Industry Top Trends 2020

Foreword

To communicate our credit views on rated companies and industries, we recently published 25 Industry Top Trends reports for corporate and infrastructure industries globally. This publication brings those reports together in a single volume and is the fifth annual collection in this format.

The year ahead will be challenging for many industries as they wrestle with slow growth, cost pressures, the intense challenges of technological disruption, and adapting to environmental regulations and concerns. Trade disputes and fluid political environments in many jurisdictions add another layer of uncertainty.

These reports outline S&P Global Ratings' key industry assumptions for 2020, as well as our views on key risks and opportunities that may affect sector trends. They draw on the assessments of the more than 5,000 corporate and infrastructure entities we rate globally. By presenting our assumptions, risks, and ratings trends in a consistent format, we hope to aid understanding of our analytical assessment of industry trends.

Best wishes

Gareth Williams
Senior Director
Head of Digital Research Strategy
S&P Global Ratings
London
Key themes

Key Takeaways

– Slowing economic growth and deteriorating confidence have taken their toll on corporate credit quality. The non-financial ratings net outlook bias is at its weakest since 2016.

– Our industry reports suggest a difficult operating environment, as companies battle the headwinds of disruption, cost pressures, regulation and adapting to environmental concerns. Economic worries and trade disputes head the list of immediate concerns.

– More positively, with the global economy likely to steady into 2020 on our base case assumptions, and with interest rates low and financing conditions favorable, the corporate growth outlook remains positive if subdued. Capex growth is still likely to contract slightly, but many sectors still need to invest heavily. M&A is still likely to feature strongly in some sectors.

Battling the headwinds

The overwhelming sense from the 25 Industry Top Trends reports presented together here is that almost all industries are battling headwinds that are constraining growth and posing risks to credit quality.

Front and center are macroeconomic concerns – the ongoing impact on revenues and profitability from the global economic slowdown, particularly in manufacturing. The slump in global manufacturing confidence has gone hand-in-hand with a deterioration in the net outlook bias for our rated non-financial corporates (see chart 1). This bias – a measure of the directional risk of ratings – is now more negative than it was at the height of the commodity and capital expenditure (capex) slump of 2016.

Chart 1

Global Manufacturing PMI And Non-Financial Corporate Net Outlook Bias

Growth forecasts remain positive if subdued

The impact of this slowdown is also clearly apparent in the aggregated forecasts of our rated non-financial companies. 2019 revenues are expected to grow by just 2.6%, down from 7.6% in 2018 (see chart 2). With profit margins also under pressure, 2019 EBITDA growth is expected to be weaker still at 2.0%, versus 8.1% the year before (see chart 3).

Under our base case economic assumptions, which are for a steadying growth outlook into 2020, we expect revenue and EBITDA growth rates to improve modestly out to 2021, albeit with the top-line only growing 3%-4% each year. This echoes the tone of the industry reports which, while pointing to many sources of pressure, do not suggest that
these amount to imminent recessionary conditions, particularly with interest rates low and financing conditions broadly supportive.

Chart 2

Global Non-Financial Corporate Revenue Growth


This picture of weaker but still positive growth is similarly reflected in aggregate sector forecasts (see chart 4). All sectors are expected to see some revenue growth in 2020 and nearly all are projected to see some improvement in EBITDA margins.

Chart 4

Estimated Global Non-Financial Sector Revenue Growth And EBITDA Margin Change In 2020

Source: S&P Global Ratings

Capex under pressure but areas of resilience underpin spending

Deteriorating economic cycles always risk becoming self-reinforcing, and a sharp deterioration in capex is a key concern here. We flagged the impending downturn in our annual capex survey (see Global Corporate Capex Survey 2019: Curbed Enthusiasm, June 19, 2019) and capex-sensitive sectors such as capital goods expect 2020 to be difficult. Multiple key demand drivers for these sectors – including autos and commodities – are stagnating or in decline, while construction has peaked. The deterioration has been confirmed by patterns in consensus forecasts of capex, which have just turned negative for the first time since 2016 (see chart 5).
However, it is important not to overstate the gloom here. There are some industries that are likely to see continued positive capex growth (see chart 6). Some notable examples include:

- **Aerospace and defense** — spending continues to grow in relation to increasing fuel efficiency and, within defense, exploring and countering new areas of threat including hypersonic weapons and cyber security
- **Media** — heavy investment in streaming/OTT platforms and content
- **Retail** — higher capex spend into improving omnichannel appeal
- **Transportation infrastructure** — Capex will remain significant, mainly to address capacity constraints, tightening emissions regulations, and digitalization, including continue conversion by roads to all-electronic toll collection.

And even in areas where growth rates are expected to be low, absolute spending is likely to hold up. For example, **telecoms** capex is already high at $250 billion globally, as per our projections for 2019, and we forecast that it will stay at similar levels in 2020 and beyond, with 5G investments a pivotal driver.

That said, much of the capex is due to the battle for dominance amid technological disruption and the emergence of new platforms. As such, it represents credit risks both in terms of the outlay but also as to whether it translates into improved market positions and cash flow. A cyclical downturn also poses a risk — for example; the chemicals report highlights the risk of not being able to curtail planned investments quickly enough should economic conditions prove weaker than our base case.

**Headwinds galore**

**Trade and political uncertainty**

Of the other risks that cut across nearly all sectors, **trade disputes and political uncertainty loom largest**. The trade conflict between the U.S. and China features most prominently, but a disruptive Brexit and the failure to ratify the USMCA trade agreement also feature. There are three strands of concern here:
First, short-term effects. For example, the consumer products report highlights how the consequent extra costs for goods imported from China has been bad news for some companies unable to pass costs fully through to customers, hurting smaller speculative-grade durable and apparel companies in the U.S. and some seafood processors in Canada that rely heavily on Chinese imports. A disruptive Brexit, while not our base case, would present similar short-term challenges.

Second, the risk of escalation in trade disputes and tariffs. While the immediate risk appears to have passed, the threat of the U.S. imposing section 232 tariffs on European and Japanese auto imports has affected confidence and uncertainty around investment plans and supply chains.

Third, the risk of longer term disruption to supply chains. For example, the U.K. is currently the EU’s biggest defense spender and Brexit could alter EU defense strategy and cause the relocation of production. It has already led to divergence with regard to development plans for the next generation of fighter aircraft, potentially increasing risks for companies involved. U.S.-China trade tensions are leading corporates to diversify their manufacturing away from China, where corporates have spare capacity and skilled labor available, which could change freight transportation patterns.

Aside from trade, political risks loom large for real estate. Increasing political risk from Brexit, policy uncertainty in Latin America, growing sentiment for rent regulation in Germany, and social unrest in Hong Kong are clouding the prospects for landlords.

Credit market risks

With credit markets increasing premiums attached to the most risky credits over the past year, even as yields remained exceptionally low and the hunt-for-yield continued, it isn’t surprising that credit market risks have been flagged by some sectors in relation to access to financing and the vulnerabilities of the most speculative credits. This includes sectors already under intense pressure like retail and oil and gas, as well as metals and mining where a maturity wall looms in 2022 and 2023 and where the proportion of speculative-grade issuers is among the highest. Absent substantial changes in operating conditions, and as reflected in current ratings, sectors like this face increasing default risks even without a sharp deterioration in the economic cycle or a decisive shift in the credit cycle.

Regulation and environmental concerns

Although highly sector-specific in their nature, environmental, social/regulatory costs, and regulations loom large across many sectors. Many aren’t new, but it is striking how central these risks have become to sector credit conditions and outlooks.

There are three broad clusters of risks:

- Environmental – examples include IMO 2020 regulations reducing sulfur content to 0.5% from 3.5% in marine fuel, which has direct or indirect implications for shipping, oil and gas, airlines and CO2 emissions regulations which are relevant to utilities, autos, and cement manufacturers, among others.

- Regulatory – examples include rent regulation in EMEA, retail pricing regulation of Australian utilities, scrutiny of e-cigarettes, and the increasing attention paid to media and tech companies with regard to social media and content as well as data protection and the sanctions embedded in GDPR

- Litigation – for example, opioid litigation for health care and emissions breaches for autos.

Margin pressures

Unsurprisingly, given the burden of new regulations and costs, many sectors report pressure on margins. This is being met with cost-cutting, pressure on suppliers, and consolidation efforts, but is another example of why zero interest rates and continued
economic growth are not translating as positively as hoped for to corporate sector performance.

One new feature this year is a greater concern about labor costs apparent in some sectors. Some specific examples:

- **U.S. homebuilders** – Homebuilders in the U.S. should get some relief from lower commodity costs, but that affects less than one-third of the cost of a new home. We expect tight land and labor availability will persist, which should continue to constrain volume growth while pressuring costs.

- **European healthcare services** - Monitoring cost structures will remain key in health care services in Europe, as shortages of qualified medical staff, changing legislation in certain markets like Germany, and low unemployment in Europe are raising staff costs, which when combined with limited fee increases can hamper margins.

- **Transportation** – Shortages in key labor groups—pilots (less so in the EU), aircraft mechanics, and truck drivers—have pushed up compensation in some markets.

**M&A likely to be remain relatively subdued**

Global M&A activity fell in 2019 (see chart 7) and our industry reports suggest 2020 will see a similar subdued pattern. Sectors that have seen intense bursts of M&A such as metals and mining and telecoms are moving into a digestion and consolidation mode.

That said, as long as interest rates remain low and financing conditions remain supportive, there are certainly quite a few sectors likely to see M&A continue apace. More M&A may emerge in sectors such as autos, commercial aerospace, gaming, healthcare, real estate, regulated North American utilities and unregulated EMEA utilities.

As with capex, though, much of this potential activity is a reflection of how challenging operating conditions are for many industries, with growth low, margins under pressure, and intense disruption. On a more positive note, some companies in sectors such as capital goods are seeking to gain exposure to new technological capabilities in terms of digitalization, software and A.I.

**Chart 7**

**Global non-financial corporate mergers and acquisitions - Value of quarterly transactions by sector and share of 2019 total by sector (%)**


**Gareth Williams**
Senior Director
Head of Digital Research Strategy
London
+44 (0) 20 7176 7226
gareth.williams@spglobal.com
# Corporate sector risk and opportunity map

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Source: S&P Global Ratings.

Risks and opportunities have been simplified and standardized relative to the originals for cross-section clarity. No rank ordering is implied between the risks/opportunities.
Aerospace and Defense

Fairly stable credit quality despite some risks

What’s changed?

Grounding of the 737 MAX is disrupting the commercial aerospace market. Boeing is taking the brunt of the financial hit from the grounding so far, but the supply chain has been holding up well.

U.S. defense spending set for the next two years. Military spending should grow modestly in fiscal 2020 and then level off in fiscal 2021, supporting moderate revenue growth for most contractors.

A no-deal Brexit could disrupt supply chains in Europe. After repeated delays, firms are now as well prepared as they will likely ever be after building buffer stocks, making alternative transport arrangements and preparing for tariff and other regulatory changes.

What to look for in the sector in 2020?

The MAX returns to service. Boeing expects to begin delivering the MAX in late 2019, but we believe this is likely to be pushed into 2020.

Weak aircraft orders likely to continue. Orders for new aircraft likely to continue to be constrained in 2020 by large backlogs for popular aircraft, as well as slowing global growth and trade tensions.

More M&A. In commercial aerospace, changes in how Boeing deals with its suppliers is spurring M&A, while defense companies use it to increase capabilities and program diversity.

What are the key medium-term credit drivers?

Aircraft demand remains solid. Rising global wealth and GDP, even at a slower pace, will keep air traffic growing and airlines need to replace old aircraft.

Supply chain is a key constraint to production increases. The global aerospace supply chain remains strained, limiting the ability of Boeing and Airbus to increase production rates, especially for narrowbodies, much above current plans.

U.S. defense spending will likely level off, with Europe’s defense spending still rising. This should result in military contractors in both regions seeing moderately growing revenues.
Ratings trends and outlook
Global Aerospace and Defense

We don’t expect many rating changes in 2020 because 73% of outlooks are stable, the non-stable outlooks have a heavy negative bias. In the U.S., the negative outlooks largely result from M&A, as well as sponsor-owned companies’ failure to meet expectations for earnings growth. There could be negative rating actions on aerospace suppliers if Boeing cuts or suspends MAX production. In Europe, we consider the ratings on our large investment-grade issuers to be relatively stable, with one or two exceptions (Roll-Royce and GKN both have a negative outlook due, in part, to their relative exposure to a potential no-deal Brexit). There are several very highly leveraged, niche high yield players who could be vulnerable to any additional bottlenecks or disruption to supply chains.
Commercial Aerospace

**Key assumptions**

1. **Boeing resumes MAX deliveries in early 2020**

   Our current base case assumes Boeing receives approval from at least the FAA to resume deliveries of the MAX by January 2020. However, we expect approval from other global regulators to occur at different times, which will further delay aircraft delivery to those countries. We also expect Boeing to increase production from 42 a month to 57 by early 2021, and deliver all the aircraft it has produced during the grounding by 2022.

2. **New aircraft orders likely to remain weak**

   Aircraft orders have declined dramatically in 2019 and we expect this trend to continue in 2020. Boeing has received no new firm orders for the MAX since the grounding and is unlikely to receive any significant orders until the aircraft is flying again, likely in early 2020. Overall demand will likely remain weak due to the long wait for popular aircraft, a slowing global economy, and trade tensions. However, air traffic growth remains good, despite a recent slowdown, and the ongoing need for airlines to replace their existing aircraft with new, more fuel-efficient models.

3. **Margin and cash flow should improve**

   Although the impact on most suppliers has been modest, the MAX grounding has resulted in slower margin improvement than we had expected because many suppliers are carrying costs to produce 57 aircraft a month, which will likely not happen until late 2020 or early 2021. Margins and cash flow should improve as Boeing increases MAX production rates and suppliers reduce costs and improve operating efficiency. This improvement could be offset by pricing pressures from the original equipment manufacturers (OEMs). Similarly, cash flow should improve as the pace of production rate increases slow, reducing the need for capital expenditures and working capital.

Despite weak orders and an uptick in cancellations (almost 300 total between Boeing and Airbus in the first nine months of 2019), backlogs for most aircraft should support production-rate targets for the next 12-24 months. Therefore, we expect overall aircraft production to spike in 2020 as MAX deliveries resume, return to the level we would have expected prior to the MAX grounding in 2021 and then probably flatten out. Boeing recently announced that it would be reducing 787 production to 12 a month from 14 a month (a rate it just reached this year) at the end of 2020 due to weak demand from China, which is likely related to the ongoing trade disputes. Development delays in the new 777X are also resulting in Boeing keeping overall 777 production lower for longer than we had expected. MAX production is likely to increase to 57 month by late 2020 or early 2021, but further increases may be on hold.

Airbus is responding to its large order book by ramping up production rates for the key A320 single-aisle program, which dominates the order book. Monthly production is also stabilizing for the A350 twin-aisle program at 10 since the fourth quarter. Airbus' neo, which are more attractive to airline customers, given better fuel efficiency, have taken good traction in the market. We expect the A330 program to also benefit from increasing orders, with the neo option as the replacement cycle approaches. Airbus has reached it’s near term target of 10 A350s a month and is on track to increase A320neo production to 63 a month if supply chain issues are resolved.
Key risks and opportunities

1. Delays to MAX return to service and long term impacts

The grounding of the MAX has gone on longer than we expected and the final approval of the updated software by global regulators could be delayed beyond our current expectation. If delays continue well into 2020, Boeing could decide to further cut or even suspend MAX production temporarily. This could result in lower revenues, earnings, and cash flow for many suppliers, weakening the already fragile supply chain. The MAX grounding is also likely to hinder the aircraft certification process, increasing costs for manufacturers.

2. Brexit could exacerbate the current supply-chain constraints

In 2018, delivery numbers of both the MAX and A320neo were delayed by operational bottlenecks and delays at the engine manufactures, as well as capacity constraints further down the supply chain and quality concerns with some castings and forgings. The grounding of the MAX has enabled both CFM and the engine-component suppliers to catch up. Airbus is still experiencing delays with the A320neo due to engine supply delays, specifically for the A321 model. Overall the supply chain remains fragile and additional disruptions are possible.

3. Trade wars and slowing global economy

Air traffic in 2018 has trended below the long-term average of 5% due to trade tensions and slowing economic growth, a trajectory that is likely to continue and could accelerate if the global economy weakens further. So far, the decline has primarily hampered new orders, but airlines could start cancelling or deferring orders as earnings weaken. This could also result in more airline bankruptcies following the high profile failures of WOW air hf., Thomas Cook Airlines Ltd., and Jet Airways Ltd. in 2019. The direct impact of the trade war with China so far hasn’t resulted in a material increase in costs for suppliers.

It’s increasingly unlikely that the FAA and other global regulators will approve the updated MAX software at the same time, which will complicate Boeing’s ability to deliver aircraft already built during the grounding and new ones coming off the production line. Depending on how much of a lag there is, Boeing could decide to slow production further or even temporarily suspend production. Either of these actions could be very disruptive to the supply chain and result in financial difficulties for smaller suppliers or ones that have a very large MAX exposure. The supply chain is still strained from years of significant production increases and the introduction of new models. As many suppliers are still producing at the old rate of 52 a month, there’s also the possibility that they’ll have to reduce production after Boeing resumes MAX deliveries due to too much inventory in the supply chain.

The MAX grounding has brought significant attention to the aircraft-certification process and the role the manufacturers play in performing some of the certification tasks. This is likely to result in changes to the process, at least in the U.S., resulting in a longer and more costly certification process for all aircraft manufacturers. In addition, the regulatory authority in the country where the aircraft was built certified the aircraft in the past, and this was generally accepted by other countries. After the second MAX crash, many non-U.S. regulators grounded the aircraft before the FAA did and are insisting on certifying the updated software independently. If this trend continues, it could complicate the certification process even more for manufacturers.

The impact of the trade tensions between the U.S. and China and other countries so far hasn’t had a direct impact on the commercial aerospace industry. Higher tariffs on certain metals and parts made in China haven’t resulted in a material increase in costs.
for manufacturers. Large jetliners have not been subject to tariffs, but orders from China have likely been put on hold as talks continue. However, trade tensions have contributed to the slowdown in global air traffic growth and a significant decline in the much smaller air cargo market, which will likely remain a constraint on new aircraft orders in 2020.

We don’t expect the recent World Trade Organization decision and announcement by U.S. trade officials to impose tariffs on aircraft at a 10% rate to have a long-term impact on the market or Airbus due to the relatively moderate level of proposed tariffs, and exclusion of all aircraft and their parts assembled in the U.S., which is a significant share of Airbus’ single-aisle aircraft delivered to the U.S. market. Furthermore, a similar case brought by Europe will likely result in tariffs on U.S. aircraft in 12-18 months, eliminating the cost differential for airlines. EU trade officials have indicated they would impose tariff on U.S. goods, including aircraft, as a countermeasure, which would constrain Boeing in the European market.

Airbus has significant business operations in the U.K., including the assembly of substantially all the wings for its commercial aircraft, which are then transported to the company’s final assembly lines, notably in Toulouse and Hamburg in the EU. In addition to its own production of wings, a no-deal Brexit could disrupt the delivery schedule for engines heading from the U.K. across the channel to final assembly lines in Toulouse (for more information, see “Rolls-Royce PLC Downgraded To ‘BBB’; Outlook Negative,” Aug. 22, 2019). Airbus has recently highlighted the operational and financial risks that would arise if the U.K. left the EU in a disorderly way, without an agreement on the future trading relationship between the U.K. and EU. In a disorderly Brexit, we assume that Airbus would face disruptions to aircraft production, higher working capital investments, penalty payments to customers, and lost turnover. Airbus has mitigated the event by building a one-month buffer stock and ensuring operational readiness in terms of customs, transport, and logistics, as well as financial partners.

**Chart 14**  
Large commercial aircraft orders

![Chart 14: Large commercial aircraft orders](image)

**Chart 15**  
Large commercial aircraft deliveries

![Chart 15: Large commercial aircraft deliveries](image)

Source: Manufacturers’ websites, S&P Global Ratings
Chart 16

Base case 737 MAX deliveries and production

Source: S&P Global Ratings
U.S. Defense

Key assumptions

1. Increasing revenue as defense spending rises

Overall military spending was set by the U.S. Congress earlier this year, which will result in an increase of 3% in fiscal 2020 to $738 billion (including funding for nuclear weapons at the Department of Energy) and then a more modest bump of less than 0.5% in fiscal 2021 to $741 billion. Due to the lag between when money is appropriated by Congress and actually spent by the military, most defense contractors should see growing revenues for the next few years due to previous higher increases. Solid international demand will also bolster sales, as demand for missile defense and other weapons systems will increase in countries in the Middle East, Asia, and Europe.

2. Margins likely to moderate

The U.S. government continues to look for the best technology at the most affordable price even though overall defense spending has increased. Therefore, we expect elevated pricing pressure in this industry will persist, although it will be less onerous than in recent years. It's not clear if Boeing’s very aggressive bidding on the T-7A trainer and MQ-25A unmanned aerial refueling tanker is having a broader impact on contract pricing. Prime contractors have also been pressuring their suppliers to reduce costs as well. Most companies have worked to rationalize their cost structures in order to bid more competitively on defense programs, though much of these savings are being passed on to customers, which has limited improvement in their margins.

3. M&A increasing as shareholder returns moderate

Increased defense spending has led many firms to shift their cash deployment priorities toward M&A and internal investment, and away from shareholder returns, which is a trend that we expect to continue. However, the volume of share repurchases and dividends by the large firms will remain high, though these companies will likely choose to fund their shareholder rewards with internal cash flows. The notable exception is Boeing, which has suspended share repurchases until the MAX returns to service and the program has stabilized. Acquisitions could lead to elevated leverage if firms do not pull back on their shareholder returns in response; however, in some cases, the effect on their credit quality could be moderated by their improved scale and expanded capabilities.
Key risks and opportunities

1. Uncertainty about longer term defense spending

We expect U.S. defense spending to increase only modestly for the next few years, with the pace of growth unlikely to exceed the rate of inflation. Although the budget deal earlier this year permanently eliminates the threat of sequestration cuts, actual declines in defense spending are possible after fiscal 2021 due to competing fiscal and political priorities. There is also still the possibility of government shutdowns in the current political environment. Military priorities are also shifting from fighting terrorists in the Middle East to countering Russia and China, which could impact individual companies depending on what types of weapons or services they provide. Defense spending has not yet been a topic in the 2020 presidential election, so it is too soon to tell if military budgets or priorities will change if there is a new administration.

2. Hypersonic weapons potentially a large new market segment

Evidence that Russia and China have leapfrogged U.S. technology for hypersonic weapons (generally defined as missiles that travel faster than five times the speed of sound) has prompted a significant increase in funding in this area. The U.S. also currently has no defense against these types of weapons so funding is also being directed to developing countermeasures, including sensors and command and control systems. Although many of the programs are classified, the publicly announced contracts have already totaled in the billions, with Lockheed and Raytheon being the primary beneficiaries so far.

3. Political impact on foreign sales

Sales of weapons to U.S. allies is an important source of demand for many large contractors, but these sales can often be impacted by political issues. There have been calls from some members of Congress to ban sales to Saudi Arabia, one of the largest buyers of U.S. weapons, following the killing of a journalist last year, but so far none have been put in place. Another recent example is removing Turkey from the F-35 program, both as a supplier and a buyer, after buying a Russian air defense system.

Fiscal 2020 has started on another continuing resolution despite the budget agreement that sets overall defense spending levels and after the fiscal 2019 budget was actually passed before the year started for the first time in more than 10 years. Defense spending is often a political issue and the current environment, including the impeachment hearings and the beginning of the 2020 presidential race, is making it difficult for Congress to reach any agreement on the detailed spending bill. We believe, even a full-year continuing resolution will result in moderate revenue growth for most defense contractors.

With our expectations for flattening defense spending in the next few years, how the money is being allocated to individual programs becomes even more important for each defense contractor. The strategic shift toward countering “near peer” countries like Russia and China, as well as rogue states like Iran and North Korea, will likely result in more spending on large platforms like aircraft and ships, as well as missile defense. Other key areas include hypersonic weapons and countermeasures, electronic warfare, cyber, artificial intelligence, and autonomous systems. Both the Army and Air Force are planning to redirect funds from upgrade programs to procuring new capabilities. The recapitalization of the country’s nuclear forces will also get a lot of funding, including a new intercontinental ballistic missile, missile submarine, and air-launched cruise missile. The impact on individual companies will vary depending on which programs they are associated with.
There has been significant M&A activity in the past two years and we expect this to continue in 2020, although we still think a combination of two of the large prime contractors is unlikely. Despite growing defense spending, companies are making acquisitions to increase their range of products and capabilities or expand their customer base with the various military services, intelligence agencies, and civilian government departments. The most activity has been in the government services sector, which was hit hard by the declines in defense spending a few years ago, and where scale is important both to improve cost competitiveness and to be able to offer a broader capabilities. The impact on credit quality has varied, with the combination of L3 Technologies Inc. and Harris Corp. resulting in upgrade as it was an all-stock deal and resulted in a larger, more diversified company. Conversely, Northrop Grumman Corp. was downgraded after buying Orbital ATK Inc. because the higher leverage did not offset the modest improvement in competitive position.

Chart 17
Base U.S. defense budget

Chart 18
U.S. supplemental war funding

Source: U.S. Department of Defense, S&P Global Ratings
European Defense

Key assumptions

1. European government's defense budgets will continue to grow
As European governments modernize their armed forces and cyber threats become a common facet of modern warfare, European defense companies are trying to establish themselves as digital leaders through M&A or by seeking partnerships. We expect the capital expenditures of European defense companies to remain fairly stable at around 5% of revenue. Therefore, we anticipate that most issuers will utilize joint ventures or strategic M&A to boost their digital capabilities.

2. Digitization will continue to gather pace, presenting opportunities for some growth
Growth in the defense budgets of European countries, due to geopolitical tensions and the rising threats posed by cyberattacks and disruptive technologies, will continue to provide a supportive environment for defense companies. European members of the North Atlantic Treaty Organization (NATO) are attempting to reach the NATO spending target of 2% of GDP (currently 1.5% on average) and continue to increase their real spending on defense, which we estimate will rise by more than 4% in 2019. European governments continue to move toward achieving "strategic autonomy," which aims to reduce Europe’s reliance on U.S.-made weapons.

3. Despite Brexit uncertainty, governments and primes continue to collaborate on new platforms
Since our last ITT, and despite the threat of a no-deal Brexit, we have seen multiple examples of governments and issuers agreeing to collaborate on platforms, with the U.K. still at the table. At the top of the list—Italy agreed to join the U.K-led Tempest fighter jet project (with BAE Systems, Rolls-Royce, MDBA UK, and Leonardo S.p.a., joining up with Sweden’s SAAB AB), adding weight to what is becoming a major race in Europe to develop the next generation of fighter planes (France, Germany and Spain are collaborating on their Future Combat Air System with Airbus and Dassault Aviation SA leading the initiative). We also note Leonardo’s JV with Thales SA for next-generation satellites.
Key risks and opportunities

1. A disorderly Brexit could negatively affect supply chains
   In terms of the potential effects of a disorderly Brexit, many European defense companies are focused on how Britain's separation from the EU will affect their supply chains. Defense OEMs often have complex cross-border supply chains that would be highly sensitive to the impact of a disorderly Brexit, which could lead to immediate production delays at the OEMs due to short-term disruptions in their transport and logistics, a longer-term rebalancing of supply chains as the industry deals with the potential introduction of customs checks, and disruption caused by delays or changes in the regulatory approval process. Smaller defense suppliers would likely be the hardest hit by a disorderly Brexit because they lack the scale, resources, and liquidity to handle sudden large swings in their working capital.

2. Brexit could alter the U.K.'s role in the EU's defense strategy and lead to relocation of production
   The U.K. is currently the EU's biggest defense spender and one of the few countries that meets NATO's target spending of 2% of its GDP on defense. In fact, the country is responsible for about 40% of the bloc's current spending on defense R&D. However, there remain many unknown factors related to the aftermath of Brexit, including what role the U.K. will play in the EU's future defense strategy, whether it will have access to European research and industrial development funding, and how the cross-border movement of skilled labor will be handled. Although most existing defense contracts will likely not be affected, U.K. firms may be prevented from bidding on future EU contracts or vice versa. Some OEMs may also decide to relocate their production assets closer to their end customers and negate some of the aforementioned risks. On the other hand, some of the impact of the U.K.'s decision to leave the EU has already been seen in the bloc's decision to raise its military budget for the first time in six years, after the U.K. dropped its opposition to the plan, with the creation of more structured defense cooperation through the EDF and DFPIP.

3. A change in U.K. government could impact foreign sales
   Just like in the U.S., weapon sales by the U.K. and the rest of Europe to their allies is an important source of demand for many large contractors, but political issues often pose difficulties. There have been calls from some U.K. and European political parties to ban defense exports to Saudi Arabia. We note that the looming general election in the U.K. could see a new government deciding to change policy in this regard. U.K. defense prime BAE Systems generates about 13% of its group sales from the Kingdom of Saudi Arabia, but BAE is mostly either operating under a government to government contract, providing support on the ground in KSI or operating under JVs with KSI companies.
Related Research

- Boeing Co. Outlook Revised To Negative From Stable On Reports It May Have Misled FAA On 737 MAX; Ratings Affirmed, Oct. 22, 2019
- Boeing Co., Sept. 4, 2019
- United Technologies Corp. Ratings Placed On CreditWatch Positive On Proposed Merger With Raytheon Co., June 11, 2019
- Rolls-Royce PLC Downgraded To ‘BBB’; Outlook Negative, Aug 22, 2019.
- Wesco Aircraft Holdings Inc. On CreditWatch Negative On Proposed Merger With Pattonair; New Debt Rated, On CreditWatch Oct 18, 2019

This report does not constitute a rating action.
Industry forecasts

Global Aerospace and Defense

Chart 19 Revenue growth (local currency)

Chart 20 EBITDA margin (adjusted)

Chart 21 Debt / EBITDA (median, adjusted)

Chart 22 FFO / Debt (median, adjusted)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Cash, debt, and returns

Global Aerospace and Defense

Chart 23
Cash flow and primary uses

Chart 24
Return on capital employed

Chart 25
Fixed versus variable rate exposure

Chart 26
Long term debt term structure

Chart 27
Cash and equivalents / Total assets

Chart 28
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
S&P Global Ratings

Industry Top Trends 2020

Autos

Higher rating pressure on amid gloomy industry outlook

What’s changed?

Global auto sales to remain stagnant. We now expect no growth for the industry in 2020 and 2021. Any recovery hinges on a modest revival of the Chinese market, and would come no earlier than 2021 in our view.

Geopolitical risks to stay for longer. An ultimate resolution of the U.S.–China trade is not in sight. Brexit uncertainty remains and the NAFTA-replacing USMCA trade agreement has not been ratified.

"Fallen angel" risk increases. We see a rising negative rating bias and an increasing number of ratings in the low 'BBB' category, mostly for the OEMs, linked to stringent CO2 regulations and shifts in consumer preferences.

What to look for in the sector in 2020?

Co2 challenge and Brexit developments in Europe. In 2020 we will focus on OEMs’ powertrain mix strategy and monitor market response.

Slightly higher recession risk in the U.S. Market concerns in the U.S. are all about recession risk building up toward the end of 2020, which we now estimate at slightly higher odds of 30%-35%.

Uncertain recovery of the Chinese car market. Decelerating economic growth and weak consumer confidence will continue to weigh on auto sales, only partially mitigated by government stimulus efforts and clarity on emission standards.

What are the key medium-term credit drivers?

Free cash flow generation and conservative financial policies. We expect balance sheet protection to be high on the agenda of OEMs and suppliers in view of the protracted market uncertainty.

Capacity to deliver on ambitious restructuring plans. Due to inflexible R&D and capex needs to support transition to e-mobility, many auto OEMs and suppliers need to step up other cost-reduction efforts.

Ability to continue to invest in R&D. The ability to balance between product-mix improvement, cost control and investment into technology enhancement will be important rating drivers.
Due to weakened market momentum and no signs of an upturn, the rating outlook for the global automotive sector (both OEMs and suppliers) is turning increasingly negative. We expect this trend to continue in the current quarter. The rising negative outlook bias reflects higher operational and financial difficulties amid macro uncertainties, and an evolving and more challenging competitive landscape. This trend could be exacerbated if the global demand softness turns out to be weaker or longer than we currently anticipate. Cushions in financial risk profiles and liquidity for some larger players has so far offset these challenges to a certain extent however.
Auto OEMs

Key assumptions

1. Virtually no growth for global auto markets over 2020-2021

Global economic growth is likely to continue to moderate during the next one to two years, as weak manufacturing activity and geopolitical tensions hurt consumer confidence, holding back purchases of big-ticket items. We have therefore lowered our assumption for light vehicle sales in the major markets and we expect virtually no growth in global light vehicle sales over the next two years.

2. Topline growth mainly relying on product and pricing mix effects

With soft demand and dim prospects for volume growth, automakers need to speed up new-model launches and optimize product mix to protect pricing power and expand their revenue base. Stricter environmental regulations drive new product pipelines in Europe and China where competitive pressure will rise. In the U.S., automaker profits will remain highly dependent on the truck segment (CUVs, SUVs and pickups), which will continue to dominate the market.

3. Limited chance of margin uptick over the next two years

We expect a combination of factors, including intense industry competition, trade disputes, higher production and R&D costs for electrification, and high restructuring costs, to keep margins under pressure for automakers.

The march toward 100 million global annual vehicles sales has slowed

Sales of global light vehicles (passenger cars and commercial light vehicles) fell a cumulative 5.6% in the year to Sept. 30, 2019, with the most relevant decline observed in China (i.e. -10.3%, according to LMC). Sales declined in all major markets with the exceptions of Japan and Germany, which reported pick-ups of 2.5%-3.1%.

Economic conditions have worsened globally as a result of the trade war between the U.S. and China. The risk of a prolonged German weakness and a recession in the U.S. will further dampen consumer confidence and, consequently, prospects for auto sales over the next two years. In light of current conditions, global auto manufacturers’ hopes for ever-increasing sales in 2020 and 2021 now appear to be dashed.
We now expect global light vehicles sales growth of 0%-1% over 2020-2021. Across the main markets we see:

Modest China recovery (1%-3% growth): After two decades of rapid development stirred by supportive government policies, China’s auto market is unlikely to see a return to hyper-growth any time soon. We anticipate decelerating economic momentum, higher household leverage, and slowing disposable income growth will continue to exert a negative influence on consumer sentiment. Nor do we expect much in the way of targeted stimulus, given local governments’ fiscal constraints, and the central government’s larger tolerance for economic slowdown.

Flat vehicle sales volume in Europe (West and East): Despite increasing concerns over economic conditions next year in Germany—which has so far been the only growing auto market in 2019 (+2.5% in September year-to-date according to LMC)—a further deterioration of the trade balance is less likely. Brexit remains a source of uncertainty in Europe mainly because we don’t spot progress on any trade-related agreement between the EU and the U.K. Given the U.K. market has been shrinking for the past three years, however, we are confident of a stabilization at least, absent a no-deal Brexit. Downside risks to European growth remain; for example if there were a surge in unemployment, though this is not our base case.

1%-3% volume declines for the U.S.: For the U.S market, we anticipate light-vehicle sales volume will drop by nearly 3% year-over-year to 16.4 million units in 2020 and further to 16.3 million units in 2021, the lowest level since 2014. This is anchored on a higher probability of an economy recession (12 months out) to 30%-35%, compared with our previous assessment of 20%-25% in May.
Topline growth mainly relying on product and pricing mix effects

With volume growth out of sight, automakers will depend on refreshing the product mix to defend pricing power and topline growth. An offensive of hybrid and battery electric vehicles will hit the European market as from 2020, with Volkswagen (across segments) and Tesla (in the premium segment) identified as the competitors to beat.

The EU is heading toward a material tightening of CO2 thresholds in 2021 (average for the market CO2 95g/km). This raises the question of whether the market will be ready to absorb the number of low-emitting vehicles that OEMs need to deliver in order to comply with their company-specific targets. The combination of increasing regulatory costs and soft market conditions will be tough for Western European markets.

In the U.S, we expect rising demand for light trucks--including SUVs, CUVs (crossover utility vehicles), minivans, and pickups--will lower passenger car sales to about 30% of total LV sales in 2019 and 2020 compared with over 50% in 2012. Automakers are set to shrink their passenger car exposure further, in our view.

In China, we expect average topline growth of 2%-4% for OEMs in 2020-2021 driven mainly by product launches that target the higher-price range. Premium brands such as BMW, Lexus or Daimler outperformed in 2019, with estimated volume growth of around 10% in the first nine months of 2019 (Source: China Passenger Car Association). We expect the trend to extend into 2020, on the back of continuous consumption upgrades and the penetration into the mid- to high-end market of localizing compact models.

