U.S. Corporate Credit Outlook Midyear 2020

Pitfalls And Possibilities

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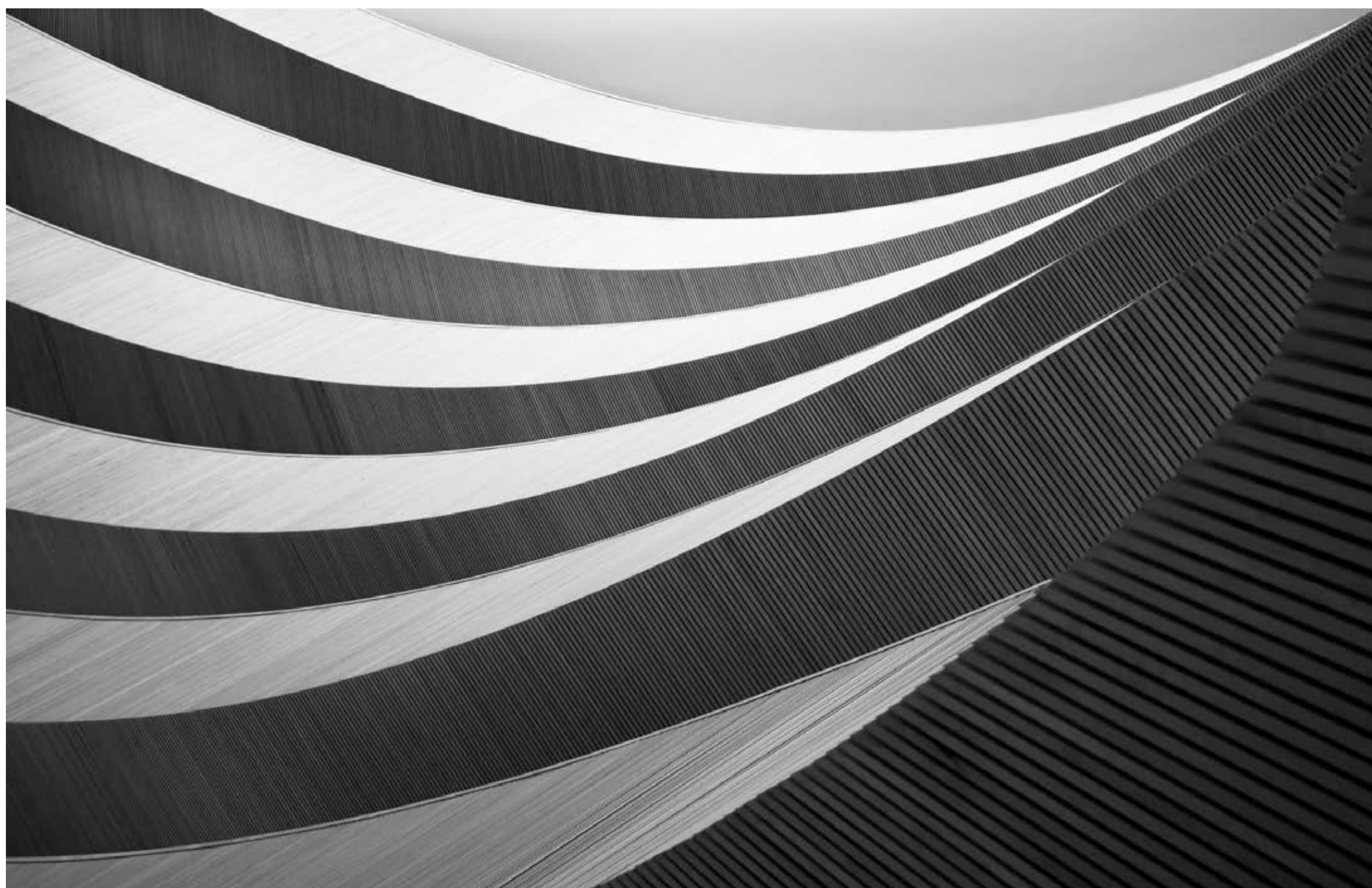

S&P Global Ratings

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Authors

David Tesher
New York
david.tesher@spglobal.com
+1-212-438-2618

Joe Maguire
New York
joe.maguire@spglobal.com
+1-212-438-7507

Yucheng Zheng
New York
yucheng.zheng@spglobal.com
+1-212-438-4436

Ratings Trends & Financing Conditions
Nick Kraemer
New York
nick.kraemer@spglobal.com
+1-212-438-1698

Sudeep Kesh
New York
sudeep.kesh@spglobal.com
+ 1-212-438-7982

Evan Gunter
New York
evan.gunter@spglobal.com
+1-212-438-6412

Leveraged Finance
Ramki Muthukrishnan
New York
ramki.muthukrishnan@spglobal.com
+1-212-438-1384

Steve Wilkinson
New York
steve.wilkinson@spglobal.com
+1-212-438-5903

Robert Schulz
New York
robert.schulz@spglobal.com
+1-212-438-7808

Key Takeaways

- A "new normal" will undoubtedly evolve as global economies ease lockdowns. Many U.S. corporates will likely grapple with weaker revenue, earnings, and credit metrics for several years compared to pre-pandemic levels.
- Corporate borrowers will likely suffer from a debt hangover, having built up leverage in order to cope with COVID-19's disruption to customer demand and economic activity.
- Government monetary and fiscal policy actions have enabled record debt issuance. However, the stimulus will inevitably be pulled back, potentially triggering a credit crunch.

With the U.S. economy facing a long, slow recovery from the COVID-19-induced recession, many U.S. corporate borrowers we rate are shifting their focus from liquidity to solvency. The trillions of dollars in fiscal and monetary stimulus that flowed from Washington D.C. in the wake of the economic shock caused by the COVID-19 pandemic helped stabilize the capital markets and relieve some of the intense liquidity pressures on companies across sectors. Now, however, many of these same companies and sectors face a protracted period of depressed consumer demand, and many borrowers in the industries hit hardest will be lucky to survive—especially if there's a significant pull-back in federal stimulus, much of which is designed to bolster the labor market (which, in turn, helps to prop up consumer spending).

As it stands, the number of U.S. firms with debt-servicing costs that exceed profits has surged. Against this backdrop, S&P Global Ratings forecasts the U.S. trailing 12-month speculative-grade corporate default rate will rise to 12.5% by March.

As the aforementioned forces push issuer credit ratings down—and default risk up—we've also lowered our expectations for post-default recoveries (see the Leveraged Finance section below). Our recovery ratings indicate average recoveries on first-lien debt in the mid-60% area—less than the 75%-80% we've seen historically). Additionally, the thickening of the senior layer of first-lien debt has pushed down recovery prospects for more junior debt classes.

S&P Global Ratings estimates that it will take almost two years for U.S. GDP to regain the level at which it started the year, with unemployment remaining much higher than before the pandemic, consumer spending coming back only slowly, and a recovery in business demand taking some time.

The full force of the pandemic's economic damage showed up in data for April. Companies slashed capital spending, with durable goods orders collapsing more than 17%, and energy-related investment plummeting as oil prices dropped sharply. Reflecting the dire outlook for investment was a record 11.2% tumble in industrial activity—the worst reading in the century-long history of the data. Consumer spending fell a record 13.6%, despite higher unemployment benefits and one-off checks to American households that pushed income up 10.5%. The associated surge in the personal savings rate to 33% reflects not only nationwide mandated lockdowns to mitigate the spread of virus, but also consumers' caution, which we think will linger.

Still, even as some U.S. states have been forced to reinstate social restrictions amid a surge in COVID-19 cases, we see the economy beginning what will surely be a fragile recovery in the third quarter. This will likely come in two phases: In the first, we'll see strong GDP growth figures as consumer spending and business demand rebound; after that the lingering effects of the crisis will

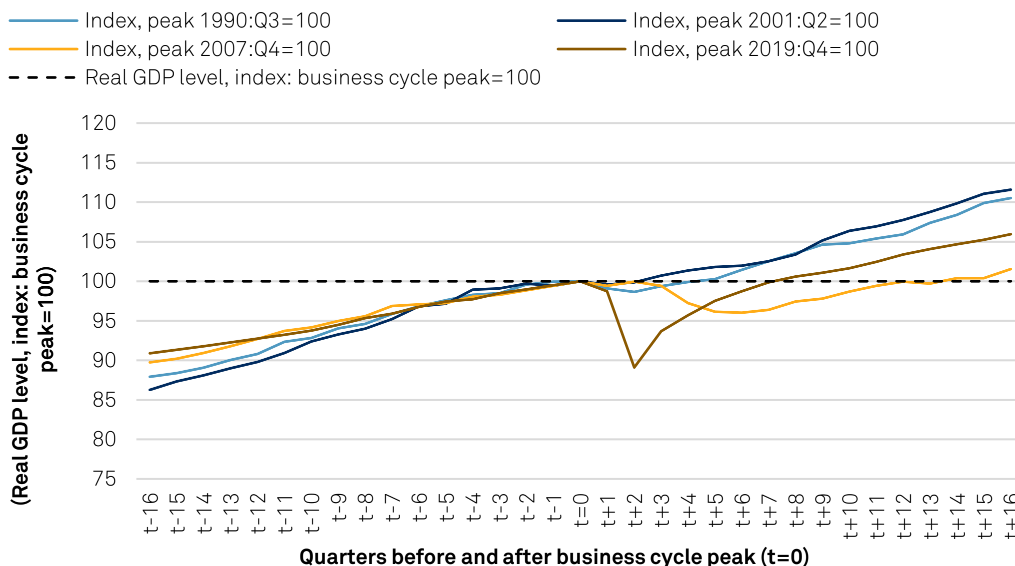
S&P Global Ratings acknowledges a high degree of uncertainty about the evolution of the coronavirus pandemic. The consensus among health experts is that the pandemic may now be at, or near, its peak in some regions, but will remain a threat until a vaccine or effective treatment is widely available, which may not occur until the second half of 2021. We are using this assumption in assessing the economic and credit implications associated with the pandemic (see our research here: www.spglobal.com/ratings). As the situation evolves, we will update our assumptions and estimates accordingly.

weigh heavily on the pace of growth. We now forecast the world's biggest economy will contract 5.0% for the full year, followed by a modest rebound in growth of 5.2% in 2021.

For now, S&P Global Ratings economists expect third-quarter GDP to jump what would normally be an astonishing 22.2% (annualized); but the magnitude of that gain is misleading, given our expectation that U.S. GDP shrank 33.6% (annualized) in the second quarter. All told, we think it will take two years before GDP levels reach their previous fourth-quarter 2019 peak (see chart 1).

Chart 1

Path Of The U.S. Economy Before And After Recessions In The Past 30 Years



Source: Bureau of Economic Analysis, National Bureau of Economic Research, and S&P Global Economics' forecast.

The recovery will face hurdles as long as fears of another wave of the pandemic keep Americans maintaining some form of social distancing. Most states began to ease lockdowns amid signs that the virus was contained and amid calls to restart the economy. However, containment has proven fragile, with notable spikes in parts of the country. Moreover, premature reopening may mean that the curtailment of the pandemic will be slower.

This is important, since the economic damage associated with the pandemic is nonlinear. That means, for example, that if containment takes twice as long as expected, the economic damage will be more than twice as bad, and recovery could take longer and be weaker (with more lost output) than projected. Moreover, even if the spread of the virus were to end tomorrow, residual scars could linger, especially if social distancing becomes more commonplace, and/or business and consumer spending doesn't bounce back.

Clearly, given the regional surges of confirmed cases of COVID-19 and the prospect that subsequent waves could follow this first one, the risk that the U.S. will go through a W-shaped (or saw-tooth) recovery is growing. Adding to the uncertainty are the protests and unrest in many cities, as the pandemic throws into greater focus the country's persistent social, racial, and income inequality, as well as a looming presidential election in November and the heightened political tensions it could bring.

All told, the economic recovery—and credit conditions for the corporate borrowers we rate—remain fragile, and risks abound (see "**Credit Conditions North America: Rolling Out The Recovery**," published June 30, 2020). Exacerbating their vulnerability is the fact that corporate borrowers have incurred massive debt to shore up liquidity and deal with pandemic-related disruptions. This high leverage and potential for insolvency are increasingly a concern, especially for lower-rated entities and particularly if the economic recovery falters.

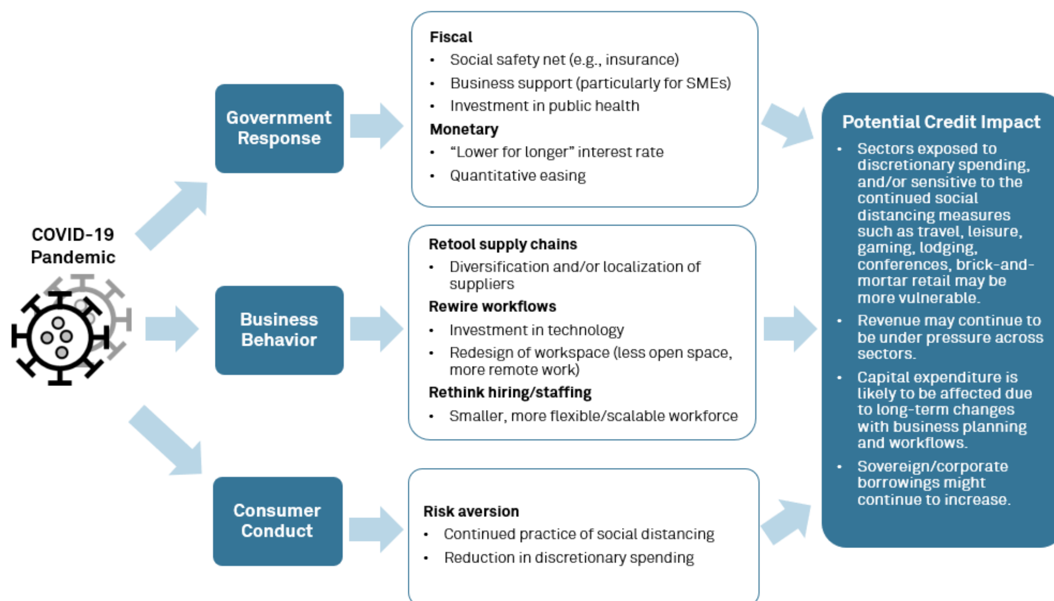
New Normal

Historically high U.S. unemployment bodes ill for any rebound in consumer spending, even under the most optimistic recovery scenario. We expect the headline unemployment rate to remain around 7.8% by the first quarter of next year, and will stay above pre-pandemic levels until late 2023—even after a June jobs report that showed nonfarm payrolls added 4.8 million jobs and headline unemployment dropped to 11.1% from April's peak of 14.7%. Those figures look overly optimistic in light of the Bureau of Labor Statistics' noting that likely misclassifications of some workers mean the overall rate was a full percentage point higher, and closer to 20% in April. (For context, the U.S. unemployment rate topped out at 25% during the Great Depression in 1933.) Moreover, the survey was done in mid-June, before the surge in COVID-19 cases in Arizona, California, Florida, and several other states.

Again, the economic damage associated with the pandemic is nonlinear, and as global economies ease lockdowns, a "new normal" will undoubtedly evolve, taking into consideration the uncertainty about subsequent waves of infection. To gauge what post-pandemic economic and credit conditions might look like, we considered three main channels of activity: the government's ongoing response, business behavior, and consumer conduct (see chart 2).

Chart 2

What Could The "New Normal" Look Like In The U.S.?



Source: S&P Global Ratings.

Previous crises suggest that the long-term damage to an economy comes in part from the initial hit to GDP and in part from shortcomings in the response—thus, aggressive and early rescue measures help foster a faster and stronger recovery. However, the longer it takes to resume material economic activity, the less successful federal fiscal and monetary stimulus may prove.

