New Year, New Risks (Beyond, Of Course, Inflation)



S&P Global Ratings

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Jan. 31, 2022

Key Takeaways

- With the third year of the coronavirus pandemic upon us, U.S. corporate borrowers still face a
 handful of hurdles, including ongoing supply-chain disruptions and the elevated input prices
 that go along with them, as well as inflationary pressures that are pushing the Federal Reserve
 to begin what promises to be an aggressive cycle of interest-rate increases.
- For now, favorable financing conditions prevail, amid the continuing economic rebound, investor hunt for yield, and a recovery in credit quality. We forecast the U.S. speculative-grade corporate default rate to fall to 2.5% by September—but downside risks are rising.
- The large amount of corporate debt at the low end of the spec-grade scale, along with debtfinanced M&A and dividends, pose risks to recovery prospects.

With 2022 shifting into high gear, any hopes that the flipping of the annual calendar would offer U.S. corporate borrowers a fresh start have been hit by a handful of persistent headwinds—and some potential new adversities.

The omicron wave of the coronavirus pandemic continues to kink global supply chains, associated input-price pressures persist, and overall inflation is running far hotter—and for far longer—than many economists expected. As the latter begins to weigh on consumer demand, the Federal Reserve stands poised to raise benchmark borrowing costs, with markets pricing in (and policy makers indicating) more than a full percentage point in interest-rate hikes this year.

Adding to market unease are intensifying geopolitical tensions, particularly between Russia and Ukraine. At home in the U.S., this year will feature a midterm election that could result in even more legislative gridlock—not to mention outright political hostility—in Washington. In this light, the downside risks to what has been a historic run of favorable financing conditions are growing.

The U.S. economic recovery remains largely intact. The world's biggest economy has become more resilient in the face of each wave of the pandemic, and our central assumption remains that the omicron variant will slow mobility in the first quarter and chip away at some of this year's expected economic expansion. That said, pandemic-related labor disruptions may add to the economic hit, as even temporary job losses—along with high prices—could crimp consumer spending. The Census Bureau estimates that more than 8.7 million Americans (more than one of every 20 employees) couldn't work in the weeks on either side of New Year's Day because they had COVID or were caring for someone who did.

For now, the personal savings rate remains upwards of 8%—more than double what it was just before the pandemic, according to the Commerce Department's Bureau of Economic Analysis. But it has shrunk significantly as the effects of massive federal fiscal stimulus designed to prop up consumer spending recede. Higher prices have already crimped purchasing power and weighed on sentiment, with retail sales falling 1.9% in December. The drying up of government support, in tandem with inflation pressures, could expose the operational and structural headwinds many borrowers face. If the recovery in companies' income starts to wobble, some issuers may find their operating environments and debt burdens unsustainable, resulting in weaker credit quality.

Rapid reflation and the potential for the central bank to tighten monetary policy much more quickly than markets had expected pose additional downside risks to our growth outlook. S&P Global Economics now expects the Fed's net asset purchases to end by March and policymakers to raise rates least three times this year, and another five times through 2024 (see "The Federal Open Market Committee's Policy Rocket Heads To The Launchpad," published Jan. 27).

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Financing Conditions

Credit Research

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The move to lift the cost of borrowing can, of course, be seen as a sign that the U.S. economy is healthy. But while markets may take the Fed's moves in stride in the longer term, growing fears among many investors that aggressive rate hikes could curb demand and damp an economy that is primarily fueled by consumer spending have caused some financial market turmoil. Equities volatility has increased notably, and the benchmark S&P 500 briefly slipped into correction territory (down 10% from a recent peak) before recouping some of those losses.

Still, after hitting a two-year high around 1.9% in mid-January, the yield on 10-year Treasury notes (a benchmark for broader borrowing costs) has come back down. Spreads, too—even those on speculative-grade debt—are still fairly tight. Secondary-market yields on corporate and Treasury debt, while up year to date, remain below where they've been for most of the past five years. But if recent market selloffs pick up steam, conditions could worsen and push defaults toward our downside scenario.

It remains to be seen whether omicron-related disruptions and new lockdowns across the globe will materially crimp the flow of goods. While there was some cooling of industrial price pressures at the end of last year, and the demand premium for goods and services has allowed companies to pass along cost increases, manufacturers are still dealing with high input costs, and their ability to raise prices to offset them is finite. In the near term, these pressures could shrink profit margins in some sectors and—if conditions get bad enough—begin to weigh on credit quality (see chart 1).

Rising Costs Unlikely To Weigh Too Heavily On Corporate Credit Quality

Though Pressures May Persist Average EBITDA Margins in 2022 vs. 2021

Question: Reflecting your assumptions for costs, product mix and any other relevant factors, how do you expect average EBITDA margins to develop for 2022 versus 2021? Rise a lot Rise moderately Rise a little Fall moderately Fall a little

Fall a lot

	Very easy	Out-of-home Regulated Metals & mining entertainment utilities
Cost Pass-through Ability Question: How easy is it to pass on cost increases?	Somewhat easy	 Airtines Cruise Lodging Aerospace & defense Leisure manufacturing Merchant power Oilfield services Paper & packaging Pharma REITs Technology Technology Autos Buisiness & consumer services Chemicals Consumer products Engineering & construction Freight transportation Gaming Homebuilders & developers Retail & restaurants Telecom
	Impossible to generalize	Oil and gas E&P Midstream energy
	Somewhat difficult	Healthcare services Film and TV programming production
	Very difficult	

Source: S&P Global Ratings' corporate sector analysts' assessment as of Jan. 28, 2022.

For most sectors, the continuation of the economic rebound—which will add to revenues—is far more crucial to boosting their bottom lines. And, in fact, corporate borrowers in many (but not all) sectors have enjoyed a recovery that has helped business activity return to pre-pandemic levels somewhat sooner than we expected. If the omicron wave wanes (as it has already begun to do in regions hit earliest), services sectors, in particular, could reap the benefits of pent-up consumer demand and a still-high household savings rate.

That, naturally, is a big "if."

Even without reinstated social restrictions, increased wariness among consumers could hit sectors that depend on in-person interaction particularly hard. The rapid spread of the omicron variant highlights the inherent uncertainties of the pandemic; the risk of new, more-severe variants that evade existing immunity can't be ruled out (although our base case assumes that existing vaccines continue to provide significant protection against severe illness).

While COVID, cost inflation, and supply-demand dynamics continue to be key risks for this year, some may face significant sector-specific challenges or opportunities (see table 1).

Key Risks/Opportunities Around Sectors' Baseline Assumptions

Sector	1	2	3
Autos	Production volatility and inflation persists into 2023	Faster transition to electrification poses risk for cash flows	Softening demand for autos due to weakened affordability
Building materials	Commodity cost inflation and volatility	Infrastructure spending growth could mean opportunities	More M&A and shareholder- friendly actions; rising rates could strain free cash flow generation
Capital goods	New COVID variants could slow growth and delay supply chain normalization	China's decelerating growth could impact global players; U.S. infrastructure bill could lift growth	More aggressive financial policy
Chemicals	Unexpected softening in demand	Pricing power weakens	Rising inflation
Commercial aerospace	COVID-19 variants slow air traffic recovery	Boeing and its suppliers need regulatory clearance to continue recovery	Aggressive increases in aircraft build rates could strain supply chains
Consumer products	Higher and more persistent inflation	Increased digitization	Tapering consumer spending
Defense contractors	Supply chain issues disrupt sales	Defense priorities shift	Defense spending declines materially
Health care	Resurgence of COVID-19 cases increases margin pressure	Labor and supply chain challenges persist longer	Extended pandemic tailwind for certain select subsectors
Homebuilders and developers	Supply chain disruptions persist longer than expected	Higher mortgage rates affect profitability	
Hotels, gaming, and leisure	Omicron and other potential variants	M&A	Inflation
Media and entertainment	Sharper macroeconomic slowdown	Rapidly changing media ecosystem	Resurgence of the pandemic
Merchant power	Capacity markets	Investment in renewables slows	Battery and hydrogen scaling
Metals and mining	Disappointing global growth	China decelerates faster than anticipated	More aggressive financial policies
Midstream energy	Accelerated energy transition	COVID demand shock	
Oil and gas	OPEC/shale production	COVID and its threat to global demand	Accelerated energy transition and regulations
Real estate	Spike in COVID delays recovery	Rising rates and persistent inflation threaten real estate values	Secular changes drive sustained demand for industrial and data centers
Regulated utilities	Longer-term inflation	Rising interest rates	Higher commodity prices
Retail and restaurants	Wage inflation is higher than expected	Evolving business models present opportunities to gain market share	Consumer spending growth slows more dramatically than expected
Technology	Higher interest rates arising from inflation	Ripe for more M&A and buybacks	Supply chain diversification accelerates
Telecommunications	The new infrastructure bill could present opportunities	Limited revenue opportunities and low investment returns from 5G mobile services	Supply chain disruptions and cost input inflation
Transportation - airlines	There is pent-up demand for travel	Slower growth becomes the "new normal"	ESG factors
Transportation - railroads	More aggressive financial policy	Regulations affect pricing or network efficiency	Supply chain issues linger
Transportation - shipping	A surge in new building threatens capacity	Failure of counterparties to deliver on charter agreements	Environmental considerations

COVID-19 related
Supply chain / cost inflation related
Financial policy / M&A related
ESG related
Other issues

Note: Risks and opportunities have been simplified and standardized. No rank ordering is implied between the risks and opportunities. For more information, see Industry Top Trends 2022. Source: S&P Global Ratings.

