new residential building end-market. Households are likely to postpone spending due to the rise in interest rates and building materials product prices. In our view, this will limit companies' abilities to pass through inflation costs to clients, adding significant pressure to margins and cash flow. The outcome of the Russia-Ukraine war is still uncertain, and further indirect consequences could emerge in 2023. Competition from other regions, which are not facing the energy crisis to the same extent, could also intensify and push European manufacturers to lower their product prices.

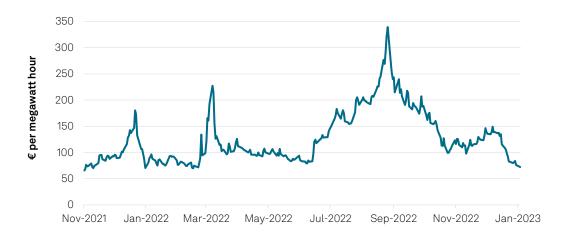
Energy prices and shortages could constrain companies' production and profitability.

Electricity and gas prices have soared in 2022 since the outbreak of the conflict in Ukraine. Building materials is an energy-intensive sector, and companies faced an elevated rise in their energy bills. In particular, natural gas is needed for the manufacturing of key building materials and products, such as ceramic tiles, clay roof tiles, and cement. Gas prices peaked in August 2022, and remain above historical levels. In addition, gas hedges have not covered the price increases and companies' needs. So far, companies have passed through the rise in energy costs to customers, which led to a dilution of profitability margins. While energy prices are declining, companies may struggle to pass through further price increases in 2023, as recession risks increases and volumes are expected to decline. The European energy crisis has deteriorated the competitive position of European building materials manufacturers. We believe some companies could permanently move away part of their production capacities from Europe.

Risks of energy shortages have increased since early 2022. However, gas reserves were almost full in Europe ahead of winter, and mild temperatures have helped contain energy needs. Although this risk has recently declined, companies could also face temporary power cuts, due to lower-than-usual electricity production output in Europe. In this situation, we would expect lower plants usage rate, sales, and profitability. This might translate into negative rating actions for less diversified companies, or where available rating headroom is limited.

Chart 19

Dutch TTF Natural Gas Futures



Source: S&P Global Ratings

In an uncertain and volatile global economy, the rise in interest rates will dent FOCF and increase refinancing risks. Many rated issuers have debt priced at historically low interest rates before the COVID-19 pandemic. Some issuers also refinanced and repriced their debt in 2021, boosted by the sector's very strong recovery and supportive financial market conditions. However, the European Central Bank and the Fed have started increasing their policy rates, and we expect that issuers will face an increase in their interest expense. In our view, the credit metrics of speculative-grade issuers will be more affected because of their highly leverage capital structures and weaker free cash flow profiles. While hedges and rate caps could somewhat protect speculative-grade issuers for some quarters, we believe the rise in interest rates could permanently weaken the companies' FOCF. We conducted two simulation exercises under which we have increased interest expense for issuers rated in the 'B' and 'CCC' category in the building material sector. In our downside-case scenario, we increased interest expense by 20% in 2023 and 30% in 2024. In our worst-case scenario, interest expense is 30% and 60% higher than our base-case one in 2023 and 2024, respectively. Under these two scenarios, average FOCF would recover less than in our base-case scenario, although we would still see higher average FOCF than in 2022, owning primarily to reversals of working capital. A few issuers would have very limited or negative FOCF. Under these two scenarios, the average EBITDA interest coverage would also drop, although it would remain above 2x.

Chart 20

Free Operating Cash Flows Sensitivity Analysis

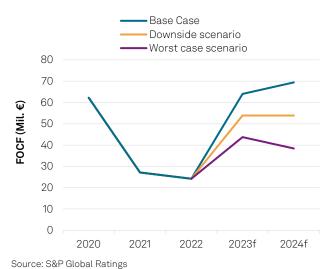
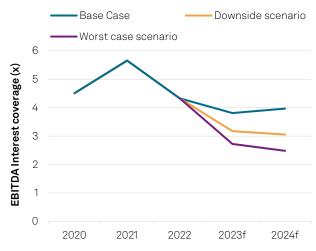