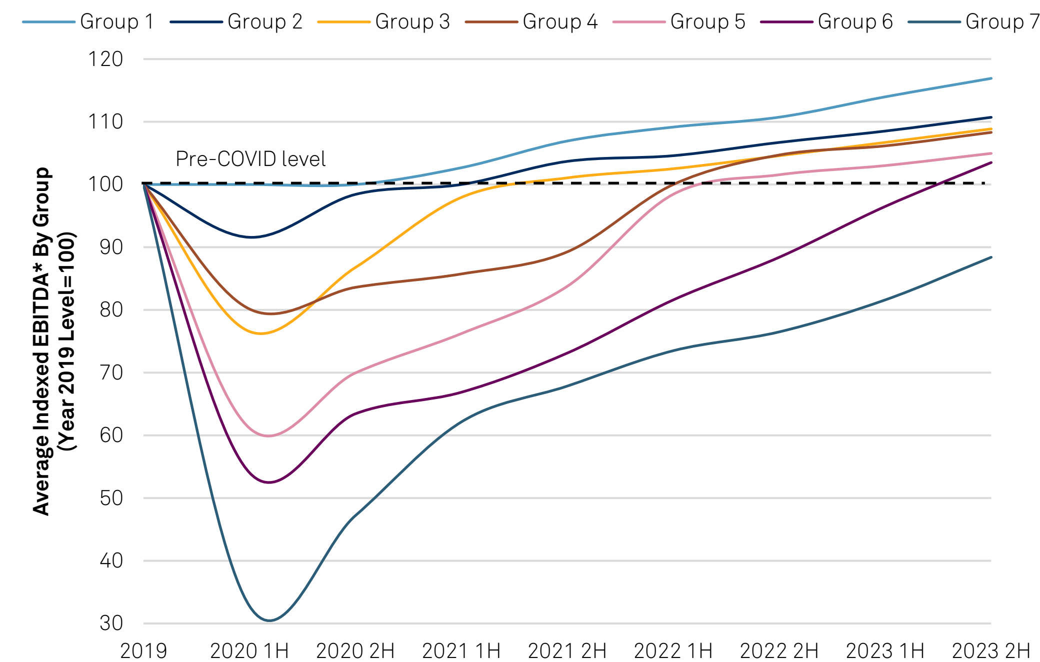
For businesses, the new normal could mean a retooling of supply chains (perhaps with more diversification and localization of suppliers), rewiring of workflows, and rethinking of hiring and staffing levels. It seems unlikely that companies will simply get back to business as usual once the worst of the health crisis has passed. Surely, there will be fundamental changes in the ways businesses engage with each other, their customers, and their workers. Take real estate as an example. Companies may seize on the success of "working-from-home" by streamlining office space, which will further disrupt the commercial real estate market. With the potential for permanent shifts in consumer behavior to the digitalized world, mall-based REITs could further deteriorate, especially if there are amplified retail bankruptcies and tenants that never reopen.

Perhaps the biggest wild card is consumer behavior. It seems safe to say that, even as lockdowns are lifted, people will still be somewhat reluctant to resume their everyday activities in the ways they did before. Indeed, grouping sectors using our ratings analysts' estimation of EBITDA recovery to pre-pandemic levels showcases the importance of consumer demand (see chart 3, and "**COVID-19 Heat Map: Post-Crisis Credit Recovery Could Take To 2022 And Beyond For Some Sectors**," published June 24). Broadly speaking, the more essential an industry's products and services, the quicker we expect the sector to fully regain its earnings. For example, with stable, if not increasing, demand for basic food and household products under "stay-at-home" orders, consumer staples (e.g., food and beverages) and essential retail (e.g., grocery stores) will likely experience no, or limited, earnings declines, and therefore better weather the crisis. Another sector that has been insulated so far is software, which has benefited from increasing home-based work and entertainment.

Conversely, sectors that involve people gathering in close proximity, or those that materially rely on consumer discretionary spending, or entered into the crisis with a weaker outlook—such as cruises, airlines, nonessential retail, autos, and commercial aerospace—may need several years to return to 2019 earnings levels.

Chart 3

North America: Stylized Shape Of Recovery By Sector Group



Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7
No deterioration	Recovery: 1H 2021	Recovery: 2H 2021	Recovery: 1H 2022	Recovery: 2H 2022	Recovery: 2023	Recovery: Beyond 2023
• Consumer Staples • Tech - Software	• Defense Contractors • Engineering & Construction • Healthcare - Pharmaceuticals • Retail Essential • Telecom	• Ad Supported Media • Healthcare - Medical Products • Homebuilders & Developers • Paper & Packaging • Restaurants • Tech - Hardware/Semi	• Building Materials • Business & Consumer Services • Capital Goods • Healthcare - Services • Oil and Gas • Power • Real Estate (REITs) • Refining	• Chemicals • Consumer Discretionary • Fitness • Gaming • Hotels • Metals & Mining • Midstream • Out-of-Home Entertainment • Utilities	• Automotive • Commercial Aerospace	• Airlines • Cruise • Retail Non-Essential

* For years 2022 and after, our opinion on credit metrics is used as a proxy for EBITDA (earnings before interest expense, tax, depreciation and amortization). Note: The chart only represents our rated issuers in North America. After a sector's EBITDA reaches 100 (2019 level), we assume it continues to grow at the rate during 2017-2019 (calculated based on industry value added reported by Bureau of Economic Analysis). If the sector is expected to have long-term negative disruptions, a discounted growth rate is assumed.

Source: S&P Global Ratings.

Ratings Trends

In the first half of 2020, S&P Global Ratings lowered more than 1,100 nonfinancial corporate issuer ratings globally, or roughly 20% of the rated portfolio—significantly more than financial institutions (12%) and sovereigns (9%).

U.S. corporate downgrades reached a record 414 in the second quarter—far surpassing the previous high of 331 in first three months of 2009—and nonfinancial corporates accounted for nearly all of these downgrades with 409 (the other five were financial services companies). By month, downgrades peaked at 268 in April, before falling in subsequent months as many states eased lockdowns. Naturally, the economic stop hit lower-rated companies hardest, with 92% of downgrades on speculative-grade borrowers (those rated 'BB+' and lower).

Meanwhile, the negative bias (the percentage of ratings with negative outlooks or on CreditWatch with negative implications) among spec-grade issuers reached its highest level on record, at 52%. On a marginally brighter note, the negative bias for investment-grade issuers, at 26%, remains below the 2009 peak of 28%.

It's no surprise that downgrade potential is highest for issuers at or near the bottom of the ratings ladder, given their comparatively weak credit metrics. At the 'CCC'/'C' level, the negative bias is 92%, while 'B-' issuers have a negative bias of 51%.

This comes as median corporate ratings for issuers around the world are at their lowest in 20 years for nearly all sectors, reflecting more aggressive financial policies, structural changes, and business transformation, such as evolving consumer preferences and regulations. Particularly in the U.S. and Europe, there were marked increases in issuers rated 'B' and lower as a share of the total rated population. Notably, this was the case before the economic stop caused by the COVID-19 pandemic (see chart 4, and "**Historically Low Ratings in the Run-Up To 2020 Increases Vulnerability To The COVID-19 Crisis**," published May 28).

Chart 4

Historically Low Ratings in the Run-Up to 2020 Increases Vulnerability to the COVID-19 Crisis

Global annual speculative-grade issuance doubled over the past decade, fueled by low interest rates

Nearly 85% of new corporate ratings originated at Speculative-Grade since 2017, Median rating of new issuers is now 'B'

Prior to the crisis, median ratings were lower than at any point in history across most industries and geographies

1/3 of corporate issuers in the US and ¼ in Europe are rated 'B' or below, indicating greater vulnerability to changes in economic and financial cycle

Source: S&P Global Ratings.

This is largely the result of speculative-grade bond issuance having more than doubled in the past decade, as low interest rates fueled demand for corporate debt at the lower end of the ratings spectrum. The median rating for new nonfinancial corporate issuers globally is 'B'; it fell to this historical low at the end of 2017, declining from 'BB-' in 2008. This is important because speculative-grade borrowers are now almost twice as likely to suffer downgrades as their higher-rated peers, with double the proportion of negative outlooks and placements on CreditWatch with negative implications.

As of July 7, 69% of entities we rate that suffered negative ratings actions because of the pandemic and/or the sharp drop in oil prices were in the speculative-grade category, and almost half were in the 'B' category and below. While most sectors were affected, there was some differentiation. Sectors such as automotive, capital goods, media, entertainment, leisure, transportation, retail, energy, and chemicals were hurt most, while others, like building suppliers, online retailers, and supermarkets, saw a boost in demand.

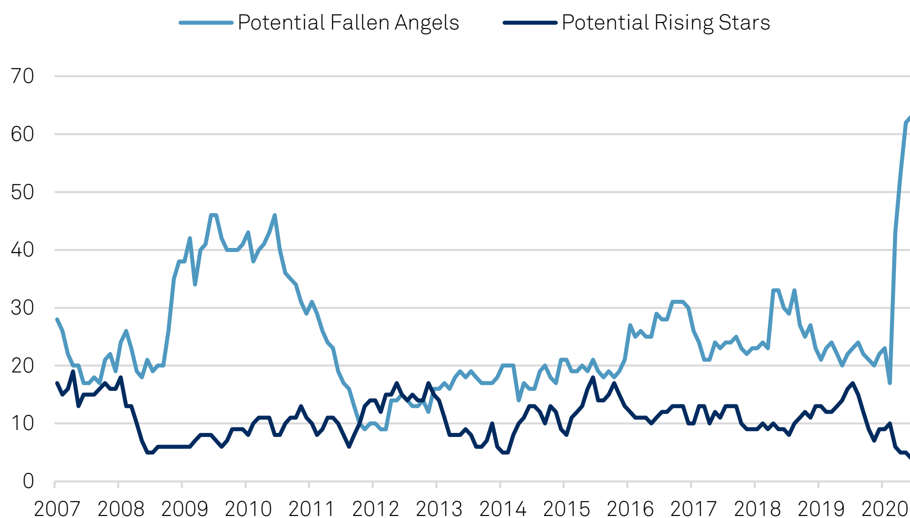
Fallen Angels

So far this year, the U.S. accounted for 19 of the 33 fallen angels (issuers downgraded to speculative grade), with more than $252 billion in rated debt (as of June 30). It also has the largest count and debt volume of potential fallen angels (issuers rated 'BBB-' with negative outlooks or ratings on CreditWatch with negative implications), with 59 issuers accounting for $305 billion in rated debt (see chart 5). The bulk of potential fallen angels are banks, including Ally, CIT, Discover Financial Services, and Synchrony Financial, followed by media and entertainment, the bulk of which are hotel chains including Marriott International, Hyatt Hotels, and Choice Hotels, which face an abrupt loss in earnings due to travel restrictions imposed to curb the spread of COVID-19.

This comes as we expect the global economic slump and the oil price shock to lead to a jump in 'BBB' category borrowers falling into spec-grade in the U.S. and Europe. A recent scenario analysis showed that as much $475 billion of U.S. corporate debt could take on fallen angel status this year (see "**'BBB' Pulse: U.S. And EMEA Fallen Angels Are Set To Rise As The Economy Grinds To A Halt**," published April 8).

Chart 5

Gap Between Potential Fallen Angels And Potential Rising Stars Rises To All-Time High



Note: Data as of June 30, 2020.
Source: S&P Global Ratings.

Among nonfinancial corporate issuers, the highest downgrade potential remains in the sectors most exposed to business disruptions from social-distancing measures, as well as oil and gas. The auto and leisure and lodging sectors show the most immediate downgrade potential, with the highest number of ratings on CreditWatch with negative implications. Financial institutions still have the highest count of potential fallen angels, reflecting exposure to their weakened clients, but most have negative outlooks instead of being on CreditWatch negative. CreditWatch negative placements typically have a 50% likelihood of downgrade, whereas negative outlooks show a roughly one-in-three likelihood and over a longer time horizon.

Default Forecast

S&P Global Ratings expects the U.S. trailing 12-month speculative-grade corporate default rate to increase to 12.5% by March 2021 from 3.5% as of March 2020 (see chart 6). We expect this general trend of deteriorating credit to continue as many firms, particularly spec-grade issuers in some of the weakest and most affected sectors, find their solvency stretched amid falling revenue. Additionally, we expect that some issuers with both high-yield bonds and loans outstanding might engage in distressed exchanges that we view as selective default.

In our pessimistic scenario, the default rate will rise to 15.5%. In this scenario, we anticipate the economic drag will extend beyond the second quarter, and the subsequent recovery will be slower

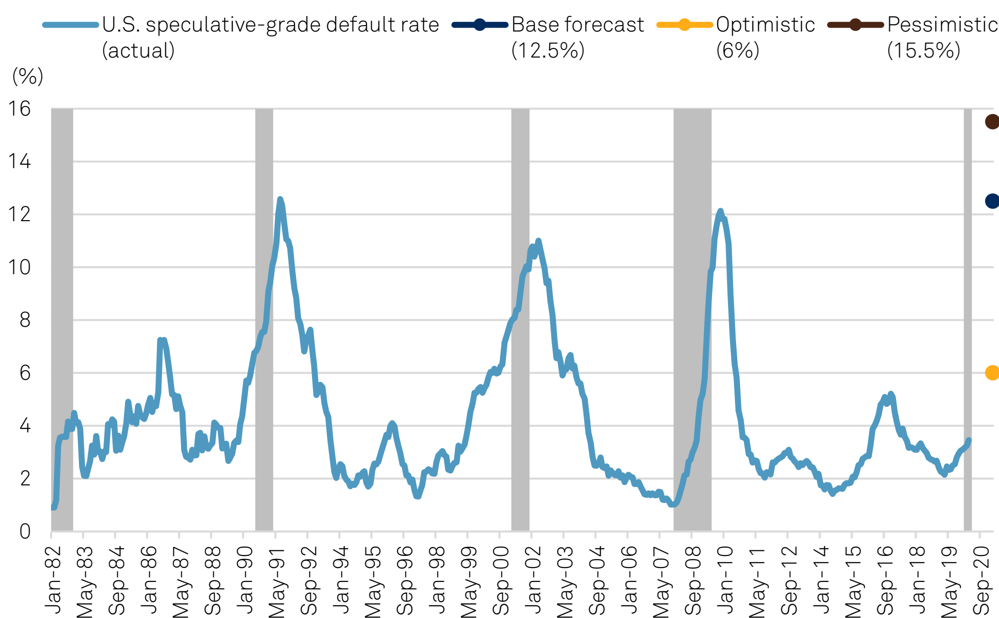
than S&P Global economists' base case. A possible resurgence of COVID-19 cases later this year or early next, which would ultimately put extreme stress on many leveraged firms and households, could further complicate this scenario. This would result in a longer period of suppressed consumer spending and a longer period of high unemployment.

In our optimistic scenario, we forecast the default rate will rise to 6%—closer to what market signals are implying about future default activity. Compared with our base-case assumptions, fixed-income markets appear optimistic, given current risk pricing even among the weakest issuers. This is likely the manifestation of a combination of factors, such as the Fed's new liquidity facilities, some moderation of new infections in some regions, and encouraging news regarding vaccine and treatment research.

The proportion of new issuer credit ratings at 'B-' and lower has also reached a multi-decade high of 49% in the U.S. The upswing in this ratio since 2017 has coincided with recent years' surge in collateralized loan obligation (CLO) issuance, providing ready demand for new debt.

Chart 6

U.S. Trailing 12-Month Speculative-Grade Default Rate And March 2021 Forecast



Note: 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®.