Financing Conditions

Tightening To The Norm

At the end of 2021, financial markets were generally calm, and interest rates low, with issuance of speculative-grade bonds and loans reaching a new annual record of more than \$1.1 trillion. However, since the Jan. 5 release of the Fed's December meeting minutes, Treasury yields have increased, and equity markets have been on a wild ride, with the benchmark S&P 500 Index briefly dipping into a correction (down 10% from a recent peak).

Markets are now pricing in at least four Fed rate hikes of 25 basis points (bps) each this year, with the first coming in March. Investor fears are growing that this tightening cycle could be disruptive, as it will likely be accompanied by an active reduction in the central bank's holdings of Treasuries as part of an all-in effort to curb inflation.

It's still too early to say for certain that 2022 will be characterized by restrictive financing conditions along with more downgrades and defaults. Even a few months ago, we foresaw higher yields on corporate debt—but this isn't in itself a sign of tight financing conditions, given how low rates have been since 2020 (see chart 2). Secondary-market corporate and Treasury yields have risen since the start of the year but remain below where they've been for most of the past five years. In fact, roughly speaking, corporate yields could widen another 100 bps and still be around the levels during the benign period of late 2017-2018. That said, we expect U.S. corporate debt issuance to shrink this year. This would mark a second straight year of declines, but only following the exceptional \$1.37 trillion that came to market in 2020.

Chart 2
U.S. Secondary Market Corporate Bond Yields Are Rising, But Remain Favorable



Data as through Jan. 21, 2022. Source: S&P Global Ratings.

Our Baseline Sees Subdued Defaults, But Risks Move To The Downside

With financing conditions still historically favorable, and some positive economic and credit tailwinds carrying into 2022, we expect the U.S. trailing-12-month speculative-grade corporate default rate to be around 2.5% by September. That's lower than the long-term average of 4%, but still higher than the astonishingly low 1.5% rate at the end of 2021 (see chart 3). Unusually low default rates have been supported by three strong pillars: robust economic growth, exceptionally strong demand for risky instruments, and a cessation of the credit deterioration seen in 2020. Indeed, the defaults of the past six months, if annualized, would produce an even lower rate (1.3%).

This sub-2% rate should persist for most of the first part of this year but could start to rise as higher interest rates converge with slowing (but still strong) economic growth. If recent market selloffs pick up more steam our pessimistic scenario would become more likely. In our downside forecast, we project the default rate to rise to 5.5%. As the omicron variant has shown, the economy is still susceptible to COVID waves that can hamper growth, particularly for the sectors hit hardest by the pandemic—media and entertainment, consumer products, and transportation. Already these sectors account for 40% of all 'CCC'/'C' issuers in the U.S., with consumer products and media and entertainment having some of the highest negative bias readings at end-2021: 22.2%, and 18.8%, respectively, compared to 14% for overall speculative-grade borrowers.

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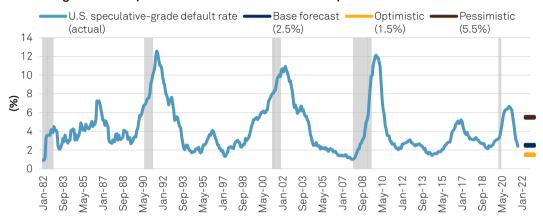
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Chart 3

Another growing risk is geopolitical instability, in particular the tensions between Russia and Ukraine. This year's midterm congressional election adds another layer of uncertainty. These disruptors, combined with growing market jitters about inflation and the Fed's response, could test our baseline default forecast if markets freeze up. However, one reprieve is that the amount of maturing debt coming due this year and next is very manageable, in aggregate.

U.S. Trailing-12-Month Speculative-Grade Default Rate And September 2022 Forecast



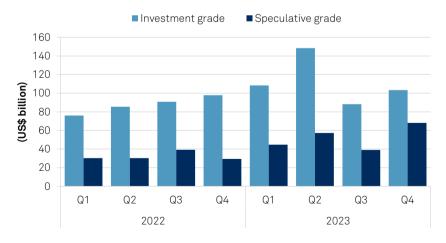
Shaded areas are periods of recession as defined by the National Bureau of Economic Research. Sources: S&P Global Ratings and S&P Global Market Intelligence's CreditPro®.

Corporate Maturities Rise Through 2025

Nonfinancial corporates have \$479 billion in debt coming due this year and \$657.5 billion maturing in 2023. This includes bonds, notes, loans, and revolving credit facilities, and these maturing sums appear broadly manageable given the volumes of corporate loan and bond issuance in recent years. In the past 12 months, U.S corporates have reduced the amount of debt coming due in 2022-2023 by 23%, as companies have pushed out some of the largest maturities to 2026 and beyond (see chart 4). The maturity wall for these borrowers doesn't peak until \$895 billion comes due in 2025, and this offers companies several years in which to refinance or pay down debt before the largest sums are due.

Chart 4

Quarterly U.S. Nonfinancial Corporate Maturities In 2022-2023



Data as of Jan. 1, 2022. Chart shows maturities of nonfinancial corporate debt, including bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Source: S&P Global Ratings.

Near-term maturities are predominately investment-grade. Almost \$350 billion of debt due this year is investment-grade, compared with \$129 billion in speculative grade. However, spec-grade maturities rise steeply in the next several years, with maturities peaking at \$572.9 billion in 2028.

While financing conditions have been very welcoming of lower-rated debt, investor sentiment can shift quickly. In such a scenario, individual issuers, particularly those at the lowest ratings levels, could face higher funding costs and limited refinancing options.

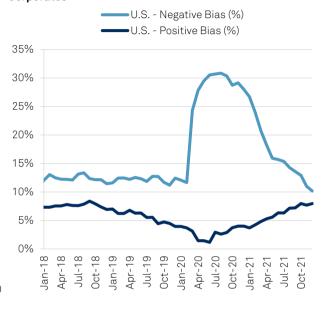
By sector, technology has the most debt due in the next 12 months, with \$57.7 billion—88% of which is investment-grade (see chart 5). Utilities follows with \$54.3 billion (87% investment grade). Sectors with the most spec-grade debt due include media and entertainment (\$20 billion) and autos (\$13.5 billion).



Chart 5

■ Speculative grade ■ Investment grade High Technology Utility Health Care Capital Goods Consumer Products Media & Entertainment Oil & Gas Retail/Restaurants Telecommunications Automotive CP&FS Homebuilders/Real. Transportation Metals, Mining & Steel FP&BM Aerospace & Defense Λ 20 80 40 60 (US\$ billion)

Bias Distribution For 'BBB' Category U.S. Nonfinancial Corporates



CP&ES—Chemicals, Packaging and Environmental Services. FP&BM—Forest Products and Building Materials. Data as of July 1, 2021. Chart shows maturities of nonfinancial corporate debt, including bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings. Source: S&P Global Ratings.

Data as of Dec. 31, 2021. Source: S&P Global Ratings.

'Fallen Angel' Debt Could Double (And Still Stay Lower Than Average)

Amid exceptional economic growth and welcoming financing conditions, the amount of U.S. nonfinancial fallen angel debt (for borrowers downgraded to speculative-grade from investment-grade) fell to a 10-year low of \$23.5 billion last year as credit quality stabilized.

We expect that the amount of fallen angel debt will increase this year in a reversion to the mean, as the effects of the pandemic linger. We estimate about \$58.7 billion in 'BBB' category corporate debt could fall to spec-grade—but that's still below the annual average of the past decade of around \$65 billion.

Reflecting the broad improvement in credit quality for many sectors, the negative bias (the proportion of borrowers with negative rating outlooks or on CreditWatch with negative implications) for 'BBB' companies suggests that downgrade risk has largely bounced back below pre-pandemic levels. The negative bias for 'BBB' U.S. nonfinancial corporates has fallen to 10% (as of Dec. 31) from 14% at of the beginning of October, and the negative bias is now lower than its 13% average since 2008. Meanwhile, the positive bias has increased by a percentage point, to 8% (see chart 6).

Breakdown By Corporate Sector

As the world approaches the third year of dealing with the COVID, the macroeconomic effects of each new wave may be less severe—but many of the U.S. corporate borrowers we rate continue to absorb the same heavy blows they've felt since early in the pandemic. Supply chains continue to be squeezed, and associated input-price pressures persist. Compounded by the fact inflation has outlasted any "transitory" phase and with the Fed standing ready to raise borrowing costs fairly aggressively (both of which could weigh on consumer purchasing power and, therefore, demand), credit pressures are rising.

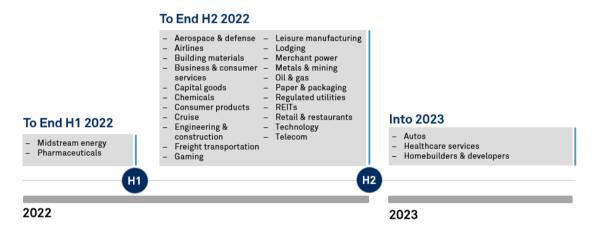
This comes as certain sectors have yet to recover to pre-pandemic levels and remain most vulnerable to new coronavirus variants. And while some challenges are temporary, others have permanently changed the competitive landscape. Businesses that depend heavily on customer mobility or in-person interaction—such as lodging, gaming, and leisure, some media and entertainment subsectors, and airlines—are learning to live with new operating conditions.