Chart 21

EBITDA Interest Coverage Sensitivity Analysis



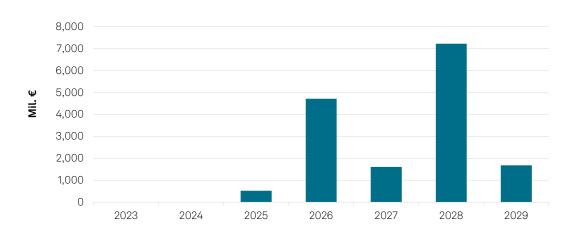
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Source: S&P Global Ratings

Positively, issuers in the 'B' and 'CCC' category do not have large debt maturity before 2025 in the European building material sector. When companies will refinance their debt, we expect much higher interest rates and expense, which will weaken their free cash flow if they do not adapt their capital structure (that is, a lower debt quantum).

Chart 22

European Building Materials Speculative Grade Debt Maturity Distribution



Source: S&P Global Ratings. Includes Term Loan B, revolving credit facilities and bonds maturities.

Decarbonizing the cement production remains at the top of the agenda for cement

manufacturers. The following are extracts from "Decarbonizing Cement Part One: How EU Cement Makers Are Reducing Emissions While Building Business Resilience" and "Decarbonizing Cement Part Two: Companies Could See Pressure On Ratings As The EU Firms Up Carbon Rules," published Oct. 27, 2022 on RatingsDirect:

Cement production is responsible for about 7% of the world's direct CO2 emissions, according to the Global Cement and Concrete Association. Cement manufacturers' carbon intensity ratios are about 6x larger than the average for the materials sector and well above most other

Industry Top Trends 2023: Building Materials

business sectors. Producing a ton of grey cement today generates around 0.6 metric tons of CO2 on average but can vary widely from 0.5 to 0.8 metric tons (EIA data). The EU's largest cement manufacturers have committed to reducing their scope 1 CO2 emissions per ton of cement by around 30% by 2030, from 1990, mostly via enhanced thermal-energy efficiency and fuel switching. We view this target as achievable, and at reasonable cost. Beyond 2030, a significant drop in direct emissions can only be achieved via reduced demand (greater product efficiency) and accelerated carbon capture and storage. The required technologies are still in prototype or development, awaiting significant infrastructure investments to scale up. As such, it remains uncertain whether the sector can achieve carbon neutrality by 2050.

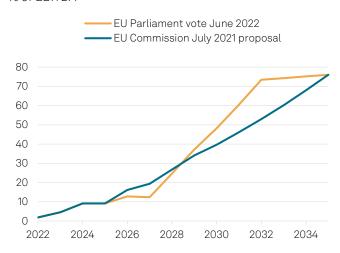
The proposed EU regulation "Fit for 55", targeting a 55% carbon emissions reduction by 2030, could lead to a much lower supply of free carbon allowances for cement companies, significantly increasing their carbon-related costs if they cannot cut emissions. The so far limited effect of carbon costs on cement companies' profits and financial risk profiles could change under the proposed EU ETS reform. This is because most manufacturers would likely rapidly consume any stockpiled carbon allowances and start paying much higher carbon costs. Their ability to sustainably pass-through much higher costs to customers would be tested. We note that so far, amid rising European energy prices, cement manufacturers have been able to increase cement prices, albeit with a time lag, largely preserving EBITDA and sales volumes.

Our scenario analysis found that annual carbon costs could reach 75% of EU cement companies' EBITDA on average, assuming a complete phase-out of allowances. We also found that cement companies with high emissions and with a high share of business in the EU could see significant profitability pressures post-2027. While sector decarbonization presents many challenges, we also consider a number of mitigating factors that may shield the most efficient players. Geographic diversification—and having the time and capacity to adapt operationally and financially—could be credit supports for cement companies. Cement substitution alternatives are currently limited, meaning demand should remain structurally steady. These factors together could allow entities to pass higher costs onto customers, but pressure on profitability still looms, in our view.