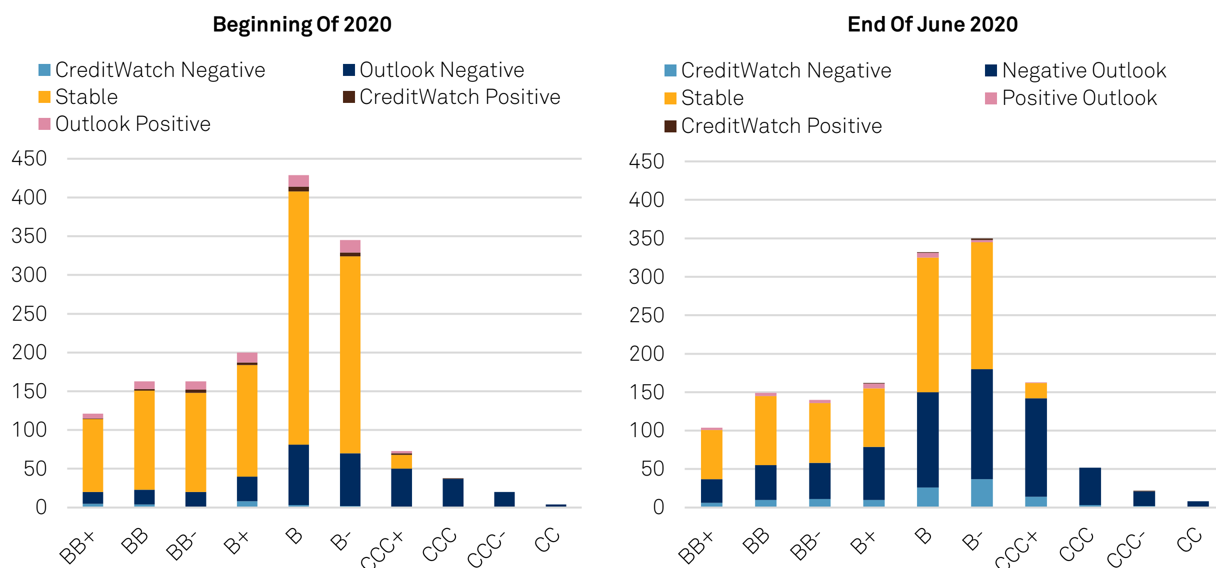
Leveraged Finance

North American corporates, especially speculative-grade borrowers, have borne the brunt of the economic damage of the coronavirus crisis. This comes after investor thirst for yield resulted in an increase in companies at the lower end of the credit spectrum in the past few years. Many of these companies were highly leveraged and poorly positioned for a downturn going into the current crisis. The effects of coronavirus containment measures, coupled with a steep drop in oil prices and demand, has left them much more vulnerable, and has weighed heavily on their credit quality.

Since the onset of the crisis in early February through the end of June, we have taken negative rating actions (downgrades or placements on CreditWatch with negative implications) on over 530 U.S. and Canadian spec-grade corporate entities, creating a shift downward for a group of borrowers already heavily weighted toward the lower end of the rating scale (see chart 7).

Chart 7

North America Speculative Grade Ratings Distribution: 'Then' and Now



Source: S&P Global Ratings.

Companies rated 'B-' now represent the largest cohort in the spec-grade universe, accounting for 23.6% of the total. Before the crisis, companies rated 'B' were the most represented. At the same time, the number of companies rated 'CCC+' has more than doubled to 163 from 73—and 87% of these ratings have a negative outlook or are on CreditWatch negative.

Consumer-facing companies suffering unprecedented revenue declines continue to experience high levels of cash burn and have accounted for the bulk of rating actions, along with companies in the energy sector. All told, energy, media and entertainment, retail, capital goods, and consumer products have accounted for roughly 60% of the downgrades.

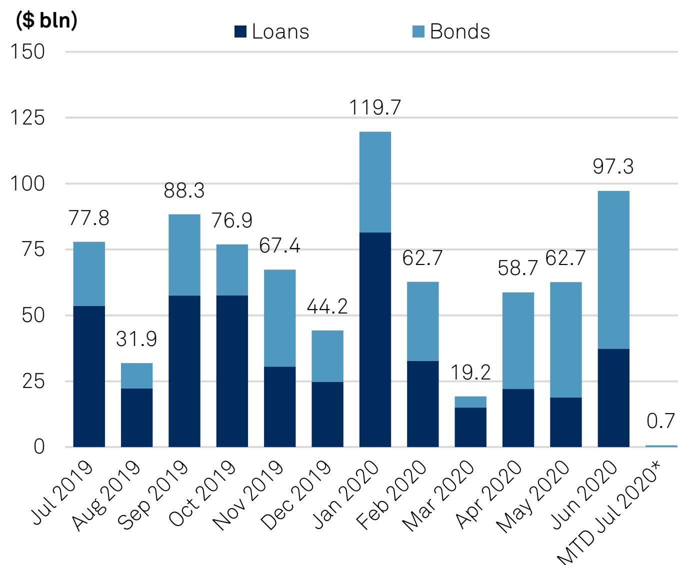
Through the end of June, 82 U.S. companies have experienced a default or a selective default. That's almost double the 44 that had done so in the same period last year, and defaults are accelerating with those in the second quarter tripling from the same period last year. The energy and retail sectors account for 40% of them. Meanwhile, 138 ratings on spec-grade companies are on CreditWatch negative. Issuers in the hotel and gaming, and media and entertainment sectors account for almost one-third of these companies.

Further, ratings on 496 spec-grade companies have negative outlooks. Companies rated 'B-' or below that are on CreditWatch negative or have negative outlooks are called "weakest links," and historically have had default rates about 8x that of other spec-grade issuers. S&P Global Ratings' most recent data show the aggregate number of U.S. weakest links at 432, compared to 190 at the beginning of the year.

And yet, the speculative-grade financing markets are far from moribund as we enter the second half of the year (see chart 8 and the Financing Conditions section below). To be sure, we've seen volatility in spreads, mixed issuance, and shifts between loans and bonds—but, bolstered by aggressive announcements and actions at the Federal Reserve, spec-grade bond markets have reopened since a dearth of issuance in March. Secondary loan spreads have also tightened dramatically since the widest gaps in March, although there has been a recent uptick in the percent of loans trading below 90 (see chart 9).

Chart 8

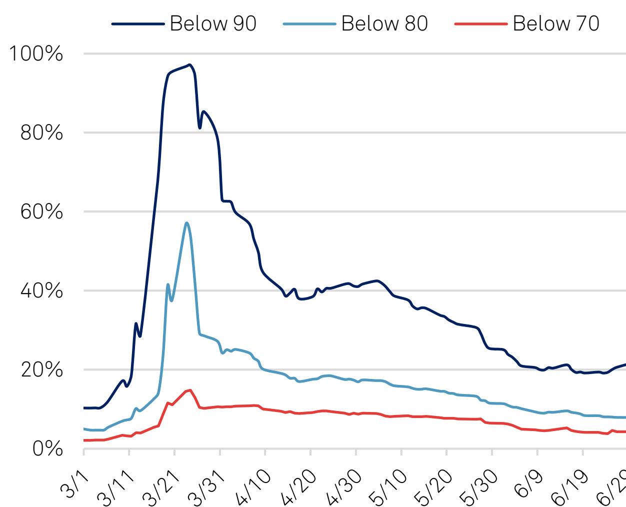
Pro Rata Institutional Loans and Bonds



*MTD updated as of Friday, July 3, 2020.
Source: LCD, an offering of S&P Global Market Intelligence

Chart 9

Share Of Performing Loans In The S&P/LSTA LL Index



Data through June 29, 2020.
Source: LCD, an offering of S&P Global Market Intelligence; S&P/LSTA Leveraged Loan Index.

We've seen more issuance of spec-grade bonds than loans, with June a record month for the former. Loan issuance has also improved from the low levels of March but not nearly as much, and bonds represented about 61% of the collective volume in the first half—a reversal from 2019 when the split was 48%/52% in favor of loans.

Unsurprisingly, there were no institutional loans to the oil and gas sector in the second quarter, according to S&P Global Ratings Leveraged Commentary and Data (LCD). And several challenged sectors saw far fewer institutional loans in the second quarter as a percentage of their last-12-months (LTM) institutional volume. These included retail (10% of LTM loan volume in April-June), restaurants (4%), and entertainment and leisure (6%). One notable exception was the hotel and gaming sector, where borrowers issued 34% of their LTM institutional loan volume in the second quarter.

While CLO new issuance volumes (a critical driver of loan demand) have slowed since last year, loan issuance has increased sequentially each month since March. And although not technically new issuance, borrowers across the ratings spectrum have been drawing on revolving credit facilities to bolster liquidity (although some new bond and loan volumes were used to repay revolvers).

Recovery Prospects

The forces pushing issuer credit ratings down—and default risk up—in the past several years have also lowered our expectations for recovery after default, as total leverage and first-lien debt have increased. Mergers and acquisitions (M&A) has helped drive this in the past several years, with rising purchase-price multiples requiring heavy borrowing to fund these transactions.

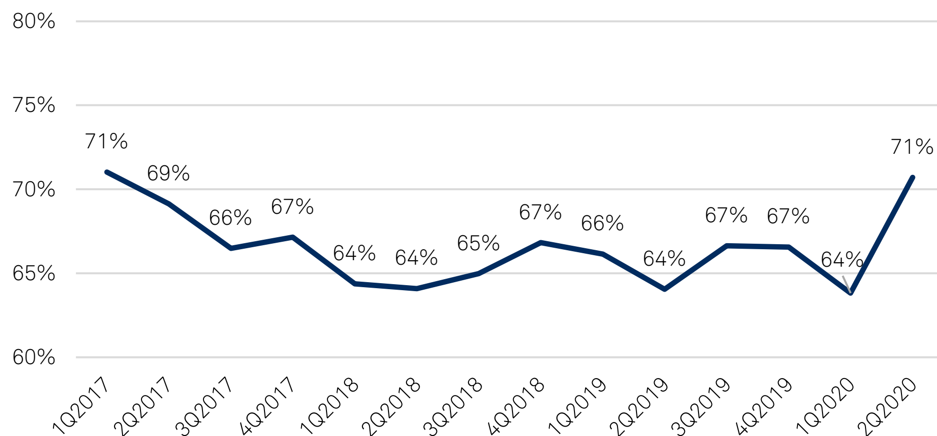
Our recovery ratings indicate average recoveries on first-lien debt in the mid-60% area (compared with 75%-80% historically), with a slight rebound in the second quarter due to heavy activity by

higher-rated speculative-grade entities (see chart 10). The thickening of the senior layer of first-lien debt has pushed down recovery prospects for more junior debt classes.

We caution that our recovery estimates don't include potential event risk related to significant erosion in debt protections in loan documents, which give companies considerable leeway to take actions that may compromise recovery prospects (through loose restrictions around adding debt, selling or transferring assets/collateral, etc.). We don't prospectively factor this risk into our recovery ratings because they aren't predictable or quantifiable, in our view. Instead, we capture these risks as part of our ongoing ratings surveillance.

Chart 10

Average Recovery Estimate Of First Lien New Issues (U.S. & Canada)



Source: S&P Global Ratings.

On a more upbeat note, because our recovery ratings already consider default, recovery prospects will likely remain relatively stable on the path to default, absent material changes in debt structures or, less commonly, in our fundamental assessment of recovery value in a default scenario. We note that these factors are also the same that drive recovery changes in a more benign economic environment. For example, of the 731 rating actions taken on issuers with loans held as collateral by broadly syndicated U.S. CLOs from Feb. 3-June 22, 70% were downgrades due to the severe economic shock. Even so, only 27% of the loans had a negative recovery change, and nearly 60% of these changes resulted in lower recovery point estimates but no change to the recovery rating itself.

Sector Revival – Looking Ahead

As outlined in the "New Normal" section, we don't expect some nonfinancial corporate sectors to return to run rate 2019 credit metrics until beyond 2023, with the remainder making progress between now and 2023. The most high-profile consumer-facing sectors that in turn depend most on consumer confidence in engaging with crowds will likely face the longest recovery.

At any rate, the recovery path has important implications for creditors. As noted, 24% of all spec-grade companies are at 'B-' and the proportion of companies at 'CCC+' have more than doubled. More than half the par amount of loans outstanding (56%) are from issuers rated 'B', 'B-', or 'CCC+', according to LCD. This weighting to the lower end of the ratings ladder isn't a new trend, but is heavier now than before the pandemic. The shape of economic recovery by sector will be critical for this cohort of issuers, since the alternative is likely default.

CLOs

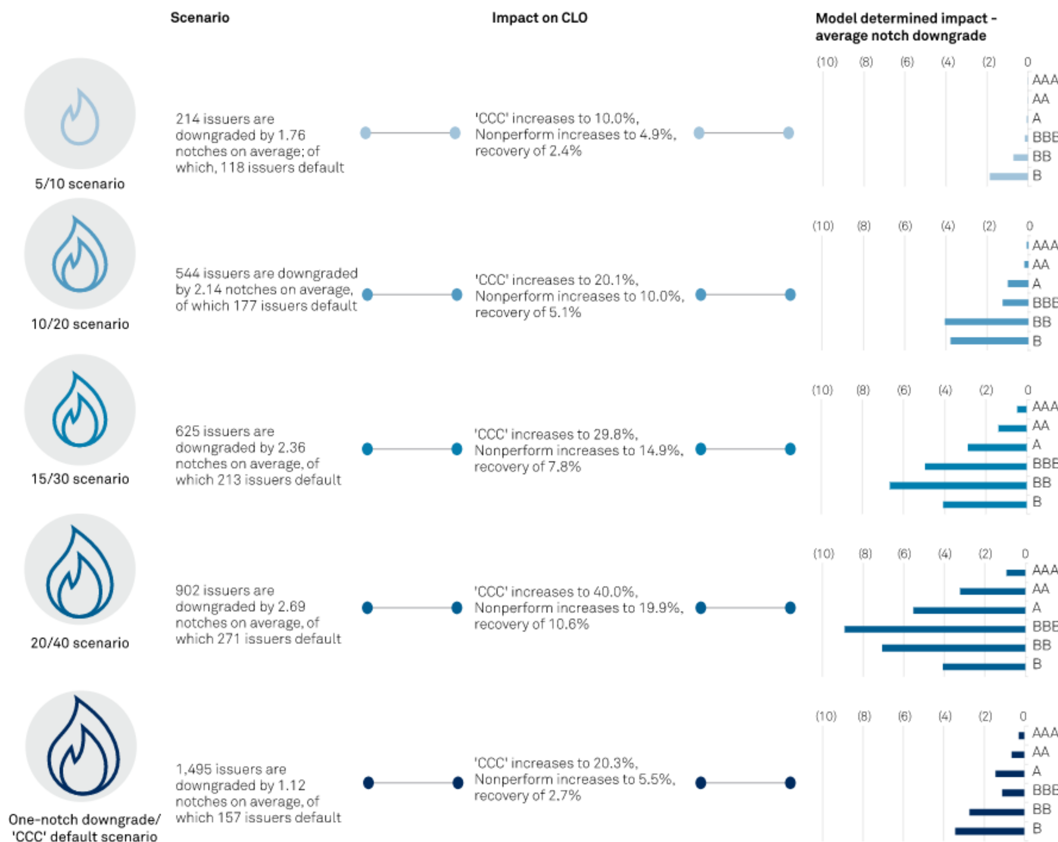
Recent corporate ratings actions have affected CLO collateral pools more than at any time since 2008-2009, and much more rapidly. Corporate rating actions during the Global Financial Crisis played out over six or more quarters, while this time we've seen a bigger shift in the rating profiles of CLO collateral pools in six weeks than during any other comparable period in CLO market history.

In less than two months, starting in early March, U.S. CLOs have seen their average collateral credit quality drop below 'B', and their average 'CCC' bucket increase to nearly 12% from about 4%. These changes are putting pressure on CLO ratings, especially for lower mezzanine and subordinate tranches. Even before the current downturn, the ratings mix of obligors in U.S. CLO collateral pools had seen a downward migration in recent years, mirroring changes seen in the overall corporate loan market (see "**To 'B-' Or Not To 'B-'? A CLO Scenario Analysis In Three Acts**," published Nov. 26, 2020).

The economic stress caused by pandemic and related social restrictions (along with stresses in the energy sector related to low oil prices) can play out in many different ways. But in a wide range of stress scenarios we conducted on our U.S. CLO ratings, the fundamentals of the CLO structure work to protect senior tranches (see chart 11). Projected rating changes at the 'AAA' CLO tranche level show nearly 99% of ratings either affirmed or lowered just one notch, to 'AA+', even under our most punitive hypothetical scenario of 20% loan defaults and 40% CLO 'CCC' buckets. And no CLO tranche rated in the 'A' category or higher experienced a default under any of our hypothetical scenarios. Under more plausible (but still harsh) conditions, a large majority of senior U.S. CLO notes would maintain current ratings, while tranches rated 'BBB' and below bear the brunt of the downgrades and defaults.