Limited chance of margin uptick over the next two years

With only a few exceptions, OEM operating margins generally took a hit in the first half of 2019 already and issuers are guiding for stability, at best, of profitability and earnings. Ongoing restructuring costs and non-deferrable investments in technology upgrades will make it very hard to improve profitability. Our forecast of slightly rising margins in 2020 versus 2019, is mainly driven by our view of non-recurring costs next year, such as litigation related costs.
The electrification megatrend brings with it a squeeze in margins, driven by high unit costs linked to batteries and the economic costs of massive investments over recent years.

Chart 36
**Average battery price over the years ($/kWh)**

Source: Bloomberg NEF

Adding to uncertainty of market acceptance of electrified mobility is the lack of an extensive and far-reaching policy framework sustaining the transition in Europe. The cost of this transition weighs almost entirely on the industry and on its average profitability.

In the U.S, electrification is nowhere near as imminent or significant. We still see chances of a modest improvement in profitability for U.S. automakers relative to 2019, due to global rollouts of new truck platforms over the next 24 months, ongoing cost reduction, and restructuring actions. Slowing demand will intensify price competition for their products, across the globe. We also incorporate increasing engineering expenses for technology advancement in relation to autonomous driving, mobility, and electrification—which will limit profitability improvement beyond 2021.

In a stabilizing market in China, margins of the overall industry will remain under pressure from intense competition, due to the wider availability of new energy vehicle (NEV) models. We expect some benefits to derive from higher R&D and capex synergies with global OEM partners targeting localization of NEV models. At the same time, we expect Chinese OEMs to introduce new proprietary models that target a higher price range, dispose of nonperforming proprietary brands, and to improve utilization by realigning production capacity. In addition, we expect largely stable dividend income from their joint ventures with global OEM partners, which is a large component of EBITDA for some companies.
Key risks and opportunities

1. Headwinds from exacerbating trade conflicts

Without comprehensive solutions, trade tensions are unlikely to subside in the near term. Conflicts including U.S.-China, U.S.-Europe, and the U.K.-EU dampen global growth and disrupt supply chains.

2. Industry transition to CO2-neutral mobility sees challenges

Non-deferrable capex and R&D-linked electrification, connectivity, and autonomous driving will limit the scope of restructuring to accommodate softer market conditions. We thus expect a longer time horizon before spotting the benefits in the operating performance of OEMs.

3. Full mergers vs partnerships

Consolidation is more likely in tougher markets. Existing partnerships have failed to lift profitability for OEMs involved, or provide other evidence of resilience to disrupting trends in the automotive industry. Closer ties might be needed to withstand disruption.

Trade conflicts poses a stumbling block for the entire industry

The U.S.-Sino trade conflict poses a stumbling block to the entire industry, with China being the world's single-largest auto market and a vital link in the global supply chain. Tariff-related disruption in the supply chain is raising operational difficulties, increasing manufacturing costs, and slowing production.

An exacerbation of the trade conflict between the U.S. and China would weigh on those European automakers exporting vehicles to China out of the U.S. We expect the BMW Group to be among the firms that would be affected by incremental tariffs between the U.S. and China as it continues to ship SUVs models from its U.S. production facilities to China and other countries. Daimler AG derived 28% of its unit sales of Mercedes Benz Car in China in 2018, but over 70% were produced locally in China. Some of the SUVs (GLE, GLS) produced in Daimler's U.S. production facility in Alabama are exported to China and could be hit by incremental tariffs. However, Daimler is expanding its local production in China and will produce the first model of its EQ brand there by the end of this year. Tariffs imposed on Europe-sourced cars and parts into the U.S. would be a game changer for the entire industry, including Fiat Chrysler Automobiles (FCA) and Volkswagen AG (see "Trump's Tariffs Could Hurt EU Carmakers--Not the Economy," published on RatingsDirect on March 26, 2019)

For China, the auto market is essentially self-sufficient, with low car import from and export to the U.S market. Therefore, the direct impact on the Chinese consumer seems quite limited. What's hurting the market is low consumer confidence, which is affected by the trade tensions. The uncertainty also clouds the prospects of market recovery, and to a certain extent, slowed the expansion of fixed asset investment into the local auto industry to 1.8% in the first nine months of this year, from 10.2% in 2017 and 3.5% in 2018. We believe some manufacturers are cutting or delaying capital spending. For the manufacturers we rate, we haven't yet seen any significant scaling back of investment, given their positions generally as industry leaders with low leverage. In some areas, they are targeting capacity expansion.

In our view, trade tensions between the U.S. and China are unlikely to have a meaningful impact on U.S. sales. However, other trade-related risks, including Section 232 tariffs on European and Japanese imports, and a potential reemergence of Mexican tariff threats
(albeit unlikely), would have an adverse impact on automotive demand because most of these costs will be passed on to consumers.

At this point, we see a limited effect on the ratings of U.S. automakers Ford Motor Co. (BBB-/Stable/A-3) and General Motors (BBB/Stable/--) because of their lower reliance on exports and higher level of localized content relative to foreign automakers. An indirect effect could be the challenges for U.S OEMs to seek growth due to tariff pressures and potential nationalism leading to anti-American sentiment in the China market. For California-based Tesla (B-/Positive/--), increased tariffs would add significant incremental margin pressure. Incorporating Tesla's overseas transport costs and import tariffs raises, the company operates at a 55%-60% cost disadvantage compared with the same car produced in China. Also, the trade war increases the likelihood for higher import duties on certain components used in Tesla's products that are sourced from China, which would further pressure margins. However, we expect tariff pressures to lessen once Tesla begins production at the Gigafactory. Also, we project lower costs from more simplified production processes and a local supply chain.

**Industry transition to CO2 neutral mobility sees challenges**

In Europe, the transition to CO2-neutral mobility is exclusively driven by regulation. Increasing penetration is well under way in countries with generous subsidy schemes and favorable tax regulation, which substantially diverges from country to country. OEMs need to deliver on regulatory diktats and create the market demand for electric cars. Regulators will not put targets on hold to accommodate weaker market conditions. Thus cost reduction measures will not likely extend to R&D and capex in our view, and the benefits of ongoing restructuring could take longer time to materialize. European frontrunners in electrification typically spend the equivalent of 6%-10% of auto revenues on R&D per year, and 5%-7% on capex.

The Chinese government has set a target for NEV sales to account for 20% of total auto sales by 2025, from the current 5%. This means a compound average growth rate of around 25% during the period (assuming no growth in total auto sales from 2022), which we deem ambitious. Can the market absorb this shift? A majority of NEVs are sold to business customers (such as car hailing/rental companies). This trend has some support in large urban areas, where mobility services are gaining appeal as an alternative to car ownership. However, a lack of charging-station infrastructure distracts from NEVs' appeal. The Chinese NEV market has been traditionally dominated by Chinese OEMs with all top-10 players being local manufacturers, and representing over 70% of market share. Most of them have a focus on battery-energy vehicle and target the lower price range. These OEMs will face mounting competition from other technologies and mid- to higher-end models, after NEV subsidy withdrawal in 2020. Foreign OEM brands could start to gain traction in this field due to their battery and vehicle technology strength. The anticipated launch of mass production of the Tesla Gigafactory in Shanghai in the fourth quarter of 2019 will likely kick off such competition.

In the U.S. market, we expect the combined share of electric vehicles (including plug-in hybrids) to remain under 3% of overall auto sales in 2020 despite significantly increased sales for Tesla's models 3, S, and X. This will lead to some market-share losses for some competitors in alternate fuel segments. Because of ongoing customer concerns regarding range, price, and charging infrastructure, we expect some downside risks to our prior base-case assumption, under which electric vehicles (including plug-ins) approach 10% of light-vehicle sales by 2025. Customer concerns are compounded by the falling cost of ownership for non-electric vehicles, given lowered gas prices, reduced tax incentives for cleaner alternatives, and the high likelihood that the Trump administration will roll back fuel-efficiency targets for 2025.
Full mergers vs partnerships

We had anticipated industry consolidation as a response to disruption. Europe faces among the toughest market dynamics over the next two years, and has one of the highest concentrations, given the two largest OEMs control 40% of the market. In a no-growth environment characterized by punitive regulation, pressure on margins and technology disruption, cost management and delivery on strategy can become overly challenging and push OEMs toward strong partnerships (VW-Ford) or full mergers (failed Renault-FCA attempt followed by merger talks between FCA and Group PSA). We see a sound rationale in this trend provided it does not weaken balance sheets. Economic benefits from partnerships do not stand out very clearly in financial performance. One question is whether aging partnerships, such as the alliance between Renault-Nissan-Mitsubishi, can still provide a valid response to exceptional pressure on industry fundamentals. This is not just cyclical. Rather, it's a deep transformation of a traditional manufacturing sector into a service oriented one with a strong technology content.

That is whether partnerships can still provide sufficient scale to generate material cost benefits for the parties involved. We tend to believe that in situations characterized by a dominant, large-scale player, partnerships might still be viable. Where the initial scale is lower, full-blown mergers might be the better strategy to maximize synergies.

In China, we've seen increasing risk of smaller and weaker players being phased out of the market. Yet large horizontal mergers remain unlikely in our view. Large OEMs, such as China FAW Group Co. Ltd., are setting up car-hailing joint ventures with peers, so as to increase sales volume (especially NEV sales) and to extend their value chain vertically. This represents a new form of strategic alliance among industry players versus the traditional merger—which could elicit potential resistance from local governments in consideration of local tax revenue and industry-chain effect. At the same time, the Chinese government would allow foreign OEM partners to increase their stake in local joint ventures (JVs—to support tech transfers). The relationship between BAIC Motor Corp. Ltd. and Daimler was further enhanced this July through the acquisition of a 5% stake in Daimler by BAIC Motor's parent, Beijing Automotive Group Co. Ltd. (BAG).

As China is the only single market where we see the potential for growth, we believe tightening partnerships and larger stake in JVs are credit supportive.

We expect the U.S. automakers to collaborate on battery development for electric vehicles and autonomous driving capabilities. GM and Honda will continue their joint development of a new purpose-built shared autonomous vehicle. The companies’ ability to leverage its recent investments in these areas would be an upside to our base-case forecast assumptions beyond 2021. Until then, we view it as neutral to the credit rating, assuming GM spends approximately $1 billion in the GM Cruise segment in 2019. Ford’s recent announcement that it will share costs and expertise on design and engineering with Volkswagen—to develop commercial vans and pickups globally and also its access to Volkswagen's MEB electric vehicle platform—will help Ford to overcome delays in its electrification roadmap.
Auto Suppliers

Key assumptions

1. Limited growth in auto suppliers' topline in the next two years

Global light vehicle sales will fall short of 100 million annual sales--by approximately 8 million in 2020. We expect virtually no growth for 2020 and 2021, thus constraining revenue growth for suppliers.

2. Supplier margins under pressure

Declining volumes, intensifying price competition, foreign exchange volatility, rising raw material costs, and restructuring costs make it harder to meet business plan ambitions over 2019. We anticipate margins will remain under pressure throughout 2020 and 2021, provided no meaningful recovery of industry conditions.

3. Financial policy decisions likely to shape credit profiles

We expect negative rating pressure in the down cycle, but financial policy can be a decisive factor for credit quality.

A limited scope to grow revenues

Our flat unit auto sales forecasts for 2020 bodes ill for auto suppliers. That said, we see some potential for revenues to stabilize in 2021. In line with unit sales trends, we expect the highest decline in auto production in the Chinese market--at 7%-9% in 2019. A number of OEM volume producers have drastically restructured their operations in the Chinese market, including by taking out production capacity. Suppliers with a high percentage of sales from China and heavy exposure to volume producers such as General Motors, Ford and PSA should particularly feel the impact in 2019 and the coming years; this includes Schaeffler AG, Robert Bosch GmbH, Autoliv Inc. and Valeo S.A. We also anticipate European and U.S. production rates will decline throughout 2019 and 2020, but at a more moderate pace compared with the Chinese market.

In the U.S., some rated auto suppliers will likely increase sales in 2020, due to the impact of pricing, mix, changes in market share, and acquisitions. For example, Aptiv PLC has been growing faster than the industry due to new programs wins, market positioning, and ability to price appropriately. Dana Inc. has grown faster than the market due in part to acquisitions and the successful conversion of backlog orders. Furthermore, tire makers and other aftermarket issuers have much lower exposure to auto production. The ability of these issuers to raise prices to cover past increases in raw material costs and tariffs is the more dominant factor at play over the next year.

For the few rated Chinese auto suppliers, we haven't seen order cancelations in 2019, but order delays are quite common.

In Brazil, auto sales should remain solid in 2020, recovering from the recent economic downturn. But production and sales could be hurt by falling exports to crisis-hit Argentina. This is because Argentina is the principal destination for Brazilian vehicles production. Exports slumped 35% year on year in August 2019. We expect weakness through into next year.

In Mexico, the risk is slower-than-expected economic growth in the U.S. This would result in sluggish consumption, and would eventually affect pent-up U.S. demand for light
vehicles. However, we continue to expect auto sales growth at about 3% in 2020 from historical growth of 5%-10%, supporting demand for auto parts.

**Margin threats push restructuring initiatives**

Dim demand outlook, increasing price competition, higher input costs, elevated R&D expenses, additional plant relocation cost or sourcing reconfiguration: these factors work together to the detriment of auto suppliers’ margins. Effective cost reduction and improved product mix are key defenses.

A number of auto suppliers have markedly stepped up cost saving initiatives over recent quarters. Continental AG announced one of the biggest restructuring programs, which will impact up to 20,000 jobs worldwide by the end of next decade. Other large global auto suppliers such as Bosch, ZF, and Schaeffler are also stepping up restructuring efforts through plant closures and headcount reductions, while imposing more stringent cost control. Nevertheless, we foresee continued margin pressure for global auto suppliers as intensifying pricing pressure add to margin dilution. We also expect costs for cost restructuring programs to weigh on operating margins and free cash flow in the coming years.

We see a few suppliers bucking the trend so far, such as Faurecia SE and Kongsberg Automotive ASA, which have shown more resilience than average. We attribute this to proactive restructuring efforts in recent years, but we also note the groups lack exposure to the traditional powertrain business that dragged on other suppliers’ margins. Japan's Denso Corp. and Aisin Seiki Co. Ltd. have also been relatively resilient. This is mainly due to the solid business performance of Toyota.

Producers with powertrain operations will likely see continued margin pressure. This is due partly to elevated R&D expenses. Another issue is tougher pricing negotiations with OEMs, many of which face their own margin issues, due to a lack scale on their electrified models.

In the U.S., for most of our large tier-1 auto suppliers, we expect steady profitability under our base-case, with a few exceptions related to firm-specific underperformance. Unless there is an economic downturn and a substantial decline in light-vehicle demand, R&D as a percentage of sales, margins, and capex as a percentage of sales will not move that dramatically. We don’t see tariffs on Chinese imports as having a materially adverse effect on U.S. tier-1 auto suppliers. For example, suppliers such as Adient PLC (Aptiv, BorgWarner Inc., the Goodyear Tire & Rubber Co.), and Tenneco Inc. (manufacture in the country or region where they sell and the impact so far has not been material. Moreover, even though many firms make where they sell, they may need to move their manufacturing footprint because their customers may need to resource their supply chains at more favorable locales. The recent trend of declining U.S. imports of auto parts from China suggests that some suppliers are resourcing; moreover, these would likely be the tier-1 players who are able to tap alternative sources more easily due to their larger size and geographic reach.

Smaller U.S aftermarket auto suppliers suffer more because they import a substantial percentage of their products from China. Tariff-related disruption in the supply chain is raising manufacturing costs, slowing production, and, hence diluting margins. While aftermarket suppliers are able to offset a part of the tariff impact by getting concessions from Chinese suppliers, the majority of the tariffs must be offset through price increases or sourcing from other countries. Both of these alternatives take time, and large price increases to major retailers with strong bargaining power, such as Autozone Inc. and Advance Auto Parts Inc., can be quite challenging. It’s true, though, that these aftermarket suppliers dependent on China for their components are similarly situated, and over a longer time period will have to pass these higher costs to the consumer. At that point, the degree of differentiation could be the extent of sourcing from China. These
companies tend to have higher leverage and weaker cash flow, and hence generally are in the 'B/B-' category, typically with negative rating outlooks.

For the rated Chinese auto suppliers, we expect their EBITDA margin in 2019 to contract on lower production utilization, and to tick up slightly in 2020 and 2021 in consideration of product mix change and improvement in operating efficiency. Rated companies are cutting labor costs, improving product standardization, and increasing production automation. They are also reducing or delaying capital spending, in production bases in China as well as overseas.

Financial policy decisions likely shape credit profiles

For Europe-based suppliers, operational underperformance and negative discretionary cash flow generation have reduced headroom for a number of issuers. This is reflected in the increased negative outlooks and downgrades over the past year, among them a number of the prominent issuers in the sector, including Autoliv, Bosch, ZF, and Valeo.

While a number of companies have engaged in bolt-on and midsized deals over recent years, we have not seen larger transformational acquisitions except for ZF Friedrichshafen debt-funded acquisition of WABCO for $7.4 billion.

Given the challenging industry outlook, we would now anticipate that issuers will act more carefully when it comes to larger debt-funded acquisitions. Instead, companies are likely to focus on cash preservation, with careful investment decisions, and potential cuts in returns to shareholders. Also likely are continued efforts to realign portfolios through disposals and spin-offs, such as the recently announced spin-off of Continental's powertrain operations, Vitesco Technologies, expected for 2020.

We also see such strategic realignments in Japan. Aisin Seiki is now planning to integrate its 56%-owned subsidiary Aisin AW Co. Ltd. to enhance its competitive position in its mainstay automatic transmissions (AT). Also, Honda Motor and Hitachi Ltd. recently announced plans to conduct management integration between Honda's group suppliers and Hitachi's automotive component subsidiary.

The rated Chinese suppliers will maintain prudent financial policy, in our view, with stable or declining capital spending and a low likelihood of acquisition activities. Given their low leverage, ratings outlooks are mostly stable. However, downside risks will escalate if global auto demand continues to weaken due to further economic slowdown or a prolonged trade war.

In Latin America, supplier companies have aligned capex intensity to the auto industry's technological evolution to electric vehicles. This allows them to maintain strong operating cash flows and abstain from incremental debt.
Key risks and opportunities

1. Trade war disrupts the supply chain

Global auto suppliers could face considerable pressure from prolonged trade disputes, given potential disruptions to supply chains. Potentially adding to the burden are higher raw material costs, and additional expenses for plant relocations if OEMs reconfigure supply chains.

2. Industry transition provides risks and opportunities to business models

The auto industry's transition toward electrification, autonomous driving and connectivity could drive some suppliers out of the market. Top suppliers will need to spend considerably on technology upgrades and business segments realignment.

3. Potentially weaker funding access

Funding access is an additional risk, as the clouded industry outlook lowers creditor confidence on the suppliers. Industry consolidation may pick up.

Supply-chain uncertainties

Many auto suppliers have production bases in local markets, which provides a natural hedge. For instance, we do not see tariffs on Chinese imports as having a materially adverse effect on U.S. tier-1 auto suppliers since they typically manufacture in the country or region where they sell. Likewise, we would expect European suppliers to mitigate the impact from increased tariffs between the EU and the U.S. thanks to their high degree of regionalism.

However, we believe that the indirect consequences of prolonged trade disputes could be more severe. Suppliers may need to move their manufacturing footprint because their customers may need to resource their supply chains to a more favorable locale. The recent trend of declining U.S. imports of auto parts from China suggests that some suppliers are resourcing; moreover, they would likely be the Tier 1 players who are able to tap alternative sources more easily due to their larger size and geographic reach. Premium OEMs would likely rise car prices for end consumers and may lose volumes; which would also indirectly affect suppliers.

For rated Chinese suppliers, they supply products to global automakers with some 30%-60% of direct exposures to the U.S. market. They are trying to shift some of the production out of China. However, there are limits to this strategy, given China's well developed steel and aluminum industries provides good quality and value-for-money raw materials. Well-trained Chinese labor is also hard to replace in a short period of time. All these make the auto suppliers' operations in China highly vertically integrated and hard to replicate elsewhere.

In Japan, Denso and Aisin are integral to Toyota group strategy and they supply core, high-value-added auto components which are difficult to substitute.

In Mexico, we believe the USMCA will not have meaningful short-term implications for the operations of the companies in the region. The new agreement (once ratified by each countries' legislatures) largely preserves the existing cross border supply-chains and trade framework. We consider the level of supply-chain integration in the North American auto industry to protect the competitive position of the Mexican companies to some extent.
Industry transition provides both opportunities and threats to existing business models

The auto industry's transition toward electrification, autonomous driving, and connectivity provides both opportunity and threat to auto suppliers, depending on the segments they serve. Auto suppliers will play a key role in such transitions by adapting their product offering and providing innovative solutions to OEMs at the best cost. This requires large investments either in R&D to develop new capabilities in-house or in M&A activities to speed up acquisition of new technologies. Partnerships represent another route to develop new products; this route has the advantage of reducing upfront investments for projects with uncertain or long-dated returns.

We expect increasing interest in interiors as cars become more autonomous. This will benefit interior-components suppliers, in our view. On the other hand, powertrain-related suppliers may need to adjust product offerings toward electrified cars to mitigate lower volumes from traditional-engine powertrains as OEMs push electrified models.

The mechanics of electric-powered vehicles are less complicated than internal combustion engines (ICE). This means fewer parts, and hence fewer suppliers needed. The majority of the traditional auto supplier segments linked to the ICE powertrain will eventually face obsolescence, albeit at least not until 2030 for those that make appropriate investments to commercialize newer technologies. For instance, several auto suppliers that focus on powertrain-related segments have added in-house electrodynamic capabilities and in-house motor and power electronics capabilities. This enables them to be able to electrify both drive applications – leading to higher content, at higher margins. As such, organization restructure is likely to devote resources to the electrification-related area. R&D costs will also be material for auto suppliers, with the majority of them fully committed to upgrade technology.

Funding could get harder

Industry headwinds cloud funding access. Smaller suppliers will struggle to survive while larger players face rising investment burdens. Heated-up competition for new technologies requires large upfront spending to capture growth opportunities. We hence expect auto suppliers to continue to rationalize their product portfolio to free up cash and direct more resources to areas with greater growth potential.

Meanwhile, mergers and the establishment of strategic alliances are more likely, to share the cost burden and in some cases to leverage partners' technology advantages. For instance, the recent joint venture between Hyundai and Aptiv is likely to advance their development of production-ready autonomous driving systems for commercialization of level 4 and 5 self-driving technologies. Such deals reinforce the need to partner in order to achieve shared vision of making mobility more safe, green, connected, and accessible.
Related Research

- Global Trade At A Crossroads: Global Auto Industry Faces Long-Term Fallout If U.S.-China Detente Dissolves, Oct. 17, 2019
- U.S. Auto Sector Faces Bumpy Roads Ahead With Rising Recession Odds And Falling Demand, Oct. 16, 2019
- Global Auto Sales Will Stay In The Slow Lane For At Least The Next Two Years, Sept. 17, 2019
- Will Stimulus Move The Needle On China's Sluggish Industrials?, Sept. 17, 2019
- German Carmakers Can Still Win The Electrification Race- At A Cost, Sept. 9, 2019
- In Europe's Auto Market It's All About Curbing CO2 Emissions, June 17, 2019
- Trumps Tariffs Could Hurt EU Carmakers Not the Economy, March 26, 2019

This report does not constitute a rating action.
Industry forecasts

**Auto OEMs**

**Chart 37**

Revenue growth (local currency)

- **EBITDA margin (adjusted)**

- **Debt / EBITDA (median, adjusted)**

- **FFO / Debt (median, adjusted)**

**Auto Suppliers**

**Chart 38**

Revenue growth (local currency)

- **EBITDA margin (adjusted)**

- **Debt / EBITDA (median, adjusted)**

- **FFO / Debt (median, adjusted)**

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. OEMs—Original equipment manufacturers. FFO—Funds from operations.
Cash, debt, and returns

Global Autos

Chart 39
Cash flow and primary uses

Chart 40
Return on capital employed

Chart 41
Fixed versus variable rate exposure

Chart 42
Long term debt term structure

Chart 43
Cash and equivalents / Total assets

Chart 44
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Industry Top Trends 2020

Building Materials

The cycle has peaked and business conditions are weakening

What’s changed?

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

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

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

What to look for in the sector in 2020?

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

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

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

What are the key medium-term credit drivers?

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

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

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

November 20, 2019

Authors

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

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

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

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

Danny Huang
Hong Kong
+852 2532 8078
danny.huang@spglobal.com
There are a lot of ratings in the ‘B’ category due to there being many smaller and highly leveraged issuers owned by financial sponsors. North America and to some extent Western Europe have the largest number of ‘B’ category ratings due to the prevalence of financial sponsors and private equity investment in these regions. Ratings are predominantly stable, but negative outlooks have increased compared with 2018 due to slowdowns in most regions. We are seeing negative outlooks prevail in Europe, mainly due to relaxed financial discipline at some investment-grade companies, and the aggressive capital structures of a few highly leveraged players. The outlook bias is negative and has worsened compared with 2018, particularly in APAC and Latin America.
North America

Key assumptions

1. **Housing starts are stuck at 1.3 million**

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

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

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

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

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

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

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

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

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

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

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

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

2. Acquisition activity is still muted

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

3. Tariffs are the big wildcard for 2020

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

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

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

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

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

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

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

**Key assumptions**

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

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

2. **We foresee no progress on margins.**

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

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

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

**Most European markets have significantly decelerated in 2019**

In parallel with lower GDP growth in Europe of 1.3% in 2019 and 1.8% in 2020-2021, compared with 2.2% in 2018. According to Euroconstruct, European construction output will grow 1.9% in 2019, down from 3.1% in 2018 and 4.2% in 2017. Growth will likely be even slower in 2020-2021, at 1.5%. We expect that the infrastructure segment will lead the European market in the next three years, with average annual growth of more than 3%—sustained by some infrastructure renovation programs announced in continental Europe—compared to the weaker performing building sector (1%). We expect Eastern Europe to post higher growth than Western Europe on average, reflecting better demographic fundamentals and lower market saturation. We anticipate very limited growth in Germany and France in particular in 2020-2021. We also foresee stable or moderately growing prices in the region, in line with CPI. Most building material companies that we rate benefit from diversified geographic exposure outside Europe, namely in the U.S. and APAC, and will likely continue posting better trading performance through 2019-2020 compared with companies with local exposure.
We doubt companies will be able to further improve margins in 2020-2021. In 2019, most large building material players in EMEA have benefit from fuel- and power-price tailwinds, which has limited cost inflation and helped companies preserve or slightly increase EBITDA margin by around 17.4% on average. Most of the benefits related to cost synergies from 2015-2016 M&As, and cost-cutting programs announced in the past few years, should have borne fruit. This means additional room for cost optimization will be fairly limited in the next couple of years. In our base case for 2020 we assume overall cost inflation of 3%-4%, which balances the much higher increase in costs in emerging markets and the U.S. compared with Europe. Some companies in certain more-commoditized segments, such as cement, may be unable to fully pass cost inflation through to end-consumers ahead of slowing volumes. As result, we forecast that margins will remain almost stable in 2020, but we could observe a moderate decline for companies with significant energy cost consumption or exposure to highly competitive markets with excess production capacity.

Chart 54

Evolution of large EMEA Building Materials issuers' profitability

Source: S&P Global Ratings. Companies included are: Buzzi Unicem, Compagnie de Saint-Gobain, CRH, Geberit, HeidelbergCement, LafargeHolcim, Legrand, Rexel, Wurth.
Still-easing financial discipline and economic slowdown will limit rating upside

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

Key risks and opportunities

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

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

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

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

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

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

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

Building materials issuers have previously seen rapid EBITDA declines when the market has taken a turn for the worse. High leverage, in turn, leaves less room for building materials issuers to maneuver when under stress. Virtually all of our speculative-grade building materials issuers now have fairly aggressive, covenant-lite debt structures in place, and we have noticed leverage gradually rising, particularly for some private-equity-owned issuers. This increased leverage has sometimes resulted in weaker credit metrics and lower ratings. We also note that most building materials players in the investment-grade category have increased shareholder remuneration in 2014-2019 through higher dividends and share buybacks (see chart below), or increased acquisition and capex, which does not leave much rating headroom in a downturn. Although the vast majority of outlooks is stable, we believe that companies' credit metrics could rapidly weaken in a downturn if they cannot shift their currently eased financial policy.
There is increased profit concentration in the North American market

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

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

Key assumptions

1. Slow cement volume recovery reflects sluggish macroeconomics

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

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

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

3. Deleveraging supported by debt reduction and modest EBITDA growth

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

Sluggish economic fundamentals are slowing recovery in cement volumes

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

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

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

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

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

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

Deleveraging will be supported by debt reduction and modest EBITDA growth

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

Key risks and opportunities

1. Political uncertainty and economic risks persist in LatAm

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

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

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

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

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

Political uncertainty and economic risks persist in LatAm

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

Specifically, delays in key reforms in Brazil, lack of clarity and polemic decisions in
Mexico, an uncertain political arena in Peru, and a recent shift in Argentina’s
administration pose some risk to GDP growth for the region.
We therefore believe there are many downside risks surrounding our base case scenario that could rapidly undermine the recovery in construction activities in the region, and therefore issuers’ growth prospects in the short term.

**Amid low interest rates there is limited appetite for expansionary projects**

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

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

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

Key assumptions

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

China’s production rationalization of building materials is the key driver behind rising prices and the turnaround of Chinese companies in 2018 and 2019 in terms of financial performance. However, China’s infrastructure investment growth has been on a declining trend this year. In Japan, infrastructure needs and a modest recovery in the property market are favorable for building materials producers while Korea’s property slowdown caps companies’ growth. Improving home construction and repair needs underpin stable prospects for Australian companies.

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

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

### 1. Downside to economic growth

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

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

### 2. Liquidity and refinancing risks

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

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

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

### 3. Overcapacity

Building materials generally still face overcapacity, especially in China. The price recovery in 2017-2019 was primarily from the rationalization of production between producers, for example cement producers in China, without shutting down excess capacity.

So far the rationalization has been functioning well. However, if demand growth slows and the market turns, also resulting in a price drop, companies may not necessarily adhere to the rationalization plan and may start to raise production to increase cash flows. Therefore overcapacity remains an overhang for the building materials industry in the region.
Industry Focus – European Cement

CO2 emissions cuts are moving to the forefront

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

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

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

In our view, companies that can achieve a more pronounced reduction of CO2 will likely gain a competitive edge over other players. This is because they will improve their ESG standing, not only related to environmental risks but also to social and governance, by enhancing their relationship with stakeholders, such as regulators, governments, investors, and clients. Furthermore, lower emissions can also result in lower operating costs for cement production. For example, by using alternative fuels, companies may reduce their dependence on volatile fossil fuel costs and lower their energy bills. Vertical integration with waste management can help cement companies plan optimal use of alternative fuels and alternative raw materials, and contribute to a circular economy. In those countries with an ETS framework, such as the European Union, companies with lower CO2 emissions will likely need to buy fewer allowances or may sell those that are in excess, which can be a source of cost efficiency, particularly if the rising CO2 price trend is going to continue (see chart below).
In our view, over the next few years European cement companies will continue investing in currently tested technologies to reduce CO2 emissions, such as plant upgrades, using alternative raw materials and fuels, or reducing the clinker ratio. (Clinker is the result of sintering limestone and alumina-silicate materials such as clay at a temperature of about 1400 °C-1500 °C during the cement kiln stage). These approaches have all proved economically viable and, in most instances, will reduce operating costs. We believe that the associated additional capex should be contained, and not exceed 2% of revenues. Those companies more advanced in this matter could easily achieve the 2030 CO2 emission target by applying the above approaches to their cement plants on a wide scale.

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

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

As for CRH, cement represents a limited 10% of group revenues, but, together with lime, it accounts for 93% of the group's direct CO2 emissions. In 2018 CRH spent €154 million on environmental projects such as carbon reduction projects, resource efficiency, and water management equipment. The proportion of alternative fuels in the fuel mix was a leading 30% in 2018, which also reflects the group’s proportionally higher share of cement business in Europe when compared with peers. On the other hand, its clinker to cement ratio stood at 78% in 2018, which provides the group room to reduce it.
In our view, there is ample room to reduce the CO2 emissions by continuing to apply, at wider scale, alternative raw materials and fuels, improving thermal efficiency, and lowering the clinker ratio. As of today, large cement players are concentrating their efforts largely in Europe. However, we believe that the number of countries putting a price on carbon, either through taxes or emission trading systems, will increase in the next few years, which means that cement players will extend CO2 reduction efforts outside Europe.

Table 2

<table>
<thead>
<tr>
<th>Company</th>
<th>Buzzi Unicem</th>
<th>Cemex</th>
<th>CRH</th>
<th>Heidelberg Cement</th>
<th>Lafarge-Holcim</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net CO2 emissions (kg per ton of cementitious material)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>705</td>
<td>642</td>
<td>578</td>
<td>610.5</td>
<td>585</td>
</tr>
<tr>
<td>2017</td>
<td>696</td>
<td>636</td>
<td>572</td>
<td>607.6</td>
<td>582</td>
</tr>
<tr>
<td>2018</td>
<td>690</td>
<td>630</td>
<td>585</td>
<td>599.2</td>
<td>576</td>
</tr>
<tr>
<td><strong>Target (date of target)</strong></td>
<td>662 (2022)</td>
<td>570 (2030)</td>
<td>580 (2020)</td>
<td>625 (2030)*</td>
<td>520 (2030)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Clinker to cement ratio (%)</th>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>80.9</td>
<td>78.4</td>
<td>76.5</td>
<td>75.2</td>
<td>73.0</td>
</tr>
<tr>
<td>2017</td>
<td>80.2</td>
<td>78.4</td>
<td>77.5</td>
<td>75.3</td>
<td>72.0</td>
</tr>
<tr>
<td>2018</td>
<td>80.0</td>
<td>78.6</td>
<td>78.3</td>
<td>74.7</td>
<td>72.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thermal substitution rate (%)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>27.0</td>
<td>23.3</td>
<td>33.4</td>
<td>19.7</td>
<td>17.0</td>
</tr>
<tr>
<td>2017</td>
<td>26.0</td>
<td>26.2</td>
<td>38.6</td>
<td>20.8</td>
<td>18.0</td>
</tr>
<tr>
<td>2018</td>
<td>27.1</td>
<td>27.1</td>
<td>30.3</td>
<td>21.7</td>
<td>18.0</td>
</tr>
</tbody>
</table>

Source: Companies’ Sustainability Report. *Based on 29% targeted reduction in CO2 emissions by 2030 compared with 1990. **Based on 30% targeted reduction in CO2 emissions by 2030 compared with 1990.

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

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

**CO2 neutrality implies concrete recycling at large scale and the adoption of breakthrough technologies to capture carbon. This is not economically viable today, but the picture may change in the next five years.**
conventional kilns. However, as of today, direct separation has some problems, mainly related to the durability of the steel reactor structure. As such, further research and testing is necessary for wide-scale application.

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

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

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

Related Research

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

This report does not constitute a rating action.

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

Global Building Materials

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Cash, debt, and returns

Global Building Materials

Chart 62
Cash flow and primary uses

Chart 63
Return on capital employed

Chart 64
Fixed versus variable rate exposure

Chart 65
Long term debt term structure

Chart 66
Cash and equivalents / Total assets

Chart 67
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Soft equipment—demand will weigh on sector performance in 2020

What's changed?

Synchronized economic slowdown. Trade tensions and dwindling growth continue to weaken the global economy and business confidence. We see a synchronized global slowdown affecting advanced and emerging economies alike. We do not expect a sudden turnaround and foresee the cautious investment climate reducing the sector’s order intake, revenue, and profitability in 2020.

Widening negative outlook bias. Currently, 16% of rated capital goods companies have negative outlooks, with an additional 1% on CreditWatch negative. The negative outlook bias has widened throughout the year, with negative rating actions exceeding positive actions by 2.5x. Nevertheless, 79% of outlooks are still stable, reflecting headroom in the ratings. We expect negative rating actions to outweigh positive actions again in 2020, particularly at the low end of the speculative-grade category, but we view large investment-grade issuers as in a good position to cope with the downturn.

What to look for in the sector in 2020?

End-market performance and investment. We expect investment to remain weak in the U.S. and Europe and to shrink in Asia-Pacific (excluding Japan). Multiple demand drivers—including autos and commodities—are stagnating or in decline, while construction has peaked. However, there are a few notable exceptions, including aerospace and defense, health care, and e-commerce. We expect weaker demand overall to curb operating expenditure and pressure prices and margins. The trade dispute between the U.S. and China trade is a swing factor in our forecast, as a resolution would likely encourage higher industrial investment and spending.

What are the key medium-term credit drivers?