On the cost side, bottlenecks up and down the supply chain—from manufacturing to shipping—are eating into profit margins, compounded by high energy costs, elevated commodities prices, and rising wages. We expect supply disruptions to linger until the second half of the year for most corporate sectors (see chart 7). Notably, sectors such as autos (affected by chip shortages) and health care services (struggling to staff medical personnel) will likely see these challenges persist into 2023. It remains to be seen whether the strategies companies are employing to deal with these stresses are sustainable enough to bolster credit quality.

Chart 7

Most U.S. Sectors Expect Supply Bottlenecks To Linger Till The Second Half Of 2022

Question: If your sector is being affected by or benefitting from supply chain and cost issues, how long do you expect the most important effect to persist?



Source: S&P Global Ratings' corporate sector analysts' assessment as of Jan. 28, 2022.

On the bright side, we expect federal support to rehabilitate and upgrade deteriorating and outdated infrastructure through the \$1 trillion Infrastructure Investment & Jobs Act President Biden signed into law in November. Spending will target transportation infrastructure (highways, roads, bridges), the electricity grid (transmission lines, utilities), water infrastructure, and communications (cable, satellites). However elevated government spending does undercut the Fed's efforts to keep inflation at bay, which is partially the reason the follow-on \$2 trillion Build Back Better bill has faced delays.

Aerospace and Defense

Orders and deliveries of new aircraft will mostly follow air-traffic trends, as global air travel continues a gradual, uneven recovery. The air-traffic rebound in some large domestic markets globally will spark demand for narrowbody planes, but the commercial aerospace market won't

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likely recover to pre-pandemic levels until 2024 at least. International travel—and the market for the widebody planes needed for it—remain weak.

Moreover, new COVID variants could slow the air-traffic recovery, as delta and omicron have proved. The timing and strength of international and business travel remain uncertain and at risk to the pandemic.

On the plus side, business aviation, which recovered only slowly from the 2008-2009 global financial crisis, has seen demand from passengers wary of health risks at airports and on commercial flights. In the U.S., the largest single market, business-aircraft flights are well above 2019 levels. Deliveries of new planes have improved from 2020 lows, with most manufacturers likely to return to pre-pandemic levels by late this year or early 2023.

Ratings in the sector have mostly stabilized after a wave of downgrades and negative outlook revisions in 2020 and, to a lesser degree, in 2021. About one-third of borrowers in the sector have negative rating outlooks or are on CreditWatch with negative implications, compared with about half a year ago.

Ratings are mostly stable for defense contractors that don't have significant exposure to commercial aerospace. Revenues, earnings, and cash flow will likely increase moderately, but the positive effect on credit measures will likely be at least partly offset by increased dividends and share buybacks, particularly among large defense contractors.

This comes as U.S. defense spending is unlikely to change much under the Biden Administration, as evidenced by the recently passed budget. Military spending is up 5% year over year, with the budget slightly larger than previously expected (the Administration's original request was for a 1.5% increase). Despite the budget being larger than expected, we expect a gradual flattening in spending growth going forward, which could result in companies seeking to expand through mergers and acquisitions (M&A).

After initial supply disruptions early in the pandemic, prime contractors have reported more delays and shortages of some materials in recent months. This could worsen due to the omicron variant as labor becomes a concern, related to both vaccine mandates and the availability of healthy workers. Given the more significant impact on commercial aerospace, defense suppliers with commercial aerospace exposure could have limited funds to invest in working capital. Ultimately, this could lead to higher costs and delayed revenues, but is unlikely to be a ratings driver for larger firms. However, some smaller contractors could see ratings effects if disruptions last longer than expected.

Autos

Our global light-vehicle sales forecasts face further downside pressure, and we now expect a slower recovery this year than in our October 2021 forecast for growth of 4%-6%. This is mainly driven by increasing downside risks in U.S. where we expect a marginal recovery this year followed by low-double-digit growth next year. Automakers with a stronger presence in the North American market will likely offset inflationary pressure through pricing because of low inventories and strong pent-up demand for highly profitable light trucks.

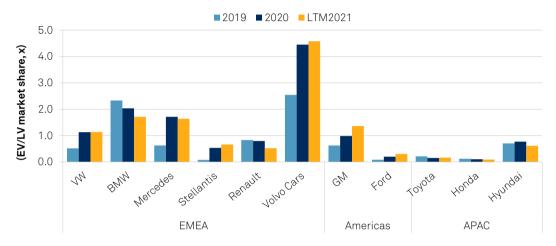
Elsewhere, the accelerated transition to electrification poses a risk to free cash flows. Traditional automakers could grab more electric-vehicle (EV) share from currently dominant Tesla—but high battery-pack costs will remain a challenge (see chart 8). This suggests some margin dilution due to the product mix moving away from automakers' most-profitable vehicles. Also, investment in the battery supply chain will likely remain high in near future. If EV adoption exceeds our base case by 2025, aggressive model launches will add headwinds for traditional automakers' free cash flows and for several powertrain-focused auto suppliers' volumes.

For U.S automakers, we expect ongoing cost-reduction programs, lower restructuring costs, favorable product pricing, and working capital improvements (leaner inventories) to bolster free operating cash flow (FOCF)-to-debt this year. These positives could offset a large portion of inflation risks, mostly associated with aluminum, steel, and precious metals.

For most auto suppliers, we expect slightly weaker credit metrics compared to our previous expectations. Most investment-grade suppliers globally have the flexibility to accommodate

market headwinds such as volatility in light-vehicle production and higher input costs (as well as expected increases in shareholder returns) while maintaining cash-flow metrics in line with ratings. We think a weaker revenue and margin outlook, combined with the decision to distribute additional cash to shareholders, will slow down improvement in credit metrics. As a result, ratings upside is limited.

Chart 8
Global EV/LV Market Share (Excluding Tesla)



EV—Electric vehicles. LV—Light vehicles. Source: S&P Global Ratings.

Building Materials

We expect credit quality for North American building materials companies to remain stable this year, as about 80% of the companies have a stable outlook, (while 11% are positive and 8% negative). Strong end-market demand will help, and companies that can pass through cost inflation will have the best shot at hitting profit and leverage forecasts. Some companies in the sector, however, have seen debt leverage rise because of leveraged buyouts (LBOs) or dividend recapitalizations. This has strained credit metrics, which makes them susceptible to unexpected business underperformance or restructuring costs. For most public companies, higher profits and incremental cash flows have been directed toward shareholder returns. For a small portion, where excess free cash flow was used to trim debt, there have been some positive rating trends.

Rising costs for commodities, labor, and production remain headwinds for the sector. The jump in commodity costs also coincides with higher transportation and logistics costs associated with supply chain constraints, which will test the industry's pricing power in 2022.

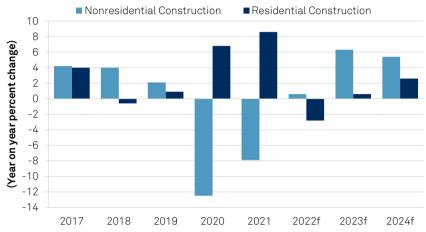
The Biden Administration's \$1.2 trillion infrastructure bill, passed in November, will be a positive for construction spending in the next few years. Investment in infrastructure such as aging power, roads, and water systems look set for double-digit percent gains this year. This could lead to a positive trend in construction for future years, which will greatly benefit many companies within the building materials sector.

Continued low mortgage rates, the tight inventory of homes, and de-urbanization trends underpin the strength in residential construction. The favorable secular outlook for home repair and renovations supports revenue growth that will offset margin pressures from higher raw-materials costs and supply bottlenecks. On the downside, nonresidential construction has seen double-digit percent declines in segments such as lodging, education, manufacturing, and office (see chart 9). Nonresidential construction continued to be slower coming back throughout 2021, regaining only a portion of its lost ground from 2020. Additionally, lower growth in residential investment and a shift in consumer spending could slow this unusual cyclical jump in demand.

The sector remains ripe for consolidation, as strategic and financial players consolidate regionally or diversify into new markets. Some of these transactions are yielding real credit benefits, as stronger businesses improve pricing power and margins. But many LBOs have resulted in downgrades among our riskiest and lowest-rated credits. Low interest funding is also continuing to

fuel the desire for private equity (PE)-owned companies in the sector to do dividend recapitalizations, increasing debt leverage expectations and creating additional pressure on many companies' credit measures. Based on attractive credit conditions, which we assume will continue this year, we could see additional aggressive financial policy actions of debt-financed acquisitions or dividends. In the longer term, there could be some refinancing risks if cyclical changes in much weaker business and economic conditions coincide with higher debt leverage and pending maturities.

Chart 9
U.S. Nonresidential And Residential Construction Forecast



f—Forecast. Source: S&P Global Economics, Economic Outlook U.S. Q1 2022: Cruising At A Lower Altitude, Nov. 29, 2021.