Chart 11

Summary Of Scenarios And Ratings Impact



Source: S&P Global Ratings.

Financing Conditions

Amid signs that the worst of the pandemic-driven recession is behind the U.S., financing conditions have improved substantially for American corporations since March. Equity and fixed-income markets are showing exceptional levels of optimism despite the fact that new cases of the virus have risen in certain locations, and that the full reopening of the economy is some time away.

The Fed has introduced massive programs to provide liquidity to nearly every asset class—including the central bank's first programs to purchase corporate bonds in the primary and secondary markets. These facilities have made possible the largest surge in rated corporate bond issuance in history in less than three months Through June 15, the year-to-date total of $1.05 trillion in rated corporate bonds was up 76% from a year earlier.

Of this, roughly 68% has come after the initial Fed announcement of the creation of these facilities on March 23. The overwhelming majority of this has been in investment grade, although speculative-grade issuance has also picked up at a record pace since April. Still, a large portion of this has come from the highest-rated 'BB' segment. Leveraged loan issuance remains weak, down 21% through June 18 (to $189.2 billion).

Moreover, while interest rates in the primary markets are above their pre-pandemic levels, they're still relatively low, particularly compared to where pricing has been in secondary markets. Given the historic volume of investment-grade debt, it's safe to say that issuers in the primary market are paying rates not all that far removed from recent averages. However, within the spec-grade segment, fewer issuers than normal in the 'B' and 'CCC' ranges are able to access bond funding, and those that can may be skewing the average yield. This could explain some of the large divergence in yields for new issuance relative to secondary pricing. This isn't uncommon; such a wide spread also occurred with the 'B' primary and secondary yields during the oil-price shock of 2014-2016.

Still, unconventional funding patterns are potentially appearing. Roughly 48 investment-grade corporate issuers have come to market multiple times since March 23, for a total of $271 billion, or roughly 43% of the investment-grade total. This also seems to coincide with a marked drop in the use of commercial paper (CP) as a funding vehicle since CP rates fluctuated wildly in early March. Since then, CP rates have come in to only slightly above zero, so it remains to be seen if this potential shift will continue.

Many speculative-grade issuers have turned to revolving credit facilities for short-term liquidity. According to LCD, spec-grade issuers have drawn down about $117 billion since March 5. By our estimates, we rated about $226 billion in spec-grade revolving debt at the beginning of the year (by full amount of facilities). This implies there is still some room to maneuver—however, we also note that revolvers accounted for just 8% of spec-grade outstanding debt in the U.S. at the start of the year.

Historically, credit, economic, and market measures are roughly in line as leading indicators of future defaults. But markets have never been this far from fundamentals. Our estimated spread is built off of economic conditions, equity market sentiment, and money supply indicators. At the end of May, it reached 1,033 basis points (bps), compared to the actual spec-grade spread of 652 bps. The gap between these two measures has exceeded 360 bps in each month since January, indicating markets may be making bets based on overly optimistic expectations.

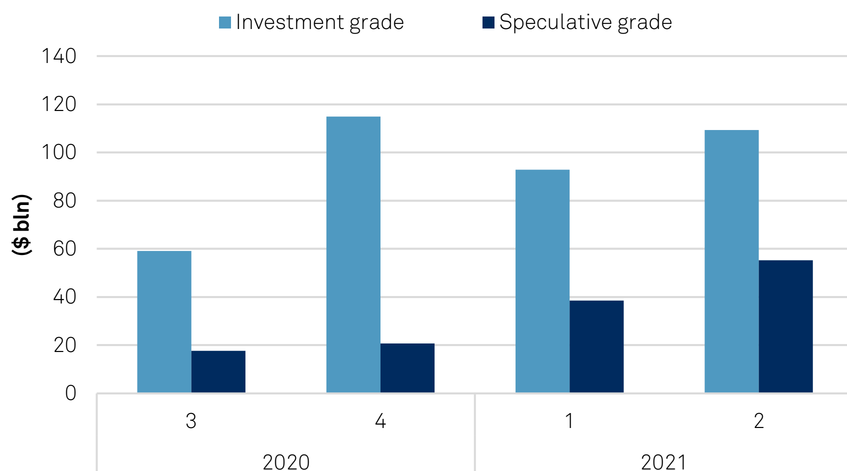
Corporate Maturities Set To Rise In 2021

Following years of largely accommodative financing conditions and low interest rates, near-term maturities for U.S. corporates as a whole appear to be manageable. Indeed, the maturity wall for these borrowers doesn't peak until 2025. U.S. corporates have $212.5 billion in rated debt (including bonds, notes, loans, and revolving credit facilities) due in the second half of this year, with maturities rising to $296.1 billion in the first half of 2021 (see chart 12).

While just $38.5 billion of the debt coming due in July-December is speculative grade, such maturities rise to $93.8 billion in the first half of next year. By comparison, leveraged finance issuance (including spec-grade bonds and leveraged loans) exceeded $420 billion in the first half.

Chart 12

U.S. Nonfinancial Corporate Maturities (Quarterly) Through 1H 2021

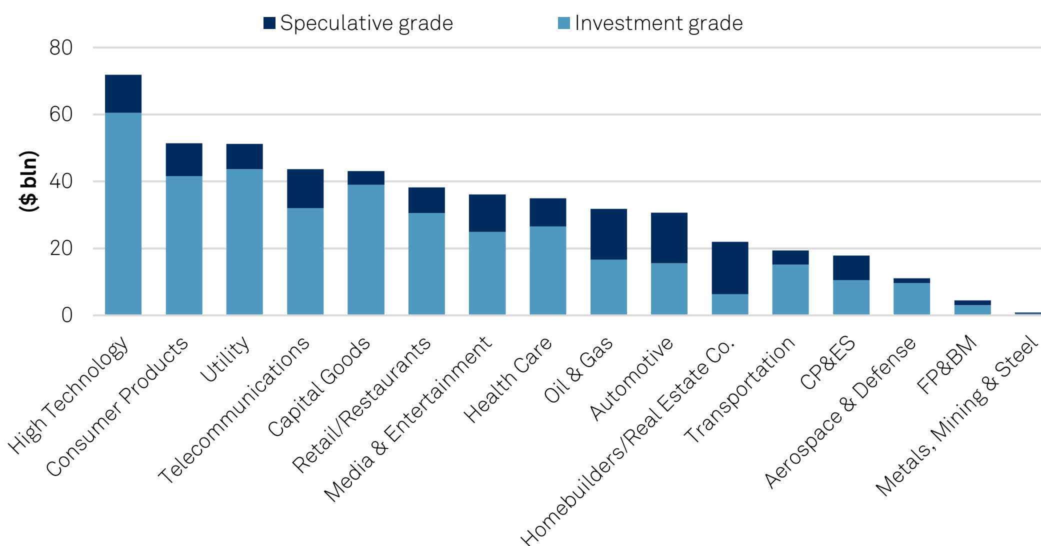


Note: Data as of July 1, 2020. Chart shows maturities of nonfinancial corporate debt, including bonds, loans, and revolving credit facilities that are rated by S&P Global Ratings.
Source: S&P Global Ratings.

By sector, technology has the most debt due in the next 12 months, with $72 billion—84% of which is investment grade (see chart 13). Consumer products follows with $51.4 billion (81% investment grade). While the oil and gas sector has a considerably lower amount of debt set to mature with $32 billion (52% investment grade), nearly half of all rated issuers in the sector are at ‘B-’ or lower. Spec-grade borrowers in this sector continue to have trouble accessing capital markets, and as a result, we expect the rate of distressed exchanges and bankruptcies to increase substantially in the next year.

Chart 13

U.S. Corporate Maturities Over The Next 12 Months (By Sector)



Note: Data as of July 1, 2020. 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

Related Research

- Credit Conditions North America: Rolling Out The Recovery, June 30, 2020
- The U.S. Faces A Longer And Slower Climb From The Bottom, June 25, 2020
- COVID-19 Heat Map: Post-Crisis Credit Recovery Could Take To 2022 And Beyond For Some Sectors, June 24, 2020
- How Credit Distress Due To COVID-19 Could Affect U.S. CLO Ratings, April 24, 2020

This report does not constitute a rating action.

Aerospace and Defense

COVID-19 slams commercial aero, defense impact limited

Christopher DeNicolo, CFA
Washington, D.C.
christopher.denicolo@spglobal.com
+1 202 383 2398

What's changed post-COVID?

Aircraft demand collapsed. With global air travel likely down more than 50% in 2020, airlines are deferring or canceling orders for new aircraft, prompting Airbus SE and Boeing Co. to cut production 30%-40%. This is depressing earnings and cash flow for many firms, some already affected by the Boeing 737 MAX grounding, resulting in numerous downgrades and outlook changes.

Aftermarket sales declined with traffic. The sale of aftermarket parts and services also dropped materially as airlines grounded fleets and put off discretionary maintenance or upgrades to conserve cash. This has a disproportionate impact on profitability as aftermarket parts generally have higher margins.

Defense impact is limited. Defense spending is unlikely to change in the near term, but it could face pressure over time. Some firms have experienced COVID-19-related operational disruptions, but only those with commercial aerospace exposure are likely to see a material impact on sales or earnings.

What is the likely path to recovery?

Aircraft production declines, then recovers slowly. It is not likely to increase from depressed levels until 2022 and may not return to 2019 levels until 2023 or later. Domestic air travel is likely to recover before long-haul international travel, favoring narrowbody deliveries over widebody. Earnings growth will depend on both higher volumes and rationalizing cost structures.

Aftermarket recovers with traffic. As the number of aircraft flying increases with increased air travel, aftermarket demand should begin to recover. However, global air travel isn't likely to return to 2019 levels until 2022 or beyond. The likely retirement of higher-maintenance, older aircraft could slow sales and profit growth.

What are the key risks around the baseline?

Slower air travel recovery than expected. If global air travel takes longer to recover than expected or growth thereafter does not return to historical rates, aircraft production may take longer to recover or be cut even further. This could result in additional downgrades, as 45% of outlooks in the sector are negative.

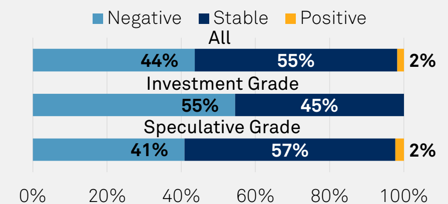
Supply chain disruptions. The lower volumes could cause some very small firms or those with weak balance sheets to fail or exit the market, interrupting aircraft production. Also, further direct COVID-19-related disruptions are possible.

Liquidity. Lower cash flow and earnings are tightening covenant compliance and constraining liquidity at some firms. Although a number of larger, mostly defense, firms have raised public debt to bolster liquidity and refinance upcoming maturities, lower-rated firms could face challenges refinancing maturities.

Latest Related Research

- Spirit AeroSystems Inc. Rating Lowered To 'B+' On Lower Boeing 737 MAX Deliveries, Outlook Stable, June 25, 2020
- Raytheon Technologies Corp. Outlook Revised To Negative From Stable On Coronavirus Impact; Ratings Affirmed, May 8, 2020
- Boeing Co. Downgraded To 'BBB-/A-3' From 'BBB/A-2' On Coronavirus Impact, Outlook Stable, April 29, 2020

Outlook Distribution



Ratings Statistics (YTD)

	IG	SG	All
Ratings	11	45	56
Downgrades	1	16	17
Upgrades	0	3	3

Ratings data as of end-June, 2020

COVID-19 Heat Map

Commercial Aerospace	
COVID-19, Recession, and O&G Impact	High
Potential Negative Long-Term Industry Disruption	Yes

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
25% to 50%	40% to 60%	>10%

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
30% to 40%	30% to 40%

Defense Contractors	
COVID-19, Recession, and O&G Impact	Low
Potential Negative Long-Term Industry Disruption	Yes

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
No decline	0% to 10%	No increase

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
≥2019	≥2019

North American Industry Top Trends Update

Autos

Slow, bumpy ride ahead for North American autos

Nishit Madlani
New York
nishit.madlani@
spglobal.com
+1 212 438 4070

What's changed post-COVID?

Auto supply and demand hit hard. Given the deep shocks to both the supply and demand sides of the U.S. economy, light vehicle sales will likely decline by over 20% year over year in 2020.

Varied impact on different subsegments. We expect mixed rating trajectories for the U.S. automakers, persistently high downgrade risks for auto suppliers, and limited downside risks for auto retailers.

Profitability headwinds for the sector will intensify due to high fixed cost nature of the industry. Auto plants will operate at suboptimal capacity or at less-efficient levels in 2020 and 2021.

What is the likely path to recovery?

Demand recovery into 2021 is a wild card. Sales will remain 10%-20% below 2019 levels in 2021. We expect high volatility in auto production schedules and considerable strain on the supply chain.

Slow recovery in credit metrics in 2021-2022. Cash flow will remain under pressure due to suboptimal demand and the buildup of working capital as production resumes.

Proactive capacity cuts and a push for consolidation. The recovery will entail a heightened focus on higher-margin launch programs versus mobility related investments.

What are the key risks around the baseline?

Demand uncertainty increases downside risks. The possibility for a resurgence in infection rates or a double-dip recession is a key risk.

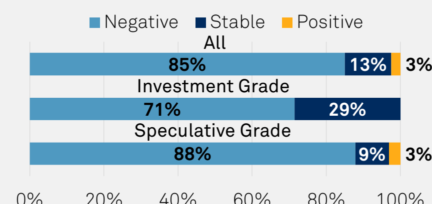
Severe supply chain-related disruptions. Execution on key product launches could have large implications for auto EBITDA margins.

Lack of discipline around financial policy. Companies that show a commitment to leverage targets and an ability and willingness to reduce debt as they balance other capital allocation priorities will have stronger credit measures.

Latest Related Research

- U.S. Autos Rating Action Summary And Key Takeaways Following COVID-19 Related Forecast Revisions, June 15, 2020
- Q&A: COVID-19 And The Auto Industry—What's Next?, June 9, 2020

Outlook Distribution



Ratings Statistics (YTD)

	IG	SG	All
Ratings	7	34	41
Downgrades	3	18	21
Upgrades	0	0	0

Ratings data as of end-June, 2020

COVID-19 Heat Map

Automotive	
COVID-19, Recession, and O&G Impact	High
Potential Negative Long-Term Industry Disruption	--

2020 Estimates v. 2019		
Revenue Decline	**EBITDA Decline**	**Incremental Borrowings**
15% to 25%	25% to 40%	>10%

2021 Estimates v. 2019	
Revenue Decline	**EBITDA Decline**
10% to 20%	20% to 30%

North American Industry Top Trends Update

Building Materials

Recovery looks choppy after steep decline from COVID-19

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

What's changed post-COVID?

Credit quality takes a hit, but business prospects hold up. Negative outlooks have tripled in mid-2020 to more than 50% of the rated portfolio, exposing pockets of high debt and restructuring costs after several years of leveraged buyouts (LBOs), mergers, and acquisitions. Even with the near-term hit to profits, the pandemic could boost at-home spending, while long-term demand prospects remain intact.

April was the cruelest month, but May and June bounced back. A pause by homebuilders, a pullback by consumers, and production problems resulted in big April declines. But homebuilders and consumers quickly resumed construction and DIY projects. Heavy construction/infrastructure looks steady. Repair and remodeling has held up well, particularly for supplies sold through home-improvement centers. Higher-priced, more discretionary (and less socially distant) products (e.g. kitchens and baths) declined sharply and may recover more slowly.

Unlike the Great Recession, issuers reacted quickly. Nearly all issuers cut operating costs by furloughing staff, reduced capital spending and discretionary shareholder returns, and shored up liquidity. These quickly lowered break-even points and better positioned companies for profitability when demand returns.

What is the likely path to recovery?

Barring more lockdowns and restrictions, we expect demand and revenues to improve sequentially through 2021. We expect annual sales for most building materials companies will be down 10%-15% in 2020 because of the very weak second quarter, which likely would drive EBITDA down 15%-25% for the year. We assume an uneven return to 2019 profitability by early 2022.