Chart 23

EU-based rated cement companies' possible carbon costs trend in 2023-2035

% of EBITDA

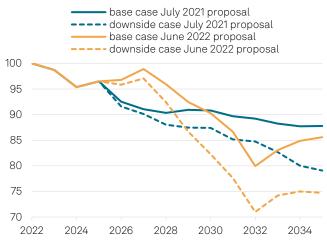


Source: S&P Global Ratings

Chart 24

EU-based rated cement companies' EBITDA trend in favorable and less-favorable scenarios

Index: 2022=100



Source: S&P Global Ratings

Industry Outlook: Latin America

Ratings trends and outlook

Credit quality for Latin America (LatAm) building materials companies were largely stable in 2022, despite pressure on profit margins from high input-cost inflation, particularly for energy, electricity, and transportation. Companies have built up enough buffers through pricing actions, strict cost controls, and prudent financial policies to sustain credit protection measures and liquidity positions within rating thresholds. As of the date of this report, close to 80% of our LatAm building materials rated entities bear stable outlooks, meaning that we do not expect many rating actions in 2023. About 22% of rated LatAm building material issuers are rated investment-grade ('BBB-' and above), while the remaining 67% and 11% in the 'BB' and 'B' categories, respectively. For 2023, we predict another challenging year for LatAm building material companies as they will face several economic and political risks. Those include a significant slowdown in most countries, moderating-but-still-elevated inflation, weakening consumer purchasing power, a lack of visibility on some government policies, and still-tight financing conditions. In our view, all these factors will reduce industry growth prospects in 2023, with risks to our forecast remaining firmly on the downside. In that context, we expect LatAm building material rated entities to maintain prudent capital allocation strategies, balanced between growth and deleveraging, with enough cushion in ratings to absorb risks.

Main assumptions about 2023 and beyond

1. Softer demand will slow revenue growth

Revenue growth prospects for LatAm building materials will likely slow in 2023 due to economic risks, weaker consumer purchasing powers, and subdued investment.

2. Profit margins will stabilize or partially recover in 2023 despite persistent higher costs

Our forecast suggests that LatAm building materials corporations' profit margins will stabilize or even slightly recover in 2023 as pricing actions continue and inflation gradually eases

3. Prudent financial policies will allow for resilient credit metrics

We believe that the adherence to prudent financial policies will continue in the sector. We expect balanced capital allocation strategies, between growth and deleveraging, without compromising credit quality.

The building material sector in LatAm continued to perform relatively well in 2022. This was thanks to still-high remittances level, which continues to foster the informal construction sector, and steady nonresidential construction activities, although somewhat offset by general elections cycles and policy direction in some countries that have maintained investments subdued. All LatAm building materials companies have increased prices to partially cope with input-cost inflation, but profit margins were down close to 150 bps on average. Moreover, early signs of consumer demand weaknesses emerged, which in our view will likely endure and slow the industry growth prospect in 2023. We now anticipate LatAm economies will slow significantly in 2023, with GDP only expanding 0.7%, as the region will face weaker external and domestic demand, and squeezed investments given tight financial conditions and political uncertainty in some countries. Although our forecast suggests that inflation should gradually ease, persistently higher costs will push building material companies to sustain their pricing strategies, but likely more slowly than in 2022, which in turn could continue to negatively weigh on household

disposable income and demand. As a result, softer demand and lower pricing actions versus 2022 will likely translate into slower revenue growth in 2023, potentially in the 4%-6% range.

Looking at LatAm's two largest economies: On one hand, we expect Brazil's GDP growth to slow to 0.5% and 2.0%, respectively, in 2023 and 2024, from 2.9% projected in 2022, due to the impact of tight monetary policy that will likely intensify as growth prospects dim, dampening domestic demand. Moreover, public policy uncertainty could slow investment implementation. Therefore, we anticipate cement volumes to continue dropping in 2023, likely by 2%-3%, following a 2%-5% contraction expected for 2022, mostly because of weak economic prospects, still-high interest rates, and elevated unemployment, all affecting the do-it-yourself (DIY) construction sector. At this stage, we expect volumes to bounce back by 2024, but only if economic prospects improve.