Mergers and acquisitions and fast-paced technological change. We expect M&A and deconglomeration to continue among major industry players—but at a slower pace. This will be boosted by low interest rates, ample funding, and companies seeking to expand in higher growth, margins, and high-technology business areas. We expect capital allocation to continue incl. digitalization, software and artificial intelligence.
The rating trend for the sector in 2019 has been negative. Of the 218 issuers, we have had 70 downgrades in the year to date, most of which were of speculative-grade companies, and 28 upgrades. Despite this, the negative outlook bias has widened, with 16% of the portfolio on negative outlook and 1% on CreditWatch Negative, versus 3% of on a positive outlook. This reflects our expectation of 2020 being more difficult for the sector than 2019, as we see weakening economic fundamentals and slowing demand already denting order intake and operational performance. Most investment-grade issuers are better placed to cope with the economic slowdown than speculative-grade issuers, as the latter have more volatile cash flows and weaker credit metrics to start with.
Capital Goods

Key assumptions

1. Investments and orders are down due to the weakening economy

The global capital expenditure (capex) boom ended in early 2019, and the economy is cooling faster than we expected. Trade tensions—particularly the tariff dispute between the U.S. and China—are casting a shadow on the global economy and financing conditions in all regions. This has already weakened order intake since the start of 2019 and is likely to continue dampen both industrial production volumes and investments in capacity. We therefore expect 2020 to be a more difficult year for capital goods companies than 2019, which was supported by higher orders carried forward.

2. Key end-market demand does not support material growth

We expect weaker demand for equipment and services in several key end markets to persist in 2020. In particular, we believe that companies exposed to short-cycle demand will continue to see a deceleration in activity, as the industrial slowdown causes customers to defer near-term purchases. For instance, we expect to see a continued slowdown in maintenance, repair, and operations activity, as well as in the general industrial, automotive, and semi-conductor markets, which have shorter lead times. Capital goods companies with longer lead-time backlogs, for instance in the aerospace and defense, construction, or infrastructure markets, should have better near-term growth prospects.

3. Flat topline, margins and credit metrics

Our global sector forecast sees overall revenue growth of about 1% and EBITDA margins of 16% in 2020, slightly higher than in 2019 due our expectation that a few large global players—such as General Electric Co.—will improve their margins. Overall we expect pressure on margins to increase, and margins in many cases to weaken. We expect a modest strengthening in weighted credit metrics over the next 12 months, related to a few large players expected to reduce their leverage, and forecast weighted average funds from operations (FFO) to debt of 23% and debt to EBITDA of 3.2x in 2020, versus our expectations of 22% and 3.4x in 2019.

The economic climate is impinging on production volumes, orders, and industrial investment

Global business and investment activity is weak, and sentiment is gloomy. Central bank firepower, including the resumption of an unconventional stimulus, should prevent a global downturn, but the odds of recession are rising for some markets, including the U.S. No corner of the world is free from geopolitical uncertainty, whether it be the U.S.-China trade dispute across the Pacific, renewed conflict in the Middle East, the Brexit saga in Europe, or political uncertainty in Latin America. These tensions are undermining confidence. Against this backdrop, real wages are holding up in most major economies, and employment conditions are steady. Consumer spending and housing remain key supports. At the same time, tepid corporate earnings and a higher ratio of speculative-grade to investment-grade borrowers pose risks to investors and incidences of market illiquidity could see defaults rise within one-to-two years.

Capital goods sector issuers face the following risks in 2020:

- Purchasing manager indexes are sinking below 50 in many markets, a sign of manufacturing contraction.
The U.S. is facing a one-in-three chance of recession in late 2020.
- U.K. and Germany are in near-recessions.
- Growth in China continues to slow down.

These factors are already influencing the capital goods sector. Despite issuers' significant share of revenue and profit from recurring services and aftersales, the sector is sensitive to industrial investment levels and overall business confidence. The recent growth in industrial production in the eurozone and Japan peaked at the start of 2018 and turned negative at the start of 2019. In the U.S., industrial production is still growing, but at an ever slower rate. More importantly for the capital goods sector, new industrial orders are contracting both in the eurozone and the U.S., which is weakening sector order books and likely to dent revenues and profits in 2020.

Chart 74
Industrial Production excl. Construction (% Change)

Source: Datastream, ECB, S&P Global

Chart 75
New Manufacturing Orders

Source: Datastream, ECB, S&P Global
We expect industrial investment to remain weak in the U.S. and Europe, and to shrink in Asia-Pacific (excluding Japan). Multiple demand drivers—including autos and commodities—are either stagnating or in decline. End markets that are still growing are aerospace and defense (excluding the supply chain impact of the grounding of the Boeing 737 MAX), health care, renewable energies, and e-commerce. Construction sector demand is still growing, but slowing down.

Our capex analysis—based on aggregated forecasts of individual rated entities by sector—foresees weak capex in many end markets. Investments in most sectors will grow moderately over the next two years compared to the latest actual numbers from 2018, and develop negatively compared to our expectation for 2019 peak levels. Notable positive exceptions are technology, aerospace and defense, and engineering and construction, where our aggregated forecast still sees growth in investment.

Overall, we forecast declining investment over the next few years, and we expect this to reduce capital goods companies’ new equipment sales. An improving economic outlook would likely reverse this development, as rated industrial companies are holding back capex due to uncertainties in their operating environment.

**Chart 76**

**Forecast Capital Expenditure for Key Industrial End Markets**

Source: S&P Global Ratings, Bloomberg
End-market demand does not support growth in 2020

Automotive: Negative short term impact due to weak demand

Global light vehicles sales as of September YTD were down by 5.6% compared to previous year with China down by 10.3%. The prospects of a fast market recovery for the remainder of 2019 and 2020 are weak due to softer market conditions in Europe and the lack of a substantial turnaround in China after what we expect to be a dip of 7%-9% in full-year 2019. The sector is reducing capacity to match actual utilization rates, and the main industry players are refocusing their businesses and product offerings to withstand a situation of no-economic growth.

Capital goods issuers exposed to the auto production industry are seeing declining revenues and margin pressure, and we expect this to continue in 2020. Uncertainty around the transition to e-mobility and alternative propulsion has led original equipment manufacturers to adopt more cautious investment behavior to avoid potential stranded investments and to protect their cash flows. Over the longer term, a shift to e-mobility is likely to increase model variety and the degree of automation, supporting the capex spent.

Aerospace and defense: Expected growth caveated by 737MAX grounding

We expect military spending in the US to grow at the rate of inflation after fiscal 2021 due to competing fiscal priorities and other political issues. However, total spending is still very high and lags in the appropriation process will likely result in growing revenues for most defense contractors for a few years after spending levels off. The long term demand for commercial aircraft is still solid, despite weak new orders, somewhat slower air traffic growth, and an uptick in order cancellations. Rising global wealth and GDP, even at a slower pace, will keep air traffic growing. Airlines also need to refresh their fleets with more fuel efficient aircraft.

Overall we expect healthy aerospace and defense spending to fuel capex on production equipment and automation, as well as software. We also expect manufacturers of components for the aerospace and defense sector to benefit from increasing production volumes on large-scale aerospace and defense programs.

Mitsubishi Electric, KUKA, Emerson, Rockwell, 3M, Hitachi, ABB, Siemens, Cummins, Toyota Industries

Mitsubishi Heavy Industries, GE, Honeywell
However, the grounding of Boeing's 737MAX has gone on longer than we expected and could be further delayed. If any delay is likely to go much into 2020, Boeing could decide to further cut or even suspend MAX production temporarily. This could result in lower revenues, earnings and cash flow for many suppliers, weakening the already fragile supply chain.

**Agriculture: Continuous weak demand due to low farm output prices**

We expect tepid demand in the global agricultural industry in 2020, as soft commodity prices remain relatively low and uncertainty from the U.S.-China trade dispute weighs on farmers' confidence, particularly in North America. While farm aid should contribute to modestly higher incomes for U.S. farmers in 2019, weather- and trade-related uncertainties could still cause customers to defer equipment purchases over the next 12 months.

Still, we believe that the underlying need for global replacement equipment persists as farmers seek to update aging fleets with more efficient and technologically advanced equipment. We expect market conditions in Europe to be relatively flat due to continued dry weather that has resulted in mixed harvest results and has moderated dairy prices. Market fundamentals in Latin America are poised to benefit from increased demand for agricultural exports as trade routes shift in the near term, although volatility in the availability of financing and geopolitical conditions in the region could dampen this improvement.

**Chemicals: Moderately negative due to weak chemicals prices**

We expect demand for virtually all commodity chemicals and many specialty chemicals to remain weak in 2020 due to softness in industrial production. For many chemicals the global demand has declined already in 2019, and we do not expect a recovery for the sector overall in 2020.

With global chemicals companies facing uncertainty of demand and risk of low earnings, we expect them to preserve cash and not engage in meaningful growth initiatives. We therefore expect their capex spending to be moderate over the next two years and to affect capital goods companies that provide process equipment and automated solutions to the chemicals sector. Spending on operations and maintenance correlates with production volumes, and we expect it to suffer less than spending on new projects and capacity expansion.

**Construction: Still positive, but with slower market growth rate**

The construction market is traditionally linked to global growth. We expect some headwinds in the second part of 2019 and in 2020, with softer market dynamics driven by lower new-build activity. Weakness stems mainly from Asia-Pacific, with some slowdown in Europe and the U.S.

We have already witnessed the order intake softening, leading to a potential drop in companies' toplines in the next 12 months, as current infrastructure projects come to an end. We see more favorable conditions for companies whose projects are linked to renewable energy integration, data centers, and storage and distribution warehouses.

We have not seen a notable change so far in low-voltage electrification, but we expect activity to slow down along with overall construction. We expect elevators to fare well due to the long-term contractual nature of the business, and rental companies to post healthy credit ratios as they will cut investment in a downturn. Manufacturers of heavy construction equipment are likely to feel the greatest impact from a slowdown.
Health care equipment: Stable modest market growth expected to continue

The health care end-market does not generally follow general economic cycles. Therefore, we expect a relatively stable performance from health care equipment manufacturers and suppliers of related components and materials, supported by the following favorable trends: aging populations, penetration into emerging markets, the rise of home-based health care, and the need for innovation and digital applications.

However, we view that the equipment markets are mature and competitive, and that with pressure on healthcare budgets in most developed countries, sales growth through upgrades or expansion will be limited. The most important market for the equipment, in particular high end solutions and related software, remains the U.S.

Logistics and e-commerce: High growth rate due to rapid market expansion

We see the positive trend in e-commerce as a key support for capital goods companies exposed to logistics end markets. We expect retailers and logistics companies to continue to respond to increased volumes of online orders by investing in fast shipping, efficiency, and reliability, which are key elements of successful competition in the e-commerce and logistics markets. Increasing automation and digitalization in warehouses is also supportive, but depends to some extent on regional factors like land restriction and labor costs. We continue to believe that logistics integrators are likely to show weaker margins than component providers, as they carry the project execution risk and face more pricing pressure as the direct suppliers of large logistics, retail, and e-commerce customers.

Metals and mining: No expansionary capex expected due to low commodity prices

We expect commodity prices to decrease slightly from 2019 levels over the next two years, and reduce investment by global miners. For instance, we see the price of nickel decreasing in 2020 to $15,000 per ton (/ton) versus our expectation of $17,000/ton in 2019, and the price of iron ore decreasing to $80 per dry metric ton (/dmt) from $90 per/dmt.

The trend for global mining companies over the past few years has been strengthening financial flexibility and improving profitability and cash conversion. We see capex focused on maintenance, driven by replacement cycles instead of new projects. The lack of new greenfield projects suggests that miners will not undertake expansionary capex in the foreseeable future. Therefore, the demand for original equipment will be subdued, while the share of aftermarket services in the revenues of capital goods companies serving the mining sector will increase.

We expect efforts to increase efficiency and production on brownfield sites to sustain and support the order intakes of capital goods companies exposed to this sector. Overall, we do not expect any revenue growth for these companies due to miners' cautious investment behavior, but performance in 2020 should be supported by a healthy order backlog.
Oil and Gas: Stagnating volumes and prices will limit spending

Oil and gas markets are prone to volatile pricing, with production volumes likely stagnating as the softer global economy affects demand. With prices remaining weak, we expect oil majors’ capex to remain roughly stable, around the 2018 level of $560 billion, over the next two years. The rig count is half that in 2014, and oil and gas majors focus on maximizing production from existing wells at a lower cost.

For capital goods companies exposed to the oil and gas sector, we expect revenue and margin pressure, with a negative impact on the ratings on companies with material exposure. As we do not expect expansionary investment over the next two years, companies with exposure to upstream oil and gas will need to be able to offer technological solutions to increase efficiency at existing fields. Overall, we expect companies with high exposure to aftermarket sales to be better able to sustain their credit metrics than those exposed to the development of new wells.

Utilities: Renewables positive, conventional negative, grids with long-term demand

In the utilities sector, trends vary substantially among different regions and subsectors. Demand for conventional large power plant equipment in most developed countries in Europe and the U.S. remains weak and is also softening in developing countries and China. This has led both to notable overcapacity in the market for equipment, for example, large gas turbines, and to a need for cost-cutting among original equipment manufacturers. With tougher regulation on carbon dioxide emissions, modifications to increase the energy efficiency of existing plants remains positive performance drive for the sector.

More favorably, we expect investment in renewable energy to grow significantly over the coming years, which is particularly positive for wind turbine manufacturers. However, the move to competitive auction-based systems as a global industry standard, as well as the fragmented market structure, keep the profitability of this subsector under pressure. Consequently, we forecast further industry consolidation, either through market exits or M&A, over the next two-to-three years.

Investments in power and gas infrastructure remain positive globally. These investments are to replace aged transmission and distribution networks and transform existing grids into decentralized power generators. We view this market segment, particularly large transmission projects, as highly competitive, and expect profitability to remain below the sector average.
Key risks and opportunities

1. M&A will continue, but at a slower pace

We expect divestments and acquisitions to continue as large U.S., European, and Japanese capital goods companies seek to simplify their structures and invest in higher-growth technologies. We saw a number of transactions take place in 2019, and there is a notable pipeline of acquisitions, divestments, and IPOs due to close in 2020. We expect large players to shield their balance sheets in the current economic environment, and therefore expect the pace of large M&A to slow down. However, most large players have the means to engage in strategic bolt-on acquisitions, and favorable financing conditions and the divestment of noncore activities will continue to provide opportunities for financial investors.

2. Large sector players well-positioned to manage the downturn

We expect large capital goods companies to be able to withstand the downturn well. Of the 13 tier 1 issuers that we rate in the 'A-' category or above, three (3M Co., ABB Ltd., and Mitsubishi Heavy Industries), have negative outlooks, but overall, we see ample headroom in the ratings. For companies rated in the 'A' category, we forecast average FFO to debt of 52% and debt to EBITDA of 1.3x in 2019, and average FFO to debt of 50% and debt to EBITDA of 1.4x in 2020.

3. Trouble for companies in the lowest rating categories

We expect to see negative rating transitions and a potential increase in defaults in the lowest 'B' and 'CCC' rating categories—where we have already seen significant downward movement and weakening credit ratios in 2019 as a result of slowing demand in combination with highly geared balance sheets. Our outlook distribution in the 'B' and 'CCC' categories has a heavy negative bias, with 25% of the ratings on a negative outlook. In 2020 we expect companies with less favorable business models, weaker operational capabilities, and more concentrated market or product exposure to experience more operational and financial challenges, including access to liquidity and feasible refinancing options.

M&A is set to continue among the large sector players, but at a slower pace

While capital goods issuers continued to pursue strategic M&A and divestitures in 2019, we expect the pace to slow in 2020 due to the global economic slowdown. Deconglomeration and strategic M&A continue to transform the industry, and 2019 was a busy year, with the announcement and completion of a number of notable transactions.

The ratings implications of acquisitions have been largely negative. We lowered the issuer credit rating on Parker Hannifin to 'A-' from 'A' following the acquisitions of LORD and Exotic Materials. While these acquisitions enhanced Parker Hannifin's competitive position and scale in the engineered materials and aerospace industries, they were largely debt-funded, resulting in a meaningful deterioration in leverage metrics. Similarly, we revised the outlook on 3M to negative and affirmed the 'AA-' issuer credit rating due to the debt-funded acquisition of medical technology company Acelity Inc. for $6.7 billion. This, combined with weaker operating performance in 2019 than we expected, led to weak credit metrics for the rating.

The ratings implications of divestitures and spinoffs have been largely neutral. We affirmed the ratings on Johnson Controls International PLC (JCI) following the divestiture of its Power Solutions unit to private equity. JCI used $3.4 billion from the $11.6 billion sale proceeds to reduce debt, demonstrating a commitment to its financial policy.
While we expect the pace of acquisitions and divestitures to slow in 2020, there are a number of relatively large transactions that have been announced and that we expect to complete in 2020. General Electric announced the sale of the biopharmaceuticals portion of its health care business to Danaher Corp. for about $20 billion in cash. We view this as largely credit-positive given the balance between the cash proceeds that General Electric expects and its retention of the majority of the EBITDA from its health care segment. In addition, United Technologies announced in late 2018 its intention to separate its commercial businesses Otis and Carrier into independent entities. Siemens announced that it would undertake an IPO of its energy-related businesses in September 2020, which will reduce the group’s consolidated topline by around €30 billion. thyssenkrupp announced an IPO or sale of its elevator technology business during the first half of 2020 after the group’s steel merger with Tata Steel Europe was blocked by the EU. We expect that ABB, which has a negative outlook after depleting its ratings headroom, will close the disposal of its power grids division to Hitachi by mid-year 2020 for a cash consideration of around $6.8 billion.

Large industrial issuers’ balance sheets remain strong, as their cash flow has recovered from the 2016 industrial downturn and most groups enjoyed two years of solid profitable growth. We expect most investment-grade issuers to maintain conservative financial policies to preserve credit quality in anticipation of an economic slowdown. We expect most acquisitions to be bolt-on and modest in size. We believe that issuers will continue to focus on running leaner, more profitable, and faster-growing businesses, and that this will drive further portfolio realignment. One factor that hinders acquisitions in the sector is the high valuations of potential companies, particularly those with more favorable growth prospects such as in the technology, health care, or consumer-related end markets.

**Large capital goods companies can withstand the downturn, but highly leveraged issuers’ default risk will increase**

We expect most large capital goods companies to maintain strong credit metrics in 2019 and 2020. For large capital goods companies rated in the ‘A’ category, we forecast average FFO to debt of 52% and debt to EBITDA of 1.3x in 2019, and average FFO to debt of 50% and debt to EBITDA of 1.4x in 2020. Most of these issuers have significant headroom in the ratings, despite the weakening operating environment. The majority have stable outlooks, as we expect they will be able to continue generating significant free operating cash flow to cover shareholder distributions and M&A without their key credit metrics breaching our downgrade thresholds.

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Industry forecasts

Global Capital Goods – Large-Capitalization Rated Issuers

For speculative-grade issuers, particularly issuers in the 'B' category and below, the situation is different, and we expect ratings to continue to transition downward. In 2019, the global capital goods sector had six defaults, all from the 'CCC' category. Of the six defaults this year, four were from Europe, one was from India, and one was from the U.S. Defaults were caused by continuous weak performance and a cash squeeze due to a high interest burden and working capital outflows, leading to an unsustainable capital structure or an inability to service debt.

In the global capital goods portfolio of 218 issuers, we had 70 downgrades in the year to date, of which 5 were in the 'B+', 15 were in the 'B', 7 in the 'B-', and 6 in the 'CCC-' categories. Compared to the end of 2018, the number of issuers rated in the 'B-' category has increased by 50% or 10, and in the 'CCC' category by 10% or 1. Debt to EBITDA for our 'B' rated issuers stands at 5.7x, for our 'B-' rated issuers at 8.2x, and those rated 'CCC-' at 8.5x, and has steadily increased over the past two years.

Therefore, in our lowest rating categories, we see a risk of a further material weakening of credit quality over the next two years, and a potential increase in defaults due to issuers' tightening liquidity and inability to achieve EBITDA growth. Additionally, in the likely scenario of an economic downturn, we see weak credit metrics, together with a potential repricing of financial risk by banks and investors, restricting the lowest-rated issuers' access to sustainable financing. This could heighten refinancing risk in 2020 and 2021.
Related Research

- Caterpillar Inc., Nov 12, 2019
- Large Capital Goods Companies Can Withstand An Economic Slowdown In 2020, Nov. 4, 2019
- Rising Orders At Wind Turbine Manufacturer Siemens Gamesa Buck Industry Trend, Nov 05, 2019
- ABB Outlook To Negative On Weaker Cash Generation; 'A' Rating Affirmed, Nov 01, 2019
- General Electric Co. Demonstrates Better-Than-Expected Turnaround Performance; No Change To Ratings, Oct 31, 2019
- Schneider Electric Retains Significant Ratings Headroom Despite Weakening Economic Fundamentals, Oct 24, 2019
- Mitsubishi Heavy Industries Ltd., Oct 18, 2019
- KUKA AG Outlook Revised To Negative From Stable Following Revised Guidance Oct 01, 2019
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- CNH Industrial N.V.’s Plans To Spin Off Commercial Vehicle And Power Train Operations Is Currently Credit Neutral, Sep 03, 2019
- ESG Industry Report Card: Capital Goods, Jun 03, 2019

This report does not constitute a rating action.
Industry forecasts

Global Capital Goods

Revenue growth (local currency)

EBITDA margin (adjusted)

Debt / EBITDA (adjusted)

FFO / Debt (adjusted)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO--Funds from operations.
Cash, debt, and returns

Global Capital Goods

Chart 86
Cash flow and primary uses

Chart 87
Return on capital employed

Chart 88
Fixed versus variable rate exposure

Chart 89
Long term debt term structure

Chart 90
Cash and equivalents / Total assets

Chart 91
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Chemicals

Slowing demand creates more challenges for credit quality

What’s changed?

Weak chemical demand: Global demand for chemicals will remain weak in 2020 following a decline in demand in 2019. We anticipate a slowdown, or in some cases, a reversal of a recent trend of demand growth, but not a trough by any means.

Potential for excess supply: There are no indications yet that companies planning supply additions have responded to weaker demand in key subsectors, including petrochemicals and some fertilizers.

Trade uncertainty: Escalating trade disputes between the U.S. and China and the U.S. and Europe are among the variables adding to an environment of uncertainty,

What to look for in the sector in 2020?

Revenue trends: Revenue could weaken for chemical companies exposed to end markets such as autos in which we anticipate greater global demand compression.

Product and raw material pricing: We expect product pricing, especially for commodity chemicals, to soften as a result of weaker demand. Some specialty chemicals may be able to hold their pricing.

EBITDA and cash flow: We generally expect EBITDA will remain flat or decline in 2020 after declining in 2019.

What are the key medium-term credit drivers?

The duration and depth of the ongoing demand weakness: A determinant of credit quality will be how long demand remains weak. We expect some stabilization in 2020.

Cushions under credit ratings: Companies that have benefitted from helpful demand conditions in recent years with cushions in their credit metrics at their current ratings may have more stable credit quality and a smaller risk for ratings volatility.

Offsetting factors: The willingness and ability of companies to preserve cash flow and defer growth-related or other capital spending or investments, and shareholder rewards will partly influence credit quality.
Globally, the ratings outlook bias is slightly negative. The most dramatic shift appears to be in Asia, which had a large positive bias in 2018 but is now negative.

Overall, the proportion of stable outlooks has reduced over time in certain regions, such as the U.S. There have been more downgrades than upgrades in 2019 in Europe and the U.S., especially among speculative-grade credits. In Latin America, expected volume growth and operating efficiency gains contribute to our generally stable outlook in the region. In Asia, despite the challenges of weak prices, lower demand, and less favorable supply-demand fundamentals, the majority of outlooks are stable.
# Chemicals

## Key assumptions

### 1. Chemical demand and pricing will remain weak
We anticipate subdued demand in 2020 following a drop in 2019. We also expect some pricing volatility in many commodities. The subdued demand coincides with ongoing global capacity additions in some chemical products. New capacity mainly in the U.S. and China will contribute to lower utilization rates in these chemicals, such as polyolefins. These challenging conditions could pressure credit quality, especially at high cost producers. However, most prices and demand will not reach a trough for most chemicals.

### 2. Financial policy will generally adapt to a more challenging environment
In a period of uncertain demand, with little to no earnings and cash flow growth and an increased potential for a recession, we believe many companies will be more judicious in using cash. More specifically, we do not expect companies to increase shareholder rewards or embark on meaningful new growth initiatives, and attempt to conserve cash if only temporarily until demand recovers.

### 3. Oil and natural gas prices will be low
In our base-case, we assume a WTI oil price of $55/barrel and a natural gas price of $2.5/gallon. This pricing maintains an oil to gas price ratio that favors gas-based producers of chemicals, mainly in the Americas and the Middle East, relative to oil-based producers in regions such as Asia. We believe prices for ethane, a key input for petrochemical production, and a constituent of natural gas, could be lower in 2020 on average, relative to 2019 pricing.

## Key risks and opportunities

### 1. The demand downturn could be greater than we anticipate
An alternate scenario could play out, which we don’t factor in our base case. For example, our economist has raised the potential for U.S. recession to 30% to 35% from 25% to 30%. We also assume a 10% likelihood of a recession in Europe over the next 12 months. A recession in one or more regions is a key risk that could result in lower-than-anticipated demand and earnings.

### 2. Financial policy may not adapt
We could see little change in shareholder rewards, M&A, or elevated capital spending. This could hurt credit quality in an environment of weaker earnings and cash flows. A key credit risk is the inability or unwillingness of financial policy to respond to a changing environment with weaker earnings and credit metrics in 2020.

### 3. Some companies are more susceptible to demand and other shocks
Companies that we rate in lower categories including those rated ‘B’ and below, or companies with vulnerabilities (such as revenue concentrated in a few end markets) or those with high operating leverage could see sharp declines in earnings and cash flow disproportionate to the decline in sector demand.
The chemical industry has increasingly relied on debt to fund growth, acquisitions, and shareholder rewards in recent years. Years of low-cost debt, relative to historical averages, and generally healthy demand conditions have contributed to a nearly 100% increase in sector debt globally in the past decade. Generally improving EBITDA and cash flow have muted the impact of this debt increase on credit quality. That supportive demand environment changed 2019, and under the challenging conditions of the next 12 months, a key credit risk is the inability or unwillingness of financial policy to respond to a changed environment with weaker earnings and credit metrics in 2020.

Our ratings have anticipated supply overhangs in certain sectors and regions, most notably petrochemicals in the U.S. In China, we do not expect future petrochemical capacity growth will bridge the supply shortfall from domestic production. In sectors with large capacity additions and excess capacity, the absence of meaningful demand growth in 2020 will likely make the operating environment more challenging than we originally anticipated. Trade frictions add further credit risk. There are limited mitigating factors including potentially lower input costs. In commodity sectors with supply overhangs, we expect overall subsector earnings to decline, but producers with less-than-competitive cost structures will be especially hard hit. In the petrochemical sector, these would include naphtha-based producers. There exists potential for increased petrochemical volumes (from capacity increases) at globally competitive producers to offset lower product pricing and boost EBITDA. However, any such improvements would be exceptions.

Not all commodity chemicals are experiencing a downturn. Our outlook is broadly stable on the prices of fertilizers. Still, there are downside risks relating mainly to the supply-demand balance in each fertilizer market and the behavior of producers in China. Overall, we think demand should be supported by the improved affordability of fertilizers, an important factor given challenging farm economics and pressure to sustainably increase food production amid persisting weak commodity prices, planting delays, growing resistance to herbicides, and the U.S.-China trade tensions.

We anticipate steady demand for nitrogen-based fertilizers in 2020, even though weather-related events could potentially disrupt the timing of the planting season in various regions. Lower natural gas prices will clearly continue supporting nitrogen producers’ profitability, including those based in Europe, which remains at a structural cost disadvantage compared with North American peers.

The risks to prices for potash fertilizers in 2020 come from demand, rather than the supply side. In 2019, weak demand from China due to ongoing high potash inventories (estimated by market sources at about 3mt) led to potash producers like K+S, Uralkali, Mosaic, and Nutrien to take supply way from the market, either by reducing production or extending maintenance shutdowns. The supply from China, given the weak renmnibi and tight global urea balance, is also a key risk.

Finally, for phosphate fertilizer, the impact of additional supply from OCP S.A. and Saudi Arabian Mining Co. (Ma'aden) was partly softened by closures at The Mosaic Co.'s Plant City or Nutrien Ltd.'s Redwater facility. In China, while the increased environmental regulations put pressure on the local producers, the effect was mitigated by the devaluation of the Chinese renmnibi and lower demand in the domestic market. As a result, contrary to our previous expectations, phosphate exports from China – which accounts for about 35%-40% of the global phosphoric acid - increased in 2019 to date instead of declining. As we look into 2020, phosphate inventories in distribution channels are still significant, notably in the U.S. and India. We believe the pace of destocking, coupled with weather conditions and the timing of the planting season, will play a major role in the recovery of phosphate prices.
Related Research

- BASF SE, Nov 13, 2019
- A Turning Point For U.S. Chemical Credit Quality, Oct 29, 2019.
- Safety, Pollution Policies Push China's Chemical Industry To Upgrade, Oct 21, 2019
- Credit FAQ: What's In The Mix For The Global Chemicals Sector?, Aug 19, 2019
- EMEA Chemical Companies, Strongest To Weakest, Aug 02, 2019
- Is Targeting U.S. Chemical Companies A Successful Formula For Activist Investors?, Aug 01, 2019

This report does not constitute a rating action.
Industry forecasts

Global Chemicals

In our base-case scenario, we generally believe 2020 will be a year of stabilization for each region, but not a year of meaningful recovery after operating performance declined in 2018. However, we also believe there is now higher potential for an alternate scenario with near-recessionary conditions and a weaker-than-anticipated 2020. There might be exceptions in some regions and product categories, especially in certain specialty chemicals, in which producers may benefit from growth in certain niches and deflating raw material costs.
Cash, debt and returns

Global Chemicals

Chart 102
Cash flow and primary uses

Chart 103
Return on capital employed

Chart 104
Fixed versus variable rate exposure

Chart 105
Long term debt term structure

Chart 106
Cash and equivalents / Total assets

Chart 107
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Industry Top Trends 2020
Consumer Products
Challenge to innovate amid evolving preferences and slow growth

What’s changed?

Ratings outlook. Rating trends have become more negative, largely at the low-end of the speculative-grade rating categories, mostly because of unsustainable capital structures and weak operating performance.

Growth prospects lie with omnichannel and emerging market strategies. Companies will have to continue developing these strategies in the face of the value-conscious consumer and their increasing preference for convenience.

Global trade tariffs. China-U.S. trade tensions have increased price volatility of grains. The outbreak of the African Swine Fever has increased prices for proteins and should offset the impact of the trade war on agribusinesses next year.

What to look for in the sector in 2020?

Remaining relevant. Companies are seeking relevance through innovation, repositioning, and renovating portfolios at a time when margins are under pressure.

Sustainability. The social and environmental agenda is increasingly prominent in consumer discourse, focusing on wellness as well as packaging and fabrics.

Margin pressure. Changing market realities, input cost increases, and subdued growth are likely to result in flat to modestly lower margins.

What are the key medium-term credit drivers?

Recession. Consumer products companies could face a tough road ahead as global GDP economic growth is slowing and the odds of a U.S. recession has increased.

Financial Policies. Financial policies relating to shareholder returns and investment are key factors affecting credit quality.

Liquidity constraints for weaker issuers. For issuers in the lower end of the ratings spectrum, shortfalls in operating performance that result in tightening liquidity and could drive downgrades.
Ratings trends and outlook

Global Consumer Products

Chart 108
Ratings distribution by region

Chart 109
Ratings distribution by subsector

Chart 110
Ratings outlooks by region

Chart 111
Ratings outlooks by subsector

Chart 112
Ratings outlooks net bias by region

Chart 113
Ratings net outlook bias by subsector

Chart 114
Ratings outlooks

Chart 115
Ratings net outlook bias

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

Key assumptions

1. Slowing economic growth but consumer spending likely to be healthy
   Our economists forecast slowing economic growth. Still, the labor and housing markets should remain healthy and consumer spending should only slow modestly.

2. Tepid organic sales growth and margin pressure
   We forecast flat to low-single-digit organic sales growth driven mainly by favorable price mix. Margins will be under pressure from focus on top line growth, limited benefit from productivity programs, and retail pressure.

3. Credit metrics will likely strengthen but won’t trigger upgrades
   We forecast credit metrics will strengthen modestly over the next 12 months because many investment-grade companies that made transformational acquisitions in 2017 and 2018 are repaying debt and achieving synergies.

Economic growth in 2020 in the U.S. and Canada should slow modestly. Still, we believe the consumer will continue to spend as the labor and housing markets remain robust. We forecast the U.S. GDP will slow to 1.7% in 2020 from an estimated 2.3% in 2019 and consumer spending will slow to 2.2% in 2020 from 2.6% in 2019. We expect Canada’s growth to modestly slow to 1.4% in 2020 from 1.5% in 2019. The U.S. GDP growth is underpinned by the strong labor market, wage growth, and U.S. household balance sheets that are in relatively good shape. The escalation of trade disputes—and the secondary effects they can have on consumer spending—remains a major risk to economic growth.

Organic sales will continue to be in the low-single digit rates because of changing consumer tastes, intense competition, and consumers continuing to be value oriented. Adding to the pressure is retailers are increasing private label offerings to differentiate themselves and drive loyalty, as well as to shore up profit margins. We expect branded goods companies to lose some shelf space this year, and will need to focus on managing price gaps with private label to keep consumers from switching. To remain relevant, companies are increasing innovation, reformulating products, and acquiring on-trend brands.

We expect margins to be flat to down as the need to reinvest in their businesses, as well as higher wage and logistic costs will likely absorb or exceed all the benefits from cost savings programs and improved pricing. Those companies that are able to increase margins will likely benefit from synergies from M&A.

Credit metrics will strengthen slightly over the next 12 months but will likely not result in upgrades. A few investment-grade companies that made transformational acquisitions over the past year or so will strengthen credit metrics as they focus on repaying debt and achieving synergies. We do not believe these actions will result in many upgrades as we lowered the ratings on many of the issuers, such as ConAgra, General Mills and Campbell, that materially leveraged their balance sheets and do not believe their leverage will be sustained below 3.0x. Nevertheless, we expect the companies’ leverage to be below 4.0x in 2020. Any lower leverage in the speculative-grade segment would signal potential dividend recapitalizations or sale on sponsor-owned companies. Similarly, in Canada, we expect most companies to modestly deleverage, driven by slight EBITDA improvement following significant cost cutting.
Europe

Key assumptions

1. Household consumption will be a key support for slowing growth

Household consumption will remain a main pillar of economic growth, which continues to slow further. Trade is unlikely to add to growth, as trade tensions remain on the agenda.

2. Sales growth will remain low with broadly flat margins

We see limited ability to grow sales in the mature markets of Europe, with polarization of the product ranges. Investment in fresh, organic, innovative products and ecofriendly packaging will pressure margins.

3. Product diversity and global reach will mitigate downside risks

Companies with narrow product ranges or with operations concentrated in niche areas are most exposed to downside risks, relating to weakening profitability or inability to reduce leverage or manage refinancing risks.

We expect GDP growth to slow further to 1.1% in 2020 and return to trend growth of 1.3% in 2021 and 1.4% in 2022. Similar to this year, net trade is unlikely to add to growth, as trade tensions and Brexit could influence tariffs. Household consumption will remain a key pillar of growth. Unemployment remains low, inflation will be contained, and lower borrowing costs will incentivize household consumption, both on consumables and larger expenditures like housing. We expect interest rates to remain low for both consumers and firms. That said, credit standards tightened for consumption loans to households, which could limit consumer demand, especially for discretionary or big ticket items.

Given the macroeconomic environment, we forecast low-single-digit top line growth as we see limited ability for consumer goods companies to grow sales in mature European markets. We see continuing polarization of the product ranges with premium and convenience products maintaining good demand while the mid-range gets squeezed. Investment in fresh, organic and innovative products will be the key differentiators and will greatly feed into the brand perception, as a growing segment of discerning consumers demand higher levels of product quality at reasonable prices. The social and environmental agenda is increasingly prominent, with a focus on sustainability, health, and nutrition, as well as the use of plastics in packaging and fabrics. Expenditures on product and packaging innovation together with higher input prices on certain commodities like sugar, together with a tough retail pricing environment, will push down margins. That said, most European consumer goods companies will be able to limit these pressures due to cost reduction efforts, which will help maintain relatively flat margins.

EMEA multinationals are unlikely to engage in mega mergers and acquisitions, and will continue to focus their strategies on in-fill acquisitions and spin-offs of non-core activities. Further, the high product diversity and the wide global reach will help mitigate exposure to weaker economic growth and evolving consumer preferences. As a result, leverage ratios for large investment-grade companies have peaked and should trend gradually down. However, shareholder returns and acquisitions in the luxury space remain risks, especially for larger companies. Smaller companies in the 'B' category, with narrower product or geographical diversity, will have very limited headroom to absorb higher leverage due to stagnation or weakening profitability despite some top line growth. Despite weakening credit quality for these companies, liquidity remains generally adequate.
Latin America

Key assumptions

1. Still weak domestic consumption, but a bright export-volumes horizon

The main domestic economies in the region, such as Mexico and Brazil, have promoted tepid economic growth, which make price adjustments to sustain margins challenging. On the other hand, the increase of protein demand from China from the ASF outbreak is boosting export prices for protein processors, improving cash flows.