Homebuilders lead the way, backstopped by repair and remodeling (R&R). With a shortage of available new and resale homes in the U.S. and a spark of interest in suburbs, homebuilding adds to baseline R&R demand for building materials. But the strength of home construction and home reinvestment will be tested by the tug of war between record-low interest rates and record-high job losses. State and local budgets are firm for 2020, but fiscal pressure could affect 2021 spending.

Credit deterioration would accelerate if conditions don't improve in 2021. Our base-case scenario indicates a one-notch downgrade for 10%-15% of issuers in the next year, for a portfolio with a modal rating of 'B/B+'. Credit quality for these issuers will rely heavily on the profit outlook in the spring-summer 2021 selling season to consider refinancing 2022 maturities from 2015-2016 LBOs.

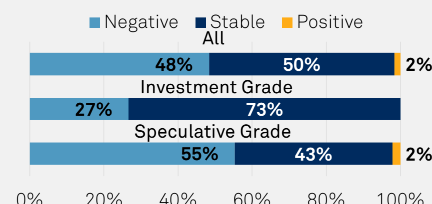
What are the key risks around the baseline?

High unemployment and uncertain benefits. Demand for new projects is bound to decline if most people do not return to work soon and benefits wane, and higher joblessness will push some first-time homebuyers out of the market.

Renewed lockdowns could cause regional dips. COVID-19 cases have spiked in large states such as Texas, Florida, and California. So-called "smile states" across the U.S. South account for an outsize portion of building materials demand given their economic and population growth.

Public infrastructure is a question mark. State income and gasoline tax collections, normally a large source of highway funding, are way down. Without new federal or state infrastructure measures, volumes in heavy materials cement and aggregates producers could decline 10%-20% in 2021.

Outlook Distribution



Ratings Statistics (YTD)

	IG	SG	All
Ratings	15	47	62
Downgrades	1	4	5
Upgrades	1	1	2

Ratings data as of end-June, 2020

COVID-19 Heat Map

Building Materials	
COVID-19, Recession, and O&G Impact	Moderate
Potential Negative Long-Term Industry Disruption	--

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
10% to 15%	15% to 25%	No increase

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
0% to 10%	10% to 20%

North American Industry Top Trends Update

Capital Goods

Multi-year recovery but few long-term disruptions

Ana Lai, CFA
New York
ana.lai@
spglobal.com
+1 212 438 6895

What's changed post-COVID?

Overwhelmingly negative ratings bias. Significant declines in revenue and EBITDA in 2020 will diminish credit quality in the North American capital goods sector. We have taken over 50 rating actions since March—mostly negative—and expect rating actions to remain decidedly negative over the next 12 months. Most downgrades were limited to one notch. About 53% of ratings had negative outlooks as of June 1 compared to 19% on January 1.

Speculative grade issuers are more vulnerable. Over 70% of ratings in the sector are below 'BB+', and many of these issuers face cash flow and liquidity pressures. We expect defaults to increase given the proportion of issuers in the 'CCC' category grew to 16% of the rated portfolio, compared to 5% in January. Investment-grade issuers face less ratings pressure, but they are not immune to downgrades.

What is the likely path to recovery?

Reduced capital spending will hurt cash flow in 2020. Demand for capital goods is cyclical and economic contraction and reduced capex by key end markets will curtail demand for original equipment and aftermarket parts. We expect revenues to decline 10%-20% and EBITDA to decline 15%-30% in 2020 compared to 2019.

The extent of cash flow pressure will depend on end market exposure. Issuers facing weaker end markets—autos and commercial aviation, for example—face greater cash flow risk. The collapse of oil prices is also a factor. To this point, issuers that are longer-cycle in nature have fared relatively well due to strong backlogs and limited order cancellations, though future orders could be delayed.

A multiyear recovery but no long-term industry disruption. Revenues could increase 10% in 2021 while EBITDA grows 10%-20% compared to 2020 and remain below 2019 levels, but credit metrics won't recover to pre-pandemic levels until at least 2022. Certain end markets, such as consumer discretionary, could take even longer.

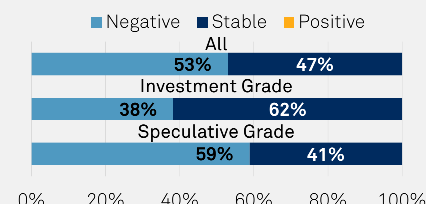
Supply chain disruptions will be relatively short term. Plant closures and limited output capacity could affect operating performance in 2020, but these disruptions will be short term and have only a modest credit impact. Some issuers will consider more-permanent capacity and labor cost reductions, and all will likely accelerate automation to their operations after the crisis subsides. We do not think the sector faces long-term industry disruption due to the pandemic.

What are the key risks around the baseline?

A second wave of coronavirus could stall a turnaround. Potential delays in recovery in key end markets such as aviation, autos, and oil & gas could dampen a recovery in industrial manufacturing activity.

More-aggressive financial policies could also stall a recovery in credit metrics. We expect issuers, particularly those in the investment grade, to limit acquisitions, reduce share repurchases, or cut dividends if weak operating conditions persist in order to enhance liquidity, preserve financial flexibility, and restore credit metrics. For spec-grade issuers, keeping incremental debt recently incurred on the balance sheet could also delay a recovery of credit metrics.

Outlook Distribution



Ratings Statistics (YTD)

	IG	SG	All
Ratings	34	88	122
Downgrades	5	36	41
Upgrades	0	2	2

Ratings data as of end-June, 2020

COVID-19 Heat Map

Capital Goods	
COVID-19, Recession, and O&G Impact	Moderate
Potential Negative Long-Term Industry Disruption	--

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
10% to 15%	15% to 25%	<5%

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
0% to 10%	10% to 20%

Latest Related Research

- Capital Goods Companies Face Shocks From COVID-19 And Economic Recession, April 27, 2020

North American Industry Top Trends Update

Chemicals

North American chemical demand drops, credit risks rise

Paul Kurias
New York
paul.kurias@
spglobal.com
+1 212 438 3486

What's changed post-COVID?

Chemical demand disruptions. We anticipate the COVID-19 pandemic will disrupt global chemical markets in an unprecedented way in 2020. Demand for chemicals will be hard hit by historical standards, but the presence of a small number of relatively resilient subsectors within chemicals will moderate the impact relative to other sectors such as auto, oil and gas, and retail. A key issue is the destruction of demand in important end markets such as auto, housing and construction, and general industrial.

Revenue and EBITDA declines. We expect revenue and EBITDA at most North American chemical companies to decline by 15%-25% in 2020 vs. 2019, with a year-over-year earnings and leverage improvement in 2021.

What is the likely path to recovery?

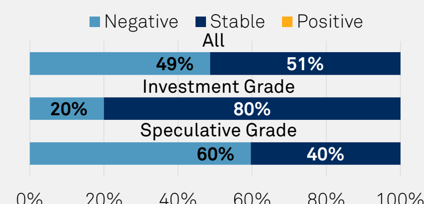
GDP growth will be key. We believe an uptick in economic activity and demand from key end markets such as auto, housing and construction, and general industrial will contribute to a recovery in chemical demand. The timing and extent of the recovery is uncertain, dictated in part by macroeconomic factors such as global GDP growth and industrial production, but also by several company-specific variables such as cost structure and competitive positions. Even with an assumed 2021 recovery, we expect debt metrics to be weaker than our pre-coronavirus assumptions, a key factor in our negative rating actions. We do not expect a return of run-rate credit metrics of 2019 levels until 2022 in many instances.

What are the key risks around the baseline?

2020 earnings and credit metrics could weaken more than we anticipate. The timing of demand recovery and better operating conditions remain uncertain in the evolving COVID-19 pandemic. We believe the unprecedented social restrictions and demand collapse in key end markets have not played out entirely and are unpredictable.

Recovery could be delayed. We assume credit metrics will improve in 2021 as demand and industrial activity rebound. This recovery continues beyond 2021, causing credit metrics to strengthen in successive years. However, the timing and extent of a recovery is still murky, and a delayed strengthening would be a credit negative. We reflect this uncertainty in our outlooks, with approximately 50% of U.S. chemical issuer credit ratings carrying a negative outlook or CreditWatch.

Outlook Distribution



Ratings Statistics (YTD)

	IG	SG	All
Ratings	19	59	78
Downgrades	12	22	34
Upgrades	0	0	0

Ratings data as of end-June, 2020

COVID-19 Heat Map

Chemicals	
COVID-19, Recession, and O&G Impact	Moderate
Potential Negative Long-Term Industry Disruption	--

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
15% to 25%	15% to 25%	<5%

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
0% to 10%	10% to 20%

Latest Related Research

- COVID-19 Hurts U.S. Chemical Credit Quality, May 20, 2020
- U.S. Chemical Companies—Strongest To Weakest, June 22, 2020

North American Industry Top Trends Update

Consumer Products

Channel and product mix driving performance

Diane Shand
New York
diane.shand@
spglobal.com
+1 212 438 7860

What's changed post-COVID?

Demand for branded consumer staples accelerated. Consumers shifted to in-home consumption and have navigated back to large brands because they trust their quality and availability. Ratings and outlooks have been relatively stable.

Durables, apparel, cosmetics, and food service were hit the hardest. These channels were highly disrupted because they were deemed nonessential. We took rating actions on most of these issuers. The outlook is negative.

Channel and product mix and innovation will drive growth. After the last recession, branded companies focused on reducing costs. Now we believe they will focus on the top line and accelerating growth in the e-commerce channel.

What is the likely path to recovery?

Consumer nondiscretionary is up against tough comparisons. This sector has benefitted from the current environment. Although sales trends should remain above historical levels, they will likely be slightly lower to up modestly in 2021 as they lap strong growth in 2020. Higher demand should have a modestly positive impact on credit quality.

Recovery for consumer discretionaries will be slow. This highly cyclical sector relies heavily on discretionary spending and consumers resuming social activity. Given the unprecedented revenue and profit declines forecasted for 2020, we do not expect meaningful recovery in credit metrics until 2022.

Credit quality will decline for many speculative-grade issuers. Many of them entered this difficult environment with high leverage, narrow product lines, and weak operating performance increasing the likelihood for lower ratings and defaults. We expect investment-grade issuers to be relatively stable because of their product portfolios, channel mix, and strong cash flow.

What are the key risks around the baseline?

Potential for prolonged muted sales for discretionary subsector. Health developments and related restrictions are key for recovery for discretionary issuers.

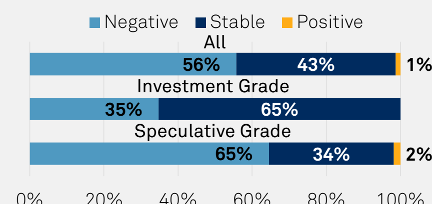
Retailers increase their own brands. Retailers push private-label offerings to improve margins when consumers become frugal and focus on value during a recession, resulting in lost market share for branded players.

Liquidity is paramount. Higher operating and labor costs because of heightened safety measures as well as working capital and investment needs could absorb the extra liquidity companies have obtained if sales remain weak or decline.

Latest Related Research

- U.S. Consumer Product Ratings Demonstrate Pandemic's Double Edge—Consumer Staples Benefit While Discretionaries Struggle, June 12, 2020
- Packaged Food, Household Products Manage Coronavirus Pressure; Not So Pretty For Cosmetics, May 4, 2020
- Food Service, Beverage, And Tobacco Prognosis Mixed From Coronavirus, May 1, 2020

Outlook Distribution



Ratings Statistics (YTD)

	IG	SG	All
Ratings	46	113	159
Downgrades	0	31	31
Upgrades	1	6	7

Ratings data as of end-June, 2020

COVID-19 Heat Map

Consumer Staples		
COVID-19, Recession, and O&G Impact		Low
Potential Negative Long-Term Industry Disruption		--
2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
No decline	No decline	No increase
2021 Estimates v. 2019		
Revenue Decline	EBITDA Decline	
≥2019	≥2019	

Consumer Discretionary		
COVID-19, Recession, and O&G Impact		High
Potential Negative Long-Term Industry Disruption		--
2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
15% to 25%	25% to 40%	5% to 10%
2021 Estimates v. 2019		
Revenue Decline	EBITDA Decline	
10% to 20%	20% to 30%	

North American Industry Top Trends Update

Health Care

Patient volumes rebound, but outlook now murkier

Arthur Wong
Toronto
arthur.wong@
spglobal.com
+1 416 507 2561

What's changed post-COVID?

The discretionary component. The collapse in patient volumes, due in part to directives to conserve hospital capacity and patient fears, highlighted the discretionary component of health care and the uncertainty on pace of recovery.

Accelerated adoption of telemedicine. COVID-19 accelerated the shift to remote care from face-to-face consultations. This adds to the ongoing disruption (e.g. value based care, payor mergers) in health care.

Health care spending just became a bigger U.S. election issue. At 17.8% of U.S. GDP, health care spending was already a top U.S. election issue. Now with a weakened economy and record unemployment, there is greater pressure to reform U.S. health care, raising the uncertainty of adverse legislative changes.

What is the likely path to recovery?

Return of elective surgeries and procedures. Hospitals derive a disproportionate percentage of earnings from elective surgeries and procedures. The rebound in procedure volumes will not only benefit hospitals but also related sectors, such as physician practices, outpatient surgical centers, medical device makers, diagnostic companies, and laboratories.

Launch of a vaccine. While health care is already seeing a recovery in patient volumes, as delayed procedures can only be delayed so long, a full recovery is not likely until a COVID-19 vaccine is widely available.

What are the key risks around the baseline?

Recovery of patient volumes stalls. While some facilities are returning to 60%-70% of normal procedure levels, it is still a significant shortfall. Regional increases in COVID-19 cases or a second wave of the pandemic could further delay recovery or even lead to a reversal of gains.

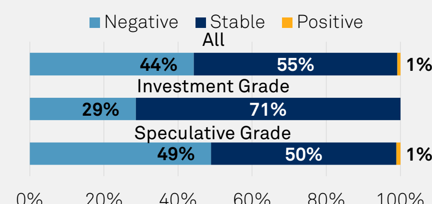
Uneven recovery due to shifts in company and patient behavior. The pace of recovery in health care will not be linear and recovery in certain subsectors, such as hospital staffing, will lag, due to changes in outsourcing. Also, accelerated adoption of things like telemedicine and value-based care could have an impact.

Recession and high unemployment are wildcards. Health care is a defensive industry. However, with increasing out-of-pocket costs and record unemployment, there could be a material impact on health care demand and a payer mix shift from commercial payors to less-profitable government sources, as well as higher uncompensated care from uninsured or underinsured patients.

Latest Related Research

- The Health Care Credit Beat: Governor Abbott Orders Elective Procedures Postponed, July 2, 2020
- The Health Care Credit Beat: Industry Recovering From COVID-19, But Timelines Vary and Ailments Abound, June 25, 2020
- U.S. Health Care Staffing Companies See a Rough Road To Recovery, Filled with Detours, Risks and Behavioral Changes, June 18, 2020

Outlook Distribution



Ratings Statistics (YTD)

	IG	SG	All
Ratings	28	98	126
Downgrades	2	14	16
Upgrades	0	2	2

Ratings data as of end-June, 2020

COVID-19 Heat Map

COVID-19, Recession, and O&G Impact	
Healthcare - Pharmaceuticals	Low
Healthcare - Medical Products	Low
Healthcare - Services	High
Potential Neg. Long-Term Industry Disruption	
Healthcare - Pharmaceuticals	--
Healthcare - Medical Products	--
Healthcare - Services	Yes

2020 Estimates v. 2019

Revenue Decline	EBITDA Decline	Incremental Borrowings
Healthcare - Pharmaceuticals		
0% to 5%	0% to 10%	No increase
Healthcare - Medical Products		
10% to 15%	10% to 15%	No increase
Healthcare - Services		
15% to 25%	10% to 15%	>10%

2021 Estimates v. 2019

Revenue Decline	EBITDA Decline
Healthcare - Pharmaceuticals	
≥2019	≥2019
Healthcare - Medical Products	
≥2019	≥2019
Healthcare - Services	
0% to 10%	0% to 10%

North American Industry Top Trends Update

Homebuilders and Developers

Demand holds up despite record unemployment

Maurice Austin
New York
maurice.austin@
spglobal.com
+1 212 438 2077

What's changed post-COVID?