As for Mexico, the latest data available (September 2022) on cement production shows that levels remain near last 10-year high level, at close to 50 million tons per year, reflecting somewhat favorable supply-demand conditions. This is mostly underpinned by still-high remittances, steady industrial and commercial nearshoring activities, and a sequential recovery in tourism activities that maintained cement demand at good levels, while exports to the U.S. remain strong. However, data for the 12 months ended September 2022 signal a slowing trend, with production falling close to 4% versus the same period a year earlier. We believe this is mostly explained by a normalization of cement bag demand after the pandemic's peak, while inflation starts to weigh on consumer purchasing power, particularly in the low and middle classes. For 2023 and 2024, we expect Mexico's GDP growth to slow to 0.8% and 2.0%, respectively, from 2.6% expected for 2022, primarily due to lower U.S. demand for Mexico's manufactured exports. In our view, growth prospects for Mexico's building materials will be tight given that consumer purchasing power will erode further due to persistent inflation, employment weaknesses, and a still-limited number of large infrastructure projects because of weak public spendings and subdued private investments. We expect cement production level of 45 million-50 million tons in 2023, while companies will maintain pricing action to pass through costs-inflation. This should moderate revenue growth, on average in the 1%-5% area. Nevertheless, continued strong remittances from the U.S., if they continue in 2023 even as the U.S. economy weakens, would help boost consumption in Mexico, particularly in the informal sector, and could mitigate some of the risks. Beyond 2023, we continue to expect Mexico's GDP growth rate close to its traditional structurally low 2% due to low and inefficient investment levels.

Our updated forecast on LatAm building materials companies for 2023 also points that EBITDA margins should stabilize or even slightly recover near 22%, after a 150 bp slippage in 2022, induced by input-cost inflation, particularly on energy, electricity, and transportation costs.

We still believe that LatAm companies have the capacity to increase prices, although less so than last year, because they could risk further undermining consumer purchasing power. These, coupled with our expectation of prudent financial policies and solid cash flow, should allow credit metrics to remain broadly stable or even slightly improve in 2023.

Credit metrics and financial policy

We do not expect any major shift in Latin America building materials corporations financial policies through 2023, but instead, a continuity of prudent capital allocation strategies, balanced between growth (through capex and selective bolt-on acquisitions, if any) with short term paybacks and debt reduction to support deleveraging strategies. We also anticipate limited shareholders rewards through dividend payments. Moreover, 2023 refinancing risks remain well contained thanks to prior pro-active refinancing strategies.

Key risks or opportunities around the baseline

1. LatAm building materials companies face economic and political risks

A deeper and longer period of economic slowdown, inflation, and tight financing conditions, as well as political uncertainty, could reduce consumer spendings, squeeze companies' capacity to pass through costs increases, and undermine operating and financial performance beyond our estimate.

2. Overcapacity is likely to increase in the next year

We believe that slower economic activity and still-high political uncertainty could slow investments and building materials companies production plants utilization rates. Therefore, excess capacity could affect operating margins if no immediate countermeasures are taken.

3. CO2 regulations are progressing slowly, but companies are moving ahead to reduce their footprints

Building materials corporations are investing to reduce their CO2 emissions footprint despite slow progress on regulatory framework in the region.

We expect LatAm building materials corporations to face another year of economic and political turbulences. This maintains risks to our forecast firmly on the downside for 2023. In our view, a deeper and longer period of economic slowdown, inflation, and tight financing conditions could further reduce consumption trends, squeeze capacity to pass through costs increases, and ultimately undermine LatAm building material companies' operating and financial performance beyond our estimates if no sufficient countermeasures are implemented.

Moreover, political risks and a high degree of policy uncertainty in some countries could also pose risks to our forecast:

- For instance, in **Brazil**, the change in government in January could slow investment implementation due to administrative delays. Some uncertainty about the new administration's policies, especially on the fiscal front, could also pare back investment until there is more visibility.
- In Mexico, beyond 2023, we expect the country to grow close to its traditional structurally low
 growth rate of 2%, due to low and inefficient investment levels from restricted policies
 responses.
- In Argentina, the government will face a tough implementation of the Extended Fund Facility (EEF) targets with the IMF. The EEF targets imply politically challenging fiscal, monetary, and reserve targets amid high inflation and slowing growth. Signs that EEF targets aren't met would likely intensify pressure on the exchange rate, increase inflation, and lower investment. This factor puts the risks to our 2023 GDP growth forecast for Argentina firmly to the downside.
- In **Chile**, we expect demand to contract in 2023, as the fading effect of the removal of stimulus measures continues, especially those that boosted consumption such as pension withdrawal allowances. Uncertainty about the rewriting of Chile's constitution will also likely temper investment until there is more policy visibility.
- In **Colombia**, we expect investor uncertainty about policies under the recently elected President Gustavo Petro, especially in terms of the energy sector and on the fiscal side. We lowered our 2023 growth forecast to 1.1% from 1.9% previously. There are clear signs that the very strong domestic demand growth of the past two years is starting to weaken, as the impact of stimulus measures from the pandemic fades.