2. Foreign exchange is a double-edged sword

While currency depreciation helps to boost export profits, and still-sound global liquidity increases demand for cross-border issuances, cash flow and balance sheet hedges are important to protect the companies in a scenario of currency swings, mainly amid credit scarcity that could happen in 2020-21. We expect companies to use of derivative tools to hedge currency exposure, even if the cost of funding increases.

3. Historically low interest rates boost funds from operations (FFO) generation

Low interest rates and still-sound liquidity have lowered the cost of funding in Latin America. But the level of private investments continues to be low.

Investments continue to be limited in the main economies in Latin America. Low investor confidence in the AMLO administration in Mexico, recession in Argentina exacerbated by uncertainties with the incoming president, and the need for further reforms in Brazil following the recent approved pension reform have undermined economic growth. We forecast Brazil growing 0.8% in 2019 and 2% in 2020; Mexico expanding only 0.4% this year and 1.3% in 2021; Chile, Peru, and Colombia growing between 2%-3% per year; and Argentina to contract 3% this year and 1% in 2020.

This tepid growth environment will mean fierce competition domestically, to enable companies to release inventories. Inflation has been contained in Brazil, Mexico, Chile, Paraguay, Uruguay, Colombia, and we estimate companies will be able to adjust prices at least by inflation and input costs to fairly sustain profits.

We continue to see a conservative approach to shareholders’ remuneration and for M&A, and companies might pursue tuck in acquisitions to improve product portfolios. Slightly better fundamentals for global sugar prices and profitable ethanol should support higher investments in the sugarcane fields in Latin America, and growing free cash flows will alleviate refinancing pressures and leveraged balance sheets for entities rated at ‘B-‘ or in the ‘CCC’ category.

Protein companies have benefited from higher export prices and volumes to China and the increased demand for all proteins. This has helped to offset still-weak volumes in some domestic economies and subsequent difficulty in increasing internal prices. The stronger cash flows have already contributed to positive rating actions in protein giants BRF and JBS, and boosted partnerships and investments with Asia-Pacific (APAC) companies.

Governance has been a key rating factor in the region, and a rating limitation in Brazil following several corruption investigations. However, these cases are helping to improve transparency on risk assessment and the implementation of internal controls, which should improve overall governance in the future.
Asia-Pacific

Key assumptions

1. Product upgrades are driving growth and mitigating consumer sentiment

Healthier and higher-end products are getting more popular among customers in Asia-Pacific, driven by many customers’ rising health awareness. However, growth in food staples and low-end products is likely to be low-single digits in the region, given subdued consumer sentiment.

2. Margin pressure from higher raw material prices and fierce competition

Potentially higher input costs and rising promotional expenses may pressure profitability. Competition on product development to meet changing tastes and online shopping preferences will remain intense.

3. Discipline, new products, and efficiency will differentiate credit quality

Companies’ financial discipline, capability to launch new products faster, sensitivity to consumer preference, and operating efficiency will differentiate credit quality. Small companies could face rising refinancing risks.

The rise of the middle classes will continue to lift consumption, albeit at a slowing pace, and support sales of consumer products in the region. Growth in dairy products and sportswear in China will continue to outpace the Chinese GDP growth, driven by rising health awareness among some consumers. Sales of cosmetics products in Japan is also likely to grow fast at 6%-7%, driven by solid growth of inbound tourists. However, growth in food staples and low-end products may hit low-single digits in the region given subdued consumer sentiment.

We believe the direct impact of the escalated China-U.S. trade tensions would be manageable for most rated consumer product companies in China, given their focus on domestic consumption. However, the potential impact on consumer sentiment and supply chains to reroute procurement may pressure consumer product companies’ growth prospects and profitability.

Profitability of consumer product manufacturers is likely to come under pressure, given the potentially higher raw material prices and persistent, intense competition. Companies also need to invest more on new products to adapt to shifts in consumer tastes.

We expect credit metrics of rated consumer product companies to slightly improve over the next 12 months, driven by steady (albeit slower) profit growth and more prudent financial investment against the backdrop of macro uncertainty. Nevertheless, we still expect large Chinese and Japanese consumer product companies with ample financial cushion to pursue overseas acquisitions, given their desire to control high-quality raw material sources or better brands or to improve the growth prospect.

Financial discipline as well as companies’ capability to develop new products and improve operating efficiency will differentiate credit quality. Small companies with weaker balance sheets or limited access to credit markets could face rising refinancing risks and deteriorating competitive position and growth prospects.
Consumer Products

Key risks and opportunities

1. Changing consumption drivers are likely to result in modestly lower margins

Technology and changes in consumers' behavior, tastes, and preferences have increased the pace of change in the consumer products industry and branded goods companies have been focusing on being more agile to repositioning their portfolios to meet these changes. Consumers are also paying increasing attention to topics related to sustainable development and responsible consumption, and companies are increasingly communicating plans and achievements in this area.

2. Geopolitical, trade and regulatory pressures loom over the horizon

The extra costs on goods imported from China is clearly bad news for U.S. companies. The U.S.-China dispute has hurt the smaller, speculative-grade durable and apparel companies and some seafood processors in Canada that rely heavily on imports from China. These companies have taken pricing actions and, in some cases, increased the diversity of their supply base, but have not been fully able to offset the lower profitability.

3. Speculative-grade credit quality will erode rapidly in case of a recession

While S&P Global economists don’t expect a sharp downturn in the global economy next year, such an event would almost certainly result in a jump in downgrades of those speculative-grade borrowers barely treading water. We would also expect downgrades or negative outlooks on some companies currently performing relatively well as price-conscious shoppers focus on value and buy only what they need. We believe volume growth could improve from increased food consumption at home, as consumers spend less on dining out. However, rising sales of lower-priced private-label products and the trade down to lower-end products may restrict revenue growth, with the unfavorable mix shrinking margins. To limit the effect of trade-downs, we expect brands to focus on strategic pricing and promotions with retailers while continuing to trim costs.

Changing consumption drivers are likely to result in modestly lower margins and ongoing reshuffling of portfolios

Companies know the world is changing around them and are increasing product innovation, reformulating products, acquiring on-trend brands, improving speed-to-market, and diversifying channels and geographies. All major consumer product companies are investing more in the online channel, including launching exclusive products and spending more on digital marketing, to enlarge exposure to the faster growing retail channel. North American companies are shifting their portfolios towards healthier and more-eco-friendly products. For European companies, not surprisingly the sectors that are experiencing the largest growth are plant-based vegan alternatives, low-impact soaps for personal use or laundry, and natural cosmetics. In Latin America, bottlers have increased the share of sugar-free or low sugar content drinks in the portfolio, which has helped to sustain volumes.

Large European branded consumer companies like Danone, Unilever, Nestlé, and Reckitt Benckiser want to achieve an annual organic growth of at least 3%. Not all of them will reach this result in 2019 and this might become even more challenging in 2020, though only a small part of this increase will come from Europe as trading conditions will remain tough in the next few quarters. In the U.S., Procter & Gamble has transformed its portfolio over the past few years and organic sales have accelerated from low-single digits to 7%
in its recent quarter. Mondelez has also consistently outpaced industry growth because of its on-trend portfolio. Leading consumer product companies in APAC, such as Shiseido Co. Ltd. and China Mengniu Dairy Co. Ltd., will continue to outgrow the GDP growth in the region, driven by the "premiumization" of their product portfolio. Consumer producers in Latin America have been challenged to sustain volumes amid macro difficulties, with political uncertainties, weak currency, and low consumer confidence weighting on volume consumption.

In light of the various challenges in the sector, we expect margins to be under pressure. Favorable product mix and cost savings initiatives will likely soften the impact, but EBITDA margins could be flat to down for at least the next year.

**Geopolitical, trade and regulatory pressures loom over the horizon**

Global trade has hurt several agribusinesses as key U.S. agricultural exports to China have ground to a halt, and farmer profits are under pressure. Some grain and ethanol producers in North America have seen profits under pressure with the increase of purchases from South American processors and more volatile prices. U.S. pork producers, whose exports to China and Mexico faced stiff tariffs, have also been hurt. In addition, the sector still waits on congressional approval of the USMCA to ensure continued free trade with Mexico and Canada while facing increased production capacity from new entrants at home.

Irrespective of whether a trade agreement is struck between the U.S. and China, a brighter future for global agribusiness players is starting to emerge. Ironically it is coming from China, whose domestic pork supplies are dwindling as the country’s farmers cull their herds in response to an unprecedented epidemic of African Swine Fever (ASF). We expect the impact of ASF in China to reverberate throughout the sector globally for years to come, mostly to the advantage of much of the industry as it is boosting demand for alternative proteins and increasing prices all around. So far, this helped to support positive rating actions in JBS S.A., BRF S.A., and Pilgrim's Pride Corp.

We see limited direct impact on consumer products manufactures located in China because of the trade tensions between China and the U.S., given most of the rated consumer product companies focus on the domestic market in China. However, the second-order repercussions of the trade friction—such as weakening consumer sentiment, currency fluctuations, and changes required to reroute procurement—may undermine the growth and profitability of all consumer products companies.

Brexit uncertainties and U.S.-China tariff skirmishes are not expected to have a material credit impact on most EMEA consumer good companies, thanks to their good manufacturing and distribution diversity.

However, like European automakers, consumer goods companies in Europe also face the risk that trade conflicts may escalate. The effect of the first round of the W.T.O ruling on the trade dispute between Boeing-Airbus, has given a clear example of how sudden tax increases can hit specific sectors. For now, the U.S. administration can impose tariffs on $7.5 billion of European products annually. The taxes have been imposed on goods that in most of the cases have very limited connection with airplanes. The list ranges from steel products to biscuits, cheeses, and alcoholic beverages. The second round will be settled next year and will probably give the EU the right to adopt similar tariffs on US products.

The tobacco sector globally continues to face legal and regulatory adversities and we do not expect this to change in 2020. After the decision of the Canadian court in the class-actions against local subsidiaries of PMI, Japan Tobacco, and British American Tobacco that forced these subsidiaries to seek creditor protection under the Companies’ Creditors Arrangement Act (the CCAA), the sector was also hit by the negative news flow on e-cigarettes, and bans on the sale of e-cigarettes in some cities in the U.S. and India. The
issue is under scrutiny and will probably trigger a more severe regulation on the use and the sale of these products.

While we are convinced that the NGPs are crucial for future growth, the inexorable reduction of combustible cigarettes volume sales continues. However, the setback in e-cigarettes reflects the risks with all new products. It also shows that stringent regulatory control on products—the best way to protect consumers—could ultimately be positive for major tobacco companies that are used to coping with stringent regulatory approval procedures and scrutiny. We expect more regulation to come in 2020 and volatility in the tobacco sector to be higher.

Speculative-grade credit quality will erode rapidly in case of a recession

Consumer products companies could face a tough road ahead as global GDP economic growth is slowing and the odds of a U.S. recession has increased. Over 2020, we expect the effect of the economic slowdown in major European economies like Germany or the U.K. to impact demand for consumer goods. We expect polarization, with premium products and convenience products maintaining decent demand and the middle part of the range squeezed. In this situation, brand recognition and ability to continue introducing new products will be important differentiating factors. In the potential recession we are envisaging in 2020 (and in contrast with the previous one), we expect pressure to come more from shrinking operating profits than from refinancing issues that affect liquidity.

As their higher ratings indicate, investment-grade companies seem to be better-positioned to withstand a more difficult operating environment. They are generally larger, more diversified, and benefit from purchasing and pricing power and economies of scale. They generally also have stronger cash flows and more solid balance sheets, with easier and less costly access to the capital markets than their spec-grade counterparts. Consumer staples manufacturers performing well now may not face negative rating actions; they demonstrated solid performance during the last recession because of the nondiscretionary nature of their products, diversified portfolios, and solid cash flow. Nevertheless, our ratings on investment-grade companies that took on significant leverage to make large acquisitions could suffer downgrades if those companies can’t reach deleveraging targets. Ratings at the spec-grade level would be more exposed to a weaker economy. These companies tend to be smaller and highly leveraged, which results in less margin for error on operating shortfalls. We note that potential issues related to covenants are likely to be limited, as in the last four years covenants have been light in the majority of the European debt issuances.

To navigate more difficult economic and credit conditions, we expect borrowers to be more cautious with their financial policies to preserve liquidity and flexibility. It’s likely that most investment-grade companies would reduce share repurchases but continue to increase dividends in line with earnings growth. That said, dividend increases may not be as prevalent as during stronger economic times. We believe that credit access to finance aggressive shareholder dividends and leveraged buyouts for spec-grade companies will be scarce.
Related Research

- Research Update: JBS S.A. And JBS USA Upgraded To 'BB' From 'BB-' On Substantial Deleveraging And Lower Volatility, Outlook Stable, Oct. 30, 2019
- LVMH's Plan To Buy Tiffany Will Reinforce Its Hard Luxury Business But Limit Rating Headroom For Future External Growth, Oct. 29, 2019
- Global Trade At A Crossroads: China’s African Swine Fever May Warm Agribusiness Elsewhere, Oct. 25, 2019
- Anheuser-Busch InBev Outlook Revised To Stable; 'A-/A-2' Ratings Affirmed, Oct 31, 2019
- Imperial Brands Hit By The Increasing U.S. Aversion To Vaping Segment, Sep 27, 2019
- ESG Industry Report Card: Consumer Products And Agribusiness, May 21, 2019
- U.S. Combustible Cigarette Volume Decline Expected To Accelerate, April 22, 2019
- Japan Credit Spotlight: Retail; Consumer Products; Pharmaceuticals, Aug 6, 2019
- China's Small Consumer And Tech Companies Rely On Refinancing To Survive, June 10, 2019

This report does not constitute a rating action.
Revenue growth will continue to be weak given the rapidly changing environment and weak macroeconomic conditions. Ability to reinvest in the business protects the top line of U.S. companies.

Margins are protected due to synergies from acquisitions being integrated. That said, we see margin growth at risk due to the tough competitive environment. Latin America should benefit from improved operating profitability of large agribusiness groups.

We see some deleveraging due to acquisitions being integrated and synergies realized.

The low financing costs in North America and Europe should support cash flow repayment metrics in the next two years.

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Cash, debt, and returns

Global Consumer Products

Cash flow and primary uses

Return on capital employed

Fixed versus variable rate exposure

Long term debt term structure

Cash and equivalents / Total assets

Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Industry Top Trends 2020

Health Care

Disruption and M&A weigh on ratings outlook for 2020

What’s changed?

More downgrades to come. Downgrades continue to outpace upgrades with ongoing disruption in the industry; the continued drive for lower pricing and transparency, increased M&A activity, and opioid-related litigation.

Disruption is accelerating in the industry. The march toward value-based care, calls for greater transparency, the threat of game-changing legislation, and the increased use of data in health care decision-making is accelerating the pace of disruption.

M&A activity increased, especially in pharma. Pharma saw an increased level of deal-making in 2019. Although, M&A and other industry pressures have been more muted in the medical devices subsector.

What to look for in the sector in 2020?

Policy uncertainty amid the 2020 U.S. presidential election. As we head into an election year where health care is a top issue, we could see further headline risk that could heighten pressure.

Industry disruption to continue. Insurance companies will seek to deliver more cost savings and increase transparency by putting more pressure on healthcare service providers and pharmaceutical companies driving ongoing investment.

Deterioration in credit metrics and ratings. Increased pressure on pricing, along with elevated debt leverage resulting from M&A (mostly at high valuations), has led to deteriorating credit metrics (on average) among the rated health care portfolio.

What are the key medium-term credit drivers?

Mergers among payors that pressure pricing. Reimbursement pressure on health care services and pharmaceutical pricing continues.

Opioids and other litigation. Opioid settlement discussions are accelerating. As we near a settlement, it could lead to further rating actions.

Healthcare equipment is an area of relative stability. The medical device sector is still digesting a wave of M&A and deleveraging, and benefits from only indirect exposure to reimbursement risk.
More downgrades likely to come.

Almost a quarter of our health care ratings universe have a negative outlook or are on CreditWatch with negative implications, compared to 14% last year. The health care services and pharma subsectors continue to bear the brunt of downgrades. The services sector is experiencing elevated reimbursement pressure, an accelerating focus on value-based metrics, and greater payor efforts to control utilization. Health care service providers also have lower margins and cash flows than pharmaceutical and medical device companies, and given the heavy presence of highly leveraged, financial sponsor-
owned companies in this subsector, modest deterioration in operating results can have more severe consequences for ratings.

**Pharmaceutical outlook has turned more negative following a very significant wave of M&A.**

Increased debt-financed M&A, greater share repurchase activity post-tax reform, a struggling generic drug industry, and opioid litigation-related rating actions have all contributed to a number of downgrades and negative outlook revisions this past year. The subsector now leads in terms of the percentage of companies with a negative outlook or CreditWatch. We believe the negative ratings pressure will continue given the sharp focus on controlling drug costs and the likely actions by payors, such as by the newly enlarged CVS/Aetna and Cigna/Express Scripts, to further squeeze more costs out of the system. In the meantime, while we believe the generic drug industry is stabilizing, a number of generic players, such as Mylan, Teva, Endo, and Amneal, remain saddled with debt from past M&A and delevering will take time. The ongoing opioid litigation has also increased uncertainty and has resulted in a number of negative rating actions. Further actions may occur as the litigation develops over 2020.

**European pharma is more stable, in contrast to North America.**

Within the rated pharmaceutical universe, the European pharmaceutical industry is more decidedly stable, versus negative for the North American pharma universe. All of our outlooks on European Pharma are stable except for GSK and Sanofi. European pipelines look healthy, and this may somewhat explain the absence of large M&A in sharp contrast with the U.S. landscape. New products like Cosentyx for Novartis (psoriasis), Ocrevus for Roche (multiple sclerosis) Tagrisso for AZ (Oncology), and Shingrix for GSK (vaccine) are driving sales growth. Equally importantly, readouts were favorable and new important filings were achieved, like Tagrisso for first-line lung cancer in China. Smaller player Merck KGaA also received a key approval for its new multiple sclerosis treatment, Mavenclad. Acquisitions have only been bolt-on so far this year, as shown by Roche’s bid over Park Therapeutics. Also, European players were not exposed to the opioid crisis and its sizable settlements.

**Services outlook remains negative.**

Our outlook on health service companies remains negative, with roughly 20% of ratings having a negative outlook, versus 22% prior year. The industry continues to experience chronic reimbursement pressure, an accelerating focus on value-based metrics, greater payor efforts to control utilization, and weaker patient volume trends for certain players. The evolving marketplace has also given rise to new market entrants that address growing demands for efficiency and optimization. However, a number of these new entrants are private equity-backed, have aggressive financial policies, and are on average higher levered. We also remain somewhat skeptical regarding these new market entrants' abilities to deliver on their promises arthugiven their limited track records and the rapidly evolving marketplace.

**Health care equipment and life sciences expected to remain stable.**

In contrast to the health care services and pharmaceutical industries, both of which have led in downgrade activity and negative ratings bias, the health care equipment and life sciences industries remain relatively stable. Both industries are not as exposed to the pricing pressures and disruption occurring in services and pharmaceuticals. Several major health care equipment companies were upgraded, such as Abbott Laboratories and Edwards Lifesciences. However, equipment and life science companies may see increased activity on the M&A front, putting pressure on ratings, despite that we expect continued solid operating results.
Health Care

Key assumptions

1. Health care spending growth to remain modestly above GDP growth.

The growth of health care spending overall has slowed over the past several years, from 5% in 2015 to 3.2% in 2017, despite continued population growth and aging demographics. We expect health care spending growth will remain at similar levels, given pricing and utilization pressure on services and our expectation for a second year of flat average sales prices in pharma.

2. M&A activity is increasing and will likely remain high.

Due to the increasing level of disruption in the health care industry, companies have turned to M&A to further improve their competitive positions and expand/diversify their businesses. The pharmaceutical and health care services subsectors have been especially active, and we expect this to continue. Given the elevated valuations, health care ratings will be under pressure.

3. No major changes on the legislative front.

Legislative scrutiny of the health care industry will continue, though we remain skeptical of the chances of game-changing legislation being passed over the next year.

Health care spending growth to remain lower than historical levels, putting more pressure on the industry.

Health care spending growth in the U.S. has slowed since 2015 because commercial payors have been able to exert pressure via plan design, such as narrow networks and the use of co-pays and deductibles, to drive patients to lower-cost providers and utilize exclusive formularies and outcomes-based contracting in certain disease categories. We expect health care spending growth to remain below 2015 levels in 2020. The newly merged CVS/Aetna and Cigna/Express Scripts, as well as the continued growth of UnitedHealth’s entry into the health care services arena, will also likely mean increased pressure on health care services providers and pharmaceutical companies. We believe there will be a growing gap between health care companies that can properly position themselves to benefit from the rapidly changing market and the ones that fail to evolve.

Disruption drives M&A.

The rapidly evolving health care environment is driving heightened M&A activity. The pharmaceutical industry saw several major M&A headlines in 2019 as companies sought to expand their portfolios and deepen product pipelines, and as pharma pricing pressure continued. Net drug pricing saw it lowest level of growth in years in 2018, and we expect net drug pricing increases to remain minimal in 2019 and 2020. Pharma M&A has mostly been concentrated among the major players, as companies such as Bristol-Myers, Amgen, Abbvie, Eli Lilly, Takeda, and Pfizer all made major acquisitions that led to downgrades. We have also seen several pharma companies divest noncore assets, with the proceeds not generally directed toward deleveraging. Meanwhile, health care services continues to see a high level of M&A activity as companies seek to increase their scale and leverage in select service lines and geographies. Another subsector seeing heightened M&A activity is the life sciences industry, given large transactions by Danaher, ThermoFisher, and PerkinElmer this past year. The life science industry is consolidating and companies are seeking to expand their portfolios and provide “one-stop-shops” for clients. Meanwhile, the medical devices industry, which had been
consolidating in previous years, has been relatively quiet. However, as major players such as Medtronic, Abbott Laboratories, and Becton Dickinson steadily delever, the subsector may return to M&A over the medium term. Indeed, Stryker announced the planned acquisition of Wright Medical in November 2019.

**Limited legislative changes on health care in the U.S.**

Next year is a presidential election year in the U.S. With rising health care costs being a top election issue, there is growing headline risk regarding health care legislation and the number of potentially far-reaching proposals to lower health care spending will increase. Proposals such as Medicare for All, an international pricing index for pharmaceuticals, bans on rebates, surprise billing, drug importation, and the ongoing efforts to repeal the Affordable Care Act will create a lot of legislative noise for the industry. Some policies will pass, but we are not assuming any disruptive pieces of legislation get passed or implemented in the coming election year.

**Key risks and opportunities**

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<tr>
<th>1. Disruption in the health care industry provides opportunities and threats.</th>
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<tr>
<td>Disruption in the industry creates risk but also opportunities. Health care systems are rapidly expanding their service offerings and expanding out of the hospital and into lower-cost delivery settings. Health care remains a strong area of interest for private equity, which sees opportunities to invest in new business models or seek to roll-up providers in specialized services in order to build scale. We will likely see a further separation of winners and losers as market dynamics evolve, such a greater focus on value-base care. Companies that successfully navigate the changing environment, execute their expansion and integration plans, and that benefit from greater scale and efficiencies will more likely be among the winners.</td>
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<th>2. Pharma ratings have little capacity for M&amp;A following this year’s deals.</th>
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<td>We’ve taken multiple negative rating actions in the pharma space in response to large deals from Bristol-Myers-Squibb, AbbVie, Pfizer, and Amgen, especially against the backdrop of declining cash balances following U.S. tax reform. We believe that the major pharmaceutical companies will remain acquisitive over the near term as they seek to improve portfolio diversity and deepen their pipelines in an environment with increasing pricing pressure. However, multiples remain high for attractive assets and we believe the industry has utilized a significant portion of capacity at their current ratings, resulting in negative rating actions. Further negative actions could occur in the coming year. While acquisitions do theoretically lead to better business profiles, given that it takes time to realize the full benefits of acquired assets and the high valuations the assets were acquired at, we may see a pharmaceutical industry that is rated lower than historical levels over the longer term.</td>
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<th>3. Appetites for higher leverage are increasing.</th>
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<td>At the lower end of the rating spectrum, the appetite/tolerance for higher leverage has increased in all three main subsectors: pharma, health care services, and medical equipment. Fueled by a combination of a favorable financing environment, high multiples, and rapid consolidation, starting leverage has been increasing steadily to almost 7x. Although most companies have the potential to deleverage, this is contingent on the delivery of often ambitious management plans, smooth integrations, cost reductions, and fast turnover of investments to cash flows. Furthermore, because most markets are consolidating it is unlikely that we will see significant debt reduction, de-risking balance sheets and reducing refinancing risks.</td>
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European healthcare services are consolidating due to cost pressures.

M&A activity is on the rise in the European health care service sector, reflecting both fragmentation in the market and ongoing efforts to increase scale and drive profitability. Examples include ongoing rapid consolidation of the routine laboratory market in France or of nursing homes in Spain. Monitoring cost structures will remain key in health care services in Europe, as shortages of qualified medical staff, changing legislation in certain markets like Germany, and low unemployment in Europe are raising staff costs, which when combined with limited fee increases can hamper margins. In addition, several names closed/executed large acquisitions, and smooth integrations will be important for cash flow quality.

Opioids litigation is quickly moving toward a settlement.

For such a large and complex litigation, given all the different parties and varying agendas, the opioid litigation settlement talks seem to be moving at a brisk pace, raising the likelihood that a quick resolution could occur and potentially have a negative ratings impact over the near term. We have already taken a number of negative rating actions on pharmaceutical companies and wholesalers, and more could come if a burdensome settlement is agreed upon. However, it remains to be seen what amount and what structure a potential settlement would entail before determining the ratings impact.

Related Research

- The Health Care Credit Beat: Drug Distributors May Have Capacity For Pain, Aug. 20, 2019
- The Health Care Credit Beat: Has The U.S. Generic Pharma Sector Hit Rock Bottom?, July 31, 2019
- Peer Comparison: How Business Strength Varies Across The Top 15 Branded Pharmaceutical Companies, June 10, 2019
- The Pharma Industry Outlook Is Negative On M&A, Pricing Pressure, Regulatory Scrutiny, And Opioid Litigation, March 11, 2019
- When The Cycle Turns: Rising Leverage And Disruption Weaken Speculative-Grade Health Care Companies, March 4, 2019
- The Health Care Credit Beat: It's Looking Like Another Down Year For Ratings, Jan. 18, 2019

This report does not constitute a rating action.
Industry forecasts

Global Health Care

Chart 132
Revenue growth (local currency)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Cash, debt, and returns

Global Health Care

Chart 136: Cash flow and primary uses

Chart 137: Return on capital employed

Chart 138: Fixed versus variable rate exposure

Chart 139: Long term debt term structure

Chart 140: Cash and equivalents / Total assets

Chart 141: Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Homebuilders and Developers

We expect the long, steady housing recovery to continue into 2020

What’s changed?

Improving debt leverage has the credit outlook trending more positive. Of the North American rated homebuilders, about one-quarter have a positive outlook.

In EMEA, lower mortgage rates and demand have driven house price growth. However, 2020 should see more moderate revenue growth amid economic slowdown and political uncertainties.

Property sales growth in China to slow down in 2020. Chinese developers will likely continue to trade average selling prices (ASP) for volume.

What to look for in the sector in 2020?

U.S. employment supports housing activity, but interest rates could hit prices. As long as the U.S. economy continues to create jobs and boost wages, demand for homes should persist.

In EMEA, affordability trends may weigh on demand in 2020. House prices are growing faster than income and rents in Western Europe, and ownership affordability may weaken demand in 2020.

Escalating refinancing risk facing weaker Chinese developers. Financing restrictions will test weak developers’ liquidity management as bond yields have surged with maturity concentration in 2020 and 2021.

What are the key medium-term credit drivers?

Financial policies could drive rating upside. Several issuers face choices between investing in land near a cyclical peak, returning cash to shareholders, or reducing debt.

In EMEA, effects from political decisions will be the key drivers. More regulation may drive consolidation in Russia, while less government stimuli in the U.K. could affect developers negatively.

Intensifying divergence among Chinese developers. While weaker players may get squeezed out, larger developers and state-owned enterprises (SOEs) could win market share.
Ratings trends and outlook

Global Homebuilders and Developers

Chart 142 Ratings distribution
Chart 143 Ratings distribution by region
Chart 144 Ratings outlooks
Chart 145 Ratings outlooks by region
Chart 146 Ratings outlook net bias
Chart 147 Ratings net outlook bias by region

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

As of Oct 1, 2019, we rated 25 issuers in the U.S. homebuilding and real estate developer sector with issuers ranging in size from $806 million to slightly over $18 billion in revenues. 52% of our ratings are in the 'B' category or lower, with only 8% (two) of our ratings investment grade ('BBB-' or higher). Currently, 15 (60%) of the outlooks are stable, with seven positive and three negative outlook.

In EMEA, we expect most property developer ratings to remain stable in 2020. While Western European players should benefit from a somewhat stable operating environment, the rated U.K. developers should be able to absorb decreasing demand as their leverage is low. In GCC, lower presales, operating margins and profitability may put...
some ratings under pressure, although most of them already conservatively incorporate the potential cash flow volatility inherent to highly cyclical markets such as Dubai. While most of our ratings on Russian developers have stabilized in 2019, we believe that in 2020 they are more likely to change in the case of potential M&A or changing financial policy.

In **APAC**, we expect the ongoing divergence trend for Chinese developers to result in balanced numbers of both positive and negative rating actions. Indeed, since mid-year, negative actions have mainly been triggered by increasing refinancing risk from high exposure to alternative financing and mounting debt leverage. In contrast, positive actions were mainly due to improving scale and revenue booking after sustained record sales and solid margins, paired with controlled debt-funded expansion.

In **Latin America**, we expect most homebuilder ratings to hold steady during 2020. In Mexico, in light of a sluggish macroeconomic environment, we expect rated homebuilders to maintain their operating flexibility to adapt to market conditions. We also believe rated players will maintain prudent financial policies, solid liquidity positions, and extended debt maturity profiles during 2020. In Brazil, the macroeconomic recovery (reflected by lower interest and inflation rates) will support real estate financing, stimulating the sector and increasing job creation. Thus, most homebuilders have harnessed the improved credit conditions to restructure their debt profile and expand launches in the following years. Despite some setbacks on Minha Casa Minha Vida (MCMV) during the government transition, we think the program will continue to be supported by the high housing deficit.
U.S. Homebuilders and Developers

Key assumptions

1. Revenue growth looks steady for U.S. homebuilders

S&P Global economists project 1.31 million U.S. housing starts in 2020, about 10% less than the 10 year average of 1.4 million. We expect several factors to remain positive heading into 2020: job growth of about 1.1%, wage growth of about 3.3%, increasing household formations, low existing-home inventory, and high confidence from consumers and builders. The product mix in the U.S. has shifted to more entry-level, lowering the ASP, but this has been more than offset by increased deliveries. With demand still strong and new sales orders increasing, we continue to expect a higher number of deliveries and overall higher ASPs, resulting in revenue growth for 2020.

2. Higher costs test margin flexibility

Homebuilders in the U.S. should get some relief from lower commodity costs, but that affects less than one-third of the cost of a new home. We expect tight land and labor availability will persist, which should continue to constrain volume growth while pressuring costs. Late in this long housing upswing, many of our rated homebuilders have become more financially disciplined and are focusing on returns. Leading homebuilders in the U.S. have adeptly managed the industry’s growth in the higher-volume entry-level market. Companies have sustained margins despite migrating down in price point, and have used a ‘soft pivot’ toward less owned land inventories and more land options to improve efficiency despite pressure on prices and costs.

3. Improving leverage metrics

The shift to lower capital intensity amid steady growth is unusual for homebuilders, which typically consume cash for working capital in an upswing. As our rated homebuilders generate cash internally, they have allocated some to debt reduction along with cyclically improving profitability. Consequently, debt to EBITDA has been declining, resulting in an industry outlook that is trending toward being more positive as opposed to stable, as about 28% of our rated homebuilders now have positive outlooks compared to about 12% last year.

Our outlook for U.S. homebuilding credit quality has shifted to a positive bias, with support from a continued favorable, but uneven, national housing market. We believe positive rating actions could outnumber negative ones in 2020, given our 7 to 3 positive outlook bias. Generally speaking, we incorporate mid- to high-single-digit revenue growth in 2020 into most of our ratings on homebuilders, thanks to higher home deliveries and higher ASPs, which is softened by the industry’s faster-growing entry-level segment. With steady top line growth, good cost control, and restrained land purchasing, we also expect higher EBITDA and internally generated cash flows. Consequently, we expect our rated homebuilders to continue to pay down debt in addition to returning cash to shareholders. In several cases, our positive rating outlook will hinge on several years of demonstrated financial discipline that balances shareholder-friendly activity with growing credit cushion for an inevitable downturn.

Several macro factors support our view of steady industry conditions, including steady job growth, increasing household formations, and higher levels of consumer confidence. We believe demand is still strong driven by the deficit in production that has persisted over a decade. For 2018, housing starts improved for the ninth consecutive year but are still below the 10 year average of 1.43 million units. Single-family starts improved for the
seventh consecutive year but are also below the 10 year average of 1 million units after finishing 2018 at 870,000 units.

Offsetting improving demand is the limited supply of homes on the market and land available for development, which we believe has slowed housing recovery. In addition, labor shortages, trade-driven material price increases, and rising mortgage rates all play a part in higher home prices and the decrease in affordability over recent years.

**Key risks and opportunities**

1. **Deteriorating affordability causes new home volumes and prices to fall**

Considering the slow growth in U.S. housing starts over the last five years and the recent constraints to significant volume increases, we do not expect an economic recession would necessarily center on U.S. housing as much as prior downturns. Pent-up demand from a generation of young homebuyers and long-delayed move-up buyers should support volumes more than prior cycles. On the other hand, buyers demonstrated acute sensitivity to higher mortgage rates in late 2018, forcing homebuilders to provide significant price incentives to preserve affordability. That was short-lived, but a protracted price decline would hit homebuilder cash margins with no cost relief likely from fundamentally constrained land and labor markets.

2. **Debt usage moderates at a cyclical peak**

Balance sheets appear to be in better shape than just a few years ago, sparking our positive credit bias for U.S. homebuilders. Overall, leverage appears to have peaked in 2016, after which leading homebuilders started taking a more conservative stance on debt usage for growth and shareholder returns. As such, homebuilders are generating solid earnings growth with less debt and less inventory at risk, steadily adding to credit cushion for a potential downturn. Homebuilders have used free cash flow in the last few years to reduce debt while maintaining adequate access to land through lower-cost options to support modest single-digit volume growth targets.

3. **Share buybacks could erode a growing credit buffer**

Several homebuilders in the U.S. have good control over their balance sheets at this point in the cycle, with declining debt leverage and good free cash flow expectations, even in a downturn. This credit buffer could be eroded with more aggressive shareholder returns, particularly if profitability deteriorates amid lower home prices.

Current market conditions appear significantly different from those that builders faced during the run-up to 2008’s housing collapse. The U.S. is facing a shortage of about 3.5 million homes—almost all of them in lower price ranges, compared to a situation of historically high new home sales, increasing square footage, and escalating prices.

**Financial policy**

The characteristics of most homebuilders are consistent with speculative-grade ratings, particularly with respect to historical earnings volatility and debt usage. As such, we believe it would be difficult for many more homebuilders to achieve investment-grade ratings absent some fairly substantial shifts in industry dynamics: A high degree of fragmentation and economic cyclicality contribute to high earnings volatility. However, earlier this year we revised the outlook on three ‘BB+’ rated homebuilders--PulteGroup Inc., Toll Brothers Inc., and MDC Holdings Inc.--because of continued deleveraging amid the long and steady upswing in the U.S. housing market. We believe these companies have solid profitability and cash flow this late in the housing cycle, which could enable them to preserve credit measures that are commensurate with an investment-grade
rating even when the housing cycle inevitably turns. Our debt leverage thresholds for achieving investment-grade ratings have been consistent for most homebuilders for years: adjusted debt to EBITDA below 3x, EBITDA interest coverage of at least 6x, and debt to capital of about 40%. All three of these companies’ credit metrics support being investment grade but the metrics should be sustainable in the event of a downturn, which is why our outlook points to a 12-24 month time horizon.

**European Homebuilders and Developers**

**Key assumptions**

1. **U.K. developers should see their selling prices start to recovery in 2020**

While developers focusing on London, especially in the prime segments, have seen their prices hit by Brexit uncertainties, a Brexit deal by the end of 2019 would likely open the way for a slow recovery.

2. **Revenue growth could lose some speed amid an economic slowdown.**

Demand for newly built residential homes in Western Europe should remain healthy as supported by decreasing interest rate. However, the slowdown in the European economy should somewhat moderate the growth in 2020.

3. **GCC developers remain tangled in oversupply and geopolitical tensions**

In the GCC region, residential prices have been on declining trend, especially in the UAE and Qatar, where prices have declined 25%-35% from the peak, and developers continue to see increased leverage due to lower presales, operating margins, and profitability. On the other hand, Russian developers benefit from better mortgage conditions and increasing property selling prices.