U.S. homebuilders had a credit buffer when COVID-19 hit. More-conservative financial policies and countercyclical cash flows in a slowdown should support credit quality in case of a year or two of unsteady operations and profits.

Lockdowns slowed construction and traffic, but serious buyers follow through. U.S. homebuilder volumes are rebounding from an abrupt COVID-19 slowdown, so monthly volumes in May and June were on par with 2019 levels. Slower foot traffic has given way to digitizing parts of the purchase and better sales conversion.

Pandemic puts the brakes on upgrades. We pulled several rising-star homebuilders back from the cusp of upgrading to investment grade, reflecting the negative sentiment in early 2020 for most economically sensitive and discretionary items, like new homes.

What is the likely path to recovery?

Early signs are good, but unemployment and construction restrictions threaten. We have assumed a 10%-15% drop in revenue for U.S. homebuilders, but Q2 indications are that volumes are holding up better along with a planned shift to lower price points for many industry participants.

Homebuilders are upbeat despite suspending guidance. The worst-case scenarios about construction, selling, and consumer sentiment have not materialized by mid-2020, and anecdotes about monthly sales and cancellations appear favorable.

Widespread credit deterioration appears unlikely. The trajectory to investment-grade is stalled for several homebuilders, but the underpinnings of good long-term demand, pricing, cost management, and prudent capital allocation and debt leverage remain intact.

What are the key risks around the baseline?

Lower price points could hit margins. Many issuers are moving to lower price points to attract a large cohort of entry-level homebuyers. Such a mix shift, unsteady operations, and higher materials could cause lower unit dollar margins.

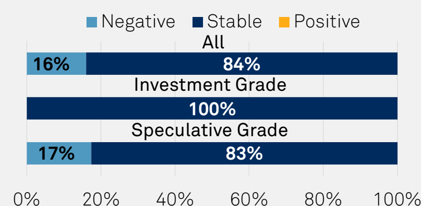
Higher mortgage rates could chill sales. Such a scenario is well outside our base-case, but a bounce off record-low mortgage rates would reverse a key factor that spurred sales through early stages of the pandemic.

Choppy construction in the Sun Belt. Homebuilding in the U.S. is widely viewed as an essential service, and lockdowns have had only a modest effect so far in otherwise tight markets. Key growth areas across the U.S. Sun Belt, however, appear particularly exposed to deeper virus effects in the second half of 2020.

Latest Related Research

- Eight North American Homebuilder Outlooks Revised To Stable As Recession Forecast Pauses Positive Rating Momentum, March 26, 2020

Outlook Distribution



Ratings Statistics (YTD)

	IG	SG	All
Ratings	2	23	25
Downgrades	0	1	1
Upgrades	0	3	3

Ratings data as of end-June, 2020

COVID-19 Heat Map

Homebuilders & Developers	
COVID-19, Recession, and O&G Impact	Moderate
Potential Negative Long-Term Industry Disruption	--

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
10% to 15%	15% to 25%	No increase

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
0% to 10%	0% to 10%

North American Industry Top Trends Update

Hotels, Gaming, and Leisure

U.S. lodging, leisure, and gaming on rocky road to recovery

Emile Courtney
New York
emile.courtney@spglobal.com
+1 212 438 7824

Melissa Long
New York
melissa.long@spglobal.com
+1 212 438 3886

What's changed post-COVID?

Revenue and cash flow declines. Since mid-March, the U.S. lodging, leisure, and gaming sectors have faced unprecedented declines in revenue and cash flow due to travel bans and restricted consumer activity.

Negative rating actions. We've downgraded more than two-thirds of issuers and 36% remain on CreditWatch with negative implications. Both investment- and speculative-grade issuers have been able to access the debt markets, albeit at high rates, to provide liquidity. Still, 4% of the sector has defaulted and additional defaults and restructurings are inevitable.

What is the likely path to recovery?

Recovery will take time. While recovery has begun in various states and regions, for many subsectors, we believe it could take two to three years for credit metrics to return to 2019 levels due to long-lasting disruptions to business fundamentals.

Casino utilization high so far. Although still very early in the reopening phase, some regional casinos are reporting better-than-feared EBITDA generation. However, virus hot spots and economic malaise threaten the recovery.

Leisure will lead the way in lodging. Lodging occupancy climbed to more than 40% in June after bottoming out at 25% in April. Since the pandemic began in the U.S., economy, midscale, and extended-stay segments have outperformed the industry, and upper upscale and luxury full-service segments have underperformed. We expect this to continue at least through the third quarter. We believe leisure travel will recover first, business transient second, and group business third because of lingering concerns about gatherings and social-distancing norms.

Cruises will lag behind. We believe the cruise industry may fare the worst, with a long period of weak demand and very weak credit measures through at least 2021 as it slowly resumes cruise itineraries, and incremental debt to bolster liquidity.

What are the key risks around the baseline?

High-cost debt. While issuance has helped to bolster balance sheets and stave off near-term bankruptcies, depending on cash burn rates, companies will be saddled with more high-cost debt as they navigate recovery and the potential for years of lower revenue.

A second wave. The sector is particularly vulnerable to a second wave of the pandemic or a resumption of tighter restrictions on consumer activity in select markets due to rising infection rates.

Structural changes. Longer-term structural changes could include properties that never reopen and permanent or prolonged supply and demand imbalances that could hurt profitability.

Latest Related Research

- U.S. Lodging, Leisure, And Gaming Sectors Face Rocky Road To Recovery, June 30, 2020
- Credit Conditions North America: Rolling Out The Recovery, June 30, 2020
- Credit FAQ: How Macau Gaming's Recovery May Unfold, May 21, 2020

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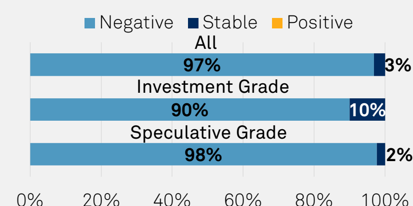

Ratings Statistics (YTD)

	IG	SG	All
Ratings	10	92	102
Downgrades	3	39	42
Upgrades	0	2	2

Ratings data as of end-June, 2020

COVID-19 Heat Map

COVID-19, Recession, and O&G Impact

Fitness	High
Gaming	High
Hotels	High
Cruise	High

Potential Neg. Long-Term Industry Disruption

Fitness	Yes
Gaming	--
Hotels	Yes
Cruise	Yes

2020 Estimates v. 2019

	Revenue Decline	EBITDA Decline	Incremental Borrowings
Fitness	25% to 50%	>60%	>10%
Gaming	25% to 50%	40% to 60%	>10%
Hotels	25% to 50%	40% to 60%	>10%
Cruise	>50%	>60%	>10%

2021 Estimates v. 2019

	Revenue Decline	EBITDA Decline
Fitness	20% to 30%	30% to 40%
Gaming	10% to 20%	10% to 20%
Hotels	20% to 30%	30% to 40%
Cruise	20% to 30%	40% to 50%

North American Industry Top Trends Update

Media and Entertainment

Waiting for a post-COVID world

Naveen Sarma
New York
naveen.sarma@
spglobal.com
+1 212 438 7833

What's changed post-COVID?

Over half of rated media and entertainment companies are affected by the pandemic or economic recession. Since February, we have taken 84 rating actions on over 50 rated companies. Currently 55 companies have either negative outlooks or are on CreditWatch Negative.

Out-of-home (OOH) entertainment has taken the hardest hit. Social distancing measures and government-mandated closures have taken a serious toll on live events, theme park operators, film and TV studios, movie exhibitors, and travel-related trade show and conference operators.

Ad markets are weak. Media sectors dependent on ad revenues such as digital publishers, TV, radio, outdoor, and print-based media, are suffering more from the accompanying economic recession than the pandemic itself.

What is the likely path to recovery?

OOH entertainment. The pace of recovery may lag both the general economic recovery and the end of formal social distancing measures. Venue reopenings may vary by country and region. Still, consumers may be unwilling to return to these venues until a vaccine is available, and their behavior may permanently change following this pandemic.

Advertising-dependent sectors. While we see ad spending growing in the second half of 2020, the recovery will be uneven in timing and degree. Short-cycle media should recover the fastest. TV will benefit from political advertising as candidates increase TV spending, particularly if in-person rallies remain challenging.

Credit metrics may rebound but ratings may not. While revenues and credit metrics could generally return to 2019 levels by 2021-2022, the trends unleashed or accelerated by the pandemic may delay rating recoveries in many media sectors.

What are the key risks around the baseline?

Timing of return of major sports leagues. If major sports programming doesn't resume in September (in particular, the National Football League and major college football), national advertisers may slash their budgets, which would stall any advertising recovery.

Consumer behavior towards OOH entertainment. Even when these venues and businesses do reopen, consumers may stay home until a vaccine or a reliable treatment are widely available.

Accelerating secular trends. Fragmenting audiences and shifts in advertising toward digital platforms may accelerate post-pandemic, increasing pressures on legacy media—in particular, television.

Latest Related Research

- Rebooting The U.S. Media Sector In A Post COVID-19 World, June 10, 2020
- Pandemic And Recession Deal Blows To Credit Metrics Of U.S. Media And Entertainment Industry, June 10, 2020
- The COVID-19 Fallout Is Squeezing U.S. Advertising Spending More Than Expected, May 21, 2020

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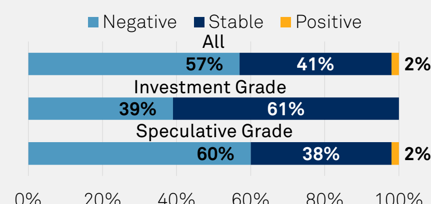

Ratings Statistics (YTD)

	IG	SG	All
Ratings	13	83	96
Downgrades	2	33	35
Upgrades	0	3	3

Ratings data as of end-June, 2020

COVID-19 Heat Map

Ad Supported Media	
COVID-19, Recession, and O&G Impact	High
Potential Negative Long-Term Industry Disruption	--

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
10% to 15%	15% to 25%	5% to 10%

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
0% to 10%	0% to 10%

Out-of-Home Entertainment	
COVID-19, Recession, and O&G Impact	High
Potential Negative Long-Term Industry Disruption	Yes

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
>50%	>60%	>10%

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
20% to 30%	30% to 40%

North American Industry Top Trends Update

Metals and Mining

COVID-19 worsens an already tough situation

Don Marleau, CFA
Toronto
donald.marleau@
spglobal.com
+1 416 507 2526

What's changed post-COVID?

The strain on credit quality gets worse. Half of metals and mining credits in North America are rated 'B' or lower, and we have a negative outlook on 40% of those. Credit quality recovered only modestly from the 2016 downturn, and lower returns and reinvestment are taking a toll on competitive positions with rising maturities.

Demand shock and inventory overhang could mean lower for longer. Metals producers are cautious as COVID-19 worsened prices and volumes that were already dropping in early 2020. Several steel and aluminum producers are reducing output and curtailing capital spending to conserve cash.

Bright spots emerge. Gold remains true-to-form by performing well in uncertain times, but its historical price relationships with the U.S. dollar and oil have diverged, leaving room for caution. Tight iron ore and copper markets are showing good price response to supply cuts, albeit at the cost of marginal volume.

What is the likely path to recovery?

Supply cuts to balance markets. Higher prices typically improve profitability faster than a volume rebound, necessitating supply discipline from high-cost producers for 12-18 months. The path to recovery likely includes the permanent closure of steel and aluminum capacity in the U.S. and Western Europe.

Capex cuts can only last so long. Many metals producers have only enjoyed about 18 months of good markets in the last five years. The consequent reduced reinvestment is taking a toll on weaker assets while better-capitalized competitors grow modern assets like electric arc furnaces for steelmaking.

Balance sheet repairs and discipline buy time. Balance sheets are in better shape than before the 2015-16 downturn, but the COVID-19 hit to profits appears broader and more enduring. Issuers used the 2017-18 price "boomlet" to reduce debt and boost investment, and the downturn that began in 2019 likely preempted more ambitious debt-funded top-of-cycle M&A or large greenfield projects.

What are the key risks around the baseline?

Elevated inventories will slow any rebound. Producer discipline is elusive and disorderly in a sharp downturn, and volumes can pile up in storage as unprofitable assets work through raw materials with unevenly timed shutdowns.

Operating costs and potential disruptions could disrupt profit recovery. Most metals producers have high fixed costs, so capacity utilization is important to profitability and cash flow. Disruptions from COVID-19 or related knock-on effects can slow output and drive up unit costs for large industrial assets.

Maturities could coincide with high debt leverage. The duration of this downturn will test access to capital for rising maturities in the next 12-18 months. In particular, U.S. thermal coal producers appear to have lost access to new capital.

Latest Related Research

- Metal Price Assumptions: Gold Shines, While Slow Recovery Flattens Other Metal Prices, July 1, 2020

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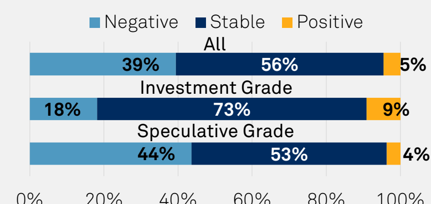

Ratings Statistics (YTD)

	IG	SG	All
Ratings	11	58	69
Downgrades	0	20	20
Upgrades	0	3	3

Ratings data as of end-June, 2020

COVID-19 Heat Map

Metals and Mining	
COVID-19, Recession, and O&G Impact	High
Potential Negative Long-Term Industry Disruption	--

2020 Estimates v. 2019		
Revenue Decline	**EBITDA Decline**	**Incremental Borrowings**
10% to 15%	15% to 25%	5% to 10%

2021 Estimates v. 2019	
Revenue Decline	**EBITDA Decline**
0% to 10%	10% to 20%

North American Industry Top Trends Update

Midstream Energy

The sector faces multiple tests to its resilience

Michael Grande
New York
michael.grande@
spglobal.com
+1 212 438 2242

What's changed post-COVID?

Weak prices. An oversupply of natural gas and crude oil combined with COVID-19-related end-user demand destruction caused prices to plummet in March and April. This could result in average midstream EBITDA declines of 10%-15% for 2020. Exploration and production (E&P) companies have scaled back production forecasts, even with modest price improvements in the second quarter.

Counterparty risk. Weaker customer credit quality will weigh on midstream ratings. Default risk for E&P companies has increased, with about 43% of oil and gas issuers in the 'CCC' ratings category. An increase in producer bankruptcies could impact midstream contracts and cash flow.

Spending cuts. A new round of dividend cuts and lower spending on growth capital will provide some cushion and insulate most companies from severe credit stress in 2020. Investment-grade issuers' operational and geographic diversity is a strength, while gathering and processing companies' volume and price exposure will require more drastic cuts to protect current ratings.

What is the likely path to recovery?

Higher prices. A sustained WTI crude oil price of $50 is required for North American producers to achieve adequate returns and spend more. This will support higher midstream infrastructure development and cash flow growth of up to 10% in 2021.

Financial discipline. Midstream companies' will likely use excess cash flow balances for debt repayment through 2021. Strong liquidity is key as the capital markets have been volatile, particularly for speculative-grade issuers.

Economic growth. Our 2021 economic forecast of 5.2% U.S. GDP growth and 5.4% growth for Canada will support demand growth for hydrocarbons and help midstream spending.

What are the key risks around the baseline?

Pandemic resurgence. Any disruption to improving demand for crude oil, natural gas, and refined products will be a setback for midstream companies.

Investor confidence. The debt capital markets have been supportive for most investment-grade issuers, and the Federal Reserve CARES Act has provided some support for speculative-grade issuers. Any change in investor sentiment could increase refinancing risk and pressure liquidity.