Industry Top Trends 2023: Building Materials

• In **Peru**, the most recent change in power reflects heightened political deadlock, and it increases risks. It also creates uncertainty about Peru's institutional stability and its capacity to sustain continuity in key economic policies and support economic growth, in our view.

Lower utilization rates could mean higher risk to operating efficiency but also low investment needed to increase installed capacity. Most rated LatAm building materials companies have dominant or leading market positions, well-established distribution networks, and state-of-the-art production plants, which in our view allow them to sustain solid profitability levels. Although, excess capacity in the region has been common in many countries, due to limited public and private investment in recent years, we believe that operating efficiencies risks could increase if slower economic activities reduce utilization rates, and if companies cannot continue with their pricing strategies. We estimate that utilization rates in Brazil, Mexico, and Peru will remain near 65%-70%, 70%-75%, and 70%-88%, respectively, in 2023. On the other hand, this means that capex needs to increase installed capacities in LatAm should not be large; instead, companies will focus on shorter payback projects to increase their operating efficiencies and reduce their CO2 emissions.

LatAm CO2 emission regulatory frameworks are progressing slowly, but building materials companies are investing to reduce their CO2 emissions footprint. We do not foresee significant progress on CO2 emission regulations and Emission Trading Systems in LatAm in 2023. Specifically, in countries where our rated entities have operations, mostly in Brazil, Mexico, Peru, and some central American countries, CO2 emission regulations have not yet been enforced. In most of these countries, it is still unclear how and when upcoming carbon taxes regulations will take effect. Therefore, it is still difficult to have a clear view on how this could affect companies' cost structure and, potentially, their credit quality. Yet most rated issuers continue to take action on their own to reduce their CO2 emissions, including increasing blended cement; using alternative fuels; injecting hydrogen; using more gas and less carbon; and, in some instances, reducing their clinker factor while increasing cement prices. Over the next few years, we expect investment related to CO2 emissions reduction to increase to meet with domestic regulations, but the magnitude of them is still unclear.

Industry Outlook: Asia-Pacific

Ratings trends and outlook

All rated building materials companies in Asia-Pacific (APAC) have a stable outlook. This should support ratings on companies to weather slower economic growth in most APAC countries, except for an anticipated rebound in China. Tighter monetary policy will weigh on housing activity and constrain demand on building materials in the region.

No rating in the sector changed in 2022 despite challenging operating conditions. This indicates resilient credit quality and sufficient financial buffer to counter weakness in demand and profitability.

With China's reopening from COVID-19 lockdowns and the bottoming out of the sluggish property sector, Chinese producers are likely to improve financial performance from a low base in 2022. The Korean market will likely turn weaker after a robust 2022. Rising interest rates and waning housing prices as seen in the recent months could continue to weigh down demand. The favorable performance in the Australian market will be supported by strong residential activity on material near-term backlog and healthy public sector investment.

Key risks include a prolonged COVID-19 outbreak in China leading to enduring weakness in demand, and rising costs hitting margins for all peers in the region.

Main assumptions about 2023 and beyond

1. Tighter monetary condition to slower economic growth in APAC excluding China

Lower global growth and higher interest rates should slow Asia-Pacific economies, except for China's. While the recovery from COVID-19 should continue to support economic growth, rising interest rates will weigh on housing activity and hamper demand for building materials.

2. China's swift exit from the zero-COVID policy will drive a possible recovery around mid-2023

With China's ending of stringent COVID-19 restrictions, we see a higher visibility on recovery in 2023. A more meaningful pick-up in demand could come around mid-year, further supported by the bottoming out of the sluggish property sector. The current outbreak will mainly cause widespread disruptions in first-quarter 2023.

3. Rated companies will maintain prudent financial policies

We expect rated entities to maintain a disciplined investment appetite due to economic uncertainty despite their rating buffers. They are usually the industry leaders, so are not in dire need of mergers to weather industry adversity. Instead, they will focus on existing operations and improve efficiency.

In Australia, we continue to see strong underlying demand for building products and good pipeline visibility. This is supported by the robust residential activity with material near-term backlog and strong public sector investment, offsetting the uncertainty in demand for multi-level apartments.