The U.K. property market saw its national average price growth decelerate gradually to 0% in 2019, from 5.3% in 2016. But London and the higher-priced segments are suffering the most, as both domestic and foreign investors have become more cautious about Brexit. Property developers focusing on these segment suffered mostly in terms of margin, while eased payment terms could support sales volume.

In the event of a Brexit deal, which we continue to assume in our base case forecast, house prices should start to recover in 2020, although the pace of price growth may be gradual as the economy adjusts after Brexit. In particular, household income growth, in real terms, should be positive, albeit moderately so, for several years. At the same time, borrowing conditions should remain relatively favorable. Mortgage rates especially should rise only very gradually, in line with the Bank of England’s policy rate and added downward pressure from a highly competitive mortgage market. Shortage of supply should also support demand for newly built properties in the years to come and benefit property developers’ revenues and margins.
Demand for newly built residential homes in Western Europe should remain healthy as supported by decreasing interest rates. We think the European Central Bank will not be in a position to raise rates before 2022, meaning buyers and sellers are likely to see their borrowing costs decrease and remain at historical lows until mid-2022, if not longer. Moreover, increasing incentives to develop energy efficient buildings, especially in the commercial space, should continue to support developers' sales.

However, the slowdown in the European economy should somewhat moderate the growth in 2020.

In France, we expect house prices to grow by 3.1% in 2020, from 3.4% in 2019. But property developers should continue to see their revenue growth constrained by the upcoming municipal election in 2020, as the lasting administrative treatment of local recourses against new building projects and low level of permit granting are putting a significant drag on new offers. We expect the situation to recover only at the end of 2020.
In Germany, solid household disposable income growth due to a tight labor market, and low borrowing costs are fueling demand for owner-occupied residences. The supply-and-demand imbalance is still favorable to sellers and the German construction sector is running on full capacity. However, lower consumer confidence, weaker affordability in big cities, and lower net immigration should level the growth. We expect prices to grow by 4.5% in 2020, from 5.3% in 2019.

In the GCC region, geopolitical tensions have escalated and been a drag on growth, in addition to existing hydrocarbon production quotas, and still-subdued oil and gas prices. Low confidence has moderated key growth sectors, such as real estate, and contained improvements in non-oil private sector growth. We do not expect a direct military conflict in the region; however, we do expect political volatility will remain high, which remains a risk to the region’s growth outlook. Still, in our base case we expect government incentives to prompt private sector activity will gradually strengthen domestic demand and that large government projects will also add to growth; we expect GCC growth will average 2.4% over 2020 to 2022, compared to 1% over 2017 to 2019. While we are seeing population growth in some countries, the region has also experienced a shift in population demographics as high-income grossing expats are being replaced by blue collar workers required for many of the infrastructure and real estate development projects. Residential prices have been on a declining trend, especially in United Arab Emirates and Qatar, where prices have declined 25%-35% from the peak. Developers continue to see increased debt-to-EBITDA ratios due to lower presales, operating margins, and profitability as prices decline. In Dubai, the key reason for weakness in the residential sector is in the large supply pipeline. We therefore expect prices to remain under pressure during 2019-2020, and don’t foresee a meaningful recovery in the near term. Since the price decline has been gradual relative to the previous cycle, we believe it will take longer for a meaningful recovery. In Saudi Arabia, we expect government initiatives (such as incentivizing developers to build affordable homes or encouraging banks to introduce more home financing options) to increase home ownership rates of locals. We also expect improving regulation in the country to promote transparency and investment in the sector.

In Russia, new housing prices have demonstrated growth year-to-date (YTD) in 2019, despite higher supply, which increased at a high-single-digit rate compared to the same period of 2018. Positive price momentum has been to some extent supported by market
expectations of future price increases after the new escrow accounts regulation came into force on July 1, 2019. Furthermore, mortgage rates trended slightly down in recent months after a moderate increase in early 2019, and we expect moderate improvement in mortgage affordability to support demand in 2019-2020. This should offset continuing real income decline. In 2020, we assume price growth would normalize while remaining in the positive zone, supported by a tighter supply pipeline. This is because the new regulation requires new housing to be financed with project finance loans, and the banks providing project finance loans are becoming more demanding as to the credit quality of homebuilders.

Key risks and opportunities

1. A disruptive Brexit would likely hit sales hard, especially in London

While we continue to assume a deal as most probable in our central forecast, a disruptive exit – where no free trade agreement was reached - would likely affect property developers’ revenues and margins quite materially, depending on the severity of impact on the overall economy.

2. Affordability trends may weigh on demand, but not in the UAE

As house prices are growing faster than income and rents in Western Europe, ownership affordability may weaken and somewhat weigh on demand in 2020. This is especially the case in cities where most rated developers focus their operations. On the other hand, after four years of price declines and improving affordability, UAE has seen the development of medium segment apartments, a new offer to address new mid-market investors.

3. Regulation may drive consolidation in Russia, U.K. and Israel face less stimulus.

In Russia, the new regulation on project loans will likely affect small developers and create opportunities for consolidations. In the U.K., the upcoming end of Help-To-Buy government incentive will likely soften demand for newly built apartments. While in Israel, political instability and continued uncertainty in the market may moderate the demand from first-time homebuyers.

In our view, a no-deal Brexit could see U.K. house prices drop between 8% and 15% (from peak to trough), depending on the severity of the impact on the economy. This would put developers’ revenues and margins under pressure. We believe they would likely ease payment terms and offer incentives to buy in order to sustain sales volumes. That said, the reduction in residential construction activity that may accompany a disruptive no-deal scenario would also translate into a further deterioration of supply for years to come, which could moderate the price drop.

As we expect the European average house price to continue growing in 2020, we see home ownership affordability as deteriorating further. Although in most countries house prices remain better than prior to the 2008-2009 financial crisis, we remain concerned that in large cities demand could shift to outside locations. Moreover, rising social demonstrations on weakening rent affordability, such as in Berlin, could represent a risk for property developers; if regulations become less landlord-friendly it could suppress investor demand for newly built residential properties. This would be detrimental to most developers that focus on these cities. On the other hand, after four years of price decline and improving affordability, UAE has seen the development of medium segment apartments, a new offer to address a new mid-market investors.
In Russia, the government is setting a new regulation that requires the development of new housing to be financed with project finance loans. At the same time, the banks providing project finance loans are becoming more demanding to the credit quality of homebuilders. We see a risk that small and weak homebuilders face difficulties as they will not likely be able to raise new financing from banks. In this light, these players would appear vulnerable to potential and we therefore envisage an industry consolidation trend in 2020-2021.

In the U.K., the Help-To-Buy government incentive that was driving demand for newly built apartments will likely decrease in 2021 and expire in 2023. From April 2021 to its expiry in 2045, the scheme will be restricted to first-time home buyers and limited based on regional factors. We believe this will likely affect demand and moderate developers’ recovery, although our rated developers currently have limited exposure to the scheme. We believe property developers may also adapt their product mix according to the new government restrictions in order to sustain volumes.

In Israel, the general elections in April 2019 and the failure to establish a new government that led to another round of elections in September 2019 created uncertainty in the market, mainly regarding the continuation of government programs and in particular "Mehir Lamishtaken". Political pressure to distribute responsibility over the housing market across various government ministries is likely to somewhat diminish the government’s ability to promote extensive programs in the housing market and to increase supply. In addition, relatively long waiting periods for completing “Mehir Lamishtaken” projects due to the marketing of land that is not immediately available for construction may drive eligible buyers back to the free market. Therefore, in the short term, we believe political instability and continued uncertainty in the market may lead first-time homebuyers to get off the fence, and support the increase in the number of transactions, creating moderate pressure for price increases, especially in demand areas.
Asia-Pacific Homebuilders and Developers

Key assumptions

1. Property sales growth in China to decelerate in 2020

As the government has tightened up liquidity, we believe developers will continue to offer price promotions to improve volume. As such, gross floor area (GFA) sold may climb mildly, while ASP may stay flat. However, both GFA and ASP in lower-tier cities could slide due to price cuts and weaker user demands. We expect residential sales to stay flat or to grow mildly by 5% in 2020 on the back of several years of double-digit growth.

2. Controlled financing conditions will likely remain in China

Brand new measures around domestic and offshore bond issuance as well as trust financing or shadow banking means all major funding sources are being constricted. After the liquidity "rollercoaster" in 2019 caused parallel fluctuations in sales, we do not expect drastic policy swings given Beijing's conviction to stabilize home prices, land prices, and property price speculation.

3. Civil unrest in Hong Kong will likely drag down home prices

We expect Hong Kong home prices to fall 5%-10% in 2020, or a total 10%-20% from the peak in mid-2019. That is mainly due to waning confidence among homebuyers amid the ongoing civil unrest and economic headwinds. Retail rental, to which Hong Kong developers have a large exposure, should suffer more, and we expect slightly negative rental reversion in 2020.

Our expectation that Chinese developers will continue to trade ASP for volume in 2020 is based on the ongoing restrictive policies on funding as well as the country's slowing economic growth. Recent growth was a sign that developers' promotional efforts are working for now. The slowing economic growth, however, will likely impact sales in lower-tier cities more, as their demand is more volatile with larger investment demand from neighboring high-tier cities. At the same time, we expect larger developers to grab more market share and outperform the wider market as smaller, regional players could get squeezed out. Indeed, rated developers who publish monthly sales figures recorded above-market sales growth of 24.4% YOY (versus 10% national growth) in the first nine months of 2019.

Considering that liquidity conditions have been relaxed at the beginning of 2019 and then retightened since mid-2019, we expect the Chinese government to maintain current policies to prevent any risk of overheating (which happened briefly in 2Q2019), and be more discerning in city-specific policies. Tightening on developers’ funding channels should continue to be more stringent than that on the physical market. Although that could create more refinancing risk for weaker players, it could also stave off developers’ debt-funded expansions, thereby supporting their credit standing.

For Hong Kong, sustained civil unrest will undoubtedly weigh on the city's residential and rental property markets. However, Hong Kong developers mostly have large financial buffers to absorb a 20%-40% simultaneous decline in home prices and rental income. They have also consistently improved their balance sheet management, gaining experience from the Asian Financial Crisis and SARS epidemic in the past. Furthermore, a structural shortage in housing supply, the relaxation of tightening measures in
government’s recent policy address, and low interest rates should prevent home price decline from steepening.

**Key risks and opportunities**

1. **Refinancing event risks have increased for weaker developers in China**

   The risk is escalating fast for weak developers with upcoming sharp maturities but limited refinancing ability or experience. For some of these developers, low investor confidence and market volatility may limit their ability to reissue or refinance their dollar-denominated bonds, at a time when policies don’t offer a lot of room for slippage.

2. **Intensifying credit divergence for Chinese developers**

   More obstacles will likely create more divergence among the Chinese developers. We believe larger players and SOEs are likely to benefit because of better financial flexibility and access. They also have the capability to deleverage, which is the government’s requirement for SOEs, too. Conversely, liquidity profiles and leverage trends for smaller players will depend more on cash generation and project completion abilities because current policies effectively place a cap on their debt growth and refinancing options.

3. **Liquidity management remains paramount for Indonesian developers**

   With property sales muted in 2019, cash flow and liquidity management will reign paramount in the next 12 to 24 months. This has resulted in gradual credit quality impairment. Rated developers have thin reserves but can service interest payments. Those with near-term maturities will have to find alternative ways to term out their existing debt, as redemption is not an option due to limited operating cash flow.

   Chinese developers’ overall maturity of about $27 billion offshore dollar-denominated bonds in 2020 looks largely manageable. But lumpy maturity concentration and needing to deal with another $60 billion in domestic bonds is an unprecedented refinancing feat for some to manage. In any case, we believe the risk mainly lies within smaller developers that have poor operating and financial performance and concentrated maturities in 2020. They may have genuine difficulties in refinancing if their yields are prohibitively high. They don’t have many other options either, considering each funding channel being capped. Their own cash flow may be the sole support, which, in a number of cases, is already weaker than peers’.

   However, things are not all bleak. As we expect credit divergence to accelerate, some players will be able to benefit. As industry growth slows and smaller players are driven into a hard place, we view larger companies and SOEs as having more opportunities to grab market share. The challenge is for them to strike a balance, as leverage trend hinges on their willingness to control debt by balancing growth aspirations.

   As for Chinese developers’ financial policy, the government’s stance of promoting deleveraging also has an impact on privately-owned developers’ financial management. A number of developers are holding back on land acquisitions and could imply softer growth aspirations. With funding being generally less available, it is a new normal that developers need to live with. Some of them also want to positively respond to government’s call to deleverage. For SOE developers, the government does have specific leverage targets for them to comply with. Hence this environment could actually instigate deleveraging and help improve credit standing. But this is subject to solid operations and abundant saleable resources.
Latin America Homebuilders and Developers

Key assumptions

1. Product mix shift and average price increases will drive sales in Mexico

While we still expect a general negative trend in housing starts in Mexico for 2020-- below 180,000 units--we believe our rated homebuilders will maintain their operating flexibility to adapt to market conditions. Thus, we foresee steady results, mostly driven by average price increases resulting from ongoing product mix shift towards the middle-income and residential segments.

2. Higher launches on gradually increasing demand in Brazil

Brazil’s gradual economic recovery will continue to support higher housing demand. While more launches will require higher working capital needs, we believe an adequate sales pace and a more efficient cost structure will compensate.

Our forecast suggests that Mexican rated homebuilders will post steady results in 2020, with low- to mid-single-digit revenue growth on average. We believe this will be mostly driven by modest price increases, as we expect units sold to be broadly flat or slightly negative given the lack of financing available in the market to address the low-income part of the population. Thus, we expect rated homebuilders to keep transitioning their product mix towards the middle-income and residential segments. This will be primarily driven by mortgage availability in these slices of the market, and from our expectations of moderate inflation rates, stable interest rates for mortgages, and job generation, although at a lower pace YOY (+1.8% in August 2019 versus 4.0% in August 2018).

Additionally, we expect these companies to keep focusing on profitability and cash flow generation through 2020, while some of them will keep investing significantly in land purchases. Nonetheless, we expect rated industry participants to maintain prudent financial policies towards the use of debt and shareholders returns, and to maintain leverage in the 2.0x area on average.

In Brazil, a gradual recovery in demand allows for monetization of finished inventories mainly in the mid-high income segment, while low-income sales on the government-housing program remain resilient. As a result, we expect increased launches in both segments, but under a prudent approach as most companies recently faced challenging industry conditions during Brazil’s economic downturn. Declining unemployment and controlled inflation and interest rates should support adequate credit granting, driving higher sales and cash flows in 2020. While more launches will require higher working capital needs, we believe an adequate sales pace and a more efficient cost structure will compensate.
Key risks and opportunities

1. Political and economic risks persist in Mexico, while material costs rise

Downside risks persist in the Mexican housing sector, particularly if softer-than-expected economic conditions materialize. We believe this could translate into a reduction in employment generation, lower household disposable income, a deterioration in consumer confidence, and ultimately lower housing demand and homebuilder growth prospects.

2. Brazil's government housing program to remain resilient

The risk of Brazil's government making relevant modifications on the Minha Casa Minha Vida housing program is low in the foreseeable future. However, the mid- and high-income segments remain exposed to macroeconomic downside risks.

3. Mexican and Brazilian homebuilders are better prepared to face a downturn

In recent years, most of the rated homebuilders have strengthened their operations, liquidity positions, maintained comfortable debt maturity profile and relatively low leverage.
Independent from the fact that the housing industry is local in nature, we believe that under a hypothetical downturn in these economies, consumer confidence could fall along with demand for housing. In any case, we believe that Mexican and Brazilian homebuilders are prepared in terms of operating efficiency, leverage, liquidity position, and financial policy to face a downturn in the economy. In Brazil, companies have strict sales policies, which contribute to lower cancelation rates and more efficient construction processes that avoid cost overruns. Still, weaker cash flow generation due to poor macroeconomic conditions would likely result in liquidity issues for lower-rated entities that don’t have relevant cash positions, particularly in Brazil.

**Industry forecasts**

In Mexico, we still predict mixed results in the sector. On one hand, we continue to expect a general negative trend in terms of housing starts--slightly below 180,000 units--given that the subsidy level is likely to be down 14% against the historically low MXN1.7 billion budget in 2019. Unless the government and/or private sector launch new financing schemes to address this segment, this will continue to affect the low-income segment, where the bulk of the country's demand stands. On the other hand, we still foresee robust activity in the middle-income and residential segments amid solid mortgage loan availability from commercial banks and public financial institutions like INFONAVIT, and solid demand for these segments as long as employment rates keep growing. In Brazil, we expect homebuilders to accelerate their recovery in top-line and cash flow generation, reporting stronger inventory sales and higher sales pace amid our expectation of a cycle turn. With the recent pension reform approval and upcoming fiscal reform, business confidence has increased and the housing market has heated. Local capital markets’ appetite for new issues is building up and structured finance instruments, such as Certificado de Recebíveis Imobiliário (CRI) and Letra de Credito Imobiliário (LCI) and Letra Imobiliário Garantida (LIG), will become more important to foster the sector growth. Additionally, the new cancelation law, enacted in early 2019, has provided more security for homebuilders and discouraged speculation.

**Industry developments**

Mexico’s housing starts will likely continue to fall throughout 2020, particularly in the absence of subsidy or other financing schemes from the government or private sector to address the needs of the low-income segment. In our view, the middle income and residential segments will remain the growth engine for the industry as long as we continue to see mortgage availability and job creation. An uncertain macroeconomic environment still poses downside risks on these two last segments should the economy contract beyond our expectations. Other key industry drivers in Mexico are the large housing deficit at close to 9.0 million units, positive demographic dynamics, mortgage loan availability from public financial institutions and commercial banks, and job creation. In Brazil, we expect the housing industry to benefit from a steady economic recovery in 2020, including GDP growth of 2.0% against our 0.8% forecast for 2019. We also expect low inflation rates at around 4% in the coming years and declining unemployment. These conditions should support a better environment for industry growth. After the approval of the pension reform, we expect a more stable market, with increasing demand and credit financing. We also forecast gradually decreasing benchmark interest rates to 5% by the end of 2020 compared to the current 5.5%, which might incentivize issuers to refinance and strengthen its capital structure. However, this will likely be counterbalanced by the companies’ deleveraging trend. Companies with prudent working capital management benefited from decreasing prices to build a more robust land reserve and might not face the increasing competition for land, especially in denser cities like São Paulo. Those that are expanding to other regions face execution risk because of the country’s size and the difficulty in implementing operations in different places while maintaining profitable margins.
Financial policy

Mexican rated homebuilders continue to maintain prudent financial policies toward dividend payments and the use of debt to fund their growth strategies. We expect Mexican homebuilders to maintain their commitment to low leverage, with net debt to EBITDA around 2x on average, coupled with healthy liquidity positions. Issuers in the sector maintain solid cash holdings, comfortable short- to medium-term debt amortizations, and significant undrawn committed credit lines available. The vast majority of Brazilian issuers have accessed credit and capital markets this year to take advantage of record-low interest rates. Still, we expect new debt or structured products issuances in 2020 if conditions remain beneficial, either to grow the amount of launches and/or to address future refinancing needs. Overall, Brazilian homebuilders have smooth debt maturity profiles in 2020 and, with expected stronger cash flows for most companies, some could eventually increase dividend payouts.

Related Research

– Unrest Holds Back But Won't Hold Down Hong Kong Landlords And Developers, Oct. 8, 2019
– China's Land-Starved Developers Could Increase Risk Appetite, June 4, 2019
– ESG Industry Report Card: Real Estate And Homebuilders/Developers, June 3, 2019
– Will Regulatory Changes Strike At The Foundations Of Russian Residential Real Estate Developers?, Feb. 18, 2019
– China Property Watch: The Slowdown Won't Stifle Jostling Developers, April 1, 2019
– For China's Developers, A Borrowing Boom Is Also Borrowed Time, March 5, 2019

This report does not constitute a rating action.
Industry forecasts

Global Homebuilders and Developers

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Revenue growth (local currency)

Chart 153
EBITDA margin (adjusted)

Chart 154
Debt / EBITDA (median, adjusted)

Chart 155
FFO / Debt (median, adjusted)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Cash, debt, and returns

Global Homebuilders and Developers

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Cash flow and primary uses

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Fixed versus variable rate exposure

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Long term debt term structure

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Cash and equivalents / Total assets

Chart 161
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Industry Top Trends 2020
Hotels, Gaming, and Leisure
Slowing Global Growth Could Hurt Discretionary Leisure Spending

What’s changed?

U.S. recession risk. The risk of a U.S. recession starting in the next 12 months was raised to 30%-35%, which is significantly higher than one year ago. Discretionary leisure spending could moderate or begin to decline, depending upon its severity.

U.S. RevPAR forecast. Trade wars, geopolitical strife, fears of a sustained global growth slowdown, and political volatility in the U.S. are increasing the risk of a 2020 RevPAR downturn. We plan to begin 2020 with flat U.S. RevPAR in our base case.

European tour operators. The traditional packaged holiday tour operator industry has been going through difficult times lately, and the demise of 178-year-old Thomas Cook is the most powerful example.

What to look for in the sector in 2020?

U.S. gaming M&A. If reasonable financing terms remain available, and with no desirable U.S. development opportunities over the near term, gaming operators and REITs will look to acquisitions to gain scale, diversity, and operating efficiencies.

Choppy cruise waters. Given 7% global capacity growth, the increasing risk of U.S. recession, and our expectation for weak German and Italian economies, we believe constant currency yields will be flat to up to the low single digits.

European RevPAR slows. European RevPar will continue to slow to the low-single-digit area in 2020 mostly due to sagging economic growth, uncertainties around Brexit and other political risks, and weakening consumer confidence.

What are the key medium-term credit drivers?

Healthy lodging managers and franchisers. If a future recession is modest, managers and franchisors may not experience EBITDA erosion due to room growth.

Big ticket leisure goods slow. We expect the sales of big-ticket leisure goods could moderate or potentially decline over the next year partly because we have raised the risk of a recession starting over the next 12 months to be 30%-35%.

Japan bidders revealed. Operators are drawing battle lines for a competitive Japan integrated resort bid process. Japan is unlikely to award licenses before late 2020.
Ratings trends and outlook

Global Hotels, Gaming, and Leisure

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Ratings distribution by region

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Ratings distribution by subsector

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Ratings outlooks by subsector

Chart 166
Ratings outlook net bias

Chart 167
Ratings net outlook bias by subsector

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

Key assumptions

1. Las Vegas poised for another year of modest growth

We expect gaming revenue (GGR) and RevPAR to be flat to up 3% in 2020, in line with our economists’ forecast for consumer spending growth.

Las Vegas 2020 RevPAR growth will largely result from higher average daily rates (ADRs), as opposed to occupancy because occupancy is already over 90% on the Strip. Las Vegas offers good value and a broad array of room types and amenities for conventions and trade shows. The market will also benefit from the return of a large citywide trade show (CONEXPO-CON/AGG) in March, supporting growth in convention visitation. Additionally, Las Vegas’s expanding entertainment options make it a compelling destination for both leisure and gaming travelers. The relocation of the Raiders to Las Vegas for the 2020 NFL season should drive additional visitation.

Given expected continued strong visitation and convention business next year and no material supply changes, we believe the market can absorb moderately higher room rates. While there are two large resorts under construction toward the northern end of the Strip, the first won’t open until late 2020, increasing the supply of hotel rooms by about 2%.

Although we would expect Las Vegas as a destination market to experience more severe declines in a recession, we suspect that if the next downturn occurs over the next few years, the cash flow declines may be less severe than in the financial crisis when the room inventory grew by 12%. The supply growth picture is more manageable over the next few years based on current development plans.

2. Mass market continues to be Macau’s strength

We forecast Macau’s 2020 gross gaming revenue (GGR) will rebound slightly to about 0%-5% from negative 2%-2% in 2019 (below our previous 2019 forecast of 0%-4%) as mass market growth could offset continued weakness and volatility in the VIP segment.

We also believe the Chinese government’s desire to limit the exit of funds for gambling in Macau could stifle growth as well.

Mass market continues to be Macau’s strength

We forecast Macau’s 2020 gross gaming revenue (GGR) will rebound slightly to about 0%-5% from negative 2%-2% in 2019 (below our previous 2019 forecast of 0%-4%) as mass market growth could offset continued weakness and volatility in the VIP segment. We also believe the Chinese government’s desire to limit the exit of funds for gambling in Macau could stifle growth as well.
We don’t expect the protests in Hong Kong to have a significant impact on GGR, as Macau draws only a limited number of customers from Hong Kong and relies primarily on visitation from mainland China.

Despite a significant decline in 2019, we expect VIP GGR could fall again in 2020 and our forecast range is down 5% to up 5%. Unlike mass-market customers, VIP customers are more affected by macrosentiments in China and to some extent regional APAC competition. We expect tight liquidity conditions in China, lingering overhangs from the U.S.-China trade war, and increased regional competition for VIP players to pressure VIP GGR.

In contrast, mass market growth relies on a growing Chinese middle class, capacity increases, and transportation and infrastructure improvements that enhance Macau’s accessibility from mainland China. After strong growth of 15%-20% in 2019, we expect mass-market GGR growth to slow to 4%-6%, more in line with our economists’ forecast for China’s GDP to grow 5.8%. While 2019’s growth benefitted from additional hotel room capacity and the shift of VIP customers to mass-market tables, we do not anticipate similar factors to boost growth in 2020, as there will be limited new hotel rooms open in the market.

**Merger and acquisition activity remains elevated in 2020**

As long as financing remains available on reasonable terms, acquisitions will be one of the main drivers of growth for both gaming operators and REITs. With no desirable U.S. development opportunities available over the near term, operators will look to acquisitions to gain scale, diversity, and operating efficiencies.

Operators may also partner with REITs to pursue acquisition activity, as REITs can represent a source of financing for operators. Gaming REITs need to demonstrate a consistent track record of growth through acquisitions as part of their business model, and partnership with operators for acquisitions can help REITs diversify their tenant bases.

We expect over $20 billion of acquisitions to close in 2020, largely due to the merger of Eldorado and Caesars. This merger is likely to spur additional acquisition activity as Eldorado seeks to rationalize the portfolio and perhaps divest some smaller regional properties and at least one large Las Vegas Strip asset. Additionally, MGM’s desire to move toward a more asset-light model could also spur further activity, although it has less real estate to sell after the recent Bellagio real estate and Circus Circus transaction announcements.

The extent to which M&A affects ratings will likely depend on companies’ decisions regarding financing choices, the REITs’ ability to issue sufficient equity to remain within their financial policy goals, and operators’ abilities to achieve cost savings.
Key risks and opportunities

1. Macau concession risk

We view upcoming 2022 concession expirations as a credit risk. While we expect operators will extend their concessions, it will likely come at a cost and the government's renewal terms are as yet unclear.

2. Interested bidders are beginning to show their hands in Japan

The battle lines are beginning to be drawn as operators focus their attention on more targeted possible locations for their Japan integrated resort (IR) bids. We expect securing a license will be a competitive process given strong prospects and the level of interest in pursuing licenses.

3. Euro online gaming and entry into the U.S. market

Online gaming in Europe continues to grow strongly thanks to increased mobile penetration and technological innovation. Mergers are likely to increase market share and margins, but also often bolster the portfolio of brands. Brands, pricing, marketing, and operating efficiency will be important factors for European online gaming operators entering the U.S. market to chase the growth opportunity.

Macau Concession Risk

We view upcoming 2022 concession expirations as a credit risk. While we expect operators will extend their concessions, it will likely come at a cost and the government's renewal terms are unclear. We believe they will probably include some combination of economic and social consideration. Economic consideration for concession rebids could include upfront payments for license renewals or additional capital investment requirements, particularly in nongaming amenities, given that the Macau government has articulated an ambitious target of 40% nongaming revenue, compared to 12.9% in 2018.

As operators expand nongaming investments, we expect lower margins and return on capital. The government may also ask for additional social considerations or safeguards for local employees such as enhanced benefits, which could reduce operators’ profitability. We expect to gain additional clarity on the renewal process over the next year as Macau’s new chief executive who will oversee the process takes office this December. We believe the government values stability and the amount of investment that concessionaires make in the market. As a result, we do not expect any concessionaires or subconcessionaires to lose their concessions. We also do not anticipate the granting of meaningful additional licenses because the already competitive market conditions and limited land for additional development act as barriers to new entrants.

Interested Bidders Are Beginning To Show Their Hands In Japan

The battle lines are beginning to be drawn as operators focus their attention on more targeted possible locations for their Japan integrated resort (IR) bids. We expect securing a license will be a competitive process given strong prospects for the size of this new gaming market and the many gaming operators and jurisdictions that have expressed interest in pursuing licenses.

That said, we believe Japan is unlikely to award any licenses until late 2020, at the earliest. Each of the interested jurisdictions is at varying stages in selecting an operator to partner with in bidding for one of the three licenses. Most jurisdictions are following a multistage process that will involve initial requests for information and concept before moving to a more formal request for proposal to select its partner.
Additionally, the central government plans to establish its casino commission and full IR policy next year. We expect that policy will lay out the criteria and process for applying for licenses. Once licenses are awarded, we believe construction of these resorts is likely to be at least four years. As a result, we believe it’s highly unlikely that operators would incur any significant development spending in Japan before 2021, and that resorts won’t open before 2025. Operators will likely spend at least $10 billion to develop IRs in large cities. Such large development costs, coupled with high tax rates, entry restrictions, and a short license tenor, could challenge returns for operators and encourage partnerships.

**Euro Online Gaming And Entry Into The U.S. Market**

Online gaming in Europe continues to grow strongly, as in other parts of the world, against a backdrop of increased mobile penetration, increasing internet speeds, and technological innovation. Other contributing factors include the increasing social acceptance of online sports betting, in particular with younger consumers, as well as rapid product innovation such as the integration of online games with gaming. Online revenues in Europe are driven predominately through sports betting, online casinos, and online lottery. We expect the continued proliferation of online gaming growth to continue to far outpace offline gaming revenue.

In our opinion, European regulation regarding online gaming has been slower to catch up with the rate of expansion and technological development in the market. We believe there is a risk of continued tightening of online gaming regulation, depending on individual markets, but on balance view the European market as more exposed to regulation than the U.S. Various contemplated measures include tightening restrictions on the use of credit cards, tighter controls over problem gambling, and restrictions on advertising, sponsorship, and in-play betting. We note the industry is increasingly leaning toward self-regulation; however, we don’t believe this will fully shelter companies from all regulatory developments.

The growth of online has also placed a spotlight on the importance of anti-money laundering and know your customer controls and procedures as online gaming companies become increasingly exposed to potential fraud or money laundering. In our opinion, parts of the online gaming market place are less exposed to social risks for now. We believe sports betting, for example, is increasingly viewed as more socially acceptable than are casino or slot betting.

The European online gaming industry continues to consolidate as players seek scale, diversification, efficiencies, increased resources for product innovation, and a platform for growth. We believe the tightening regulatory environment in Europe is also prompting the consolidation. It enables players to better deal with regulation, particularly increased regulatory costs, but also enhances diversification by lessening exposure to any one local or regional regulatory regime, which creates event risk.

Taking the U.K. market as an example, growth is slowing given the maturity and increased regulatory pressures. Countering this, we believe this increases barriers to entry, entrenches existing market positions, and promotes increased consolidation and M&A.

Mergers are likely to increase market share and margins, but also often bolster the portfolio of brands. Brands, pricing, marketing, and operating efficiency will be important factors for European online gaming operators entering the U.S. market to chase the growth opportunity. From a consolidated platform of greater scale, players are able to position themselves to take an early-market leading position and invest strongly to gain market share as the market develops.

We expect the legalization of sports betting in U.S. states to continue gradually following the prior announced Supreme Court decision. The U.S. opportunity provides the European participants the ability to leverage their existing knowledge, brands, and IP and diversify away from Europe, with the aim of establishing leadership positions and market share.
Hotels

Key assumptions

1. U.S. 2020 RevPAR growth range is (1%)-1% and vulnerable to a recession

Slower anticipated economic growth in the U.S. in 2020 is causing investment, employment and travel to slow down, hurting business and leisure hotel demand. U.S. 2020 RevPAR is flat in our base-case forecast, which is the midpoint of a plausible range of negative 1% to 1%.

2. European RevPAR growth is slowing down to low-single digits

We forecast European RevPar to continue slowing down to the low-single-digit area in 2020 mostly due to sagging economic growth, uncertainties around Brexit and other political risks, and weakening consumer confidence.

3. Timeshare contract sales will grow in 2020, a modest recession would hurt

We believe a deceleration in the economy would pose a challenge for rated timeshare companies to sustain recent contract sales growth rates.

U.S. 2020 RevPAR growth range is negligible and vulnerable to a recession

Slower anticipated economic growth in the U.S. in 2020 is causing investment, employment and travel to slow down, hurting business and leisure hotel demand. Overall average occupancy in the U.S. turned negative in June and has been down nearly every month since as of November 2019, and RevPAR is barely growing because of a tepid level of higher average daily rate.

Even though hotel room supply growth is benign at 2% anticipated in 2020, the demand for hotel rooms is growing at an even slower rate. Trade wars, geopolitical strife, fears of a sustained global growth slowdown, and political volatility in the U.S. are all contributing to the increasingly likely prospect of a 2020 downturn in U.S. lodging. We plan to begin 2020 with the assumption that U.S. RevPAR is flat in our base-case forecast, which is the midpoint of a plausible range of negative 1% to 1%.

European RevPAR growth is slowing down to low-single digits

We forecast European RevPar to continue slowing down to the low-single-digit area in 2020 mostly due to sagging economic growth, uncertainties around Brexit and other political risks, and weakening consumer confidence. Our economists’ forecast GDP growth of 1.1% in the Eurozone in 2020, including 1.1% in the U.K., 1.3% in France, and 0.5% in Germany. We expect mixed performance among countries and cities with some being more resilient like Spain, Paris, and London. However, we think the overall RevPar trend will slow, which started in the second half of 2019 and will continue across all European lodging markets.

U.K. RevPar growth in 2020 is forecast to be around 0%-1%, mostly due to continuing uncertainties around Brexit, a high number of rooms additions, and softer economic conditions. We expect stronger performance in London, due to strong international tourism boosted by the weak pound, as well as UEFA EURO 2020 final and semi-finals that will be held in London, while U.K. regions outside of London may slip into negative territory. We don’t expect significant movement in the occupancy rates for the U.K., with some potent modest decline of negative 1% to flat in London due to an increase in supply over the past several years. We believe ADR will grow (flat to 2% in pounds) and should offset the occupancy decline.
European RevPAR (excluding the U.K.) could grow 1%-3% in 2020, absent terrorism events and incorporating the potential for continued political volatility in Spain and Turkey. Growth will come mostly from ADR, while occupancy rates will remain flat or decline by a modest amount. The best performers are expected to be France, with sound trends in Paris, Belgium, and Southern European countries. We expect Spain to be more volatile due to continuing instability and the political situation in Catalonia; however, the rest of Spain still enjoys high demand from leisure travelers and should show sound mid-single-digit RevPar growth.

**Timeshare contract sales will grow in 2020, a modest recession would hurt**

S&P Global’s economists have raised the risk of a recession starting over the next 12 months to 30%-35%, double the possibility compared to about one year ago. We believe a deceleration in the economy would pose a challenge for rated timeshare companies to sustain recent contract sales growth rates.

In recent years, several timeshare companies deployed a strategy of entering new markets, inventory acquisitions, and investments in new sales centers and distribution partnerships that generated first-time buyers and owner base growth. We believe these strategies will continue to be effective, but we could begin to see a moderation in sales growth and tour flow conversion if consumer sentiment deteriorates. We believe timeshare issuers could potentially maintain investment spending in an environment of decelerating growth, resulting in temporarily lower sales efficiency and profitability.

However, we expect Marriott Vacations (BB/Stable/--), Wyndham Destinations (BB+/Positive/--), and Hilton Grand Vacations (BB+/Stable/--), to generate mid- to high-single-digit percent contract sales growth in 2020, supported by sales distribution investments and Blue Thread strategy of cross-selling to Wyndham Hotels loyalty members, respectively. We preliminarily expect Hilton Grand Vacations to generate low-single-digit percent contract sales growth in 2020 after underperforming in 2019 due to an inventory shortage. We expect Diamond Resorts (CCC+/Negative/--) to have some sales growth because of its recent focus on new owners, although the company's high provisions for loan losses will likely weigh on profitability and the health of its owner base growth.
Key risks and opportunities

1. Managers and franchisors weather a U.S. downturn better than owners

The severity and duration of a possible recession will determine the extent of the negative impact on lodging companies' profitability. However, if a future hypothetical recession is modest, managers and franchisors may not experience much EBITDA erosion at all.

For example, if RevPAR hypothetically falls 1% in 2020 (the low end of our negative 1%-1% range), then theoretically net rooms growth should offset the hit to RevPAR. For several lodging operators, current anticipated growth in rooms is well above 1% and should offset a decline in RevPAR of 1%, as long as expenses are held in check. Obviously, the more significant the RevPAR decline, the less growth offsets the hit to revenue.