Regulatory/legal risk. Recent legal setbacks for pipeline projects has cast a shadow over future midstream infrastructure development, but also makes existing pipe in the ground more valuable. The U.S. Presidential election will likely hang over the industry for the remainder of 2020.

Latest Related Research

- North American Midstream Companies' Debt Maturities Are Manageable For Most, Challenging For Some, April 22, 2020
- Supply And Demand Shocks Are Throwing The U.S. Midstream Industry Off Balance, March 24, 2020

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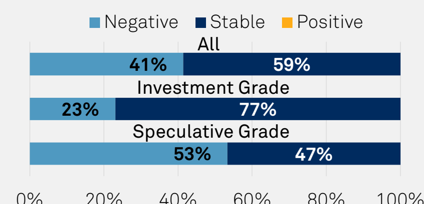


Ratings Statistics (YTD)

	IG	SG	All
Ratings	39	62	101
Downgrades	4	27	31
Upgrades	1	2	3

Ratings data as of end-June, 2020

COVID-19 Heat Map

Midstream	
COVID-19, Recession, and O&G Impact	High
Potential Negative Long-Term Industry Disruption	--

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
5% to 10%	10% to 15%	<5%

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
0% to 10%	0% to 10%

North American Industry Top Trends Update

Oil and Gas

Portfolio decimated by COVID-19 and low prices

Thomas Watters
New York
thomas.watters@
spglobal.com
+1 212 438 7818

What's changed post-COVID?

Prices plunged. Demand and prices fell dramatically because of excess crude oil supplies and the COVID-19 pandemic impact. Indeed, for the first time, we saw a negative price on the May West Texas Intermediate crude contract. While we viewed it as an anomaly, it reflected the steep decline in demand and rising inventory. Subsequently, prices rebounded, supported by OPEC+ production cuts and economies slowly reopening.

Negative outlook. We expect a high number of defaults over the coming year with capital market access limited for high yield credits and shrinking liquidity due to cuts to the borrowing bases of revolving credit facilities. Approximately 43% of the upstream U.S. portfolio is in the 'CCC+' rating category and below.

Fallen angels. Of particular interest, eight credits are on the precipice of falling out of investment grade.

What is the likely path to recovery?

Oil prices. Any recovery for the sector will rest on the level of recovery in hydrocarbon prices. However, the futures curve is relatively flat, approximately $40 per barrel of oil equivalent for the next few years and below the $50 break-even price most North American producers need.

Natural gas prices. Prompt prices are weak, but the futures curve is in a contango for next year. This reflects a decline in associated gas production from liquids drilling. Issuers with gassier exposure could benefit.

Increased spending. Oil field services has been decimated, unable to increase prices and subjugated to the 38% cuts in North American capital expenditures. Exploration and production spending needs to recover with crude oil and natural gas prices.

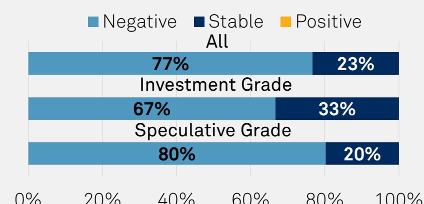
What are the key risks around the baseline?

Sustained price improvement. Unless hydrocarbons rally significantly, we expect most of our ratings in the 'CCC+' category and below to default over the next year or so. A stabilization for investment-grade credits will rest on hydrocarbon prices rallying and staying above $50.

Latest Related Research

- Global Oilfield Services And Drilling Companies, Strongest To Weakest, June 19, 2020.
- U.S. Upstream Oil And Gas Rating Action Summary And Key Takeaways Following The March 2020 Hydrocarbon Price Deck Revision, May 19, 2020
- S&P Global Ratings Cuts WTI And Brent Crude Oil Price Assumptions Amid Continued Near-Term Pressure, March 19, 2020

Outlook Distribution



Ratings Statistics (YTD)

	IG	SG	All
Ratings	30	90	120
Downgrades	8	60	68
Upgrades	0	7	7

Ratings data as of end-June, 2020

COVID-19 Heat Map

Oil and Gas	
COVID-19, Recession, and O&G Impact	High
Potential Negative Long-Term Industry Disruption	--

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
15% to 25%	15% to 25%	No increase

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
10% to 20%	10% to 20%

Real Estate

Retail and office REITs have not hit bottom

Ana Lai, CFA
New York
ana.lai@
spglobal.com
+1 212 438 6895

What's changed post-COVID?

Growing negative rating bias. We have taken 20 negative rating actions since March, most of which were outlook revisions to negative. Of the entire rated portfolio, 20% have negative outlooks; the negative rating bias is higher for retail REITs at 27%, and 36% for office REITs. Still, real estate remains an 80% investment-grade sector. In addition, REITs entered this downturn in better shape with materially lower debt leverage, increasingly unencumbered asset bases, more staggered debt maturities, and better liquidity compared to the last recession.

Rent collection remains resilient, except for retail properties. Rent collection remains in the 90% area for most property types. However, retail strip centers collected 55%-75% of contractual rent in April and May, and malls collected 15%-40%. We expect significant short-term cash flow volatility for retail REITs.

The pandemic is accelerating the shift to remote working, resulting in gradual reduction in office space utilization. The sustainability of co-working concepts could also pressure the office sector, particularly in gateway markets. However, a potential counter to the reduction of space could be the reversal of office densification.

What is the likely path to recovery?

Declining revenue and EBITDA for most sectors by 10%-15% in 2020 compared to 2019, given lower rent collection and weak leasing activities. For retail REITs, given the impact of mandated store closures, cash flow could decline 20%-30%.

Deferrals, closures, and bankruptcies. Retail assets, particularly malls, received some of the lowest levels of rent among rated REITs and granted a significant number of deferral requests from tenants. If there is an increase in tenant bankruptcies, the amount of write-offs and abatements will rise proportionally.

A multiyear recovery will begin this year as the economy further reopens, resulting in a rebound in revenue and EBITDA in 2021 of up to 10% compared to 2020, but remain below 2019 levels. Still, credit metrics will not fully recover to pre-pandemic levels until 2022.

What are the key risks around the baseline?

Another economic shutdown from a second wave of coronavirus cases could delay rent payments further and stall the demand recovery for retail or office space. Given the external funding nature of REITs, capital markets volatility (particularly in equity markets or an inability for REITs to sell assets) could also hamper a recovery of credit metrics and result in higher debt leverage than we expect.

A more aggressive financial policy could stall a recovery in credit metrics. We'd expect issuers to adjust share repurchases or dividend distributions if weak operating conditions persist to enhance liquidity and preserve financial flexibility.

Latest Related Research

- Rent Pressure And Development Delays Heighten Risks For U.S. Office REITs, July 2, 2020
- COVID-19 Accelerates Structural Shifts In Global Office Real Estate And REITs, June 9, 2020
- REITrends: Negative Ratings Bias Rises As North American REITs Confront Effects Of COVID-19, May 28, 2020

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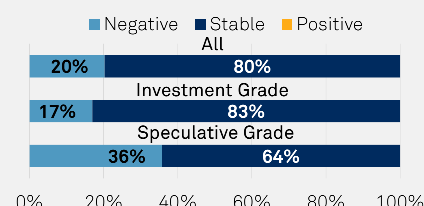

Ratings Statistics (YTD)

	IG	SG	All
Ratings	65	14	79
Downgrades	0	4	4
Upgrades	0	0	0

Ratings data as of end-June, 2020

COVID-19 Heat Map

Real Estate (REITs)	
COVID-19, Recession, and O&G Impact	Moderate
Potential Negative Long-Term Industry Disruption	Yes

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
10% to 15%	10% to 15%	5% to 10%

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
0% to 10%	0% to 10%

North American Industry Top Trends Update

Regulated Utilities

Credit quality is on a downward trajectory

Gabe Grosberg
New York
gabe.grosberg@spglobal.com
+1 212 438 6043

What's changed post-COVID?

Weaker financial measures. We expect the industry's funds from operations to debt will weaken by about 100 basis points in 2020 from COVID-related lower commercial and industrial load, higher bad debt expense, lack of consistent access to the equity markets, delayed rate case filings, and underfunded pensions.

Minimal financial cushion. Credit quality was already weak heading into 2020, with about 25% of the industry's outlooks on negative. This reflected tax reform, record capital spending, and the increasing number of utilities that are strategically managing their credit measures closer to the downgrade threshold.

The industry remains investment-grade. For the year to date, there have been seven downgrades and only one upgrade, which is a departure from prior years when upgrades consistently outpaced downgrades. However, we expect only a modest weakening to the industry's overall credit quality.

What is the likely path to recovery?

Regulatory deferral mechanisms. Utilities are either volunteering or have been mandated not to shut off service for nonpaying customers, and many regulators are approving the deferral of COVID-related costs for future recovery.

Operating and maintenance costs. Permanent cost reductions are being realized through the increasing use of technology and a shrinking real-estate footprint.

Capital spending and dividend levers. The industry consistently operates with annual capital spending of about $150 billion and dividends of about $35 billion. Under financial stress, a utility could pull either of these levers to temporarily restore its credit measures.

What are the key risks around the baseline?

Wildfires. The early Western U.S. 2020 wildfires and the below-average 2020 rainfall in California could potentially signal a longer wildfire season, which, in our view, could increase the possibility of a catastrophic wildfire. COVID presents additional risks because it could challenge emergency response time.

Environmental risks. The cancelation of the Atlantic Coast Pipeline is the latest demonstration that customers want carbon-free energy. High carbon-emitting utilities may need to accelerate the transformation of their generation fleet.

Safe operations. Utilities that cause gas explosions, electrical blackouts, wildfires, water contamination, service interruptions, or have high greenhouse gas emissions are facing increasing political and regulatory scrutiny.

Latest Related Research

- North American Regulated Utilities Face Tough Financial Policy Tradeoffs To Avoid Ratings Pressure Amid The COVID-19 Pandemic, May 11, 2020
- COVID-19: While Most Of The U.S. Is Shut Down, Utilities Are Open For Business, May 4, 2020
- An Old Age Problem? While North American Regulated Utilities' Credit Measures Could Dip On Pension Underfunding, Cost Recovery Ability Supports Credit Quality, April 20, 2020
- COVID-19: The Outlook For North American Regulated Utilities Turns Negative, April 2, 2020

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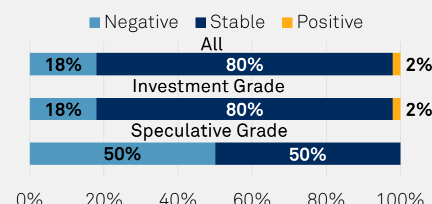

Ratings Statistics (YTD)

	IG	SG	All
Ratings	280	4	284
Downgrades	7	0	7
Upgrades	1	0	1

Ratings data as of end-June, 2020

COVID-19 Heat Map

Utilities	
COVID-19, Recession, and O&G Impact	Low
Potential Negative Long-Term Industry Disruption	--

2020 Estimates v. 2019		
Revenue Decline	**EBITDA Decline**	**Incremental Borrowings**
5% to 10%	**0% to 10%**	**<5%**

2021 Estimates v. 2019	
Revenue Decline	**EBITDA Decline**
≥2019	**≥2019**

Retail and Restaurants

Going from bad to worse

Sarah Wyeth
New York
sarah.wyeth@
spglobal.com
+1 212 438 5658

What's changed post-COVID?

Risks for retailers and restaurants increased dramatically. The COVID-19 pandemic and unprecedented economic shutdown to contain it forced retailers and dine-in restaurants to temporarily close their doors and pivot to digital channels. Consumers, wary or unemployed, limited spending to basics. Grocers and other retailers deemed essential—such as Walmart Inc., Target Corp., Loblaw Cos. Ltd., and Dollar General Corp.—have benefitted.

The hardest hit subsectors are mall-based retailers and casual dining. The shutdown and lingering fears of the coronavirus are likely to weigh on foot traffic to indoor malls and restaurants. Department stores and typical mall-based apparel retailers face the double whammy of being less relevant in consumers' new homebound life.

The sector was already struggling amid secular pressures. Competition for share of wallet, bargain-hunting, conscious consumerism, and the shift to less profitable e-commerce contributed to an annual spec-grade default rate of 10% since 2017.

Increased focus around social risks include health and safety. As retailers and restaurants reopen, they will bear extra COVID-19-related costs of implementing measures to ensure a safe workplace and product.

What is the likely path to recovery?

For many, there won't be a recovery. Defaults and bankruptcies increase every week. With around one quarter of our ratings in the 'CCC' category, the 2020 default rate will easily double relative to recent years.

Essential retailers will be followed by restaurants and nonessential retailers in the recovery. Grocers' higher volumes will likely absorb elevated safety and e-commerce costs. Quick-service restaurants, well-suited to social distancing and a weak economy, should stabilize in 2021. Dine-in restaurants and discretionary mall-based retailers are unlikely to recover until 2023 and beyond.

What are the key risks around the baseline?

Those that survive face a choppy, nonlinear road to a new normal. Regional hotspots of COVID-19 cases are likely to force retailers and restaurants to reinstate temporary closures and/or capacity limitations. Where in-person sales are permitted, health and safety costs will pressure margins. Ramping up efficient digital capabilities is imperative.

Reverting to shareholder-friendly activity too soon could delay credit quality recovery. Many issuers have tapped debt markets to bolster liquidity. Elevated share buybacks or dividends, funded with excess cash or otherwise, before the operating environment and earnings have recovered could pressure ratings further.

Latest Related Research

- COVID-19 Will Shape The Future Of Retail, May 27, 2020
- Shakeout In Retail, Restaurant Sectors Begins With J. Crew, May 4, 2020
- Impact Of The Coronavirus Likely To Drag U.S. Retail And Restaurants Ratings Down Further, April 24, 2020

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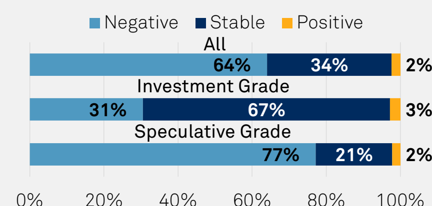


Ratings Statistics (YTD)

	IG	SG	All
Ratings	36	102	138
Downgrades	6	38	44
Upgrades	0	8	8

Ratings data as of end-June, 2020

COVID-19 Heat Map

COVID-19, Recession, and O&G Impact	
Retail Essential	Low
Restaurants	High
Retail - Non-essential	High

Potential Neg. Long-Term Industry Disruption	
Retail Essential	--
Restaurants	Yes
Retail - Non-essential	Yes

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
Retail Essential		
No decline	0% to 10%	<5%
Restaurants		
10% to 15%	25% to 40%	>10%
Retail - Non-essential		
15% to 25%	>60%	>10%

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
Retail Essential	
≥2019	≥2019
Restaurants	
≥2019	≥2019
Retail - Non-essential	
10% to 20%	20% to 30%

North American Industry Top Trends Update

Technology

Less COVID impact, earlier recovery than corporate average

David Tsui
San Francisco
david.tsui@
spglobal.com
+1 415 371 5063

What's changed post-COVID?

S&P global IT spending forecast revised downward twice since COVID-19 outbreak, with expectation of 4% contraction in 2020 currently, down from 2%-3% growth expected in November 2019.

Investment-grade issuers have been resilient so far as flexibility provided by their stronger balance sheets and liquidity, and their willingness to suspend shareholder returns, helped blunt the effect of a weaker business environment on their credit metrics.

Speculative-grade issuers saw the majority of rating actions mostly due to liquidity concerns and our expectations for weaker operating performance over the next 12 months. Of the 49 negative rating actions we took on spec-grade issuers since the COVID-19 outbreak, 25 were downgrades (7 to the 'CCC' category) and 24 were negative outlook revisions.

What is the likely path to recovery?

Sector performance will depend on macroeconomic activity. Our base-case expectation is for a gradual recovery from the sharp drop in economic activity in North America in 1H20.

Full recovery should take about two years for hardware and semiconductor issuers. Hardware and semiconductor customers are cautious about making major capital purchases, and we don't expect issuers in this subsector to see their credit metrics to return to pre-COVID-19 levels until the end of 2021. We expect most software issuers' credit metrics to be relatively unaffected. Certain software issuers with higher exposure to small-to-medium sized business or vulnerable end markets have been hurt and we expect their credit metrics to recover to pre-COVID-19 levels by mid-2021.

