Rating outlooks stabilize. The outlook is stable on about 75% of capital goods credits globally mainly due to a strong recovery in revenues and demand prospects; a year ago negative outlooks comprised almost 50%. The negative outlook bias has eased significantly, indicating a return to more stable credit quality.

End markets continue to recover. In addition, the recent U.S. infrastructure bill and EU recovery fund should provide a tailwind to capital goods activity over the next several years. A slowdown in Chinese construction represents a risk.

Supply chain challenges and raw material cost inflation. Higher costs for commodities and shortages in key components will expose competitive drivers, with leaders using their strengths to source materials, increase prices, and grow profits; weaker-positioned issuers may face pressure on revenue growth and margins.

What's changed?

What are the key assumptions for 2022?

Higher costs will be passed on to customers as issuers flex their pricing power. Our global data currently indicates moderating revenue growth in 2022 assuming backlogs ease. High input costs and logistical slowdowns could move market leaders to call on their pricing power to maintain margins and cash flows.

Good profits and cash flow enable reinvestment, acquisitions, shareholder returns. Higher revenues/margins should largely offset elevated investments in working capital. Issuers will use operating cash flows for corporate development or shareholder returns; improving credit metrics will be mostly driven by earnings.

What are the key risks around the baseline?

A pandemic resurgence could slow demand or output. Reduced labor capacity around the world, for example from lockdowns in China that limit semiconductor output, could weigh on revenues and operating leverage.

More severe supply chain challenges hurt earnings. Persistent raw material inflation and continued supply chain constraints could pressure volumes, earnings, and cash flow, especially for weaker, less-diversified issuers.
Ratings trends and outlook

Global Capital Goods

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.
Capital Goods

Ratings trends and outlook

Our net outlook bias has improved significantly in the last year, and now indicates good credit stability in the next year or two defended by solid demand, improving earnings, and generally consistent financial policies. Only 16% of ratings in capital goods around the world have a negative outlook or CreditWatch. Asia-Pacific (APAC) has the most negative bias, with about 40% of the portfolio on negative outlook or CreditWatch negative, followed by North America at roughly 15%. Net negative bias in APAC is higher than the global aggregate despite earnings recovery. The pace of recovery is slower than what we had anticipated due to the pandemic, with lower vaccination rate, lockdowns in Asia, and slower recovery in some end markets. However, the rapid deterioration of the bias lies in company specific issues such as large acquisitions (like Hitachi Ltd.), or governance issues (like Shanghai Electric (Group) Corp., Toshiba Corp). The strong net negative bias will likely continue for the time being because it will take some time to resolve such issues.

About 40% of the global capital goods portfolio is rated 'B' or lower, and about 45% of issuers in the U.S. portfolio are 'B' or lower, owing to a preponderance of financial sponsor-owned companies. Still, we have seen positive rating migrations at the lower end of the rating spectrum, with upgrades modestly outpacing downgrades by 1.5:1 around the world. Defaults remain below historical levels with four globally for this sector against eight in 2020. Consistent with decade-low defaults among all corporates in 2021, low-rated capital goods issuers benefited from fiscal stimulus, lower costs, and remarkable access to capital markets. Financial policy for private-equity controlled companies (which comprise most of the 'B' category) has remained aggressive, with a reversion to debt-funded dividends and acquisitions once capital markets access and end markets began to rebound from COVID lows.

Main assumptions about 2022 and beyond

| 1. Supply chain challenges to persist into 2022 |
| Building on an estimated 10% revenue rebound in 2021, we believe mid-single-digit growth of the capital goods sector is supported by solid demand in most end markets and will help improve margins. We assume raw material cost inflation and component shortages will ease in the second half of 2022, though if they don’t it could dampen profits and cash flow. Inability to ship product on a timely basis or incurrence of higher costs to expedite shipping can weigh on issuers’ credit measures, particularly those with weaker competitive positions or more narrow end market exposure. |

| 2. Debt leverage should decline modestly in 2022 on higher earnings |
| Backed by the global economic recovery, capital expenditures (capex) in many end markets of the capital goods industry will continue to pick up in 2022, supporting further revenue growth and earnings expansion. The median ratio of debt to EBITDA for the rated capital goods sector is forecast at about 3.5x in 2022, lower than an estimated 4.1x in 2021. |

| 3. Companies will tend to devote their free operating cash flow (FOCF) to acquisitions and shareholder returns |
| We anticipate that companies will devote their free cash flows to shareholders’ remuneration and acquisitions and keep capital spending as percentage of revenues largely stable. |
Following the pandemic-induced recession of 2020, demand recovered much quicker than we expected. Manufacturers were generally able to reduce capital investment as well as generate strong free cash flow through the unwinding of working capital. Restarting the global supply chain following the sudden halt, however, turned out to be more difficult than anticipated. Strong demand and a sluggish supply chain resulted in skyrocketing commodity prices, component shortages, and a growing backlog for most issuers in 2021.