Capital Goods

In addition to broad end-market improvement, the U.S. infrastructure bill will provide a tailwind for capital goods companies in the next several years—even while a slowdown in Chinese construction represents a risk.

Amid sharply higher costs for commodities and shortages in key components, well-positioned leaders will likely use their strengths to source materials, increase, prices and grow profits—while those in weaker positions may face pressure on revenue growth and margins. We expect labor availability to remain a challenge this year, as well. Companies in the U.S. may face more difficulties as several years of tighter labor markets increase the bargaining power of workers. Companies that rely on skilled labor are facing increasing wage pressures, as labor force participation has dropped significantly.

Still, logistics and freight costs will likely moderate, especially if labor availability improves—but disruptions may persist early in the year. As supply issues begin to resolve, we believe there will be less need for unexpected or premium logistics costs.

The sector's growth prospects are overall positive. We assume heavy machinery and construction-exposed issuers will benefit from the lift to demand created by the infrastructure bill—although the uptick 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 this year. On the other hand, we continue to assume the demand for railways and aircraft, which depend on travel demand, will remain lower than pre-COVID levels until next year. Demand for some energy-related equipment and services, such as for coal-fired power plants, may decelerate further.

Our net outlook bias has improved significantly in the past year, and now indicates good credit stability in the next one to two years, helped by solid demand, improving earnings, and generally consistent financial policies. Only 15% of North American capital goods borrowers we rate have a negative outlook or are on CreditWatch negative. And while about 45% of issuers in the U.S. are rated 'B' or lower, owing to a high preponderance of financial-sponsor ownership, we've seen some positive ratings migration at the lower end of the ratings spectrum.

Chemicals

A broader end-market recovery will likely support demand growth for chemicals, which were propped up last year by the rebound in a small set of end markets including housing, fertilizers, and packaging. That said, pandemic-related supply constraints look set to continue, perhaps for longer than we initially anticipated. Supply could be constrained for some chemical end products, as well as raw materials required for chemical manufacturing at least through the first half of the year. While the sector has benefitted from constrained supply of some chemicals, it has been hurt by constraints in raw-materials availability.

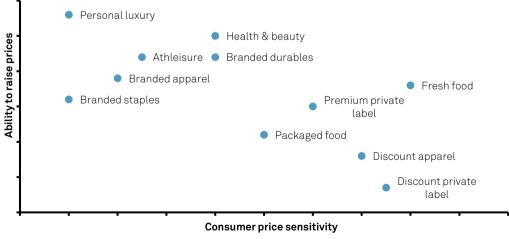
Chemicals markets have functioned for more than a decade without significant cost inflation, and with a gradually improving global supply chain. This year could present setbacks to these long-running trends, creating some uncertainty in the response from end-market demand or from raw-materials suppliers. A decline in pricing power would reduce the sector's ability to maintain margins in the face of rising costs. We think anything beyond a reversion to "normal" could hurt credit quality.

Our assumptions around financial policy are company-specific, but, in general, we expect policies—especially for shareholder rewards or M&A—will support credit metrics within our range of expectations.

Consumer Products

Inflationary pressures that began in 2021 due to supply chain constraints and labor shortages, especially in North America and Europe, will likely continue well into 2022. To date, the ratings impact of inflation has been limited. However, we expect pressure to increase before it abates, possibly leading to more rating actions in the coming months. In our view, branded consumer products companies have a moderate to high ability to pass costs on to consumers (see chart 10). However, the wide array of competing brands and products often mean consumer prices increase, typically after a lag and only after consideration of several alternatives. These include implementing cost efficiencies elsewhere in the value chain, promoting less, and modifying, rationalizing, or reconfiguring the product. Furthermore, many consumer goods companies have invested significantly in IT systems to gather and analyze customer data. They have good visibility on what their consumers are buying and their reaction to price modifications. We expect many companies will make small and periodic price adjustments, carefully monitoring consumers' response at each increment, rather than one-off large increases.

Chart 10
Pricing Flexibility And Impact Vary By Segment



Source: S&P Global Ratings.

We expect the omicron wave will pause the rebound in the **food-service sector** early in the year—after large players had already recovered 90% or more of 2019 sales. Credit metrics will likely weaken somewhat due to supply disruptions and labor headwinds—although we assume large distributors will continue to pass through most cost inflation. Assuming COVID cases subside, the

sales recovery should resume by midyear. However, a sustained increase in food prices could pose a risk to volumes and profits if they become too expensive for many people to dine out.

The pandemic continues to weigh on the prospects for **personal luxury** sectors, as well, with the global industry suffering an estimated value reduction of 22%-25% in 2020 and a much more significant decline in operating profits. That said, operating performance and recovery prospects remain mixed, with the large rated luxury companies outperforming our original expectations mainly thanks to better-than-expected performance in the U.S. and China.

Meanwhile, the **alcoholic-beverages sector** has performed better than expected through the pandemic and is positioned to continue to grow faster than the broader consumer products sector—as reflected in our expectation for 4%-6% net sales growth on average this year for our rated universe. Nonetheless, the growth isn't sector wide, with certain segments facing secular pressures, notably non-premium domestic beers in mature markets, while the still fast-growing hard seltzer category has started slowing in key markets like the U.S. Therefore, we expect certain companies to reinvest more heavily in advertising, promotion, and innovation, which may pressure margins while supply constraints and input-cost inflation remain headwinds.

Health Care

Omicron has increased uncertainty and strains on an already stressed **health care provider** system. The prolongation of the pandemic will pressure margins and cash flows for many industry participants—and health care companies, especially providers, will likely incur higher costs for labor (particularly nurses), and see inflation for key health care supplies this year. With commensurate reimbursement increases lagging, this will result in lower EBITDA margins and cash flows versus 2021.

Federal aid, such as the CARES (Coronavirus Aid, Relief, and Economics Security) Act provided a financial cushion against the pandemic-related disruption. But that safety net will diminish, as the bulk of the federal aid has already been disbursed, and we don't expect more federal aid. The longer-term impact of COVID—including the degree to which related deaths among the medically vulnerable will reduce demand for health care services and the potential for increased demand after patients put off other medical care—isn't yet clear.

Health care M&A, which steadily increased last year, looks set to continue this year, potentially pressuring ratings quality. At the same time, efforts on the health care reform front continue, but we believe it will be largely credit neutral in 2022. Still, unexpected pharmaceutical pricing reforms would be a negative for the drug industry.

The highly rated **pharma industry** continues to have a more negative bias among rating outlooks than other health care subsectors and has seen several downgrades in the past two years, due largely to M&A. However, we believe the ratings outlook bias for the industry is improving, based on several reasons: improving product pipelines at many companies because of all the M&A activity the previous several years, less concern regarding drug-pricing legislation, progress on the resolution of the opioid litigation, and a more stable environment for generics pricing. And the speed of development and approval—and the subsequent success—of COVID vaccines have resulted in a somewhat improved public opinion of the industry.

Homebuilders And Developers

U.S. homebuilders started the year with healthy backlogs amid continuing strong demand, which we expect will result in improvement in both revenues and EBITDA.

However, supply disruptions continue. Shortages in certain building materials have lengthened cycle times and contributed to a production deficit. The industry's tight supply, in addition to strong demand, has caused an unprecedented increase in home prices over the past few months. This higher pricing has yielded stronger margins on lower volumes at smaller home sizes, which we expect to continue, albeit at a decelerating rate.

Given our expectations for home-price gains to decelerate and for cost inflation to persist, we expect margins to begin to stagnate this year.

Health care M&A looks set to continue, potentially pressuring ratings quality

Even so, our outlook for the sector has a decidedly positive bias. Of the homebuilders we rate, 37% have a positive outlook, which indicates a possibility that we could see some upgrades within the next 12 months. Many homebuilders have reduced debt and bolstered land holdings to protect balance sheets from an unpredictable—but inevitable—downturn. Even if the boom in homebuilder profits moderates this year, we expect that robust profitability and lower debt levels will sustain solid credit measures for most.

Homebuilders will likely spend significantly more on land in the next few years as they replacing four- to five-year-old inventories (and some older) with land values that have risen more quickly since 2018. The shift to land options versus outright purchases is much different than the housing boom in late 2000s. Homebuilders now have less debt during a market upswing covering a smaller pool of illiquid real estate assets.

And while supply constraints and higher costs have caused some leading homebuilders to revise downward their production guidance, U.S. household formation appears solid. Slower foot traffic and a potentially slower closing process, to account for social distancing, has accelerated the digitalization of homebuying, enabling better sales conversion and helping to lower costs. On the other hand, a rise in mortgage rates off record lows could sap the important price growth that has sustained margins. We believe higher mortgage rates will have more of an impact on homebuyers for whom affordability is an issue. If these consumers exit the market, it could alleviate some of the supply constraints, making for a deceleration in home price growth (or, perhaps, an outright decline in prices), which would affect profitability.

Hotels, Gaming, And Leisure

Despite our base-case assumption for the **lodging** industry that this year's revenue per available room (RevPAR) could be closer to pre-pandemic levels, the price segment and sector mix of rooms matter significantly for EBITDA and the recovery of credit measures. EBITDA and credit measures of lower-priced economy and leisure-focused hotel portfolios have already recovered well above 2019 levels, as reflected by ratings on these issuers also returning to pre-pandemic levels.