We believe this is a large motivation for nearly all diversified lodging operators separating real estate from fee-based businesses. The model is less volatile than hotel ownership, which bears the burden of the hotel's fixed costs and capital expenditures, and therefore, experiences high profit and cash flow volatility. The market also awards a higher multiple to managers and franchisors, for the same reason.

2. Latin America's lodging sector should be resilient in 2020

The Latin American lodging sector has benefitted from local currency depreciation and has many high-quality resort assets and locations that are perennially attractive to North American and European tourists. We expect the region can maintain stable occupancy rates around 60% and generate RevPar growth in the low- to mid-single-digit area in 2020, despite slower anticipated global economic growth prospects in 2020.

Our current forecast is for an increase in Latin America GDP (excluding Venezuela) growth of 1.6% in 2020, compared to an estimated 0.7% in 2019, which should support our modest anticipated increase in RevPar, ADR in line with inflation and stable occupancy

3. Increased scale could benefit independent third-party management

We believe third-party managers can fulfill a need in the lodging industry and provide a solution for hotel owners that seek to sustain margin while maintaining brand standards under their franchise agreements. We would view longer contract duration, more favorable hotel ownership mix, and lower contract turnover as signals of success among third-party managers.
rates. We expect lodging companies to fund new hotel openings with a mix of cash and debt, maintaining moderate leverage and adequate liquidity positions.

Nonetheless, if global political tensions and policy uncertainty increases in the region’s largest countries, economic growth prospects may deteriorate and expansion projects may be postponed. We believe the region’s top risks relate to macroeconomic downside risks mainly from political turmoil in Mexico, a slow economic recovery in Brazil, and still difficult political and macroeconomic environment in Argentina. If coupled with slower global economic growth, these factors could take a toll on the region’s occupancy rate, both in business and resort lodging.

Moreover, some areas are also exposed to security issues and extreme weather. In addition, we believe the surge of nontraditional lodging options, such as Airbnb, will continue to increase competition over the next few years, although the penetration of digital tourism platforms in Latin America remains limited by low levels of internet access compared to developed markets.

Increased Scale Could Be An Advantage In Independent Third-Party Management

The merger between Aimbridge (B/Negative/-) and Interstate would create the largest third-party lodging manager that is several times the size of the closest competitor. If the merger is successful, we would likely see continued consolidation in this fragmented space. We believe a successful merger for Aimbridge would need to enable cost savings for hotel owners. The company would likely need to invest in technology that brings higher visibility into hotel-level spending, which could boost potential procurement savings opportunities for owners. Over time, procurement savings could be a key value proposition for contract acquisitions particularly in an environment of hotel operating cost inflation.

We view that the cost benefit of increased scale provided by third-party managers mirrors the revenue benefit from increased scale among brand owners. In recent years, brand owners such as Marriott, through its 2016 acquisition of Starwood, demonstrated how beneficial scale can be by growing the number of brands under one loyalty program and incentivizing hotel developers and owners to allocate capital to Marriott-branded hotel developments and conversions.

Likewise, third-party managers that can demonstrate the benefit of scale on profitability could attract desirable, long-term, and more sophisticated owners, including REITs, institutional investors, and high net-worth individuals. In our view, the success of third-party managers could support a trend among brand owners toward greater emphasis on franchising rather than hotel management. The trend is observable in the shift in revenue toward franchising fees at Marriott, Hilton, and Hyatt over the past few years.

We believe third-party managers can fulfill a need in the lodging industry and provide a solution for hotel owners that seek to sustain margin while maintaining brand standards under their franchise agreements. We would view longer contract duration, more favorable hotel ownership mix, and lower contract turnover as signals of success among third-party managers.
Cruise

Key assumptions

1. Cruise operators may face choppy seas

We are expecting cruise industry capacity growth of around 7% in 2020. We believe this capacity can be absorbed without material price discounting or incentives to stimulate. We also believe demand for cruising will grow given it is still a small piece of the overall leisure market. Nevertheless, we believe 2020 constant currency industry net revenue yields will be flat to up to the low-single-digit area.

2. Boutique and low cost fitness clubs drive industry growth

We expect fitness revenue to grow 3%-5%, which slightly exceeds our U.S. consumer spending growth forecast in 2020. Our revenue expectations are fueled primarily by organic growth and the rise of low-cost fitness clubs and boutique studios.

3. Declining RV retail sales will drive a prolonged 2020 inventory correction

We expect that declining RV retail sales will cause wholesale shipments to decline through 2020.

Cruise operators may face choppy seas

We are expecting cruise industry capacity growth of around 7% in 2020, based on data provided by Cruise Line Industry International Assn., and public company filings. We believe this capacity can be absorbed without material price discounting or incentives to stimulate demand because we expect modest consumer spending growth in 2020, particularly in the U.S. (which represents approximately 45% of global cruise passengers), albeit at a decelerating rate. We also believe demand for cruising will grow given it is still a small piece of the overall leisure market, and consumers typically vacation each year and increasingly desire experiences. Nevertheless, given the capacity growth, the increasing risk of a recession beginning in the U.S. next year, and our expectation for the economic environment to remain somewhat weak in major European economies like Germany and Italy, we believe 2020 constant currency industry net revenue yields will be flat to up to the low-single-digit area.

Boutique and low cost fitness clubs drive industry growth

We expect fitness revenue to grow 3%-5%, which slightly exceeds our U.S. consumer spending growth forecast in 2020. Our revenue expectations are fueled primarily by organic growth and the rise of low-cost fitness clubs and boutique studios. Although we expect flat- to low-single-digit same-store revenue growth, we expect fitness club operators to increase total revenue by innovating existing clubs and expanding club count to promote member convenience, enhance club clustering strategies, expend geographic footprint, and grow membership count. We expect improvements in operating income to be limited by rising rent, utilities, and minimum wage as many fitness club operators experienced in 2019. We could expect fitness club operators to close underperforming clubs to improve operating income.
Declining RV retail sales will drive a prolonged 2020 inventory correction

We expect that declining RV retail sales will cause wholesale shipments to decline through 2020. In the October 2018 to June 2019 period, for which data is available, retail units declined at an accelerating pace. Two factors possibly responsible for the decline in retail units are incremental tariff-related costs, which increased retail prices to a level that demand could not easily absorb, as well as consumer sentiment that has trended lower year-over-year.

In addition, excess OEM manufacturing capacity could incentivize dealers to pace their orders and only ramp up inventory purchases when demand improves. We expect retail units to decline in the high-single-digit percent area in 2019 and in the mid-single-digit percent area in 2020. We also expect shipments to decline in the mid-single-digit percent area in 2020. We preliminarily assume that in the second half of 2020, shipments and retail units could begin to match more closely because the ongoing shipments decline could overcompensate for the decline in retail units. However, this assumption is subject to the risk that the economic environment becomes more uncertain, which could cause a worsening in retail sales in 2020 and an inventory correction that would persist.

Some companies we rate are coping with the shipment and retail sales decline. Thor (BB/Negative/--) reduced costs and working capital needs, which enabled it to repay debt within three quarters of acquiring Erwin Hymer. Winnebago (BB-/Stable/--) and Patrick (BB-/Stable/--) have moderate leverage, therefore they can probably absorb the impact of near-term headwinds. In addition, despite Airxcel’s (B/Negative/--) high leverage, the company has a flexible cost structure and continued to diversify into the commercial/industrial segment. We believe Camping World (B/Negative/--) could have the most operating variability, partly because it is closest to the consumer in the supply chain and is struggling with the integration of its Gander location.
Key risks and opportunities

1. Fuel could be a cruise headwind
We expect fuel expense for all cruise operators to increase in 2020, due to an expected shift in consumption toward more expensive marine gas oil (MGO), from lower-priced fuels like heavy fuel oil (HFO).

2. A U.S. recession's impact on fitness
We have recently revised our estimated probability of a U.S. recession in the following 12 months to 30%-35% from 10%-15%. Given the discretionary nature of fitness club memberships, a decline in consumer spending could reduce demand for memberships and prompt margin-eroding price competition.

3. Transformation of the tour operator industry in Europe
The traditional packaged holiday tour operator industry has been going through difficult times. It is an extremely fragmented market with intensifying competition, disruption coming from online players, changing consumer habits, and geopolitical concerns. These factors have all been pressuring the traditional tour operators and travel agents

Fuel Could Be A Cruise Headwind
We expect fuel expense for all cruise operators to increase in 2020, all else being equal, due to an expected shift in consumption toward more expensive marine gas oil (MGO), from lower-priced fuels like heavy fuel oil (HFO). Cruise operators need to shift consumption because of a global cap on sulfur emissions in marine fuel beginning in 2020, implemented by the International Maritime Organization (IMO).

In 2020, Carnival Corp. and NCL Corp. both expect MGO usage as a percentage of total fuel consumption to double, while Royal expects its MGO usage as a percentage of total fuel usage to be similar to 2019. Operators have taken steps to mitigate the impact of higher-priced fuel consumption and volatility in fuel prices resulting from geopolitical events. NCL has hedged 56% of its total 2020 fuel consumption, with 55% of expected MGO consumption hedged. Royal has 55% of its 2020 fuel consumption hedged, with a greater percentage of the hedges being for MGO.

Further, over the past few years, operators have improved fuel efficiency through itinerary optimization, technology initiatives (for example, improved HVAC systems and exhaust gas cleaning systems), and construction of more fuel-efficient ships. Operators have also sought alternative fuels and in 2018, Carnival introduced the AIDAonva, the first cruise ship to be powered by low-emission liquefied natural gas.

We believe that over time, the negative impact of the shift toward higher-priced MGO will abate as operators take delivery of more efficient ships, add technology to ships to reduce sulfur emissions, and find ways to improve overall energy consumption.

A Recession's Impact On Fitness
Recently, we have revised our forecast for a recession in the following 12 months to 30%-35% from 10%-15%. Given the discretionary nature of fitness club memberships, a decline in consumer spending could result in reduced demand for memberships and higher-priced club operators may engage in price competition to retain members. As a result, revenue could decline and due to the high-fixed cost base associated with fitness club operators, declines in EBITDA margin would most likely outpace revenue declines. While higher-priced fitness club operators would see the largest reduction in revenue, we
would expect to see a shift in revenue to the lower-priced club operators with membership plans starting as budget-friendly rates.

Aggressive capital-intensive growth plans are common among fitness club operators, and we expect these plans to continue. Typically, a variety of options are used to fund growth expenditures including raising debt, sale lease-back transactions, or free cash flow but each option comes with risks given the possibility of an economic downturn in 2020. In the event of an economic downturn, raising funds via debt markets and sale lease-back transactions can become scarcer as lenders pull back. In addition, internally funded growth plans will become harder to sustain as cash flow is reduced and retained for non-capital spending needs. As a result, a possible recession would hinder fitness club operator’s ability to expand club growth.

**Transformation Of The Tour Operator Industry In Europe**

The traditional packaged holiday tour operator industry has been going through difficult times. It is an extremely fragmented market with intensifying competition, disruption coming from online players, changing consumer habits, and geopolitical concerns. These factors have all been pressuring the traditional tour operators and travel agents.

The main incident of the year was the default and ultimate liquidation of the second-largest European travel group--Thomas Cook--that has been in the business for 178 years. The collapse of the group was a result of multiple external and company-specific events, including tough market conditions with adverse weather in summer 2018, changing consumers’ booking patterns, seasonality of the business, and working capital intensity with very high cash needs to pay for committed capacity much in advance of a travel actually taking place. In addition, there was high inventory risk and an asset-heavy business model with airline operations and a very high fixed-cost base. Ultimately, the company was unable to sustain operations because it did not have sufficient liquidity to go through the 2020 summer season and pay its hotel, airline, and other suppliers. After Thomas Cook’s demise, there is one giant left in the market. Tui AG will likely grow its market share further, picking up some of Thomas Cook’s customers; however, the mass travel market continues to evolve and is moving online.

We believe that there is still space for packaged tour operators in the broader travel market; however, risks to the business model may be mitigated by being more diversified and vertically integrated to allow for some flexibility when demand is weak. Since the packaged tour provided by a tour operator is a bundle of hotels and flights, operators that are present in all parts of the chain have higher flexibility and better control over capacity. Owning assets may increase flexibility if they are well managed; however, increased capital intensity creates its own risks and must be financed either internally or with incremental leverage. We believe both traditional tour operators and OTAs will continue coexisting but their business models, customer, and earnings profiles will change. What is likely to be common for both business models is an increasing shift toward travel booked online, including on mobile platforms, providing the customer with higher transparency in pricing and flexibility to create an individual package.
Additional Industry Trends

Canadian leisure companies have delayed deleveraging

In 2019, Bombardier Recreational Products Inc. (BRP) and Gateway Casinos & Entertainment Ltd. (Gateway) upstreamed cash to their shareholders that was funded with incremental debt, thus delaying the pace of deleveraging. As a result, we revised the outlook to negative from stable for Gateway (B/Negative/--) reflecting its high leverage and negative free operating cash flow from its huge capital build program that creates limited balance sheet flexibility to accommodate operational underperformance. At the same time, BRP (BB/Stable/--) has sufficient capacity in the current rating to absorb shareholder remuneration reflecting its high-single-digit organic EBITDA growth and steady free cash flow generation.

We believe Canadian leisure companies have enjoyed good EBITDA growth over the past few years, which has created an appetite for debt-funded shareholder remuneration. However, an economic slowdown could lead to lower demand for leisure companies. This could pressure credit measures and debt repaying capacity, which we view to be credit negative.

Revenue softness for companies that sell big-ticket leisure goods

We expect the sales of big-ticket leisure goods could moderate or potentially decline over the next year partly because our economists raised the risk of a recession starting over the next 12 months to 30%-35%. Through the third quarter of calendar year 2019, we observed moderating revenue growth or revenue decline among some recreational vehicle, boating, motorcycle, and timeshare companies.

In our view, the reasons for each company’s revenue softness are idiosyncratic and without an underlying theme. Some reasons cited by management include atypically unfavorable weather in the U.S. during 2019, which affected the boating season and delayed recreational marine purchases potentially by one year to summer 2020. Timeshare companies were hurt by hurricanes that lowered tour flow and timeshare sales in key travel markets. In the case of one company, revenue will decline temporarily in 2019 due to inventory sourcing variability.

Additional factors driving revenue softness include tariffs, which increased retail prices on manufactured goods such as boats, RVs, and motorcycles. Higher retail prices, combined with waverer consumer sentiment and the perception of higher macroeconomic risk partly resulting from trade tensions, likely dampened demand in recent quarters and could continue to do so. In addition, we believe this perception could persist even if tensions resolve, because businesses and consumers may discount the plausibility and sustainability of trade resolution declarations.

While we believe recent instances of revenue softness among different big-ticket leisure goods industries are mostly unrelated, we could be underestimating their correlation and macroeconomic variables may be bigger drivers than we currently assume. We believe there is more downside than upside on currently assumed levels of sales growth over the next year.

Brexit will affect the European leisure sector

With general elections now announced for Dec. 12, 2019, a no-deal Brexit scenario gets another push back to 2020. While our base case is an orderly Brexit, it seems a mammoth task to get both the EU and U.K. to agree on amicable divorce terms and conditions. Consumer-facing sectors such as leisure, retail, and consumer goods are among the first sectors that reflect Brexit uncertainty in the form of volatility in earnings and reduced headroom in ratings. Operating underperformance alongside opportunistic M&A and
dividend recaps has landed the leisure sector in third place among all corporates with net negative bias.

Although the Brexit resolution is unclear, we believe a no-deal Brexit scenario would translate into reduced consumer spending, shrinking wallets, and a macroeconomic slowdown especially in the Eurozone. The Eurozone is already slowing while its biggest economy, Germany, is already under pressure due to a light recession as manufacturing weakness spreads to the services sectors. This could possibly have a meaningful impact on the European gaming sector, which is also under pressure from increased regulation and could possibly face a decline in both revenue and EBITDA margin in the case of a sharp downturn.

We believe hotels and theme parks that are based in the U.K. and depend on domestic demand would be less likely to be hurt by a no deal Brexit. While a luxury holiday across the continent is always appealing, U.K. tourists have embraced staycations. They are taking shorter breaks and we have seen a pickup in volumes as more European tourists would flock to the U.K. due to a weak sterling and a shift in weather patterns.

**Related Research**

- U.K. Gaming Firms Face Further Potential Regulatory Risk After Call For Tighter Regulations, Nov. 6, 2019
- Carnival Corp. Outlook Revised To Negative On Increased Possibility Of Higher Leverage; 'A-/A-2' Ratings Affirmed, Oct. 10, 2019
- Drawing New Cards, Macau’s Gaming Pot Builds Slower, July 29, 2019
- Industry Top Trends Update, Hotels, Gaming and Leisure, July 25, 2019
- Could A 2019 Slowdown In U.S. Lodging Turn Into A 2020 Downturn?, Feb. 19, 2019

This report does not constitute a rating action.
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Industry Top Trends 2020

Media and Entertainment

Increasing investment and regulation pose challenges

What's changed?

New entrants are launching over-the-top (OTT) services. Over the next six months legacy media companies are launching several new OTT services, intensifying competition.

Regulatory risk is increasing. Internet companies face an increasingly challenging regulatory and political environment with greater focus on user privacy, unsafe content, and antitrust/market-power concerns.

What to look for in the sector in 2020?

Escalating content costs. We expect content costs to continue to increase as media companies accelerate investments in premium content across the globe.

Continued, albeit slowing, digital advertising growth. We expect digital advertising in the U.S. will increase at low-double-digit percentages. In China, we expect digital advertising to expand about 15% in 2020 from about 20% in 2019.

What are the key medium-term credit drivers?

Evolving media ecosystem. Increasing audience fragmentation, expanding OTT options, and accelerating declines of pay-TV subscribers will drive significant evolution.

Increasing regulatory costs. The regulatory burden on online companies has increased meaningfully and we expect this to pressure compliance costs and margins.

An economic downturn that will pressure advertising growth. Advertising is sensitive to overall economic growth, but economic weakness will affect pockets of the media sector in different ways.
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Television

Key assumptions

1. OTT competition is intensifying globally.

In the U.S., major media companies are set to launch new OTT services in late 2019 and early 2020. These include Disney (Disney+), AT&T (HBO Max), Comcast (Peacock), and Discovery (Food Network Kitchen). We expect them to invest heavily in expanding their services as they compete with incumbent OTT services like Netflix, Amazon Prime, Hulu, and CBS All-Access. In Europe, ITV and BBC are bundling content for the new Britbox offering in the U.K. We consider this a niche product that will not directly compete with Netflix and Amazon, and we do not expect original content investment to spike significantly. In France, Television Francaise (TF1), M6, and state-owned France Television plan to launch joint platform Salto in the first quarter of 2020. In China, competition remains intense, while government restrictions on content have slowed new programming and revenues for major OTT providers.

2. Content investments will continue to increase.

As media companies launch new OTT services, we expect them to invest heavily in original content to differentiate their services and increase subscribers. We expect the intensifying OTT competitive landscape to drive up content costs as new and existing services vie to acquire premium content. We expect these investments to pressure margins and cash flow in the short term, especially for new entrants, as it will take time to build scale. Chinese OTT providers are investing more heavily in original content, reducing their reliance on licensed content. While content costs improved for many players, content spending growth slowed due to government restrictions. In Brazil, we expect Globo will continue investing heavily in original content for its OTT platform (Globoplay) to compete with global competitors. Consequently, we expect margins to remain under pressure in 2020.

3. Digital video advertising is bolstering television advertising growth.

Television advertising expanded in 2019 with strong digital video advertising growth offsetting weakness in traditional linear television. Major media companies are investing in digital advertising capabilities to a scale allowing rapid growth in digital video advertising. This is mitigating the reduced audience reach in linear television due to declining viewership. However, large advertisers looking for national reach and sensitive to experimenting with online channels due to reputational concerns continue to utilize television advertising given its significant reach, providing some stability.

Media companies are investing heavily in OTT platforms

As video consumption shifts toward OTT and away from linear television, media companies are focusing their efforts to develop viable OTT services that offset declines in their linear television businesses. In the short term, this will be a very expensive proposition, as new entrants will forgo high-margin licensing revenue, invest heavily in original content, and face significant technology and marketing costs to build brand awareness. Disney, which launched Disney+ in November 2019, expects multibillion dollar losses for the next few years as it builds subscribers. Additionally, Apple (Apple+), AT&T (HBO Max), and NBC Universal (Peacock) are launching OTT services, and we expect them to invest heavily to expand services over the next few years. While new entrants spend heavily, incumbents (Netflix, Amazon, Hulu, etc.) are ramping up spending and investing in films, local language content, and unscripted television. Netflix alone is
expected to spend approximately $14 billion-$15 billion on content in 2019, up from $12 billion in 2018.

**Investments could pressure margins**

Many newer market entrants appear comfortable sacrificing short-term profitability to create or acquire compelling content that they believe will drive long-term subscriber growth. While this strategy may help position established media companies in an ecosystem where OTT viewing continues to rise and traditional pay-TV subscriptions decline, this strategy will likely pressure established media companies’ operating margins until they gain sufficient scale through subscriber growth. This could pressure operating margin, cash flow, and credit metrics, especially if increased competition drives up content costs. We also believe that while most media companies will continue to invest in their own content production, those with weaker balance sheets will need alternate strategies such as coproduction partnerships and joint ventures to gain access to either intellectual property or financing to produce content and remain competitive with larger peers.

**Media companies’ digital video has robust advertising growth**

Despite steep declines in ratings for linear television over the past 2-3 years, television advertising has modestly increased due to the strong pricing environment because the medium has the broadest reach. However, as video consumption migrates to digital and OTT platforms, established media companies invested in improving their digital video advertising capabilities to capture growth opportunities as viewing shifts away from linear television. These investments are on TV-everywhere apps, virtual multichannel video programming distributor (MVPD) partnerships, and AVOD services. Over the past couple quarters, advertising for U.S. media companies is trending above GDP growth. Digital video advertising is now a sizable portion of overall television advertising and rapidly increasing, offsetting declines in linear advertising. Viacom purchased Pluto TV (an AVOD OTT service) for about $340 million in 2019 as it looks to leverage its advanced marketing solutions platform to monetize the inventory it brings. We expect media companies to continue to invest in digital platforms to fuel growth, though it remains to be seen if these trends are sustainable given the secular challenges to linear television, which still makes up most of their advertising revenue.
Key risks and opportunities

1. OTT launches.
Several large media companies are embarking on new OTT launches as they look to mitigate the effects of declining pay-TV subscribers by establishing direct-to-consumer (DTC) OTT services. Video consumption continues to shift to OTT platforms and away from linear television, necessitating strategies that allow media companies to ensure their content is consumed through these new media and effectively monetize their content.

2. Continued consolidation in Europe.
Several mergers involving European content producers and broadcasters were announced in 2019, and we expect most will close in 2020. This reflects the pressures of an evolving media ecosystem and media consumption shifting away from linear television on smaller players that require larger scale to compete on a more global basis.

Advertising is sensitive to global economic growth, and a slowdown would hit television advertising. Even though advertising decreased as percentage of revenue for most media companies due to growth in affiliate fees, it is still a sizable portion of their revenue bases. Additionally, the pace of MVPD subscriber declines could accelerate in the next slowdown as consumers shift toward OTT alternatives, which was not the case in the last recession given the lack of OTT alternatives.

Large investments in OTT services will not ensure success.
As the traditional pay-TV ecosystem shrinks and more video consumption shifts to OTT platforms, it makes strategic sense for legacy media companies to join the crowded DTC market and establish their own products. However, the OTT ecosystem has yet to prove as profitable as the pay-TV model of the last decade. Netflix is the leading global service with over 150 million subscribers, but its free cash flow (FCF) deficits are still over $3 billion annually as it invests in more content to keep its subscriber base engaged and entice new subscribers. All major subscription video on demand services (Netflix, Hulu, and Amazon) and new entrants (Disney, AT&T, and Apple) expect to generate FCF deficits for at least the next 2-3 years. However, if competition remains fierce, they could persist longer than expected as content costs rise even further and subscriber churn is more elevated due to the plethora of OTT options and ease to switch between services.

The European media ecosystem faces similar pressures as the U.S.
Shifts toward OTT video consumption are leading European media companies to try to increase scale through acquisitions and compete more effectively against the global OTT services. Although these transactions are smaller in scale than the 2018 cross-Atlantic Comcast/Sky deal, they involve companies rumored to be M&A targets for several years. Horizontal mergers include the acquisition of the world's largest independent TV content producer, Endemol Shine Group, from Disney and Apollo Global Management by France-based TV producer Banijay. France-based Canal+ (part of Vivendi) acquired broadcaster M7, which operates in Benelux and central and eastern Europe, and M6 (part of Bertelsmann) acquired France-based Lagardere's TV business.

Also by year-end 2019, global toy company Hasbro plans to acquire independent film and TV content producer Entertainment One (eOne). We expect it could achieve synergies between eOne’s family and brands division, which produces and manages the licensing and merchandising of preschool children’s content such as Peppa Pig and PJ Masks, and its toy production and licensing capabilities.
An economic slowdown could adversely affect media companies

The last downturn materially affected operating and credit metrics due to the sharp drop in advertising revenue. Since then, large media companies’ percentage of revenue generated from advertising decreased significantly as subscription/affiliate revenues increased. However, the pace of cord-cutting probably remains high in an economic slowdown, unlike in the last recession when pay-TV subscribers experienced growth. If both advertising and affiliate revenues are affected, operating and credit metrics will likely worsen and affect ratings. Amplifying these pressures is that several media companies increased leverage over the last 12-18 months from large acquisitions that left them with minimal cushion for current ratings.

Local Media (TV, Radio and Outdoor)

Key assumptions

1. **Focus will be on debt reduction.**

2019 was active for M&A in local television, with transformative acquisitions of Tribune by Nexstar and regional sports networks by Sinclair. These and other station acquisitions by E.W. Scripps and TEGNA were largely funded with incremental debt. At the same time, the two largest radio companies, iHeartMedia and Entercom, have leverage around or above 5x, which we consider high, given their material exposure to economically sensitive radio advertising. We expect broadcasters will use their significant cash flow in 2020 to prioritize debt repayment for leverage reduction, flexibility, and to better absorb a recession.

2. **Prospects for M&A are unlikely.**

We do not see much prospect for additional transformative M&A over the next years. Few companies have the balance sheet capacity to absorb sizable acquisitions, and we do not expect significant assets becoming available for sale. However, we believe there could be smaller television or radio acquisitions or swaps to further optimize local media companies’ portfolios. We expect outdoor companies will selectively acquire billboard portfolios, mostly from family-owned companies.

3. **Core advertising declines for television and radio, but increases for outdoor.**

We expect radio broadcasters’ share of advertising dollars will decline 1%-2% in the near term primarily due to competition from digital media. We expect a low-single-digit percentage decline in core television advertising next year primarily due to displacement from political advertising. We expect outdoor advertising growth in the U.S. will be slightly higher than GDP growth, as digital boards and minimal disruption from digital advertising lead to higher ad rates and increased occupancy.
Key risks and opportunities

1. Lift from political advertising

We believe traditional media, in particular television, remain attractive for political advertisers, given both its meaningful reach and ability to target voters in select districts. We expect more than $3 billion in political advertising revenue for local television in 2020 (largely in the second half of the year) given the U.S. presidential election and intensifying political climate. While we expect a smaller share of political ad dollars will flow to radio and outdoor advertising, we still expect a modest benefit, particularly to larger radio companies such as iHeartMedia.

2. A sharp downturn in the global economy.

With local media revenue highly correlated to GDP and the health of local markets, a recession would hurt revenue and profitability. We expect declines in local advertising to exceed those of national advertising since spending on the former is closer to when an ad is shown or aired, allowing advertisers to more quickly pull back if the economy softens. While television and outdoor companies recovered revenue lost during the 2008-2009 recession, the radio industry has yet to recover from a 25% revenue decline. If an economic downturn hits the U.S. over the next 12-18 months, our expectation is for a slower cyclical rebound coming out of a recession for more mature forms of media such as radio, which will represent a smaller share of overall domestic advertising.

3. Accelerated pay-TV subscriber declines.

Local TV broadcasters have largely offset declines in traditional video subscribers with more virtual video subscribers. However, if pay-TV subscriber declines continue to accelerate from 2019-2020, it could hamper growth in retransmission revenue. Cord-cutters may find virtual offerings less attractive as savings narrowed over the last year following various price increases. Several DTC platform launches over the next year could provide consumers with additional alternatives, particularly if supplemented with free over-the-air television. Alternatively, password sharing could become more prevalent, contributing to lower growth.
**Internet/Online**

**Key assumptions**

1. **A secular shift will continue to fuel online investments, and subscription services will become ubiquitous.**

Change in consumer preference toward online media will continue to drive innovation and experimentation with new business models, and pressure businesses to find sustainable online models and increase customer engagement globally. Indeed, most media companies—including print, radio, and television businesses—have experimented with online models with varying success. We expect the transition to digital will continue to disrupt traditional businesses that do not innovate and find a way to remain relevant. Further, consumers are increasingly willing to pay for subscriptions to services and products fueling the growth of new business models.

2. **Digital advertising will continue to gain share.**

The ongoing secular shift will continue to drive outsize growth in digital advertising. Further, digital advertisers will continue to improve their mousetraps to better personalize and target advertisements by harnessing algorithms and data as consumers continue to increase time spent on mobile and video viewership. We expect digital advertising in the U.S. will continue to increase low-double-digit percentages in 2020. Further, in China, higher internet penetration, users increasing time spent online, consumption-led economic growth, and rising monetization of the user base mean significant long-term growth potential for online ad spending, tempered by the possibility of an economic slowdown.

**Double-digit percentage growth is expected to continue**

Globally and in the U.S., we expect digital ad sales will account for at least half of total ad sales in the next two years, supported by a growing user base and increasing time spent online by users. Advertising on mobile, social media, especially using video, and more recently podcasts represent the fastest growth areas. Further, small and midsize businesses are increasingly using these formats, whose advertising continues to evolve, improving engagement. We expect these trends will continue to support secular growth in digital advertising, fueling low-double-digit percentage growth in the U.S. and about 15% growth in China in 2020. We also expect that digital advertising in China will benefit from the shift toward a consumption-driven economy, which tends to contribute more to advertising spending. That said, we expect growth to slow from over 20% in both the U.S. and China due to the larger base of advertising share. As digital advertising matures and gains a larger share of total advertising, displacement in traditional advertising lessens.

**Online services are becoming ubiquitous**

Consumers are increasingly willing to pay for online services and subscriptions such as OTT, music, online dating, travel and experiences, skilled and professional services, and retail. We expect this trend to continue to support the growth of a number of online companies we cover, such as Match Group, IAC/InteractiveCorp, Expedia, Booking, and marketing services companies such as Red Ventures.

**Political ad spending presents upside for digital**

While less likely, increasing U.S. spending for the 2020 elections on digital advertising could further accelerate such growth and potentially threaten broadcast TV advertising revenues if candidates choose to lessen their historical emphasis on the mass market.
appeal of TV advertising for more targeted online advertising. However, different digital platforms are approaching political advertising differently, with Twitter recently announcing it will not solicit such ads.

**Key risks and opportunities**

1. **Elevated regulatory risks.**

   The regulatory burden is meaningfully increased on online companies’ data privacy, data localization, and antitrust mandates. We expect companies will likely increase investments to ensure the content on their platforms meets community guidelines, complies with regional data privacy and localization rules, and their products are tailored to comply with jurisdictional requirements. Further, increasing antitrust scrutiny reduces the potential for meaningful M&A by larger players.

2. **Uphill challenge for smaller content providers.**

   They struggle to match the significant traffic and robust data and targeting capabilities of larger peers, limiting their ability to effectively monetize it. In addition, smaller players typically derive a majority of their advertising revenues from programmatic advertising through ad exchanges, which have lower monetization rates.

3. **Bite from competition in China's digital advertising industry.**

   Despite robust growth, incumbents in digital advertising and media—Baidu, Alibaba, and Tencent (collectively BAT)—face intense competition from a relatively new player Beijing Bytedance. As such, we expect digital advertising revenue growth for key online media platforms to slow from the robust growth of previous years.

**Regulations pose challenges for some players and opportunities for others**

While the largest online players such as Alphabet and Facebook confront risks, regulation could present an opportunity for others. Limitations on data collection and the ability for consumers to port or delete their data could potentially reduce the effectiveness of advertising and make advertising via other smaller channels a more compelling alternative. However, smaller players lack substantial traffic and scale on their platforms, which deters advertisers looking to deploy their marketing budgets efficiently.

**Smaller providers walk tightrope between subscription and ad revenues**

Challenges to sufficiently increasing online revenues will continue. Newspapers and magazines are experimenting with paywalls, but subscription revenues are small. More reliance on subscriptions increases the risk that digital advertising revenues could decline due to the lack of sufficient traffic and subscribers.

**Competition for the largest companies is increasing**

In the U.S., Alphabet and Facebook are trying to fend off Amazon, which has expanded rapidly from its position as the largest online retailer globally and a good location to identify consumers with intent to shop. Similarly, Bytedance, developer of the popular global app TikTok and Douyin in China, is a key contributor to slowing advertising revenue growth at Tencent and Weibo. They, along with Alibaba, control a sizable share of digital advertising revenues. Bytedance plans to increasingly monetize its apps over the next few years and rapidly increase its advertising revenues by 50% to RMB100 billion ($13.9 billion) by 2019. Alibaba’s digital advertising revenue, on the other hand, remains more resilient due to performance-based advertising tied to its own dominant e-commerce platform. Alibaba accounted for about 60% of total online retail sales in China in 2018.
Advertising Agencies

Key assumptions

1. Organic revenue growth remains at or below global real GDP growth rates.
   We think ad agency holding groups’ organic revenue growth will remain there over the
   next several years, as was the case in 2018-2019. This reflects our expectation for
   slowing global economic growth and secular industry pressures. If in 2020-2021 the
   macroeconomic environment weakens more substantially than we forecast, it will be
   difficult for ad agencies to sustain growth as the industry reacts quickly to changing
   macroeconomic conditions.

2. Data, technology, and creative talent are key for competitive advantage.
   Competition between ad agency holding groups and new market entrants, including
   consulting and tech companies, will remain robust. The ability to leverage data and data
   analytics, acquiring and retaining creative talent, and offering more transparent
   solutions to clients will remain differentiating factors.

3. Limited M&A allow companies to focus on existing portfolios.
   We do not expect ad agency holding groups to pursue sizable M&A over the next couple of
   years. Publicis and Interpublic are integrating large acquisitions in 2018-2019, WPP has
   yet to achieve its targeted debt reduction after strategic restructuring and asset
   disposals, and Omnicom remains focused on optimizing its portfolio.

We expect below-GDP organic revenue growth

Global ad agency holding groups’ organic revenue will increase only low-single-digit
percentages, at or below real GDP growth, in the coming years. This is due to our
expectation for slowing global economic growth and secular industry pressure. These
include cost cutting and tighter advertising budgets from large clients, and increasing
competition among agencies and from new market entrants, such as consulting and tech
companies. The operating environment could deteriorate quickly if the global economy
negatively turns.

Organic revenue growth varies between among main ad agency holding groups and
depends on their geographic and client mix and contract wins and losses. In 2019, WPP’s
and Publicis’ organic revenue continued to lag that of their U.S.-based peers because
they are more exposed to fast-moving consumer goods producers that scaled back
advertising spending while losing share to emerging brands that cater to secular shifts
toward more health conscious consumer tastes. Contract losses and restructuring parts
of their business curbed revenue growth. For 2019, Omnicom and Interpublic guided for
2%-3% organic revenue growth, while Publicis recently lowered its guidance to between
a 2% loss and 1% growth. We think WPP managed to stabilize its performance through
2019, but expect only modest improvement in 2020.

Ad agencies’ ability to organically expand and sustain margins will depend on utilizing
their large scale, global reach, data analytics capabilities, and creative talent. Scale is
relevant for leveraging investment in technology and for programmatic ad buying.
Customers with in-house advertising and marketing work and new competitors such as
consulting and tech companies lack these strengths.
Industry Top Trends 2020: Media and Entertainment

M&A expectations are modest, with a focus on deleveraging

We think ad agencies will continue acquiring technology and data businesses that could help them enhance their data-driven analytics. However, we do not expect sizable or transformative M&A over the next couple of years. While some holding groups do not have the financial flexibility to pursue large debt-financed acquisitions (especially at this point in the economic cycle), others strategically chose to focus on their portfolios and divest less strategic assets. Publicis and Interpublic are integrating the large acquisitions in 2018-2019 that increased leverage 0.5x-1.5x turns. We expect them to focus on returning to preacquisition leverage before looking at further M&A. WPP is progressing with strategic restructuring and will dispose of its data management business Kantar in early 2020 (which we expect to close in the fourth quarter of 2019 or first quarter of 2020). Omnicom has lower leverage and potentially higher capacity for M&A, but its strategy is to optimize the portfolio. We also expect it to continue investing in internally developed data analytics tools rather than acquiring new technology.