We assume raw material and component availability will begin to normalize in mid-2022, so that prices for key inputs such as steel and resin could also decline in 2022. The uncertain timing and magnitude of any cost relief will affect 2022 cash flow, potentially releasing working capital and lowering costs as tight conditions ease. In our view, many capital goods companies are well positioned to enact price increases, as well as negotiate terms with suppliers to offset at least a portion of the higher costs. We believe companies with stronger business profiles should be in a good position to pass through most or all additional costs through price increases and potentially increase profits. Companies with less of a competitive advantage, however, might not be able to pass the costs on and could continue to see margin pressure.

We expect labor availability to remain a challenge in 2022. Across the globe, companies are facing higher levels of absenteeism as new COVID-19 variants emerge. Companies in the U.S. appear to be facing more difficulties as several years of tighter labor markets increase the bargaining power for labor. Companies that rely on skilled labor are facing increasing wage pressure and must offer incentives to attract new talent. Furthermore, the labor force participation rate has dropped significantly, and the timing of it reaching pre-pandemic levels remains difficult to predict.

Logistics and freight costs will likely moderate, especially if labor availability improves, but disruptions will persist in early 2022. Truck driver shortages in the U.S. and Europe led to a declining supply of workers for the transportation of goods, raising freight costs. Many companies are also having to incur increased freight rates not only for their typical business use but for substituting parts that may not be available, or for shipping components between factories. As supply chain issues begin to resolve in 2022, we believe there will be less of a necessity for unexpected or premium logistics costs.

The capital goods industry’s growth prospects are overall positive. We assume heavy machinery and construction-exposed issuers will benefit from the incremental demand raised by the Infrastructure bill in the U.S. and recovery fund in Europe, the Middle East, and Africa (EMEA), although the uptick in demand will be gradual and likely extend several years. Backed by the tailwind of digitalization, strong demand in products and services for factory automation and semiconductor factories should continue in 2022. Automobile production volumes, which faced a tempered recovery in 2021 due to the shortage of semiconductors, could also increase by mid-single digits in 2022.

On the other hand, we continue to assume the demand for railways and aircraft, which are dependent on travel demand, will remain lower than pre-COVID levels until 2023. Demand for some energy-related equipment and services, such as for coal-fired power plants, may decelerate further.

Credit metrics and financial policy

Credit metrics

Globally across more than 200 issuers, we project revenue growth in 2022 of close to 5%, reflecting good demand and pricing power for large industrials. We forecast that EBITDA margins should slightly improve compared to 2021, reflecting an expansion of about 50–100 basis points from our baseline scenario for 2021 of about 15%. Even if costs rise faster, we have assumed that large corporations have an ability to pass through cost inflation. By comparison, we believe smaller, less-diverse, speculative-grade issuers will
generally have less flexibility to navigate increased costs to protect operating performance and cash generation. The impact on each individual issuer will depend on end market exposure and operating leverage. For example, we have recently downgraded a few speculative-grade issuers in the U.S. because narrow product breadth and a shortage of component inputs have combined to squeeze profits and cash flow. In many of these cases, the rating trajectory remains negative, because the visibility on improving profits before mid-2022 is poor.

Overall, we forecast debt leverage and absolute debt levels to decline somewhat in 2022 (see chart 7). Although we anticipate improving financial performance and profitability given generally solid demand dynamics, we expect cost inflation, supply chain constraints, and more aggressive financial policies (such as larger-than-expected debt-financed acquisitions) could slow the credit metrics improvement this year.

Chart 7
Reported Debt By Region

Financial policy

Last year saw significant acquisitions across the capital goods sector (see table 1). We estimate acquisition activity reached about $100 billion in 2021, and we revised outlooks to negative or placed the ratings on CreditWatch negative on a number of companies in the ‘A’ or ‘BBB’ categories--for instance Hitachi, Rockwell Automation, Assa Abloy, and Parker-Hannifin. The willingness to take on material acquisitions may be signaling the choice to grow the business over maintaining rating positions. Still, many issuers completed tuck-in acquisitions well within their rating boundaries, though reducing overall financial flexibility.