Companies focused on full-service hotels face a potentially slower recovery if omicron significantly hurts group and business travel through the first half of the year. This could cause a slower recovery in EBITDA and credit measures for these borrowers. In addition, we believe policy choices around acquisitions and the resumption of share repurchases that add to leverage will be a key risk factor. Several issuers last year used acquisitions to focus more on leisure and away from full-service city center hotels because of the divergence in the recovery paths. This will likely continue this year.

Room rates have held up surprisingly well compared to prior cycles and may continue to support margin improvement this year. But if the industry gets beyond omicron and travel begins to normalize, increased rate competition may emerge as hotels try to put additional heads in beds.

Despite new coronavirus variants and surges in COVID cases at various points last year, **regional gaming** revenue proved resilient, outpacing 2019 levels. Nevertheless, we believe strong demand trends could wane as consumers deplete accumulated savings, and alternate travel and entertainment options fully reopen. We also expect regional gaming operators will give back some of the strong margin improvement seen since the second half of 2020 through higher marketing and labor costs. Operators may need to increase marketing to compete for consumers' discretionary income, and we believe a tight jobs market could lead to higher costs as casinos increase staffing levels, as demand dictates. Nevertheless, we do believe some improvements operators made to cost structures are sustainable and will support higher margins.

Similarly, pent-up demand for out-of-home entertainment brought visitors back to **theme parks** last year, and we think attendance will continue to improve and could finish 2022 with higher visitation than 2019. If COVID-related hospitalizations stay within capacity limits, we believe consumers will continue to view theme parks as a safe entertainment option. Destination resorts such as Disney and Universal may lag because of a slower recovery in international visitation, which we expect to return to normal levels by the end of the year. We expect industry-wide revenue to exceed 2019 levels and for EBITDA margins to improve after cost-cutting in the past two years.

Full-service hotels could recover more slowly if omicron hurts group and business travel

Along these lines, we expect events such as **sports, theatrical performances, and concerts** to grow substantially this year, supported by a strong pipeline of events that have been postponed due to the pandemic. Event attendance, especially within the U.S., recovered through last summer as the vaccination effort progressed, restrictions on live events were largely lifted, and consumers began to feel more comfortable in traditional entertainment venues. Absent a return of social restrictions, we expect the number of events to be at or above pre-pandemic levels driven by those that have been rescheduled for this year. Although ticket pricing could moderate from very high levels, still-elevated consumer savings and strong demand could support pricing above pre-pandemic levels. As a result, we believe industry revenue will exceed pre-pandemic levels.

For the **fitness sector**, the recovery may remain uneven across regions and price points. Operators of budget gyms have seen a more aggressive recovery in member counts and revenue than operators of luxury gyms. Additionally, operators in states where COVID restrictions have been more lax or nonexistent have seen faster membership recoveries than operators in states where restrictions have been tighter, and we expect this to continue.

Elsewhere, inflationary pressures on **toy manufacturers** have yet to abate, with industry giants Hasbro and Mattel likely face continued supply disruptions and cost pressures through the year. So far, manufacturers have passed through price increases to retailers, partially mitigating inflationary pressures, and low unemployment and high household savings rates have enhanced consumers' willingness and ability to absorb price increases. But declining consumer confidence could weigh on consumers' moods and purchasing power.

Media And Entertainment

Major U.S. media companies are set to spend more than \$100 billion on content this year—a record driven by media and tech companies' frenetic need to fuel growth of their video-streaming services.

As the studio economic model undergoes seismic changes, we believe selling new content to streaming services is a less attractive model than the traditional TV model. In addition, the film model is impaired as both theatrical windows narrow and those movies that end up being sold to in-house streaming services are skipping the highly profitable secondary-release windows. As a result, studio margins and cash flow will weaken unless pricing and payment dynamics change.

All told, we see this as a bubble. How, or when, the bubble deflates is unclear. Streaming services depend on new content to grow their subscriber bases. But the current pace of spending is unsustainable and will only decline if the number of streaming services shrinks through consolidation or failures that result in less of a dogfight for new subscribers.

Large media companies are all in on scaling their streaming businesses globally and are spending heavily to achieve this. However, the cost to achieve the required level of scale isn't cheap, and we expect media companies with global ambitions to spend heavily on content, marketing, and global infrastructure, and to pursue acquisitions or partnerships to accelerate the process.

The outlook for media companies that aren't building a global streaming service is mixed, and generally negative. We believe the decline of the U.S. linear-TV sector is inevitable, but the pace of that decline will vary based on the genre. In our view, broadcast networks and local TV broadcasters will suffer the least severe effects, whereas general entertainment cable networks, premium cable networks, and regional sports networks will see the most severe impact.

One constant for the media and entertainment sector is that the pandemic is unpredictable. This has hammered the movie-exhibition sector of the media ecosystem the hardest, as film studios have been hesitant to release blockbusters into a market where box office revenue could be hit. While it seems most countries are learning to live with COVID, this uncertainty makes for continued tail risk for the industry.

Merchant Power

For merchant power providers, inflation, rising interest rates, and continued supply disruptions could create a challenging environment. Many borrowers successfully kept operating and maintenance costs flat to declining, in recent years, with labor attrition and technology advances

Major U.S. media companies are set to spend a record \$100 billion on content this year

offsetting inflation. However, as materials costs increase those pressures could start to weigh on margins.

Last year, electricity demand rose 2.8%, after a 2.9% decline a year earlier. We project loads to grow 1% this year overall, with some regions flat. This comes as accelerated de-carbonization efforts, along with policy support, provide a major tailwind to sector growth. The power market now expects renewables to deliver more than interruptible power. The focus is on not just clean and cheap power but power that is also firm and scalable.

Still, it's likely that renewables deployment will slow this year because of supply-chain issues—which poses both a risk and an opportunity, based on the resource mix and nimbleness of a generator's assets.

Compared to 2020, our ratings distribution in the merchant power sector has strengthened in the 'BB' category (compared to an average rating of 'B+' in 2018). Partly contributing to the move is the stable ratings on renewables portfolios and industry consolidation. Investment-grade credit quality has also strengthened after deteriorating in the past three years.

Metals And Mining

Record prices and profits for metals producers along with several years of financial discipline led to moderate but widespread credit improvement in 2021. The lack of new meaningful supply and limitations in ramping up volumes should support prices this year—commodities such as iron ore, copper, and coal are setting high prices, albeit with extraordinary volatility. Such market conditions should also continue to yield healthy profits and cash flows for many metals and mining companies, supporting shareholder returns, growth capex, and acquisitions. Attractive funding costs, ESG mandates, and the global energy transition will likely spur further M&A.

However, as economies continue to emerge from the COVID-19 pandemic and adapt to a new norm, the potential for prolonged economic weakness remains a key source of uncertainty. This could undermine growth, weaken market sentiment, and increase commodity price volatility. In addition, China's decarbonization drive will move markets for years to come. Given that China accounts for over half of global demand for raw materials, a prolonged weakness in demand or market expectations would weaken key support for prices. We believe the Chinese government is unlikely to loosen the control on steel production this year, and its crude steel production is likely to gradually fall given China's goal of peak carbon emission by 2030.

Midstream Energy

Most of the large, **diversified midstream energy** companies across North America were free cash flow-positive last year, and we expect that to continue. We expect EBITDA to continue to remain at similar levels when excluding any one-time gains they may have realized from the Texas winter storm in February 2021. These companies used excess cash to repay billions of dollars in debt last year, and we foresee them continuing to focus on capital discipline while they improve their leverage profiles through the first half.

In the past decade, diversified midstream energy companies spent billions of dollars to meet infrastructure needs in North America. Although growth opportunities have declined from previous years, we expect these companies to continue to focus on organic growth opportunities. At the same time, diversified entities are better-positioned to pursue M&A than their smaller competitors.

We expect **gatherers and processors** (G&Ps), as well as diversified midstream companies with G&P operations, to continue to focus on the Permian basin, where volumes are growing the quickest among all major U.S. basins. We think consolidation of smaller, regional G&Ps will continue to be a theme, especially in the PE-backed companies in the Permian. We believe larger diversified midstream companies could look to acquire smaller Permian G&Ps, especially due to diversified midstream companies' stronger balance sheets and ample discretionary cash flow. The consolidation of smaller Permian G&Ps provides an opportunity for EBITDA growth, larger scale, and the ability to ensure volume flows to keep current assets at close to full capacity. If funded conservatively, these acquisitions could support credit quality due to the creation of midstream companies with greater scale. However, we would view debt-funded acquisition as harming credit quality if credit metrics weakened. Smaller Permian G&Ps could also see improvement in credit

Ratings in the merchant power sector have strengthened in the 'BB' category

quality even if they aren't acquired. This would be a result of improved cash flows as volumes increase in the Permian, which will have the effect of improving credit metrics.

For **pipelines**, we expect continued oversupply in crude-takeaway capacity in the Permian basin this year. As contracted capacity matures, competitive pressures will drive down cash flows for crude-pipeline operators unless there is a rationalization of capacity. We believe that the larger, diversified operators are likely to perform better than their smaller, single-asset peers, given the formers' flexibility to ship barrels to multiple destinations and demand centers through their pipeline network. Natural gas pipelines' cash flows look set to be more resilient. Both the Permian and the Northeast are short takeaway capacity, which will benefit the pipes and operators in both regions, given strong natural gas pricing and growing production.