Key risks and opportunities

1. Leveraging data analytics capabilities.

Ad agency holding groups have chosen different approaches to owning data. While Publicis and Interpublic recently acquired large data assets, WPP and Omnicom are focused on developing internal and open-data analytics platforms. We are not certain which strategy will be more successful long-term, but think the ability to effectively embed data-driven analytics into their operations will be crucial for growth.

2. A global economic downturn in 2020

The advertising industry reacts quickly to changing macroeconomic conditions, so we believe a downturn in the global economy could lead to a rapid and substantial contraction of advertising budgets and agency revenues. However, the agencies have more cost flexibility that could help them adjust.

Data and technology are key differentiators

We think agencies’ ability to integrate data management assets into their operations and utilize data analytics, rather than their approach to data ownership, will differentiate their trajectory for growth and margins. While owning data provides an advantage over smaller competitors without access to the data sets of similar size and quality, it requires running complex systems. It also brings additional costs and risks of complying with regulation that continue to evolve. In this context, we think agencies’ ability to integrate data analytics with their creative offering will be key for their competitive success.

Over the last couple of years, large ad agency holding groups pursued different strategies relating to ownership of data. Interpublic and Publicis acquired data management companies Acxiom and Epsilon in 2018-2019, which brought ownership of large arrays of first-party and proprietary data. At the same time, WPP is disposing of its controlling stake in Kantar. The group sees less value in directly owning data and plans to focus on open platforms and using data from multiple sources. Omnicom developed its internal data platforms and plans to rely on renting data from other providers.

Cost controls will mitigate effects of an economic slowdown

Increasing automation could also help protect ad agencies’ operating performance if the macroeconomic environment weakens more significantly than we expect. If the global economy faces a downturn in 2020, advertising budgets and agency revenues could contract rapidly and quite substantially, as they are closely correlated with changing...
Industry Top Trends 2020: Media and Entertainment

macroeconomic conditions. While such a downturn would initially hit the agencies’ operating margins, we think the longer-term impact would be less pronounced. Agencies’ business models and flexible cost bases would likely allow them to adapt relatively quickly. Labor costs represent the lion’s share of agencies’ fixed costs, about 65%-70% of revenue. As agencies increase automation, their ability to adapt to macro conditions will improve.

Related Research

- When The Credit Cycle Turns: Recovery Prospects In The U.S. Media Sector, Sept. 26, 2019
- Will the NFL and TV Still Need Each Other in 2023?, Sept. 9, 2019
- Industry Top Trends Update: North America Media and Entertainment, July 29, 2019
- Sinclair’s Regional Sports Play Nets 21, July 26, 2019
- The U.S. Ad Market Is Healthy With Growth Expected In 2019, But Current Trends Are Fragile, July 12, 2019
- What A Potential CBS/Viacom Merger Could Mean From A Credit Ratings Perspective, July 8, 2019
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- The Future Of Retransmission Revenue For Broadcast Television, June 6, 2019
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This report does not constitute a rating action.
Industry forecasts

Global Media and Entertainment

Revenue growth (local currency)

EBITDA margin (median, adjusted)

Debt / EBITDA (median, adjusted)

FFO / Debt (median, adjusted)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Cash, debt, and returns

Global Media and Entertainment

Chart 190
Cash flow and primary uses

Chart 191
Return on capital employed

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Fixed versus variable rate exposure

Chart 193
Long term debt term structure

Chart 194
Cash and equivalents / Total assets

Chart 195
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Cautious pessimism greets the second downturn in five years

What’s changed?

Prices and volumes have dropped amid weak indicators. Our revenue expectations for 2020 remain fairly weak, after declining almost across the board in 2019 for base and bulk metals, as a result of lower auto production and weak construction.

Market conditions are eating into credit buffers. Weaker cash flows in 2019 and 2020 will arrest the improvement in debt leverage since the 2015-2016 downturn.

The outlook bias has shifted negative again. Negative outlooks exceed positive outlooks in metals and mining, reversing a brief positive bias in 2018.

What to look for in the sector in 2020?

Production cuts must take hold. With a tepid demand outlook for 2020, output reductions that rebalance consumption and inventories could be key to a pickup in prices and profits, particularly in steel and aluminum.

Blockbuster M&A is giving way to asset reshuffling. The decline in metals and mining equities in 2019 has slowed M&A to a trickle. That said, the gold sector looks primed for asset transactions, with large miners looking to shed less productive assets after major acquisitions in the past year.

Tariffs are reducing steel and aluminum imports, but prices are still tumbling. Tariffs into the EU and U.S. insulated domestic volumes, but trade barriers haven’t prevented a sharp downturn in global prices in 2019.

What are the key medium-term credit drivers?

Capex and acquisitions adjust the competitive landscape. Issuers aim to bolster their businesses by investing, acquiring, or pruning.

Maturity wall looms for spec-grade companies. Debt maturities escalate quickly in 2022 and 2023, and the metals and mining sector has among the highest proportion of speculative-grade issuers in our ratings universe.

ESG is core to credit ratings. In addition to headline-grabbing catastrophic failures that prompt rating actions, our ratings on steel producers provide a good indicator of competitive assessment differentiation and financial costs caused by ESG factors.

November 21, 2019

Authors

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

Flavia Bedran
Sao Paulo
+55 11 3039 9758
flavia.bedran@spglobal.com

Elad Jelasko
London
+44 (0)207 176 7013
elad.jelasko@spglobal.com

Jarrett Bilous
Toronto
+1 416 507 2593
jarrett.bilous@spglobal.com

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

William Ferara
New York
+1 212 438 1776
bill.ferara@spglobal.com

Diego Ocampo
Buenos Aires
+55 11 3039 9769
diego.ocampo@spglobal.com

Simon Redmond
London
+44 (0)207 176 3683
simon.redmond@spglobal.com
Several key indicators turned negative in 2019, most notably the net outlook bias, increasing pressure on a low-rated sector. The ‘B’ category accounts for two-thirds of our ratings in metals and mining, which indicates our view of those issuers’ inherent volatility and capricious access to capital markets. That said, pressure on credit may be less acute this time around because many issuers had curtailed less profitable output, lowered capex, and reduced debt in 2018, leaving little opportunity for the debt-funded corporate development activity that provoked downgrades in previous cycles. On the other hand, low returns over the past decade are causing tighter capital budgets that could weaken the sustainability of operations.
Industry Outlook

Key assumptions

1. Lower prices and volumes from slowing economic growth

Global trade and macroeconomic concerns have contributed to a weaker outlook for several metals and mining commodities tracked by S&P Global Ratings. In addition to plunging prices in 2019, metal demand and consumption appear to be declining, which is remarkable and could indicate economic weakness instead of just an industry downturn.

2. Organic growth and asset sales will temper cost inflation

We expect modest cost inflation to continue across much of the metals and mining sector, likely in the low single-digit percentage area. Efficiency initiatives have become core to most issuers' operating strategies and, in certain cases, yielded meaningful cost savings.

3. Balance-sheet repair should ease the downside

We believe the majority of metals and mining companies are better positioned to manage this price downturn than the previous one in 2015-2016 because of lower debt leverage from a concerted effort to reduce debt across the sector.

Lower debt levels should cushion profit decline

Lower demand, partially caused by global trade friction, is combining with another U.S. political hot button, as the dollar strengthens and pinches export competitiveness. It is difficult to conclude that tariffs have insulated any producers in the U.S. or Europe from supply in Asia that can ultimately find its way into protected markets.

The phase of balance-sheet repair in 2017-2018 contributed to the only positive bias in six years, and weaker earnings prospects are driving this down heading into 2020. The current 5%-10% negative bias is nowhere near the depths of almost 40% in the two years 2016 and 2017, which occurred because the commodity downturn coincided with heavy debt loads and capital commitments in a buoyant economy.

The weak price environment for most metals follows the strength that persisted through the first half of 2019. For example, copper prices averaged close to US$3.00 per pound (/lb) earlier this year before a steady descent to below $2.60/lb over the past few months. We expect modest supply growth across most of the sector. Barring a weaker macroeconomic climate, we believe relatively balanced supply/demand fundamentals should limit sustained price declines for most metals and mining commodities tracked by S&P Global (see “S&P Global Ratings Cuts Copper and Zinc Price Assumptions And Lifts Those On Nickel And Gold,” Oct. 9, 2019, for our most recent price assumptions).

Profit turnaround is key for refinancing in 12-18 months

Metals prices in a few cases are approaching decade lows, and numerous assets globally are operating near cash breakeven, which typically incentivizes production cuts. The key issue for corporate profitability at the lowest end of the rating spectrum could be the persistence of this downturn, rather than the depth, because we believe that liquidity is adequate to support a quick downturn, but debt maturities in 2021 loom. Prices swing regularly, with a sharp drop most recently in 2015-2016 amid still growing demand volumes, but industrial metals volumes haven’t actually dropped on a year-over-year basis since the financial crisis. In our view, softer demand fundamentals remain a key risk for industrial-linked mining commodities, namely aluminum, copper, zinc, and iron.
ore. Much of this reflects the increased likelihood of slowing economic growth, notably impacted by the trade disputes between the U.S. and China that have negatively affected global trade flows. Interest rate reductions in the U.S. and elsewhere have followed, and contributed to the resurgence in gold prices from a multi-year lull.

Credit markets in the second half of 2019 have been poor for speculative-grade metals issuers; about 85%-90% of the issuers in this sector have speculative-grade ratings, and about two-thirds of the debt is high-yield. We expect that many would access markets at an early opportunity because of impending maturities in this sector and among most industrials.

We expect most issuers to have greater capacity to manage a protracted period of weaker prices before ratings are jeopardized, and lower debt reduces the relative sensitivity of weaker earnings and cash flow on credit measures. Moreover, restrained capital commitments and growth investing should preserve some cash flow cushion in a downturn. In a lower price scenario, we expect issuers to curtail shareholder returns, which had increased materially over the past year but were funded from windfall free cash flow rather than higher debt. In our view, this reflects the commitment across much of the sector to maintain or, in certain instances, reduce long-term leverage targets.

We assume material unit cost improvement will prove elusive for most issuers: steadily higher labor rates, consumables price inflation, and the impact of declining grades across certain commodity segments remain key headwinds. Issuers engaged in significant development projects that accelerate organic growth present opportunities to stabilize or trim cash and all-in sustaining costs. We expect certain miners to sell assets with cost profiles that exceed their consolidated average, although the benefits will likely be less pronounced for globally diversified players.
Key risks and opportunities

1. Sharp economic downturn causes lower prices for longer
We are forecasting slower global economic growth in 2020, and a sharper decline could worsen the deterioration in metals markets. China’s GDP growth slowed to 6.0% in Q3 2019, the slowest in 27 years.

2. Shareholder returns or new investments consume precious capital
After several years of pushing back costs and optimizing capex, we might see an increase in capital allocation toward share repurchases and dividends, as well as companies pursuing acquisitions to increase portfolio diversification and to optimize energy use.

3. Steel profitability could bounce back
We estimate average steel producer margins will improve modestly in 2020 from currently weak levels. Steel prices deteriorated sharply through 2019, and we expect that production cutbacks could boost prices from depressed levels.

China’s metal demand slows
Growth in China’s infrastructure investment was 4.5% year to date in September 2019, much lower than the 20% growth three years ago due to the government’s deleveraging initiatives. Further, we believe the government will take this opportunity to transform the economy by reducing risk from high debt and phasing out inefficient and uncompetitive companies that are over capacity, which will put downward pressure on overall demand. We assume most metal prices will remain stable or improve in 2020, but inherent volatility and economic sensitivity could cause prices to fall even further, leading to shortfalls in cash flow and capacity closures. Most issuers have high operating leverage that would be affected by relatively small changes in prices, particularly at currently low levels. As such, prices modestly below our current assumptions could have a meaningful impact on our estimates and potentially start moving credit ratings down.

Leading miners return capital to shareholders
The growing concerns in the market will mean conservatism continues into 2020. After the top five global miners reached or even exceeded their gearing objectives, all except Vale shifted to shareholder returns. We are now forecasting total returns to shareholders of close to $40 billion in 2020 by the big miners compared to slightly less than $30 billion in 2019. However, this level is unlikely to be sustainable, as lower commodity prices, namely iron ore and coking coal, will translate into lower free cash flows. In this respect, with companies’ comfortable debt positions and low appetite for investments, commodity prices are becoming slightly less important. A movement of $10 per ton for iron ore will translate into a direct change in the returns to shareholders, and this would change only if commodity prices fell materially.

From a rating perspective, we assume that major miners will maintain ample rating headroom in 2020. Under our stress test, an extended price shock doesn’t lead to downgrades (see “How Would The Top Five Global Miners Fare In A Downturn?” July 9, 2018). However, this is not going to be the case for small miners. The current weakness in commodity prices and some pressure on costs has already started to pressure their cash flows and liquidity, causing several negative rating actions in 2019.

In contrast to previous commodity cycles, these companies have refrained from large acquisitions or multiple ambitious greenfield projects. We believe that the big five, like most other companies in the mining sector, will continue to focus on organic growth and improving cost profiles. Most producers view prospective acquisitions as too expensive.
relative to brownfield expansion projects, nor do most acquisitions fit portfolios for reasons like country risk or exposure to specific commodities. Based on recent capex guidance, spending in 2020 and 2021 should remain fairly flat.

Highlighting the portfolio pruning in late 2019, Barrick agreed to sell its 50% joint-venture interest in its long-held Kalgoorlie mining operation for $750 million. Meanwhile, mid-tier producers are aiming to bolster production and reserves amid progressively difficult opportunities for organic growth. Issuers remain wary of the long-term benefit of large transactions with debt-funded premiums because meaningful cost or revenue synergies and incremental returns have proven difficult to achieve in this capital-intensive commodity industry. Returns on capital for gold miners have been dismal despite a decade of elevated gold prices and good margins, because capital investments to sustain production and for M&A have yielded single-digit returns, at best. Several large and midsize gold producers will consider a range of scenarios that extract cost synergies at operations, none of which would include much additional debt.

**Steel and aluminum makers aim to deleverage and develop their businesses**

The deleveraging trend that started with the largest global miners hasn't skipped metal producers. However, unlike the miners, most companies couldn’t meet their targets because of the sharp and quick downturn in steel and aluminum, despite trade barriers meant to insulate these companies.

Slower demand is a key risk facing steel producers, and may not be offset sufficiently by capacity curtailment. In our view, integrated steel producers (blast furnace operators) are the most susceptible to weaker prices; the price of iron ore, a critical input for integrated steelmaking, remains elevated and we assume only a slight moderation in 2020. In contrast, we believe electric arc furnace (EAF) steel producers should sustain relatively stable margins given the historically tight correlation with steel scrap, its primary raw material. However, steel spreads (a benchmark of hot-rolled coil minus scrap steel) have tightened recently to $275-$300/st compared with an average of $480/st in 2018 because of unusually high steel prices averaging $830/st. We note that if prices remain at this level or steel spreads tighten further for several quarters, companies may experience short-term pressure on credit metrics in 2020. This is not our base case, as margins should benefit from reduced supply following several rounds of production cuts and a potential pickup in infrastructure investment. Prices for long steel products, mainly used in construction-related sectors, remained flat year-on-year during the first half.

Steelmakers in the U.S. are making their boldest push in decades, spending $5 billion-$6 billion in the next few years and adding debt to build primary steelmaking capacity at mini-mills and at integrated facilities. Notably, Steel Dynamics, Inc. is investing $1.9 billion in a new flat roll mill in Stinton, Texas, while Nucor Corp. is constructing a $1.35 billion greenfield plate mill in Kentucky. U.S. Steel Corp. is undergoing a $1.2 billion expansion of its Mon Valley Works facility, and recently invested $700 million to acquire a 49.9% interest in Big River Steel LLC, which owns and operates an EAF mini-mill. Big River itself is investing $700 million to double capacity at its mill. All of this incremental capacity might not compete directly in terms of regional location and product type; the increased volumes could squeeze out marginal-cost domestic capacity or imports.

Apart from that, most companies will continue to focus on deleveraging and meeting their public gearing objectives, but it will take more time. For example, ArcelorMittal in late 2017 announced its commitment to reducing net debt to $6 billion from about $10 billion. Since the initial announcement, and following the change in market conditions, the negative outlook incorporates our revised projection for the company's timeline of achieving this target in 2021 instead of 2019.

In our view, the Russian steelmakers (such as PAO Severstal, Novolipetsk Steel) are exceptions. They have already achieved robust balance sheets and they are well positioned to absorb the pressure on the ratings from lower profitability and cash flows.
In the U.S., we continue to view refinancing and liquidity concerns as some of the more influential factors for credit quality in the next few months. Large maturity walls have been reduced by nearly one-half: $3 billion or about 25% of the sector’s outstanding debt is due by 2021 compared to $6 billion last year. This change should provide some cushion in the next downturn. Credit quality among some of the largest U.S. steel producers remains strong even in the weakening pricing environment. We think Nucor will generate adjusted EBITDA of about $2.5 billion-$3.0 billion in 2020, while maintaining leverage of 1.0x-1.5x due to its highly variable cost structure and low-cost asset profile. Steel Dynamics, recently upgraded to ‘BBB-’ from ‘BB+’, has publicly committed to maintaining net leverage below 2x debt to EBITDA. In our view, it will likely maintain this target given its commitment to fund most of its capex and future share repurchases from free operating cash flow.

Several M&A transactions that were announced in early 2018 were rejected by the European regulator, or experienced delays. This means that the steel industry will likely remain fragmented. The planned merger of Tata Steel and TK to create two market leaders with ArcelorMittal’s acquisition of Italian steelmaker Ilva was envisaged as a key change in the European flat steel market. But the merger was denied and more recently ArcelorMittal has canceled the acquisition due to legal issues. We believe that the European regulator’s hard stance could lead companies to pursue organic growth rather than business combinations.

**ESG Looms Large In This Risky Sector**

Integrated steel producers in Western Europe and North America face increasing pressure to invest significantly to reduce heavy GHG emissions from coal-fired blast furnaces, while their often higher-rated mini-mill competitors use electricity to reduce scrap steel into saleable metal.

The transition to lower-carbon emission sources for electricity generation, especially in the U.S. and Europe is the key driver of declining demand and weakening profit margins for U.S. thermal coal companies. Scrutiny of tailings facilities has increased dramatically after Vale’s second dam collapse in Brazil. Several upstream dams in Brazil, prohibited in other countries, were obliged to be decommissioned quickly or converted to dry waste. We have highlighted our concerns with board oversight of ESG risks and companies’ abilities to map, control, and mitigate these risks. Some companies have made niche investments aimed at improving energy efficiency and pollution, which is another factor that could lead to the closure of less efficient mills.

A sharp drop in prices for international metallurgical and thermal coal since late 2018 has contributed to at least six U.S. coal producers filing for bankruptcy this year, as looming maturities appear insurmountable. In addition to the price decline, U.S. thermal coal demand continues to drop due to coal plant retirements with utilities transitioning to lower-carbon emission sources for electricity generation such as natural gas and renewables.
Related Research

- Rising Gold Prices Bring A Shine To The Industry, But Upgrades Aren't Likely For Gold Issuers Oct-22-2019
- Metal Bashing: European Steel Is Going Through The Mill (Again) Oct-11-2019
- S&P Global Ratings Cuts Copper And Zinc Price Assumptions And Lifts Those On Nickel And Gold, Oct-09-2019
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- Research Update: U.S. Steel Corp. Outlook Revised To Negative On Debt-Financed Big River Acquisition; Ratings Affirmed, Oct-01-2019
- The Top Five Global Miners Remain Sensitive To Environmental And Social Risks Jun-18-2019
- ESG Industry Report Card: Metals And Mining, Jun-03-2019

This report does not constitute a rating action.
Industry forecasts

Global Metals and Mining

Chart 202
Revenue growth (local currency)

Chart 203
Capex growth

Chart 204
Debt / EBITDA (median, adjusted)

Chart 205
FFO / Debt (median, adjusted)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Global Metals and Mining

Chart 206
Cash flow and primary uses

Chart 207
Return on capital employed

Chart 208
Fixed versus variable rate exposure

Chart 209
Long-term debt term structure

Chart 210
Cash and equivalents / Total assets

Chart 211
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Midstream Energy

Midstream companies' resiliency will be tested as headwinds approach

What's changed?

Heightened counterparty risk. The precarious financial health of many companies in the upstream sector could result in cash flow pressure for the midstream gathering and processing companies.

Slowing production growth. We assume low natural gas prices will persist unless there is a significant supply response by the upstream industry.

Take-private transactions and private equity money is creating uncertainty. Private equity firms and infrastructure funds have filled funding gaps, which in some cases has resulted in more complex organizational structures and higher financial leverage.

What to look for in the sector in 2020?

Lower capital spending and high-grading project backlogs. We assume that the midstream industry will scale back on capital spending by 15%-20%.

Increased regulatory and environmental risk. Permitting delays and heightened social opposition to new pipelines has in some cases affected timing and construction costs.

A move toward consolidation and asset rationalization. We think there is an opportunity for some consolidation between larger diversified companies and their smaller peers.

What are the key medium-term credit drivers?

The demand for hydrocarbons and U.S. exports. Growth in North American LNG capabilities, the strength of U.S. producers, and more disciplined production are the key drivers to watch for natural gas supply and demand.

Financial discipline and portfolio optimization. Balancing capital spending, shareholder needs, and growth strategies will be key differentiators.

Scale, scope, and diversification. Increased scale and geographic and asset diversification are becoming more important credit drivers as companies look to compete in high-growth areas or for access to export markets along the U.S. Gulf Coast.
Ratings trends and outlook

Global Midstream Energy

Chart 212
Ratings distribution

Chart 213
Ratings outlooks

Chart 214
Ratings outlook net bias

Source: S&P Global Ratings. Ratings data measured at quarter end. Data for Q4 2019 is end October, 2019
Our 2020 outlook for the midstream sector is stable, but we believe there is increased negative bias in ratings because of the drivers that we’ve outlined above: weaker counterparties, slower production assumptions, and heightened environmental and regulatory risk. Our view is based on a modest uptick in the negative outlooks on companies to 18% from 13% in May 2019. That said, most of the portfolio have stable ratings (79%), which is little changed from May (81%). We expect midstream companies to continue to fund most of their organic growth projects with retained cash flow, with minimal use of incremental debt. We forecast that the investment-grade companies will have average debt-to-EBITDA ratios of about 4.2x in 2020, while their speculative-grade peers will have ratios in the 4.75x area. Our forecast assumes capital spending to be down 15%-20%, but we think this could be revised lower given weaker industry and investor sentiment, coupled with the rising risk of a global recession.

**Midstream Energy**

**Key assumptions**

1. **Commodity Prices**
   
   Our base-case price assumptions for West Texas Intermediate (WTI) and Brent crude oil is $60 per barrel (bbl) and $55/bbl, respectively, for 2020. We then have Brent decreasing to $55/bbl for 2020 and beyond, which is in line with our assumptions for WTI. Our price assumption for natural gas is $2.50 per million British thermal unit (mmBtu) in 2020, $2.75/mmBtu in 2021, and $3.00/mmBtu in 2022 and beyond. We are forecasting that natural gas liquid (NGL) prices average about 50 cents per gallon. Under these price assumptions, we don’t expect commodity prices to substantially change our forecast assumptions or harm midstream companies’ credit profiles because most already have largely fee-based contract profiles.

2. **Slower Production Growth**

   We expect U.S. E&P companies to scale back production, which has been factored into our midstream growth forecasts. We believe companies with exposure to the Permian Basin and Bakken Shale regions will perform the strongest in 2020, while companies with exposure to areas of the SCOOP/STACK basin and Marcellus and Utica Shales may somewhat underperform based on our revised forecasts.

3. **Generally Flat Financial Performance, Lower Capital Spending**

   We assume that midstream credit measures will modestly improve, depending on the use of excess cash flow. We forecast that investment-grade midstream companies will achieve average debt EBITDA of about 4.2x, while their speculative-grade peers will have a debt-to-EBITDA ratio closer to 4.75x in 2020. We assume that midstream spending will decline 15%-20%, and credit measures could be stronger if companies allocate capital for debt repayment, which we think is less likely.
Key risks and opportunities

1. Regulatory Risk
We believe opposition to large pipeline projects will continue to be a significant risk for midstream companies, even if the Atlantic Coast Pipeline and Mountain Valley Pipeline projects receive a favorably ruling by the U.S. Supreme Court. We also believe that the 2020 presidential election holds some risks for midstream companies, such as the fracking ban on federal land some Democratic candidates have proposed.

2. Counterparty Risk
Producer credit quality is under pressure from financial and operational restructurings, and in some cases bankruptcies. Although the effects of the last downturn in the upstream sector were mostly benign for midstream credit quality, we nevertheless think that weak upstream credit quality and lower volumes could affect midstream cash flows this time.

3. Disciplined Growth Can Lead To Strong Balance Sheets
We think most midstream companies will stay on a more disciplined financial path and focus only on the highest return projects, while scaling back capital spending. The strategy of partnering on larger capital projects not only shares the risk but preserves some balance sheet flexibility, in our view. We think selective acquisitions are possible but the acquiring company would need to be provided with an asset that is viewed as strategic to the integrated model and would not add significant commodity or volume risk that we’d view as dilutive to the credit profile.

U.S. Crude Oil And Natural Gas Production Growth Will Slow In 2020
The Energy Information Administration (EIA) expects U.S. crude oil production growth (excluding Gulf of Mexico) will slow, increasing by about 870,000 barrels per day to 13.2 million barrels per day and that natural gas production growth will average about 2% in 2020 to 93.5 billion cubic feet per day (Bcf/d.) We believe slowing production and the precarious health of the upstream industry could have profound effects for some companies in the midstream industry.

We believe gatherer and processors (G&P) are the most vulnerable, while new crude oil pipeline operators that have capacity to fill could confront a more challenging competitive landscape depending on location and the strength of the assets’ strategic relationships. We believe the natural gas pipelines that have been placed into service and new additions expected in the next 12-24 months are in a good position to transport excess natural gas production and associated gas to demand and export markets. We think NGL logistic providers and their assets, when part of an integrated network that can provide redundancy and operational flexibility for its customers, are best positioned. The smaller peers that have disparate groups of regional assets will remain the most challenged from a credit perspective.

Regionally, we believe the Permian Basin and Bakken Shale areas will provide the best opportunities for midstream companies in 2020, while the midcontinent regional and Marcellus and Utica Shales will be somewhat challenged. With the prospects of crude oil production reaching 5.7 million barrels per day and natural gas production hitting 13 Bcf/d, the Permian Basin will continue to see significant activity and capital projects. That said, the risk of an overbuild, particularly on the crude takeaway, is possible, in our view, because we’ve already seen new operators cut transportation rates to remain competitive. The Bakken will continue to require associated natural gas processing from
the crude production, which is expected to grow to more than 1.5 million barrels per day in 2020.

U.S. rig activity continued its downward trend, averaging 932 rigs in October 2019—a 5.2% monthly drop. Within the major eight basins, rigs fell most heavily in the SCOOP-STACK, down by 14.5% in October compared to September. Natural gas production is expected to be flattish in the basin, while crude oil production could post modest single-digit growth in 2020.

We also believe midstream companies with significant exposure to the Marcellus and Utica Shales will feel pressure. Although natural gas production in Marcellus will grow in 2020, production growth will slow to the mid-single-digits. Average monthly dry gas production in Utica will drop by 3% to an average of 6.4 Bcf/d in 2020. The region’s expected production is driven by low natural gas prices, which have incentivized E&P companies to focus on well completion rather than drilling.

**Private Capital Is Available For Funding But Raises Uncertainty For Credit Quality**

Midstream companies’ stubbornly low equity prices have opened the door for financial sponsors and infrastructure funds to invest capital in the industry. Take-private deals or changes in a company’s financial policies after a private capital investment could lead to negative rating actions across our rated portfolio. Over the past few years, private equity investors, infrastructure funds, and investment management companies have made compelling bids to take private several midstream partnerships, such as Boardwalk Pipeline Partners, TransMontaigne Partners, Buckeye Partners L.P., and Tallgrass Energy Partners L.P. We believe that financial investors will be the leading candidates for any future transactions largely due to the steep price and the contracted nature of their cash flows, including the potential sale of Western Midstream Partners or Energy Transfer L.P.’s interest in Rover Pipeline. Large diversified energy companies such as Energy Transfer L.P., Kinder Morgan Inc., TC Energy Corp., Enbridge Inc., and MPLX L.P. have executed and may consider divesting certain noncore assets to financial sponsors to bridge the funding needs of their capital spending initiatives, maximize shareholder value, or reduce leverage.

Our take on some of the recent transactions:

- **Tallgrass Energy Partners**: The partnership announced that the board of directors of its general partner received a nonbinding proposal from Blackstone Infrastructure Partners, its partners, and respective affiliates to pursue a take-private deal. The proposed transaction would lead us to consolidate the debt at its holding company and could lead to a lower rating.

- **Boardwalk Pipeline Partners**: A take-private transaction by majority owner Loews—an investment holding company—didn’t affect the ratings because we did not expect any change to the company’s financial policy or credit measures.

- **Western Midstream Operating L.P.**: Currently for sale and while no buyer has emerged, the expectation is that private equity will likely buy and control these assets if sold by Occidental Petroleum (OXY). Given OXY’s public comments, we now assess Western Midstream as nonstrategic to the company. The outlook is negative given the increased likelihood that the partnership is sold to a more aggressive owner over the next 12–24 months.

These transactions usually lead us to take negative rating actions due to the sponsors’ more aggressive financial policies, which often involve using leverage to partially finance the transactions. In our view, financial sponsors are generally more willing to use debt or debt-like instruments to boost equity returns and sell within a shorter time period than an infrastructure fund. A sponsor’s track record could also influence how we assess a company’s financial profile and lead to lower ratings. In certain cases, we could look at holding company financial leverage separately from the operating company’s leverage.
but will likely consolidate credit ratios in a take-private scenario, which often leads to significantly weaker credit metrics. That said, if the new owner commits to no dividend and allows the private operating company’s excess cash flow to pay down debt, it could mute the harmful impact on the credit rating. We would expect financial sponsors to pay themselves a distribution rather than repay debt, but infrastructure funds are more cognizant of leverage levels. This was reflected in the recent transaction involving IFM Global Infrastructure Fund’s take-private of Buckeye Partners L.P., which we expect will use internally generated cash flow to fund capital requirements and repay debt for the next several years.

**Weakened Credit Quality For Upstream Companies Could Affect Midstream Issuers**

Sustained low gas prices, heavy debt burdens, high cost structures, and other contractual obligations have hurt many U.S. E&P companies’ credit quality. We took several negative rating actions on upstream issuers that focus on the Marcellus and Utica Shales, including Antero Resources, EQT Corp, CNX Resources, and Range Resources. The rating actions at Antero Resources and CNX Resources led to subsequent actions at their respective midstream operating subsidiaries, Antero Midstream and CNX Midstream, because they derive most of their cash flow from their parent companies. CNX Midstream receives 70%-80% of its revenues from CNX Resources while Antero Midstream gets all of its cash flow from Antero Resources.

Even if commodity prices do not fall further, producers’ credit quality could keep deteriorating because of financial and operational restructurings and bankruptcies, which could affect contracts with G&P companies. G&P companies concentrated in the Northeast U.S. with high exposure to natural gas producers are the most vulnerable, but we also see some vulnerabilities in the midcontinent region and other dry gas areas like the Haynesville Shale or Powder River Basin. Weaker credit quality for the midstream industry’s customers could result in a replay of contract renegotiations, or the amend-and-extends that proliferated in 2016 and 2017. However, most producers are living within their current cash flow, and in our view it may be harder for midstream companies to maintain strong financial profiles if things get worse for producers. Separately, we expect low natural gas prices to result in lower growth profiles for Northeast-focused G&P companies than we previously expected. These companies have some flexibility, including the ability to scale back capital spending, which may preserve some balance sheets and credit measures.

**Regulatory Challenges For Large Capital Projects Will Persist**

Regulatory challenges to large-scale pipeline projects plague the industry and we expect this trend to continue in 2020. The harmful effect on the credit quality of some midstream issuers and has led the industry to share the risk among multiple joint venture partners on many of these large oil and natural gas transportation projects. Most notably, EQM Midstream Partners L.P.’s Mountain Valley Pipeline (MVP) project continues to face headwinds, with permit issues stopping the completion of the last 10% of construction. The most recent legal challenge comes from environmental groups who sued the U.S. Fish and Wildlife Service to reevaluate the pipeline project’s impact on the environment and endanger species along the pipeline’s route. Additionally, EQM is waiting on the Supreme Court to hear arguments on Dominion’s $7.5 billion Atlantic Coast Pipeline project, agreeing to rule on a permit that would let the pipeline cross under the Appalachian Trail. The court’s decision, expected in June or July 2020, will affect EQM’s MVP project and its ability to cross the Appalachian Trail, allowing completion of the project. Due to the many regulatory hurdles MVP’s in-service timing has been pushed back from the original date of 2018 to year-end 2020 and the budget has increased to between $5.3 billion and $5.5 billion from the original budget of $3.7 billion. EQM is responsible for approximately $2.7 billion of the total MVP budget.
Even pipeline operators in Texas, one of the most energy-friendly states in the country, are not immune to regulatory speed bumps. Due to slower-than-expected regulatory authorizations, Kinder Morgan has pushed back the in-service date for its Permian Highway Pipeline Project. While this does not affect Kinder Morgan's credit quality, it demonstrates the regulatory hurdles the industry faces. We expect environmental groups to continue pursuing action in the courts, which will affect large-scale pipeline projects. The results of the Democratic primary and 2020 election could create further regulatory headwinds for the industry, including a possible fracking ban on federal lands, stricter rules for water use, and the inability to obtain permits.

**Canadian Midstream Is Looking For A Clear Path Among Bumps In The Road**

The Canadian energy sector generally remains challenged due to political uncertainty, a difficult regulatory environment, persistent infrastructure constraints, and weak oil prices. Alberta’s curtailment quotas and U.S. sanctions on Venezuelan heavy crude have supported Western Canadian Select (WCS) prices this year, with differentials versus WTI crude now close to $20/bbl, which primarily reflect rail transportation costs to U.S. refineries and markets, particularly the Gulf Coast where demand for heavy oil is the most favorable. We believe Canadian oil sands producers could ship up to 200 million barrels per day of heavy oil by rail above the provincially imposed caps in 2020, which will likely keep the differential in a $15-$20/bbl discounted band from WTI and help U.S. refiners’ profitability.

Despite the Alberta government’s decision to ease curtailment quotas, the curtailment program has been extended to December 2020 in response to the lack of export capacity. The midstream industry’s ability to provide some relief to producers has been challenging. The egress solution that Enbridge’s Line 3 replacement project was to provide has been delayed until the second half of 2020 due to permitting issues with Michigan. As such, we believe a costlier and riskier rail solution will be the answer for producers in 2020, at the expense of midstream cash flow and credit quality.

The availability of liquids-rich gas in the Montney region, cheap natural gas, and incentives offered by the previous Alberta government have made large-scale petrochemical projects economically attractive. That said, several large petrochemical plants that are under construction have weakened credit measures and could add commodity risk to cash flows, which may pressure ratings. The capital spending and construction risk associated with Pembina Pipeline Corp.’s integrated propane dehydrogenation plant and polypropylene upgrading facility and Inter Pipeline Ltd.’s Heartland Petrochemical Complex will be a key risk factor for both companies’ credit profiles.

Regulatory risk has also increased in Canada, with several bills passed in 2019. Bill C-69, which Parliament passed in June 2019, overhauls the federal environmental assessment process for major construction projects. The bill also replaces both the National Energy Board Act with the Canadian Energy Regulator Act and the Canadian Environmental Assessment Agency Act with the Impact Assessment Act. Therefore, the Canadian Energy Regulator is now the primary authority responsible for federally regulated oil and gas pipelines and power lines. Though the bill is aimed at improving trust and transparency in the review process, we believe it adds some complexity and uncertainty to the project approval process, making it more difficult for midstream companies to receive construction approval for future oil and gas pipelines. Additionally, Bill C-48 also received Royal Assent in September 2019 and aims to limit the movement of large oil tankers (those carrying more than 12,500 metric tons of oil) at ports or marine installations located along British Columbia. Critics call the bill an effective ban on oil tankers. We believe the legislation is somewhat inconsistent with the federal government’s commitment to increase tidewater access for the export of Canadian natural resources after its purchase and intention to expansion the Trans Mountain Pipeline. The Alberta government has pledged to launch a constitutional challenge against both bills.
Related Research

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- IMO 2020: The Coming Storm, Oct. 7, 2019
- S&P Global Ratings Lowered Its Henry Hub Natural Gas Price Assumption For The Rest Of 2019 And For 2020, 2021; Long-Term U.S. Natural Gas, Canadian AECO, And Crude Oil Price Assumptions Unchanged, July 30, 2019
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This report does not constitute a rating action.
Industry forecasts

Global Midstream Energy

Chart 215
Revenue growth (local currency)

Chart 216
Capex growth (adjusted)

Chart 217
Debt / EBITDA (median, adjusted)

Chart 218
FFO / Debt (median, adjusted)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Cash, debt, and returns

Global Midstream Energy

Chart 219
Cash flow and primary uses

Chart 220
Return on capital employed

Chart 221
Fixed versus variable rate exposure

Chart 222
Long term debt term structure

Chart 223
Cash and equivalents / Total assets

Chart 224
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Industry Top Trends 2020

Oil and Gas

Default risks grow, while IMO 2020 is the short-term focus

What’s changed?