Table 1
Top 10 Issuers In Terms Of Acquisition Spend In 2021

<table>
<thead>
<tr>
<th>Company Name</th>
<th>$US Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Siemens AG</td>
<td>Approximately 17</td>
</tr>
<tr>
<td>Hitachi Ltd.</td>
<td>Approximately 10</td>
</tr>
<tr>
<td>Teledyne Technologies Inc.</td>
<td>Approximately 8</td>
</tr>
<tr>
<td>Schneider Electric S.E.</td>
<td>Approximately 5</td>
</tr>
<tr>
<td>Eaton Corp plc</td>
<td>Approximately 4.5</td>
</tr>
<tr>
<td>Danfoss A/S</td>
<td>Approximately 3.7</td>
</tr>
<tr>
<td>Sandvik AB (publ)</td>
<td>Approximately 3</td>
</tr>
<tr>
<td>AMETEK Inc.</td>
<td>Approximately 3</td>
</tr>
<tr>
<td>Rockwell Automation Inc.</td>
<td>Approximately 2.5</td>
</tr>
<tr>
<td>CNH Industrial N.V.</td>
<td>Approximately 2.5</td>
</tr>
</tbody>
</table>

Source: S&P Global Ratings.
The policies of financial sponsors were on display in 2021, as good access to credit markets enabled numerous leveraging transactions for dividends and acquisitions. But rising interest rates could affect the risk appetite of sponsors and debt investors, and continued activity in this segment will depend on the confluence of good industry conditions and good access to credit markets.

In 2022, we assume M&A activity cools down to around historical levels, given the significant transaction activity last year, risks to profitability given supply chain and pricing conditions, as well as the likelihood for rising interest rates. However, the pace of transactions is highly varied and difficult to predict, and we believe portfolio optimization will remain a key focus area for large and diversified capital goods companies in 2022. This could include divesting non-core assets and reducing the universe of capital goods conglomerates over time.

In addition, we recognize that companies aim their asset allocations toward activities with high barriers to entry, high growth and margin profiles, as well those with better agility with regards to capital intensity. Strategic repositioning is inescapable in the broad and mature capital goods industry, so that many issuers are often at varying stages of their strategic transformation. For first movers like Siemens (following their spin-off of Siemens Energy and the sale of Flender), the pace of disposals should slow down, and management focus will shift more towards organic and margin growth. Notably, however, General Electric is picking up its transformation, as it has announced its intention to split its businesses into three different companies. We believe the pressure from shareholders and incentives for management to unlock value will drive continued focus on higher growth opportunities.

Further, we expect capital expenditures to increase by about 6% compared to 2021, roughly in line with revenue growth, and for research and development (R&D) spending to remain roughly stable in 2022 compared to 2021. We project capex to reach about $50 billion in 2022, representing about 3.5% of our expected sales for 2022, and for R&D to be about $45 billion, representing about 3.0%-3.5% of global sales, both being in line with pre-pandemic levels. Despite the potential for short-term business-related challenges this year, we believe issuers will continue to prioritize growth.

In the absence of acquisitions or other growth opportunities, we continue to believe issuers will utilize free cash flow or debt capacity for shareholder returns, including share buybacks and dividends (see chart 8).

**Dividends And Share Repurchases**

<table>
<thead>
<tr>
<th>Year</th>
<th>Dividends</th>
<th>Share Repurchases</th>
<th>FOCF</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>40,000</td>
<td>20,000</td>
<td>60,000</td>
</tr>
<tr>
<td>2019</td>
<td>45,000</td>
<td>25,000</td>
<td>70,000</td>
</tr>
<tr>
<td>2020</td>
<td>50,000</td>
<td>30,000</td>
<td>80,000</td>
</tr>
<tr>
<td>2021e</td>
<td>55,000</td>
<td>35,000</td>
<td>85,000</td>
</tr>
<tr>
<td>2022f</td>
<td>60,000</td>
<td>40,000</td>
<td>90,000</td>
</tr>
<tr>
<td>2023f</td>
<td>65,000</td>
<td>45,000</td>
<td>95,000</td>
</tr>
</tbody>
</table>

*—Estimate. f—Forecast. Source: S&P Global Ratings.*
Key risks or opportunities around the baseline

1. New COVID variants could slow growth and delay supply chain normalization
Rapidly spreading new COVID variants could suspend or delay capital expenditures in the short term, while more COVID restrictions may cause temporary facility shutdowns and lead to delays in production, particularly in Asia and other key regions that supply components to global capital goods companies. Slower demand and rising costs could limit the ability to implement price increases on a timely basis, eroding earnings.

2. China hard landing could slow growth prospects for global players
We see a slower pace of economic growth in China, due to the impact of zero-COVID measures, alongside a transition away from carbon-intensive industries and property development, which may temper the corporate spending for capital investment in various end-markets, including energy and heavy machineries.