Credit quality in the North American midstream energy industry strengthened last year, rebounding from the effects of the pandemic and subsequent credit stress. The economic reopening and surge in demand, coupled with broader supply chain issues and rising inflation, caught producers and midstream companies alike somewhat flatfooted. Domestic upstream producers have remained disciplined, living within cash flow, which has led to more modest growth expectations. As it stands, 75% of midstream ratings have stable outlooks, 9% are positive, and 16% are negative. This is greatly improved from the same time last year, when 57% of ratings were stable, 4% were positive, and 39% negative.

We believe commodity prices and demand will continue to support the industry's credit quality this year. Capital spending will likely increase modestly but remain well below 2019 levels and is unlikely to increase substantially any time soon, given that North American infrastructure is generally adequate to meet supply and demand needs. A more intense investor focus on ESG, and legislation that seeks to address climate change, could bring changes to the oil and gas industry more quickly than we expect. But a secular shift in demand patterns would likely take decades to make a significant industry impact, and midstream companies are beginning to develop strategies to be part of the solution as the energy transition accelerates.

Oil And Gas

The global backdrop for oil remains supportive of the industry's credit quality, with demand gaining momentum as economies continue to reopen—provided the fallout from the pandemic remains manageable or subsides. After OPEC completes its policy of bringing back 400,000 barrels of oil per day (mm/bpd) per month of offline production, until it offsets the nearly 10 mm/bpd cut in 2020, it will have limited spare capacity, and tight global inventory will continue to support prices. How shale-oil producers respond will remain key to prices in the latter half of the yea. We expect natural gas prices to be more volatile, with much of the outlook largely determined by winter weather in the Northern Hemisphere and the status of the Russia's Nordstream 2 pipeline into Europe. We expect global inventories to remain tight.

The outlook for ratings remains largely stable with most balance sheets in a much better position. With the strong rebound in hydrocarbon prices and production, base cash flow and credit metrics have looked very strong for most issuers and their rating categories. Much of the upstream portfolio resides in the U.S., and with prices well above the approximate average shale breakeven of \$50/bbl, issuer profitability and ability to generate cash has improved considerably. Responding to investor pressure and unlike previous cycles, borrowers have remained steadfast in limiting capital spending and generating cash flow for permanent debt-reduction and shareholder initiatives. The adoption of this "fiscal religion" policy led to a slew of upgrades last year throughout our rated portfolio. Despite what we expect to be credit-friendly hydrocarbon prices his year, we don't expect the magnitude of ratings activity to mirror that of 2021. This is largely due to a smaller debt-maturity profile industry-wide, increased use of free cash flow for shareholder initiatives, and increased capital budgets as the sector has largely underinvested in the past couple of years. We expect a 15%-20% average increase in capex this year in North America, owing partly to rising inflation. Globally, capital spending will likely increase 10%-15%. We expect further potential for debt-reduction but not to the extent we saw last year.

North American refiners' credit measures are slowly improving, rising from the deep hole they found themselves in when demand and EBITDA plummeted in 2020 and the first half of 2021. While many bolstered liquidity with additional debt, investment-grade issuers didn't sacrifice their

The global backdrop for oil remains supportive of the industry's credit quality

dividend payments, while many speculative-grade peers did. While we viewed this significant use of cash as a negative for credit, this strategy among larger, higher-rated refiners paid off as demand and margins recovered. While credit measures are still weaker than what we expect during normalized midcycle conditions, we believe metrics will continue to improve, which we reflected in a number of ratings outlook revisions, to stable from negative, toward the end of last year. Ongoing improvement will largely depend on sustained positive economic growth globally and resilient demand. We expect margin improvement but think midcycle margins will remain elusive, likely not returning until 2023.

Real Estate

Economic expansion, robust consumer demand, and healthy job growth should feed demand for real estate. Across the sector, we expect a continued rebound in operating metrics with improving occupancy and rent growth for most property types. We expect demand for rental housing, industrial assets, storage and data centers to remain robust. However, demand for office assets remains muted and we expect occupancy and rents to remain pressured.

For rental housing, we expect multifamily real estate investment trusts (REITs) with exposure to urban markets such as New York and San Francisco to see some improvement, driven by a rebound in leasing and higher rents. Across most markets, we expect material improvement, with low-double-digit growth in net operating income (NOI). Single-family rental and manufactured-homes REITs continue to outperform their multifamily peers given robust demand.

Operating performance for retail REITs largely normalized last year, and we expect some ongoing improvement to metrics, with NOI growth in the low- to mid-single-digit range. Rent collection has recovered and is at pre-pandemic levels. Retail REITs have also made significant progress in the collection of deferred rents, pointing to the stabilization of the tenant base.

Office REITs are showing relatively stable performance, although leasing activity remains below pre-pandemic levels. We expect the recovery for office REITs to be slow as the pandemic continues to weigh on vacancy and rent growth as tenants evaluate space need given hybrid work has become the norm. We foresee a flight to quality as tenants become more selective, benefiting the high-quality assets typically owned by REITs.

Rising labor costs are having an outsized impact on health care REITs, particularly those focused on senior housing and skilled-nursing facilities. For the senior housing operating property assets, rapidly rising labor costs are directly pressuring margins. As a result, we think occupancy rates will have to rise well above pre-pandemic levels (which were in the mid-80% area) to fully restore profit margins.

All told, REITs are positioning themselves for growth again and have resumed their external expansion strategies, with more acquisitions. Improving operating fundamentals and low borrowing costs have driven M&A, and this could continue for the next several quarters.

The number of negative ratings actions for U.S. REITs are easing as operating performance stabilizes and credit metrics recover. The negative rating bias has eased to about 14%. We expect credit metrics to recover to pre-pandemic levels this year, although the path could be bumpy, given the potential for new COVID variants that require social restrictions.

The course of the pandemic is difficult to predict, and new variants could bring additional operating disruptions to the real estate sector—particularly for property types that are more exposed, such as retail, office, and lodging. Rising inflation, too, is a growing concern for real estate, particularly if this pushes interest rates significantly higher, thus pressuring property values. However, REITs are somewhat protected from rising inflation as most leases are either triple-net leases or have built-in rent escalators tied to inflation indices. Assets with shorter-term leases (such as residential) could suffer more if rents can't be adjusted amid weak demand.

On the flip side, industrial REITs and data centers continue to benefit the most from e-commerce and remote-working trends, and demand continues to surge for both property types. While supply is also rising rapidly, rated industrial REITs have outsized exposure to high-barrier markets that are better-insulated from new supply.

Rising labor costs are having an outsized effect on health care REITs

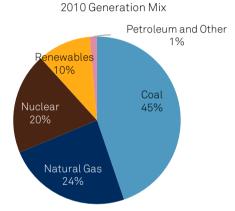
Regulated Utilities

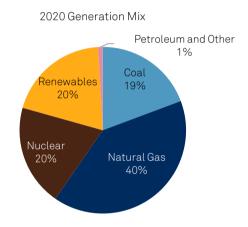
The industry's capital spending exceeded a record \$170 billion last year, reflecting necessary investment in energy transformation, safety, and reliability. We expect industry capital expenditures (capex) will continue to gradually increase, reaching more than \$180 billion by 2024. This comes as the Biden Administration's infrastructure plan allocates about \$65 billion of investment toward the electricity-transmission grid, \$50 billion to protect against physical risks, and about \$7.5 billion to build a network of EV-charging stations. We expect grants or other financial assistance provided under the plan to offer temporary relief for affected utilities, modestly offsetting the funding needs for those that already face elevated capital spending.

The industry has already made significant progress towards reducing its greenhouse gas emissions. In the past decade, the industry has reduced its reliance on coal-fired generation more than 50% and more than doubled its generation from renewable sources (see chart 11). But pressure to accelerate this transformation could lead to unintended consequences, such as operational issues from an overreliance on intermittent power, which could weaken financial measures.

U.S. Generation Mix By Energy Source

Chart 11





Source: S&P Global Ratings.

Borrowers' financial measures have already weakened, reflecting record-high capital spending and ESG-related credit risks. And because the industry will continue to experience negative discretionary cash flow, substantial outside funding is necessary to meet the industry's capex and dividends requirements.

The industry outlook remains negative. For the second consecutive year in 2021, downgrades outpaced upgrades, reflecting how many companies within the industry are strategically operating with only minimal financial cushion from their downgrade thresholds. Furthermore, ESG credit risk factors continue to weigh on credit quality. Given that about 20% of the industry has a negative outlook and only about 5% of the industry has a positive outlook, it's more likely that downgrades will continue to outpace upgrades this year.

Retail And Restaurants

Grocers and "big box" retailers continue to enjoy high demand, and we expect this to continue as hybrid work and school arrangements persist and allow grocers to maintain the food-at-home market share gained in the pandemic. As excess savings dwindle in the face of double-digit inflation, consumers will cut spending on more discretionary items before groceries and basics. Trading down to private labels will boost margins for grocers, helping to offset inflationary pressures in labor, packaged foods, and household products. Big box retailers such as Walmart, Target, and Costco will benefit from similar dynamics. Digital sales will continue to be an area of intense focus and investment.