The solid demand will support most of the buildings material companies in Australia to pass through increasing costs to consumers. However, we expect ongoing supply chain constraints,

labor shortages, high raw material costs and extreme weather events to continue to drive construction delays and cost pressures in 2023, tempering earnings growth and margins.

In China, the sector is likely to embrace a recovery in demand around mid-2023 supported by the country's exit of zero-COVID policy and ease in property downturn. In 2022, the shockwaves from China's COVID lockdown on resurging cases and the stressed property sector had hit construction activities, spurring a decline in demand and weakening in prices. In the first 11 months of 2022, China's cement production volume has dropped 10.8% year-on-year. In 2023, China's building material sector continues to be strongly affected by COVID developments. The current surge of infections will weigh on the labor-intensive construction activities by reducing workforce productivity. Still, we do not foresee the sector as being materially affected by the short-term disruptions. We believe the impact of COVID outbreak this round will be largely manageable with the first quarter being the low season for construction activities in China due to the Lunar New Year.

The recovery in demand could come around midyear 2023 on the eventual bottoming out of the property sector and gradual pickup in construction activities after the current coronavirus outbreak. Solid infrastructure investment from the Chinese government aiming to prop up the economy will also stem the demand recovery. A batch of government measures adding fresh liquidity to the Chinese property sector in November 2022 has set a floor to the property crisis since China Evergrande Group first encountered liquidity difficulties in second-half 2021. The package of policy support includes easing bank lending, supporting onshore bond issuance, and allowing equity raising.

Nevertheless, we continue to expect a 'L' shape recovery in the Chinese property sector, as it takes time to restore the weak confidence towards homebuyers and investors. Recovery will only begin in the second half of this year, at the earliest.

In Korea, the sector's operating performance should come under pressure in 2023, as construction companies turn more selective in their project starts, raw material prices remain elevated, and property transaction volumes are likely to be low. We expect housing market sentiment will likely remain weak over the next 12 months due to the rising interest rates, subdued demand and lowered property prices. Nevertheless, major building material companies such as KCC Corp. are likely to be more resilient because of their ability to transfer increased cost burden to selling prices on the back of good market position. Also, the government's deregulation efforts, including more reconstruction and taxation relaxations, could provide some additional support, but visibility on the magnitude and potential impact of such measures remain low at current stage.

Credit metrics and financial policy

We forecast credit metrics of our rated companies to remain resilient in 2023. Revenue growth will be mitigated by ongoing pressure on profitability driven by high costs. Chinese producers are likely to see improvement in financial performance from a low base in 2022.

Financial policy will remain disciplined. Capex will be stable year over year in 2023 because there will be no significant expansions or acquisitions. We also do not foresee demand for higher dividends. Overall, our rated universe's credit metrics should sit comfortably within their respective rating range.

Key risks or opportunities around the baseline

1. Input cost inflation continues to weigh on profitability

Still-high raw material and fuel prices will continue to pressure building material companies' profitability. Companies' focus on managing costs through operational efficiencies and execution of price increases is key to mitigating input cost inflation.

2. The prolonged outbreak in China will drag on the recovery in demand

A longer-than expect outbreak in China will diminish the positive economic impacts from the economic activity growth following the reopening. Subdued economic growth and delayed recovery in the property sector will hinder the resumption of construction activities.

3. More stringent environmental requirements will benefit industry leaders

Although APAC generally lags Europe in carbon trading, more countries will likely introduce their own emission trading systems. The impact on the sector depends on the design of the scheme and the price of carbon. Yet rated entities are generally industry leaders with fewer emissions than the industry average.

Companies in APAC will continue to face pressure on profitability from input cost inflation. A weaker economic outlook would probably limit the magnitude of cost increases. Yet high fuel prices and power costs driven by the Russian-Ukraine conflict and high labor costs will continue to hit volume and pricing, thereby continuing to weigh on margin and credit metrics.

We expect thermal coal prices to stay high and subject to high price volatility on supply constrain and geopolitical risk. Thermal coal is the major energy source and the key cost component for building materials producers. Still-high coal prices are underpinned by enduring tight supply conditions, high natural gas prices, as well as an intensifying switch to coal in many countries given its relative affordability as a substitute.