What are the key risks around the baseline?

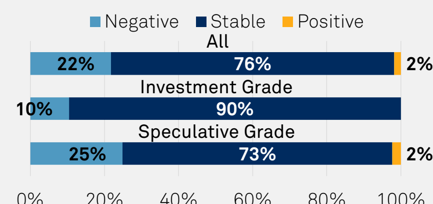
Failure to contain COVID-19 will be detrimental to business and consumer confidence, and will further weaken IT spending. Spec-grade issuers with tight liquidity cushions will be most vulnerable but investment-grade issuers who now have fewer levers to pull will also face increased downgrade risks.

U.S.-China political tension is the wildcard, with hardware and semiconductor issuers the most exposed. Near term risks are manageable as suppliers to Huawei have significantly lowered their business activities with the Chinese telecom and smartphone maker over the past two years. Longer term risks are more complex as China's ambitions to be more self-reliant will challenge U.S. tech firms.

Latest Related Research

- COVID-19 Heat Map: Post-Crisis Credit Recovery Could Take To 2022 And Beyond For Some Sectors, June 24, 2020
- A Slow Recovery And U.S.-China Trade Tensions Could Test U.S. Investment-Grade Tech Companies, June 3, 2020
- Credit Conditions North America: Rolling Out The Recovery, June 30, 2020

Outlook Distribution



Ratings Statistics (YTD)

	IG	SG	All
Ratings	48	174	222
Downgrades	2	23	25
Upgrades	4	5	9

Ratings data as of end-June, 2020

COVID-19 Heat Map

Technology - Software		
COVID-19, Recession, and O&G Impact		Low
Potential Negative Long-Term Industry Disruption		--
2020 Estimates v. 2019		
Revenue Decline	**EBITDA Decline**	**Incremental Borrowings**
No decline	No decline	No increase
2021 Estimates v. 2019		
Revenue Decline	**EBITDA Decline**	
≥2019	≥2019	

Technology - Hardware/Semiconductors		
COVID-19, Recession, and O&G Impact		Moderate
Potential Negative Long-Term Industry Disruption		--
2020 Estimates v. 2019		
Revenue Decline	**EBITDA Decline**	**Incremental Borrowings**
10% to 15%	10% to 15%	<5%
2021 Estimates v. 2019		
Revenue Decline	**EBITDA Decline**	
0% to 10%	0% to 10%	

North American Industry Top Trends Update

Telecommunications

U.S. telecom and cable can withstand the recession

Allyn Arden, CFA
New York
allyn.arden@
spglobal.com
+1 212 438 7832

What's changed post-COVID?

U.S. telecom and cable can withstand macroeconomic pressures. We expect some weakness in top-line trends and profitability, but credit quality should not deteriorate significantly given their recurring, subscription-based business models. Broadband and mobile services are essential to businesses and consumers.

Issuers exposed to small and medium-sized business (SMB) customers are most likely to experience weaker revenue and cash flow. Wireline and cable providers derive some revenue from SMB customers, many of which will scale back operations or go out of business. Cable companies have taken share from the U.S. telcos in the SMB market over the last 10 years but revenue contribution remains small.

Cord cutting will accelerate. Higher unemployment will likely push consumers to use less expensive streaming platforms such as Netflix and Disney+. Cable companies offer higher margin broadband services that should more than offset declining video, but satellite TV providers could face top line pressures and margin compression since they lack a broadband hedge.

What is the likely path to recovery?

Cable operators can rebound quickly. The outlook for COVID-19 is still murky and more people working from home highlights the need for reliable broadband connections. Cable operators have a competitive advantage over slower, copper-based, high-speed data services. As a result, we expect the recession to have a limited impact on their operating and financial performance.

New 5G networks could boost wireless demand. U.S. wireless carriers are aggressively deploying 5G, which promises faster data speeds on mobile devices. Consumers could upgrade their devices and carriers will look to charge more for faster data, which could drive revenue growth and partially mitigate slower subscriber trends in the first half of 2020.

Secular industry declines will likely prevent a recovery in some segments. Wireline and satellite video recovery is very uncertain. Wireline companies' balance sheets are constrained and fiber is necessary to compete. They continue to lose broadband share to cable and voice customers to wireless. Satellite video will continue declining as more consumers shift to OTT services.

What are the key risks around the baseline?

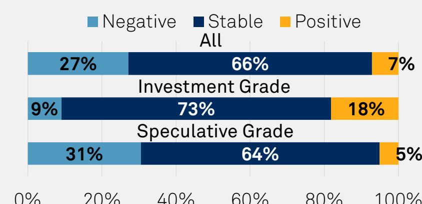
Persistent high unemployment. If economic conditions remain weak and unemployment does not recover, churn and bad debt expense could worsen in the second half for telecom and cable services, absent government support that would provide more money to consumers for broadband.

Enterprise customers cut IT spending. Growth in cloud-based networking solutions, such as SD-WAN, could accelerate, reducing demand for more expensive legacy products, accelerating top-line declines for U.S. wireline companies.

Latest Related Research

- Credit FAQ: Will U.S. Telcos Be Recession Proof This Time Around?, April 8, 2020
- As COVID-19 Cases Surge, Pockets Of Risk Emerge For Certain U.S. Telecom And Cable Providers, March 17, 2020

Outlook Distribution



Ratings Statistics (YTD)

	IG	SG	All
Ratings	11	59	70
Downgrades	0	10	10
Upgrades	0	2	2

Ratings data as of end-June, 2020

COVID-19 Heat Map

Telecom	
COVID-19, Recession, and O&G Impact	Low
Potential Negative Long-Term Industry Disruption	--

2020 Estimates v. 2019		
Revenue Decline	**EBITDA Decline**	**Incremental Borrowings**
0% to 5%	0% to 10%	<5%

2021 Estimates v. 2019	
Revenue Decline	**EBITDA Decline**
≥2019	≥2019

North American Industry Top Trends Update

Transportation

A long road back for North American transportation

Philip Baggaley
New York
philip.baggaley@spglobal.com
+1 646 285 4615

What's changed post-COVID?

Passenger transportation hit hard. Fear of the virus, government travel restrictions, and recession combined to destroy demand (the revenue outlook has worsened over the past month, and some large airlines with international flying could see revenues down > 50% versus 2019 levels). We downgraded all North American airlines, in most cases multiple notches, and outlooks remain negative.

Related sectors hurt to various degrees. Car renters are suffering as airport rentals dry up (and Hertz files for bankruptcy). Global aircraft leasing companies remain under pressure but have more stable cash flows than their airline customers. Outlooks are all negative.

Freight transportation hurt to a lesser degree. Recession and declining global trade hurt, but a base load of consumer and industrial demand, as well as an ability to flex capacity, position these companies better to ride out the storm.

What is the likely path to recovery?

Airlines' way forward uncertain. Airlines need progress on containing the virus, reopening economies, and regaining passenger confidence—which is mostly out of their control. Domestic and leisure travel will recover before international and business.

Airline recovery could stretch into 2023. Recovery in revenues and credit measures will take years, and airlines plan to downsize by 20%-30% later this year (matching likely revenue shortfalls in 2021 versus 2019). Additional debt improves liquidity and buys time, but further burdens balance sheets.

Freight transportation should bounce back sooner. Freight is mainly correlated to the economy and should track our economists' expectation of a one- to two-year recovery.

What are the key risks around the baseline?

A second wave of COVID would set back the recovery. Passenger transportation in particular remains vulnerable. If a second wave is on the scale of the first, multiple bankruptcies are likely.

A "new normal" helps some and hurts others. Spreading passengers out destroys an airline's business model, and global downsizing undermines aircraft leasing. Package express and some trucking benefit from the boom in internet shopping, but typically not enough to offset fewer business shipments.

As always, the economy matters. Consumer spending, which rests on employment gains, could recover slowly and delay demand improvement in freight and passenger transportation. Shrinkage and regionalization of trade will trim growth prospects for some.

Latest Related Research

- COVID-19 Heat Map: Post-Crisis Credit Recovery Could Take To 2022 And Beyond For Some Sectors, June 24, 2020
- Canadian Corporates Face Unprecedented Credit Stress In 2020 Thanks To Plummeting Oil Prices And COVID-19, May 11, 2020
- Live Webcast and Q&A: COVID-19 And The North American Transportation Sectors, April 22, 2020

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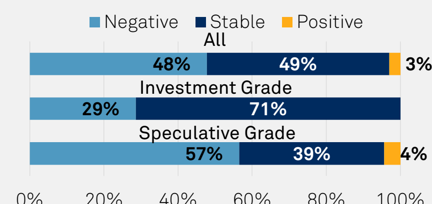

Ratings Statistics (YTD)

	IG	SG	All
Ratings	21	47	68
Downgrades	3	23	26
Upgrades	0	3	3

Ratings data as of end-June, 2020

COVID-19 Heat Map

Airlines	
COVID-19, Recession, and O&G Impact	High
Potential Negative Long-Term Industry Disruption	Yes

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
25% to 50%	>60%	>10%

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
20% to 30%	40% to 50%

North American Industry Top Trends Update

Transportation Infrastructure

Has COVID-19 accelerated the arrival of the new normal?

Dhaval Shah
Toronto
dhaval.shah@
spglobal.com
+1 416 507 3272

What's changed post-COVID?

Unprecedented stress. COVID-19 has had a deeper impact on volume-based transportation projects than any stress event before it, with airports, parking and managed lanes facing the greatest decline.

Risk transfer is key. Projects under construction or that have availability-based payment mechanisms are facing supply chain issues and reduced productivity. Force majeure provisions have risen in prominence.

All rated volume-based transportation projects remain investment grade thanks to their robust debt service coverage, hybrid revenue streams (availability payments with some traffic risk), capital structure, and significant liquidity.

What is the likely path to recovery?

A new normal. Shifts in travel patterns/modes and commuter behavior (along with government actions and economic recovery) will drive and vary the recovery across transportation assets.

Recovery to take longer for airports than for roads. Mature toll roads with limited free alternatives should recover first—around 2021/2022—whereas airports, parking, and managed lanes could have to wait until 2024/2025.

Cash is king. Some projects are preserving liquidity or even, in some cases, adding to it through equity injections. Some are controlling expenses in line with declining revenues, and some have sought covenant amendments and waivers.

What are the key risks around the baseline?

Is there a secular shift in the industry? We expect the transportation industry to revert to our base case expectations over the near to medium term. But what is the shape of the recovery, and what does the new normal look like? A lot will depend on public policies (such as curfews), remote working arrangements, and consumer behavior.

A second wave of infections could make many projects lose their investment-grade status.

Cash flow pressures on counterparties. A more pronounced downside could also put pressure on availability projects should counterparty risk rise and/or the burden of risk transfer become intolerable.

Latest Related Research

- Infrastructure: Global Toll Roads Poised For Steep Climb Out Of COVID, July 19, 2020
- Activity Estimates For U.S Transportation Infrastructure Show Public Transit And Airports Most Vulnerable To Near-Term Rating Pressure, June 4, 2020
- Webinar Slides Cover COVID-19 And The North American Transportation Sectors, April 30, 2020
- Coronavirus Travel Restrictions Cut Cash Flow Of U.S. And Canadian Project Financed Roads, April 14, 2020

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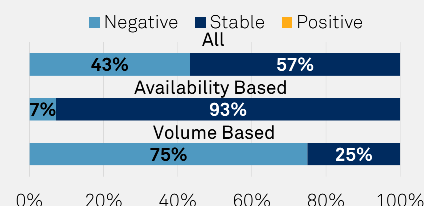

Ratings Statistics (YTD)

	Availability based	Volume based	All
Ratings	14	16	30
Downgrades	1	6	7
Upgrades	0	0	0

Ratings data as of end-June, 2020

COVID-19 Risks

Transportation Infrastructure		
How people...	**Pre COVID-19**	**Post COVID-19**
Travel	-Prioritize experiences over material goods - Highest historical bookings	- Local travel by personal car - Reduced airline travel - Spare use of hotels, cruises, rentals
Commute	- Ridesharing, public transport, and rentals used - Decreasing personal car ownership	- Rise in personal transportation ownership (car, bike, other)
Learn	- Live and in person - Tailored to student	- Uncertainty over in-person opening for Fall 2020 - Likely mixed reopening
Socialize	- Strong preference for in-person meetings - Larger crowds for events	- Cautious socializing, resilient distancing - Events can become costly
Work	- Collaborate in person - Shared office spaces	- Increased flexibility in working options - Less business travel

North American Industry Top Trends Update

Unregulated Power

Surprisingly resilient

Aneesh Prabhu
New York
aneesh.prabhu@
spglobal.com
+1 212 438 1285

What's changed post-COVID?

Impact has been muted compared to other energy sectors. Especially compared to energy sectors such as oil and gas, midstream, and refining, the impact of COVID-19 and economic recession on independent power producers (IPPs) has been mild. Even in an unprecedented shutdown such as this, it takes time for the energy juggernaut to slow. Having a big balance sheet, operational diversity, and countercyclical retail operations make a significant difference to credit quality.

We plan to maintain the positive outlooks on the leading players. Delayed upgrades are possible given the broader market uncertainty and volatility. However, AES Corp., NRG Energy, Vistra Energy, and Calpine Corp. all generate free operating cash flow under our base case scenario even after the COVID-related sensitivities. Arguably, the cash flow will be lower and the financial ratios a trifle weaker than what we had earlier estimated for 2020. Still, that may not influence the credit profile of these companies.

Accelerated erosion in credit quality of smaller term loan B project financed assets. Many financings were hindered by milder winter weather in 2019-2020; the impact of COVID-19 put many transactions at risk of breaching their financial covenants soon. We expect to see more negative rating actions.

What is the likely path to recovery?

Recovery is underway but measured. There are indications that industrial activity is improving from the lows of April and will recover significantly through December 2020. We expect commercial and industrial (C&I) power demand to remain down 15% through July, 10% through September, and 5% through December.

Full recovery will take a few quarters. Demand could return to 2019 levels in 2022, although a second pandemic wave would push this outwards.

Residential retail demand across the country has held up and, in most regions, has risen. The ERCOT (Texas) market has been buoyed by weather and shows the least demand weakness. Importantly, the forward power curve has remained robust and most markets still show secular strength in 2021 prices. We expect power companies to be hedging their expected 2021 generation aggressively.

What are the key risks around the baseline?

Demand could still be irreparably harmed. Declining loads could have a secular slant, which could hurt power prices over the long run. ERCOT continues to show backwardation in the forward curve, suggesting a possible 5%-10% decline in wholesale EBITDA of IPPs in 2021.

Uncertainty in PJM Interconnections' capacity market construct. Further delay in the timing of PJM's reliability pricing mechanism auction as well as the risk of fixed resource requirement based pullout could influence credit quality of the sector.

Latest Related Research

- Refining Our Views On Independent Power Producers, June 8, 2020
- Independent Power Producers Navigate Falling Demand And Credit Risks In Wake Of Economic Shock, May 6, 2020
- S&P Global Ratings Updates Its Capacity Price Assumptions, April 13, 2020

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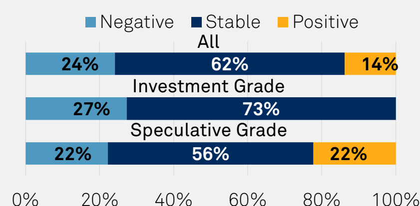

Ratings Statistics (YTD)

	IG	SG	All
Ratings	11	19	30
Downgrades	1	2	3
Upgrades	0	1	1

Ratings data as of end-June, 2020

COVID-19 Heat Map

	Power
COVID-19, Recession, and O&G Impact	Moderate
Potential Negative Long-Term Industry Disruption	--

2020 Estimates v. 2019		
Revenue Decline	EBITDA Decline	Incremental Borrowings
10% to 15%	0% to 10%	No increase

2021 Estimates v. 2019	
Revenue Decline	EBITDA Decline
0% to 10%	0% to 10%

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