Department stores enjoyed a good recovery last year and outperformed many other retail segments, reflecting continued vaccination progress, greater mobility, and pent-up demand. E-

commerce remains a key growth platform, supported by enhanced omni-channel capabilities, loyalty programs, and other operating initiatives.

Positive trends in credit quality for the retail and restaurant sector began in the second half of 2020 and continued through last year. Consumers started last year flush with cash accumulated from government stimulus and savings from fewer vacations and dinners out in 2020. Consumers have largely proved their resilience to COVID waves with only modest reductions of in-person activities, such as dining out, and continued spending overall throughout the year.

For the full year, upgrades dwarfed downgrades by about 10 times. The portion of the U.S. portfolio rated 'CCC+' is now below 10%, from the 2020 peak above 25%. There were only two defaults in the year, the lowest number since 2014, and the recovery of credit quality in retail and restaurants suggests this will also be a year of few defaults.

In 2021, the full-service **restaurants** we rate proved resilient to the on-and-off imposition of social restrictions with effective pivots to off-premise operations, slimmed down menus, and beefing up their digital platforms. After a slower-than-expected start in the first quarter due to the omicron variant, health and safety measures will likely be less onerous and enable restaurants to turn their attention to the growing challenges posed by inflation in commodities and labor costs. Therefore, we expect borrowers to take a targeted approach to wage increases because competition tends to stem from the regional presence, or absence, of alternative opportunities, such as warehouse fulfillment centers. If commodity-cost inflation rises faster than restaurants can raise their menu prices, it could lead their credit quality to decline. Broad-based inflation will likely also pressure consumer budgets and potentially lead to softer demand at casual diners as consumers shift to food at home. On the other hand, fast-food restaurants tend to perform well in times of economic stress because of the relative value of their offerings.

Technology

Against the backdrop of COVID-accelerated digital transformation across enterprises, and significant demand for remote work-related hardware and services, tech companies enjoyed strong growth in 2021, and we expect global IT spending to remain generally favorable this year (see table 2). Specifically, we believe spending will outpace global GDP growth as supply constraints have pushed some demand into the current year; this tailwind should last through at least midyear.

We expect the **software** market to grow about 11% in 2022, a modest deceleration from about 13% in 2021 but still above the high-single-digit pace we typically see in this segment. Enterprises are leaning into their digital transformation plans due to the pandemic. Input constraints on raw materials and labor, and remote working policies have increased pressure on companies to find efficiencies and become more flexible, and they are looking to software solutions to deliver these outcomes. A continued strong demand environment will provide funds for a healthy pace of business investment, which will benefit software companies over a multiyear horizon.

Table 2
Global IT Growth Forecasts

	2020	2021e	2022e
Global GDP Growth	(3.3%)	5.7%	4.2%
Global IT Spending	3.0%	10.5%	6.3%
Revenues			
IT Services	2%	8%	7%
Software	9%	13%	11%
Semiconductors	7%	26%	9%
Network Equipment	(3%)	2%	5%
Mobile Telecom Equip	5%	12%	3%
External Storage	(4%)	6%	5%
Shipments			
PC	13%	15%	2%
Smartphone	(7%)	4%	1%
Server	3%	6%	5%
Printer	0%	(5%)	3%

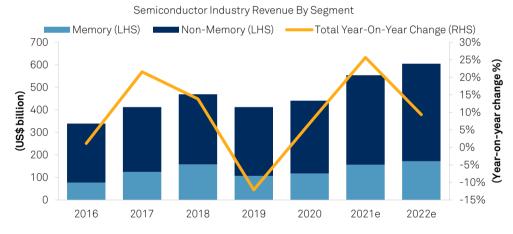
e-Estimate. Source: S&P Global Ratings.

We expect the **IT services** sector to enjoy growth above global GDP expansion, with gains of about 7% in revenue this year—adding to last year's 8% jump fueled by businesses adapting to the COVID-disrupted world. Large projects, such as enterprise resource planning software implementations and consulting engagements, returned last year, and we saw large IT services vendors such as Accenture, Cognizant, and IBM post double-digit revenue growth in these areas. As the pandemic changed the way we work, businesses realized the importance of hybrid work and have relied even more on IT services vendors for help to accelerate their shift to a private and public cloud infrastructure, as well as need for digital transformation, application modernization, and automation.

The **semiconductor** industry had a banner 2021, with an estimated overall revenue growth of about 26%, to around \$550 billion. Demand trends remain favorable, and we forecast the industry will expand about 9% for the year (see chart 12). The economic outlook, while uncertain, remains positive and supply continues to be hampered by chip shortages which we believe will last through 2022 for some products. Telecommunications

As the semiconductor shortage affects all industries, our view on **smartphone** unit growth is predicated on supply constraints continuing at least through first half of the year. Disruption will likely remain pervasive across regions and affect the largest smartphone manufacturers, such as Samsung Electronics and Apple. Despite the slowing momentum, we believe average selling prices will rise in the low-single-digit percent area as 5G smartphones represent a growing proportion of overall unit shipments.

Chart 12
Semiconductor Industry Is Set To Grow Again



e-Estimate. Sources: SIA, S&P Global Ratings.

All this comes as supply chain diversification gains momentum. Increasing nationalistic sentiment is resulting in more government policies that favor local supply chains, which could add to reasons for diversification. Many semiconductor companies, such as TSMC and Samsung, are increasing investments in U.S. and European manufacturing facilities driven by customer demand, as well as subsidies from local governments.

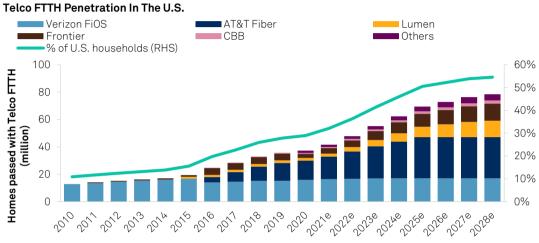
Investment-grade companies' balance sheets have remained mostly consistent over the past few years. By and large, most tech companies have refrained from overextending their balance sheets following the U.S. tax reform in 2017, with a few exceptions.

Telecommunications

Even as U.S. **wireless operators** last year posted their biggest subscriber gains and service-revenue growth in several years, aggressive promotional activity to differentiate their 5G networks pressured margins, coupled with a massive \$95 billion spend in the C-band auction pushed up leverage for all the rated carriers. This year, we expect wireless service-revenue growth to moderate as aggressive promotions and elevated capex weigh on margins and FOCF.

Conversely, **cable operators**' broadband subscriber growth last year slowed in the wake of homebound consumers' increased demand for internet connectivity at the start of the pandemic. In the next several years, competition could increase from recapitalized **wireline companies**, which are aggressively deploying fiber-to-the-home (FTTH) in their markets to better compete for high-margin broadband customers. We believe cable can still expand its broadband subscriber base in non-fiber rural markets and through edge-out opportunities, which should lead to solid—albeit moderating—earnings and cash flow growth this year and beyond (see chart 13). It will likely take some time for wireline companies to realize the benefits from their network upgrades. Declines in legacy products and lost subsidy revenue will continue to pressure the top line over the next couple of years.

Chart 13



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

Overall, the effects of supply disruptions and inflation have been somewhat muted for U.S. telecom and cable providers—but there have been some pockets of stress, including the impact of higher energy prices on data center operators, as energy is the largest component of the cost structure for data centers after rent. Higher prices aren't easy to pass along and can only be re-priced when a contract comes up for renewal. While a combination of hedging strategies and some pass-through provisions can limit the hit to margins, the weight of higher energy prices on data centers may be heavier this year. We also expect this to be another big year for M&A, as long as interest rates remain fairly low and equity prices high.

Upgrades outpaced downgrades last year for the first time since 2014. U.S. telecom and cable borrowers we rate suffered less during the pandemic and recession as many corporate sectors—however, this has made for a comparatively limited rebound. Several factors drove upgrades, including improving industry dynamics, especially for cable providers; stronger business conditions; and transactions that enabled debt repayment and leverage improvement. About 11% of telecom and cable issuers we rate either have negative rating outlooks or are on CreditWatch with negative implications, compared with 20% at year-end 2020 and 30% at year-end 2019. We expect rating trends among U.S. cable providers to remain relatively stable despite the potential for moderating broadband subscriber growth and ongoing pay-TV customer declines. We also expect some rating upside for data center operators due to favorable industry trends, especially among interconnection providers. And even though high capital spending and aggressive competition could hurt telcos' credit quality, we believe current ratings already reflect these operating risks.

Transportation

A significant recovery in U.S. domestic travel has shifted **airline** outlooks to stable or positive, and many carriers in North America have used a combination of government aid and borrowing in receptive capital markets to bolster liquidity—often to record levels. This provides a cushion against weaker or more slow recovery. We anticipate that North American airlines' traffic will this year reach 80%-90% of 2019 levels, slightly higher in the U.S., with its large domestic market.