While our base-case scenario assumes improved business activity in China to have a more dominant impact than reduced workforce productivity this year, new and longer-than-expected infection waves could dampen demand recovery in 2023. The prolonged COVID-19 waves in China could exacerbate the challenging operating conditions with disruptions in construction activities and supply chain. Spikes in infections will also bring risks to our forecast of 5%-8% decline in home sales in 2023 and may push the expected "L" shaped recovery in the property sector further into the coming year.

China's national carbon trading scheme was launched in July 2021 and currently covers only power producers. The government plans to expand this to cover other heavy emission industries like building materials, steel, and petrochemicals. The impact on cement producers remains to be seen, depending on how the government allocates carbon quotas and the price of carbon, currently at about 10% of that in Europe.

Whether carbon quotas are allocated free of charge, like power producers, or at a cost, we believe our rated companies stand at a better position compared with their peers because their emissions are below the national average. Therefore, they are the ones more likely to benefit from the introduction of carbon pricing because those that cannot meet national standards will likely shut down or sell themselves to stronger players who can meet standards.

Related Research

- <u>Decarbonizing Cement Part One: How EU Cement Makers Are Reducing Emissions While</u> <u>Building Business Resilience</u>, Oct. 27, 2022
- <u>Decarbonizing Cement Part Two: Companies Could See Pressure On Ratings As The EU Firms</u> <u>Up Carbon Rules</u>, Oct. 27, 2022

Industry Forecasts: Building Materials

Chart 25

Revenue growth (local currency)

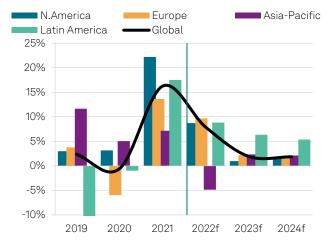


Chart 27

Debt / EBITDA (median, adjusted)

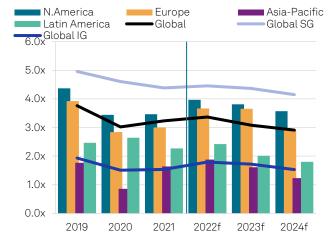


Chart 26

EBITDA margin (adjusted)

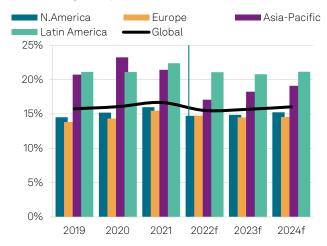
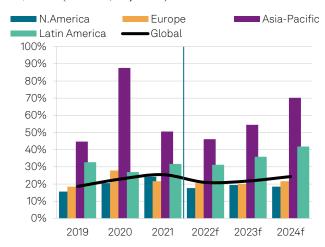


Chart 28

FFO / Debt (median, adjusted)



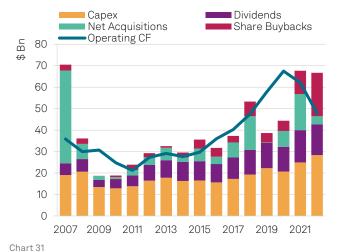
Source: S&P Global Ratings. f = Forecast.

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.

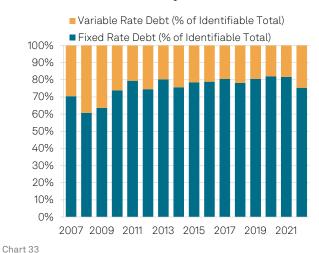
Cash, Debt, And Returns: Building Materials

Chart 29

Cash flow and primary uses



Fixed- versus variable-rate exposure



Cash and equivalents / Total assets



Chart 30

Return on capital employed



Chart 32

Long-term debt term structure

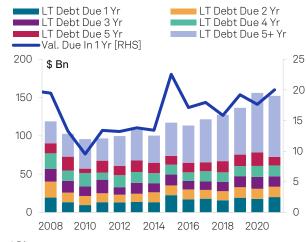
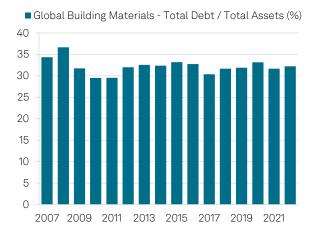
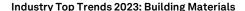


Chart 34

Total debt / Total assets



 $Source: S\&P\ Capital\ IQ, S\&P\ Global\ Ratings\ calculations.\ Most\ recent\ (2022)\ figures\ use\ the\ last\ 12\ months'\ data.$



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