3. U.S. infrastructure bill could lift growth forward
A boost in spending from the recently passed infrastructure bill could drive revenue growth in the next few years, particularly for those with more exposure to the non-residential construction sector.

4. More-aggressive financial policy
Larger than expected debt-funded acquisitions could exert negative pressure on our ratings absent credible plans to restore credit metrics. Given an overall increased debt load for capital goods issuers in 2021, there is reduced cushion in ratings to withstand a moderate recession or sizable increases in shareholder returns, particularly for lower rated issuers.

The key risks to our forecast are a decline in demand in end-markets, which currently benefit from robust demand, and a later-than-expected normalization of the supply chain if operating conditions worsen due to rising COVID cases. While not our base case, rapidly rising new COVID variants pose a threat to the pace of the industrial recovery, resulting in slower revenue growth. The recovery in some end markets, such as commercial aviation, remains fragile due to lagging demand for international and business travel. Capital goods issuers have faced cost inflation in raw materials, logistics, and labor in 2021, and these headwinds will likely persist in 2022. We currently expect supply chain headwinds to ease by the second half of 2022, but there is a risk that these could spill over into 2023, hurting EBITDA margins. Recent and potentially new COVID-19 variants could also delay the recovery of the supply side, due to increased absenteeism or temporary plant closures. Under this scenario, the rate of inflation continues at a high pace and companies may have trouble continuing to pass it along to customers on a timely basis, weighing on profitability and cash flows. For instance, the semiconductor shortage could put more pressure on some important end markets of the capital goods sector. Global automotive production was far less than we had anticipated in 2021 and another year of shutdowns would be difficult for those with high exposure to auto end markets or electronics.

Another risk is the decelerating growth in China amid its zero-COVID measures and stress in the property development sector. S&P Global economists revised down their China economic growth forecast to 4.9% in 2022 from 5.1% following persistent funding woes impacting China’s real estate developers’ liquidity. While rated global capital goods issuers have moderate exposure to China, those more exposed to construction and trucks could see near-term pressure in revenue growth, though we expect impact to be limited at this point given robust growth in the U.S.
The Biden administration’s $1.2 trillion infrastructure bill passed in November 2021. While this was significantly smaller than the $2.25 trillion proposal that was unveiled through the American Jobs Plan, it is still the largest investment that legislation has passed for physical infrastructure, and includes roads, bridges, water systems, electricity grids, broadband, and health care. The significant expansion in spending to rebuild the U.S. infrastructure could lead to upside potential not factored into our forecast, particularly for issuers with exposure to non-residential construction. While we expect the increased spending will likely materialize starting in 2023, capital goods issuers could see positive trends in orders and backlogs sooner.

M&A activity and strategic actions to divest or acquire assets remains a theme in 2022 as business recovery takes hold and growth appetite increases. Acquisitions remain a key risk for credit quality in 2022 due to the uptick in debt incurred in 2021 and still-high valuations for assets. Leveraged buyouts by private equity or dividend recapitalizations could pressure ratings in 2022. Issuers who recently engaged in sizable M&A activity or those meaningfully impacted by supply chain pressures may have limited cushion in the rating to absorb large debt-funded acquisitions. In addition, assets divestitures or spin-offs could pressure ratings absent a plan to enhance credit metrics to compensate for the loss of cash flow from divested assets.
Related Research

- China's Capital Goods Cycle Is At The Top Of The Roller Coaster, July 28, 2021
- Industry Top Trends Update North America, July 15, 2021
- Industry Top Trends Update EMEA, July 15, 2021
Industry forecasts

Global Capital Goods

Chart 9
Revenue growth (local currency)

Chart 10
EBITDA margin (adjusted)

Chart 11
Debt / EBITDA (adjusted)

Chart 12
FFO / Debt (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 Capital Goods

Chart 13
Cash flow and primary uses

- Capex
- Dividends
- Net Acquisitions
- Share Buybacks
- Operating CF

Chart 14
Return on capital employed

Chart 15
Fixed versus variable rate exposure

- Variable Rate Debt (% of Identifiable Total)
- Fixed Rate Debt (% of Identifiable Total)

Chart 16
Long term debt term structure

- LT Debt Due 1 Yr
- LT Debt Due 2 Yr
- LT Debt Due 3 Yr
- LT Debt Due 4 Yr
- LT Debt Due 5 Yr
- LT Debt Due 5+ Yr
- Val. Due In 1 Yr [RHS]

Chart 17
Cash and equivalents / Total assets

Chart 18
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations. Most recent (2021) figures are using last twelve months (LTM) data.