Unfortunately, the recent run-up in fuel prices has been rapid, so even when raising ticket prices is possible, fares can't adjust as quickly as expenses. Many airlines outside the U.S. hedge their fuel purchases, which slows, but doesn't fully offset, rising costs. U.S. airlines hedge much less but have somewhat more ticket-pricing power in a consolidated industry. Still, airlines' main current source of revenues, leisure passengers, are more price-sensitive than business travelers, so pricing power has its limits even in concentrated markets.

A longer-term cost risk is labor expense, the largest operating item, at 25%-35% of the total. Pay and benefits are set in contract negotiations, but pressure is building for greater compensation. And there are long-term shortages in some markets for pilots and mechanics. We foresee rising costs for several years, which will trim the benefits of expected recovering revenue.

In **shipping**, congestion on the U.S. West Coast continues. Strong trade flows have helped stimulate a surge in containership ordering and could trigger a flood of new ships in 2023-2024—but supply growth is unlikely to meet rising demand in the coming quarters, propping up freight rates.

We now forecast that freight rates could start normalizing (from current all-time highs) late this year, provided the pandemic's effect on container shipping eases. Thereafter, as overall industry capacity increases and vessels on order are delivered, ocean tariffs might face a further correction and ultimately stabilize at profitable levels that are likely above the pre-pandemic 2019 base.

Among **railroads**, our ratings and outlooks on large North American freight railroads are mostly stable. Macroeconomic conditions remain strong, with high demand for freight transportation set to continue through most of the year. Supply chain-related disruptions, such as port backlogs and equipment shortages, should abate over the year, supporting operating efficiency. Nonetheless, freight transportation providers, including trucking, will likely continue to face labor-related challenges given the tight jobs market. We think railroad debt-financed share repurchases will remain high, keeping credit metrics mostly stable.

Transportation Infrastructure

COVID-vaccine rollouts and fewer social restrictions have contributed to higher demand across the transportation sector—and some areas, such as toll roads and ports, are very close to, or are surpassing, pre-pandemic volumes.

On the other hand, the rebound in global airport traffic, while continuing, varies across countries and regions. Domestic traffic is likely to recover to pre-pandemic levels by late 2023, while international recovery could be in 2025 or beyond (see table 3). For U.S. airports, we expect the uneven recovery led by the domestic and leisure market may slow in the near term but smooth out as business and international travel recovers. On average, we expect U.S. airports (predominantly domestic) to regain 85%-90% of pre-pandemic levels.

Table 3
Global And U.S. Total Traffic Recovery (Passenger Volume)

Calendar Year	Global	U.S. Airports ¹	
(From 2019 Baseline)	Domestic Traffic	International Traffic	0.5. Airports
2021e	65%-80%	20%-30%	70%
2022f	75%-100%	40%-60%	85%-90%
2023f	85%-100%	70%-80%	95%-100%
2024f	95%-100%	90%-95%	100%-105%

¹ Of total market, approximately 80% is domestic traffic. e—Estimate. f—Forecast. Source: S&P Global Ratings.

U.S. ports, meanwhile, are experiencing historic congestion, and cargo tonnage totals have already recovered beyond pre-pandemic levels.

We also expect continued resilience and stability for toll roads globally. That said, some commuter toll roads in North America, will lag as they navigate a new environment. While U.S. not-for-profit toll roads that saw traffic rebound last year—with some agencies raising tolls and fees, restructuring debt, or reducing operating expenses to offset revenue declines—look set for resilience and stability through the year.

Leveraged Finance

After a landmark 2021, in which U.S. leveraged loans and collateralized loan obligations (CLOs) enjoyed record issuance, the prospects for this year look almost as good.

Last year, institutional leveraged loan volumes reached \$615 billion and high yield bond issuance also reached a record \$465 billion—together pushing leveraged finance issuance to more than \$1 trillion, according to LCD data. Demand for leveraged loans was primarily driven by CLOs, which reached about \$187 billion on new issuance.

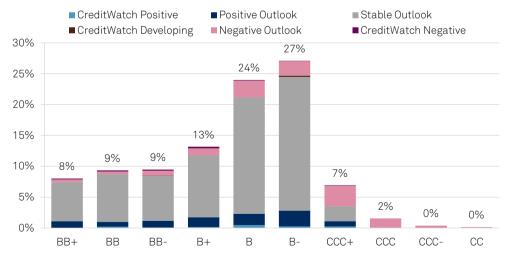
S&P Global Ratings forecasts U.S. CLO issuance of \$160 billion this year, which would be the second-highest ever recorded. Based on demand from CLOs, the leveraged loan market will likely see another busy year. We also expect to see continued demand from loan funds and other investors, given the attraction of floating-rate instruments in an environment of potentially rising interest rates. However, the sunsetting of LIBOR as a benchmark could temper CLO issuance early in the year, as the market achieves price discovery and settles on margins and spreads.

The Credit Environment And Speculative Grade Rating Actions

Last year, U.S. corporates benefited from an easy credit environment—buoyed by strong economic growth, highly favorable lending conditions, improved performance arising from the pent-up consumer demand, and general optimism around business conditions. North American speculative-grade companies enjoyed almost 350 upgrades in 2021—with more than 75 companies upgraded out of the 'CCC' category, as several opportunistically refinanced debts at reduced rates and pushed out maturities. While these actions improved their liquidity (71% of spec-grade companies we track now hold more cash than they did in 2019) and improved coverage ratios, we expect the pace of upgrades to decelerate this year.

To start the year, about 75% of the spec-grade companies had stable rating outlooks (see chart 14). Only 13% had negative outlooks, in stark contrast to January 2021, when 38% of them had negative outlooks. Still, 2022 begins with slowing economic growth, uncertainty around the timing of (and market reactions to) Fed's monetary-policy actions, the persistent pandemic and supply constraints, and, notably, profit margin pressures from rising wages and input costs.

Chart 14
Rating Distribution As Of January 2022



Data as of Jan. 3, 2022, Source: S&P Global Ratings.

Most new North American corporate borrowers have received ratings at the lower end of the credit scale. Given that CLOs are the biggest buyers of new loans, new issuers have relied on loan funding, and nearly 70% of those we rated last year came in at 'B' or 'B-.' More than two-thirds of them were owned by financial sponsors, which, in our view, will likely pursue aggressive financial policies such as debt-funded dividends and M&A that could hurt credit measures and add leverage to balance

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sheets. Further, the sponsor-owned companies tend to have a small operating scale or a niche market focus with a weaker or vulnerable business risk profile, resulting in a modest ability to withstand sharp business downturns.

Leverage Among Legacy Issuers

In looking at leverage (calculated as reported gross debt over EBITDA) of the 1,083 spec-grade companies we rate in the U.S. and Canada, median leverage peaked at 6.5x in the second quarter of 2020, when the full brunt of the pandemic hit. Since then, leverage has declined steadily, returning to the pre-pandemic level of 5.3x at the end of September 2021.

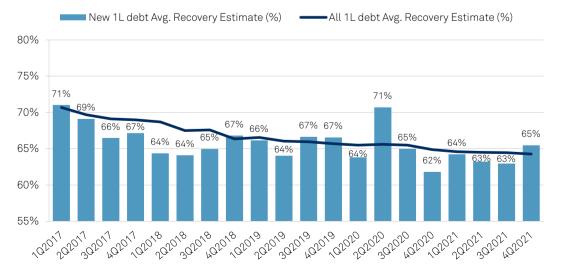
But the moderation in leverage was primarily the results of a robust rebound in earnings, rather than debt-reduction. As operations stabilized, naturally, the need for a large liquidity buffer also diminished. Many companies last year took steps to repay debt, starting with the costliest amassed at the height of the pandemic. However, progress on debt-reduction was more than offset by a resurgence in borrowing, at least in the aggregate—as evidenced by an 8% increase in median debt over the first three quarters of last year. The challenges that lie ahead are that the Fed's expected series of rate hikes would increase financing costs and erode debt-service coverage ratios.

In our view, the growth in EBITDA margins has likely peaked, with cost inflation and labor shortages now catching up with profits. Specifically, rising costs for raw materials, wages, and freight are the primary factors pressuring on margins.

Pressures Persist On Recovery Ratings

The concentration of newly rated corporate issuers at the low end of the speculative-grade scale, along with high levels of debt-financed M&A and dividends, continue to weigh post-default recovery prospects. High debt leverage tends to be inversely correlated with recovery rates, as more debt seeks recovery from the same collateral/assets. The effects on first-lien debt have been exacerbated because the increase in total leverage has also fueled a preference for first-lien debt, with companies (and sponsors) seeking to lower the overall cost of capital. This is especially true for smaller, highly leveraged companies too small to tap the bond market. As a result, there has been a prevalence of first-lien-heavy and first-lien-only debt structures in recent years. Recovery prospects (as approximated by the rounded estimates underlying our recovery ratings) for first-lien debt are now consistently, and significantly, below historical averages, generally cited at 75%-80% on an ultimate (or post-restructuring) basis (see chart 15). To a lesser extent, the dominance of covenant-lite term loan structures in the syndicated loan market also contributes to lower actual and expected recovery rates for first-lien debt.

Chart 15
Average Recovery Expectations For First-Lien Debt: New Issuance And Overall (U.S. And Canada)



As of Dec. 31, 2021. U.S. and Canada. Includes public and private ratings for bank loans and notes. Source: S&P Global Ratings.

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This report does not constitute a rating action.

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