**Growing concerns about 2020 oil demand.** Slowing economic expansion is crimping demand growth for crude oil, although it’s likely to grow around 1.2% or 1.2 million barrels a day (MMbbl/d) in 2020. OPEC continues to constrain supply even as overall production keeps rising, possibly ahead of consumption in 2020.

**Low natural gas prices.** Most regions have an oversupply, if not an adequate amount of, gas. Even with a seasonal uptick in winter in consumption, high storage levels with muted demand mean price upside is likely limited.

**Climate change populism.** We see the potential for step changes in the operating environment and more aggressive regulation as policies evolve. Policies and popular opinion haven’t reconciled the twin realities of growing global energy demand and greenhouse gas levels.

What to look for in the sector in 2020?

**IMO’s new regulations.** Oil product markets face massive changes as global shipping dramatically cuts its use of high sulfur fuel oil in response to IMO 2020. A hike in demand for middle distillates will likely boost prices. Sour higher-sulfur crude oils are likely to be less attractive to refiners.

**Will OPEC continue with supply cuts, set to expire in March 2020?** Without production cuts from OPEC and Russia, oil prices would be well below their current levels. However, we remain concerned about the resolve to do so indefinitely.

What are the key medium-term credit drivers?

**On average in 2020, Brent oil prices above $55 and WTI above $50.** For most producers that we rate, especially in the high yield space, a sustained price below $50 for WTI and $55 for Brent probably means a rapid deterioration in credit quality. As such, sub-investment-grade companies would likely experience downgrades.

**Restructuring risk.** We anticipate another wave of defaults and bankruptcies, particularly in North America owing to a heavy preponderance of highly speculative issuers with limited access to capital markets. Low bond prices raise the specter of distressed exchanges.
Our negative outlook bias signals that the sector as a whole is not healthy, specifically for high-yield credits and many oilfield service companies and drillers. In contrast, large investment-grade players and most refiners have been able to rebuild or consolidate rating headroom in recent years. This dichotomy is partly due to the success of the upstream players, especially the majors, in controlling costs and spending after the 2014–2016 oil price crash. The flip side is that the suppliers to the producing companies remain under varying degrees of pressure. Still, many smaller upstream companies in North America are also feeling the heat. Financial—as well as operational—restructurings are therefore unlikely to be confined to the service companies and drillers, as we’ve already seen in 2019. And all this even without a U.S. or global recession.
Exploration and Production

Key assumptions

1. Oil prices

Our base case deck for average Brent and WTI prices is relatively flat mirroring the futures curve. Our price deck assumes Brent and WTI prices, per barrel (bbl) and respectively, of $60 and $50 for 2020, $55 and $55 for 2021, 2022, and beyond. Oil fundamentals remain reasonably supportive of credit quality. Barring a recession, we expect oil prices to remain between $50 and $60 on average. We assume the 1.2MMbbl/d of production cuts from OPEC and several other nations, as well as ongoing sanctions against Iran will continue. In addition, we do not expect Venezuela will increase production, but rather that the likelihood of further cuts in production remaining high. Also, U.S. producers, yielding to investor sentiment, are curtailing aggressive spending and production, opting to operate within cash flows, which curbs rampant production growth. A sustained oil price below $50 would not be good for overall credit quality for both the E&P and oilfield service sectors.

2. Natural gas prices

Natural gas prices tumbled in 2019. In the U.S., our current Henry Hub natural gas prices for the remainder of 2019, 2020, 2021, and 2022 and the long term are, respectively, $2.25, $2.50, $2.75, and $3.00. For AECO, we assume $1.25 for the remainder of 2019 and 2020, and $1.50 for 2021 and the long-term deck. Inventory levels, while having increased rapidly, are within the five-year average heading into the heating season. A cold winter could quickly pull levels down and push prices up. However, if the winter is mild, we could see natural gas prices dip below $2.00. We remain concerned about bi-product natural gas coming out of the Permian Basin in particular, which could continue no matter what the price of gas is. Furthermore, a recession could further weaken demand for gas.

3. Regional price differentials, especially in North America

Regional differentials, which we factor into our credit analysis, are typically more problematic for oil and gas producers in North America than in other regions. The price for oil on the Western Canadian Select, the Canadian oil benchmark, is trading markedly below WTI due to takeaway capacity limitations. However, it’s difficult at this juncture to ascertain when this will subside because of ongoing Canadian regulatory and court battles that have delayed or cancelled pipeline additions. For natural gas, the Waha gas hub in Texas had rebounded meaningfully with the construction of the Gulf Coast Express Pipeline. But the pipeline quickly filled to capacity, triggering another sharp drop for Waha and it is now trading well below the Henry Hub. Moreover, the Permian Highway pipeline project was delayed until early 2021 due to regulatory hurdles. Permian gas is finding its way into the Denver-Julesburg basin and has caused differentials there to widen as well. Additionally, the price for natural gas at the AECO storage facility in Alberta, Canada is trading well below Henry Hub due to the lack of takeaway capacity basically from the NOVA Gas Transmission System.

Brewing concerns about 2020 oil demand. It’s been some time since we’ve been concerned about the demand for oil, with oversupply being the main trouble area. That’s not to say supply is no longer a concern. Rather, we’re seeing that the demand side of the equation has reared its head. Trade wars and increasing concerns about the global economy slowing down have led to declining oil prices over the past year. The U.S. Energy Information Administration, for example, has lowered its demand growth outlook for 2019 from 1.5 million bpd at the beginning of the year to 760,000 bpd. While the International
Energy Agency (IEA) demand outlook for 2020 is likely to be around 1.2% or 1.2 MMbbl/d, this estimate could be lower if global economic growth continues to weaken. These revised demand expectations ring true, for example in the failure of oil prices to rise higher--and for longer--after the attacks and outage in Saudi Arabia, even if supply disruption was also avoided. OPEC continues to constrain exports even as overall production keeps growing, ahead of possibly weaker consumption in 2020.

Low natural gas prices. Natural gas in most regions is oversupplied, particularly in North America. Entering the 2019 injection season, at the end of last year, prices were high, natural gas directed rigs were at their lowest levels since November 2017 and inventory levels stood below the one-year and five year averages, setting up what should have been a robust year for natural gas prices. However, gas prices have dropped this year due to:

- Concern amongst traders given record increases in gas injection rates;
- Completion of the Gulf Coast Express pipeline, which alleviated trapped gas in the Permian;
- LNG-related regulatory delays in the Gulf of Mexico and low global LNG prices that have caused buildout construction delays and made attracting capital difficult to build facilities; and
- Bi-product natural gas continues to be responsible for approximately half of U.S. natural gas production and thus, does not behave to the laws of supply and demand for gas alone.

A mild Asian winter in 2018-2019 meant LNG volumes from well-supplied markets there arrived in an already well-stocked Europe, putting pressure on European benchmarks, just as U.S. LNG exports have also been ramping up.
**Key risks and opportunities**

1. **Capital market access**
   One of the major sector risks is the debt maturity wall facing speculative-grade companies and their ability to meet maturities. The unsecured debt markets have practically dried up for most of the high-yield issuers looking to secure financing to meet maturities, as long as they have sufficient PV-10 valuations and room under secured covenant tests to secure obligations. Preliminarily, with the bank revolver redetermination season in full cycle, it looks like revolver borrowing bases could be reduced by an average of 10%-12%, more so for some of the companies that rely more on gas.

2. **Global recession**
   A sharp downturn in the global economy would clearly result in a pronounced decline in demand and therefore in oil and natural gas prices. Recent history suggests oil prices could drop severely in a recession. During the industry trough of 2015-2016, the price per barrel of WTI and Brent averaged $43.15 and $43.55, respectively. Trading actually saw both Brent and WTI fall from more than $100/bbl to below $30/bbl in early 2016, although prices didn't stay there very long. In the previous industry downturn in 2008, oil prices retreated from a high of more than $145/bbl to $32/bbl due to the financial crisis, a stronger U.S. dollar, and lower global demand. Predicting oil prices through a recession is difficult, but just as difficult as projecting how long oil prices will stay low. In 2009, we saw a rapid rebound in prices. Given this swift increase, few oil and gas companies defaulted because they were able to weather the brief downturn. However, with shale production increasing materially since then and production continuing to grow while marginally barrels remain profitable, the recent downturn lasted more than two years, resulting in a significant number of bankruptcies and defaults. If the recent downturn in oil prices is any indication of what oil prices could look like and for how long during a 2020 recession, there could be another significant wave of bankruptcies.

3. **Increasing defaults**
   With the E&P portfolio so highly weighted to the lower end of the high yield universe, especially in the U.S., anticipating an increasing wave of defaults and bankruptcies is a normal reaction. We are expecting it. In fact, we already saw in 2019. Given where current bond prices are trading and where industry yields are, alongside the inability to finance upcoming maturities, it’s highly likely that companies will negotiate with bond holders and conduct what we view to be distressed exchanges, where the bond holders are getting less than the original promise of the indenture.

**IMO 2020.** On Jan. 1, 2020, the IMO's regulations to reduce sulfur content to 0.5% from 3.5% in marine fuel will have dramatic implications for oil product markets. We expect complex refineries that have the ability to process what will likely be lower-priced, high sulfur crude into higher margin distillate and marine gas oil, will benefit. This will trigger a spike in demand for middle distillates, prompting price increases in respective products. The price of sour, higher-sulfur crude will likely decline. While most refineries we rate should benefit, especially those in the Gulf of Mexico, we do not anticipate positive rating actions since we assume any windfall will be used to improve shareholder returns.

Producers who can produce sweet (low in sulfur) oil should realize higher prices, as refineries that lack the necessary complexity (equipment) to process sour crude into light distillate/low-sulfur fuel oil—a product that will be demanded by shipping companies to comply with the new regulation—will increase demand for sweeter crude. Producers in the U.S., North Sea, and West Coast of Africa that produce light/sweet crude...
stand to benefit from higher prices. Producers of heavy/sour-based crudes, such as producers in Canada, the Middle East, and Mexico, will likely see an immediate drop in prices for their crude as lower demand from refineries hurts pricing.

**Will OPEC continue with supply cuts, set to expire in March 2020?** One thing is clear: Without the production cuts from OPEC and Russia, oil prices would be well below their current levels. OPEC and Russia have continued to do what it takes to support oil prices. Still, we remain concerned about how long this will carry on. Saudi Arabia, which has a big influence on OPEC’s decisions, is preparing the IPO of Saudi Aramco, and it makes sense to keep production cuts and support the oil price until at least the IPO is completed. Moreover, in light of the recent attacks on the Saudi Abqaiq oil processing facility, allegedly by Iranian backed Houthi militia, Saudi Arabia could conceivably consider driving down the price of oil to affect Iran’s ability to fund political instability in the region. Saudi Arabia still has deep pocketed sovereign wealth funds and could withstand a prolonged period of low crude prices while maintaining and funding its socio-economic programs.

**When do investors come back to oil and gas?** Not any time soon. It’s been approximately two years since equity investors forced oil and gas companies to operate at a minimum, live within their cash flow, stop the rampant production growth, and focus more on return of capital to shareholders either through dividends or share repurchases. This has driven E&P companies to undergo major strategic transformations. E&Ps revamped their portfolios, selling off non-core, high-cost assets to focus on high-return core properties and improve returns. They have embraced fiscal discipline by cutting capital spending to live within cash flow while prioritizing shareholder returns by instituting dividends and stock repurchase programs. Lower capital spending and higher production have been the rule in 2019, and there are early indications that 2020 will not be all that different.
Oilfield Services and Offshore Contract Drillers

Key assumptions

1. Capital spending
We expect E&P capital spending growth to be muted in 2020, consistent with moderating oil prices and lower natural gas prices.

2. Rig count/utilization
The global rig count currently stands at 2,141, approximately 4.6% less than the end of last year. We believe that, at current prices, rig count will, at best, remain at or near present levels due to capital budget restraints.

3. Margins
It’s unlikely oilfield services (OFS) companies will see bigger margins in 2020, not with the expectation of oil and gas prices remaining at or near where they are now and with spending declining in the last few months of the year.

Capital spending
We expect E&P capital spending growth to be muted in 2020, consistent with moderating oil prices and lower natural gas prices. Lower capital spending and higher production seem to have set the tone in 2019, especially toward the end of the year as budgets have been met and prices have declined. We’re already seeing that 2020 may usher in similar conditions. It’s possible that at a $60/bbl Brent, overall global spending in the oil field service patch could actually decline to about 5% in 2020. Shale could see more than that. U.S. companies will remain sensitive to investor aversion to outspending cash flow and focus on return of capital to shareholders. We also expect efficiency gains, while slowing, will allow drillers to be more productive with less money. International spending will likely strengthen incrementally, driven by the major and international oil companies’ need to improve reserve replacement and a modest increase in offshore activity.

Rig count/utilization
The global rig count currently stands at 2,141, approximately 4.6% less than the end of last year, largely driven by declining rig counts in the U.S. International markets tend to be less volatile on both the downside and upside, incorporating the influence of national oil companies and lack of short-cycle development, which is typical of shale. Venezuela continues to be a drag on the total rig count because of financial distress, while the U.S rig count, for both oil and natural gas, has declined over 2019, primarily due to lower oil, LNG, and gas prices. Also, drilling and unforeseen geological issues in the SCOOP/STACK play has led to meaningful declines in rigs in the basin. We believe at current prices, rig count will, at best, remain at or near these levels due to capital budget restraints.

We believe the deepwater offshore market has stabilized but at extremely low levels. Utilization remains depressed and there are still too many rigs that are warm stacked and able to very quickly come on the market. Some are still being built. We believe that, without an increase in oil prices, operators will need to cold stack more rigs but that this will continue slowly due to the cost and charges incurred. Although we expect utilization for floaters to slightly improve in 2020, we don’t expect it to reach 85%--typically the level at which day rates begin rising--until the back half of 2021.
### Margins

It’s unlikely that oilfield services (OFS) companies will see bigger margins in 2020, not with the expectation of oil and gas prices remaining at or near where they are now and with spending declining in the last few months of the year. Pretty much across the board and product lines, OFS companies are seeing declining prices. The outlook for proppant prices, which are very low, is that they will remain relatively flat over the next several years. There remains too much supply from in basin sands to be able to push through any increases while pressure pumping prices are expected to recover nominally from trough levels as operators continue to lay down and cold stack rigs. We believe the OFS industry has been fundamentally altered due to spending constraints at the E&P level and permanent efficiencies that have reduced the need for equipment and services. Indeed, the oil rig count in the U.S. is roughly half of what it was at the end of 2014, but oil production is at an all-time high.

### Key risks and opportunities

<table>
<thead>
<tr>
<th>1. Hydrocarbon prices</th>
</tr>
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<tbody>
<tr>
<td>We view a sudden drop in commodity prices as the main risk to the credit quality of OFS companies. Under our assumptions, development levels will either remain broadly unchanged or drop in 2020. We believe a sustained price below $50 would restrain already tight E&amp;P spending budgets and would be detrimental to the overall credit quality of the sector.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Increasing defaults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given very high yields and the lack of capital market access to meet maturing debt, the entire sector faces an elevated risk of increasing defaults. Most of the OFS companies we rate have very low ratings and will most likely default in the coming years without financing options. All of the exclusively offshore drillers are in our ‘CCC’ category given unsustainable leverage and concerns about access to capital.</td>
</tr>
</tbody>
</table>
Refining

Key assumptions

1. Stricter low-sulfur marine fuel requirements from IMO 2020

IMO 2020 presents a risk for low-complexity refineries with limited crude and product flexibility, but an opportunity for complex refiners, particularly U.S.-based refiners. We believe crude and product markets will accommodate these shifts during the first half of 2020, but that pricing, especially in local markets, could be very volatile as supply and demand balances across the product slate adjust.

2. Refining margins

Our working assumption is that average 2020 refining margins are above 2019 levels. Refiners—and traders—are likely to capture stronger profits per barrel as purchasers lock in supplies of IMO 2020 compliant and other fuels.

3. Distillate and gasoline demand

Since middle distillates are a key substitute for HSFO, we believe they will benefit from a step-up in demand from late 2019 and early 2020. More broadly, emerging economies, especially China and India, will likely continue to drive global gasoline demand growth, as well as for other oil products. Aside from IMO 2020 effects, demand from OECD members is likely to be flattish in 2020.

Stricter low-sulfur marine fuel requirements from IMO 2020

In general, IMO 2020 presents a risk for low-complexity refineries with limited crude and product flexibility, but an opportunity for complex refiners, particularly U.S.-based refiners. The IMO is further tightening the limit on sulfur emissions in bunker fuel for ships. As a result, from late 2019, we anticipate a drop in demand for HSFO and a hike in demand for middle distillates. This is material for the product markets and represents a swing in oil product demand of about 3.0-3.5 MMBbl/d. We believe crude and product markets will accommodate these shifts during the first half of 2020, but that pricing, especially in local markets, could be very volatile as supply and demand balances across the product slate adjust. We believe U.S. refiners will be the most profitable given their flexibility to optimize their crude slate to the most profitable crudes (heavy, sour crudes) and process it into higher-value-added products. Refiners located in Africa, South America, Russia, parts of Europe, and some Asian countries that have limited coking or hydrotreating ability and yield more low-value fuel oil will most likely have to transition into to lighter/sweeter (but more expensive) crude slates and could see some pressure on profitability and cash flows.

Refining margins

Our working assumption is that average 2020 refining margins are above 2019 levels. Refiners—and traders—are likely to capture stronger profits per barrel as purchasers lock in supplies of IMO 2020 compliant and other fuels. Still, because the IMO disruption works out of the global system, we see conflicting drivers for refining margins in most regions globally emerging in the latter part of the year. As the anticipated supportive impact of IMO 2020 changes for diesel cracks and refining margins fades, capacity additions and refinery runs could outstrip softening product demand. We expect that distillate refining margins will be robust in 2020, not just from shipper demand for pure distillate or diesel but from bunker suppliers looking to blend with HSFO. Blending residual fuels with more distillate to improve compliance will likely further increase
demand and the price for distillates. Prices and cracks for low sulfur fuel oil (LSFO) and distillates are expected to rise sharply. Gasoline margins should increase as well due to the shift in utilization of distillate production and thus reduced production of gasoline.

**Distillate and gasoline demand**

Since middle distillates are a key substitute for HSFO, we believe they will benefit from a step-up in demand from late 2019 and early 2020. More broadly, emerging economies, especially China and India, will likely continue to drive global gasoline demand growth, as well as for other oil products. In contrast, beyond IMO 2020 impacts, demand from the Organization for Economic Cooperation and Development (OECD) members is likely to be flattish in 2020 given ongoing efficiencies and our base-case view that global and OECD GDP growth will continue, albeit at a slowing rate. The U.S. will likely see steady demand for gasoline and distillates, but a decelerating economy could dampen domestic growth. Most U.S. Gulf Coast refiners will continue to have the flexibility to export product, mainly to Latin America.

**Key risks and opportunities**

1. **IMO 2020**
   The upcoming rollout of new IMO regulations has engendered significant uncertainty: The implications for marine fuel product demand patterns; the flexibility of refiners and traders to produce and supply necessary volumes; and the consequences for pricing.

2. **A sharp downturn in the global economy in 2020**
   A significant deviation from our base-case view of global GDP growth would be likely to affect our assumptions for oil product demand.

3. **Increased global refining capacity**
   The trend of high refinery utilization of recent years in North America and Europe could change as competing capacity continues to ramp up in 2020.

**IMO 2020**

The upcoming rollout of new IMO regulations has engendered significant uncertainty: The implications for marine fuel product demand patterns particularly in early 2020; the flexibility of refiners and traders to produce and supply the necessary volumes of these products; and the consequences for pricing of both products and different crude feedstock grades. Heavier crudes tend to have a higher sulfur content and yield a higher proportion of HSFO through the refining process. Some of the highest sulfur-content crudes (like those from Canadian producers that produce the heavy bitumen Western Canadian Select [WCS], and Mexico’s Maya, as well as grades from Middle Eastern producers) will see some of the widest discounts given their high sulfur content and heavy gravity. There are risks that at times over last weeks of 2019 and in 2020, some refiners misjudge the short-term demand and trade flows for products in particular. This could hinder actual performance, for example compared with indicative regional benchmarks.

**A sharp downturn in the global economy in 2020**

A significant deviation from our base-case view of global GDP growth would be likely to affect our assumptions for oil product demand. Crude and product prices in local currencies also have a bearing on demand. However, S&P Global Platts, a division of S&P Global, as is S&P Global Ratings, has noted from historical correlations that shifts in GDP
growth can have a more material impact. A more severe downward revision in demand
expectations, due to tariffs and trade wars, for example, even if accompanied by a
downward move in crude prices, could have an adverse impact on refining margins,
especially if capacity continues to increase and utilization levels decline.

Increased global refining capacity

We note that global net refining capacity additions in 2019 of above 2MMbbl/d have been
the greatest since 2009, according to the IEA and S&P Global Platts. These were mostly in
non-OECD countries, half in China, and most of the rest in Saudi Arabia, Brunei, and
Malaysia. Some of this capacity in Asia is focused on petrochemicals, a key driver of oil
demand outside transport. Nonetheless, the trend of high refinery utilization of recent
years in North America and Europe (with declines in Latin America and Africa) could
change as competing capacity continues to ramp up in 2020. Or, margins could come
under some pressure.

Related Research

- European Gas Producers: Do Lower Gas Prices Mean Lower Ratings?, Oct. 28, 2019
- IMO 2020: The Coming Storm, Oct. 7, 2019
- S&P Global Ratings Lowered Its Henry Hub Natural Gas Price Assumption For The Rest
  Of 2019 And For 2020, 2021; Long-Term U.S. Natural Gas, Canadian AECO, And Crude
  Oil Price Assumptions Unchanged, July 30, 2019
- ESG Industry Report Card: Oil And Gas, June 3, 2019
- Reports Rank Global Oil And Gas Companies’ Relative Risks, May 15, 2019

This report does not constitute a rating action.
Industry forecasts

Global Oil and Gas (excluding Midstream)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.

It’s clear from the capex chart that we are expecting spending to be down in 2020. It follows a rebound from the crisis spending cuts of 2015-2017. This lack of further increases in spending is largely due to E&P’s pandering to investor sentiment on focusing on returns and living within free cash flow.
Cash, debt, and returns

Global Oil and Gas

Chart 235
Cash flow and primary uses

Chart 236
Return on capital employed

Chart 237
Fixed versus variable rate exposure

Chart 238
Long term debt term structure

Chart 239
Cash and equivalents / Total assets

Chart 240
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Real Estate

Credit quality remains resilient despite risk of an economic slowdown

What’s changed?

Low interest rates driving lower borrowing costs. A low interest rate environment will help support asset values in most property types into a slower growth period in 2020.

Signs of asset valuation pressure growing. There is growing pressure on retail assets, particularly lower quality shopping centers in the U.S., Asia-Pacific (APAC) and Europe as competitive pressure from e-commerce continues to hurt traditional retailers. We expect store footprint rationalization to remain a theme.

Political risks increasing in key property markets. Increasing political risk from Brexit, policy uncertainty in Latin America, growing sentiment for rent regulation in Germany, and social unrest in Hong Kong is clouding the prospects for landlords.

What to look for in the sector in 2020?

Growing negative ratings bias with more negative actions than positive. Negative rating actions have outpaced positive ones, mainly in the retail real estate sector.

Increased debt issuance and higher M&A activity. We expect access to debt capital to remain generally favorable as interest costs remain low. A recovery in share prices and low cost of debt could drive greater M&A activity in 2020.

Impact from global economic slowdown. While we expect the real estate sector to remain fairly resilient if there’s a slowdown in 2020, weaker-positioned assets in the retail or office sector could underperform if tenant risk rises.

What are the key medium-term credit drivers?

Growth strategy and appetite for M&A. As organic growth remains low, real estate companies are looking to enhance growth via M&A or development.

Shifts in financial policy to increase debt leverage. Greater focus on share repurchases could also pressure ratings in 2020, particularly in cases where stock prices trade well below net asset value.

Disruption in the retail sector impacts operating performance. We continue to monitor the retail sector given our ongoing expectation of pressure in occupancy and rent growth in 2020.
On a global basis, we expect growing negative bias as the number of negative rating actions have outpaced positive ones. While 87% of ratings were stable, ratings with negative outlooks grew to 6% as of Oct. 30, 2019, from 5% a year ago, while the number of ratings with positive outlooks declined to 6% from 7% for the same time period. Credit quality in the sector has peaked in 2019 as we enter the late stages of the cycle and a global economic slowdown. In 2020 we expect negative rating actions to outpace positive ones with more downside risks in the retail, healthcare and office sectors as we think these sectors are likely to be more cyclical than multifamily assets or the industrial sector.
sector (which is currently enjoying tailwinds from e-commerce growth) when the next downturn occurs.

In the U.S., 6% of outlooks are positive and 7% are negative, largely reflecting increasingly negative rating trends in the retail sector. APAC is the most stable as more than 90% of ratings have a stable outlook. This reflects the higher portion of ratings in the 'A' category. Rating trends have been slightly more favorable in EMEA compared with the U.S. and APAC, with a somewhat higher portion of positive outlooks. This is the result of companies growing their portfolios through acquisitions and operating with leaner balance sheets. The majority of real estate ratings in Latin America remain speculative grade due to potential volatility in results, and in some cases exposure to sovereign risks. We expect ratings to remain largely stable in 2020 due to an expected recovery in Brazil’s economy and steady performance of asset portfolios in Mexico. In Mexico, few ratings are investment grade with stable outlooks.

**U.S REITs**

**Key assumptions**

<table>
<thead>
<tr>
<th>1. Operating performance to remain resilient as economic growth slows</th>
</tr>
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<tbody>
<tr>
<td>S&amp;P Global economists have raised the odds of a recession in the U.S. to 30-35% in the next 12 months because of the ongoing trade dispute with China. While occupancy and rental growth could face some pressure, we expect U.S. real estate investment trusts (REITs) to achieve relatively stable cash flow given a strong labor and consumer markets, while supply remains constrained.</td>
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<table>
<thead>
<tr>
<th>2. Lower interest rates provide favorable access to capital</th>
</tr>
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<tbody>
<tr>
<td>The reversal of interest rate trends from rising in 2018 to falling in 2019 contributed to the recovery of equity prices and improved access to debt markets.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Capital allocations could shift towards more M&amp;A</th>
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</thead>
<tbody>
<tr>
<td>REITs could pursue more M&amp;A in 2020 as the development pipeline slows as we enter an economic slowdown. Share repurchase activities remain modest in most REIT sectors given the recovery of share prices.</td>
</tr>
</tbody>
</table>

While a recession could put some pressure on occupancy and rent growth, the U.S. labor market remains robust, with solid job gains and wage increases. We expect a solid job market and consumer spending to drive demand for real estate while new supply remains largely constrained. U.S. REITs have been operating at peak occupancy with good rent growth for the past two years and we expect continued deceleration in net operating income (NOI) growth of about 2% in 2020 compared to the mid-2% area in 2019. U.S. REITs have reduced debt leverage over the past few years from portfolio recycling strategies, and most issuers are operating with adequate cushion in credit metrics.

Credit quality remains resilient in an economic slowdown
U.S. REITs’ issuance of debt and equity rebounded strongly after a trough in 2018 given a lower interest rate environment. U.S. REITs raised over $55 billion in senior debt as of September 2019, more than doubling the $21.3 billion for the same period in 2018. The Federal Reserve cut interest rate for a third time in October, providing opportunity for REITs to further lower their borrowing costs. In addition, a number of highly rated REITs tapped the commercial paper market in 2019, diversifying their funding sources at an attractive cost of capital. We also expect lower interest rates to support asset values, mitigating risks from slower revenue growth. Still, asset prices could face some modest pressure following frothy levels over the past few years.

Given the recovery of public equity prices and favorable borrowing costs, we expect an increase in M&A activity in 2020. M&A activity picked up in the latter half of 2019, with Prologis acquiring Liberty Property Trust for $12 billion and Industrial Property Trust for about $4.0 billion; Digital Realty acquiring Interxion for $8 billion, expanding their footprint in Europe; and Hospitality Property Trust acquiring a portfolio of net lease retail assets from Spirit MTA REIT for $2.4 billion.

A more favorable interest rate environment to fund growth

Shifting capital allocation from development and share repurchases towards acquisitions
European REITs

Key assumptions

1. Rising revenues and strong coverage metrics

Steady revenue growth in 2020, in the low-single digits, on the back of lower but positive indexation and rent contribution from investments. EBITDA interest coverage will remain strong, benefiting from the low interest rates and liability management activity in 2019. This should also ease debt-to-EBITDA ratios downward.

2. Fewer asset acquisitions, but possibly more share buybacks and M&A

We foresee lower direct property investments, as prices are getting too high. Given the equity markets, most issuers trade at a big discount to net asset value (NAV), REITs may grow through either M&A or developments. These may be more risky but more cash-flow generative. Another route can be share buybacks in the absence of investment opportunities.

3. Valuations should not rise further, despite tightening interest rates

The plateauing of asset valuations should benefit companies’ debt-to-debt and equity ratios, despite further decreases in interest rates. This is because most yields in Europe have reached a very low point. We even expect some further decline in the retail segment, due to the negative investor sentiment and growing capitalization rates by appraisers.

Widespread indexation of rents on various measures of inflation, although lower than previously anticipated, and resilient macroeconomic trends, such as decreasing unemployment rates and still positive GDP, indicate that like-for-like revenue growth for REITs based in continental Europe, especially those operating in the prime office segment, will increase in the low-single digits in 2020. We also foresee rising revenues from portfolios’ additions, partly as a result of M&A but also through ongoing development activities (renovations, extensions, and greenfield or pre-let projects). Stronger revenues should also result in better debt-to-EBITDA ratios. At the same time, interest rates have decreased and REITs have been quite active refinancing their maturing debt at significantly lower coupons this year. We therefore expect the cost of debt should strengthen and result in stronger EBITDA interest coverage in 2020.
Companies have gained significant financing headroom thanks to the lower interest burden and valuation uplifts in recent years. But external growth is increasingly difficult as assets remain expensive relative to the REITs’ cost of capital. Rental yields have reached very low levels across most property segments, especially in the prime office market (around 3% in Paris Central Business District, for example), and therefore acquiring standing properties could be significantly cash flow dilutive. Given the equity markets currently trade their shares at a wide discount to their NAV, REITs may find it more attractive to grow through either M&A or property developments. Although these options generate more returns they present clear operational risks. In the absence of investment opportunities, REITs may be tempted to buy back their shares, which we would view as a credit negative.

Fewer asset acquisitions, but possibly more share buybacks and M&A
While we expect another year of low interest rates, we do not believe it will strongly benefit asset revaluations in 2020. Similar to the interest rates in Europe, the average rental yield has significantly decreased in the past few years, thus generating significant revaluation gains for REITs. Although risk-free rates have decreased more proportionally than rental yields over the same period, leaving risk premiums (rental yields minus risk free rate) significantly higher than before the 2008 crisis, we believe rental yields may have bottomed across most mature property markets. We even expect some further yield expansion in the retail segment, due to negative investor sentiment and cap rate increases by appraisers. As a result, debt-to-debt and equity ratios should not significantly improve, absent deleveraging measures.

Chart 10

Asset Valuations Are Turning Negative In The Retail Property Sector
Asia-Pacific REITs

Key assumptions

1. Landlords will be more accommodative of tenant demands.

Weakening economic conditions will slow rental growth and tenants will be considering cost-competitive real estate options.

2. Strong coverage metrics will prevail, as a result of low interest rates.

Debt usage by the sector is currently manageable and debt leverage is being kept in check due to asset prices holding up. Strong demand from institutional investors, who benefit from a low cost of capital, are bolstering asset valuations in spite of the weakening rental outlook.

3. More shares will be bought back.

Fewer asset acquisition opportunities, in combination with robust capital structures, will encourage REIT managers to undertake share buybacks to bolster equity prices.

We expect weaker economic growth compared with last year. This will likely lead to reduced rental growth and heightened vacancy levels. In addition, there could be a contagion effect in neighboring countries if China's economy slows suddenly.

Australia

We are forecasting growth of 2.0% in 2019 and 2.4% in 2020. Improving financial conditions, led by monetary easing, should feed through to both firms and households. We assume the housing market bottoms and exerts less of a drag over time. Household spending should pick up, helped by solid real income growth, the benefit of low inflation and reduced mortgage payments. Improving final demand and lower interest rates should lift nonresidential investment spending. However, the risks to growth are still on the downside. Externally, a sharper than expected slowdown in China, especially in the real estate market, could hit commodity prices, especially iron ore, worsening the terms of trade and setting back the recovery in mining investment.

Hong Kong

We have cut our growth forecast to 0.2% for 2019 and about 1.6% for 2020. Political tensions have suppressed economic activity; tourism arrivals and retail sales have fallen sharply, and property prices are declining. The uncertainty is affecting business sentiment and investment plans. Economic activity will likely stabilize gradually, although the effect on business and tourist sentiment could persist.

Japan

We expect growth to be 0.9% in 2019 and then to slow to 0.2% in 2020. Buoyant consumption, both private and public, has helped offset deteriorating exports and a steady falloff in investment growth. Households are benefiting from job creation at about 1%. However, wage growth remains stubbornly low and is failing to keep up with subdued inflation, eroding purchasing power. Most engines of growth will lack power over the next 12-18 months. Most importantly, the looming consumption tax hike is set to hit household spending, albeit by less than previous occasions.
Singapore

We are lowering our growth forecast for 2019 to 1.0% and 1.6% in 2020. Weak external demand led to a sharper than expected slowdown in the second quarter. This is likely to persist through the remainder of the year, and manufacturers are pessimistic about business conditions in the year ahead. Services growth will likely moderate gradually. There have been some job losses in manufacturing and employment gains in services have slowed, but overall labor market conditions remain stable.

With this economic backdrop, we factor slowing rental growth in our APAC forecasts. The retail sector is likely to continue to be buffeted by weakening consumer sentiment. However, the magnitude of the negative rent reversions will depend on whether each landlord has exposure to discretionary or nondiscretionary retailers. Office rentals will continue to rely on employment levels and growth in the services sector. Industrial rentals will benefit from the increasingly sophisticated logistics service centers that are being built or reconfigured to facilitate the growth of e-commerce. Traditional industrial manufacturing will be impacted by local economic activity, particularly in trade-impacted economies. While residential rental will be largely stable, the hotel sector will be susceptible to volatile inbound tourist levels.

Strong coverage metrics will prevail, as a result of low interest rates.

Debt usage by the sector is currently manageable and debt leverage is being kept in check due to asset prices holding up. Strong demand from institutional investors, who benefit from a low cost of capital, are bolstering asset valuations in spite of the weakening rental outlook.

We expect a benign interest rate environment. Low borrowing rates have enabled APAC REITs to bolster their interest coverage metrics and their credit providers have remained supportive of further debt financing. However, for some real estate sectors the favorable impact of low interest rates will not be evenly felt. The cost of funding for industrial landlords, with a logistics exposure, should remain more advantageous due to the growth opportunities that are presented from the e-commerce evolution. As a result, retail landlords whose tenants have a diminishing consumer catchment won’t enjoy the same low funding costs. Asset values will hold up for office and logistics but weaken for retail. However, we expect the current buffer in loan-to-value covenants within existing REIT credit agreements will provide sufficient rating headroom.

With institutional investors funding sizable asset acquisitions that benefit from a lower cost of capital than the REIT sector, investor sentiment could turn negative. The inflation driven by competitive capital is driving net asset values to a high point. However, this asset inflation is not uniformly spread and some REIT equity prices are trading at a discount to net asset values. This has prompted debt-funded share buybacks. While this shareholder-friendly development is not pervasive, it could leave rated entities with reduced headroom in their financial profiles, making them more susceptible to an economic shock or sharp negative investor sentiment.
Latin America Real Estate

Key assumptions

**1. Mexico's real estate operating performance to remain resilient**

Despite Mexico's weak economic growth prospects for the rest of 2019 and 2020 and the fact that the USMCA deal to replace NAFTA is still not finalized, we continue to expect resilient operating indicators for real estate operators. However, given the uncertain business environment, we expect prudent business strategies in the sector, including maximizing asset portfolios and lease structures with limited expansions and development projects.

**2. Economic recovery in Brazil should support better business conditions**

In line with our expected macroeconomic recovery, we expect Brazilian real estate companies to gradually improve their operating and financial indicators.

Despite Mexico's weak economic growth prospect for the rest of 2019 and 2020 (1.3% GDP growth expected for 2020) and the fact that the USMCA deal to replace NAFTA is still not finalized, we foresee broadly stable occupancy rates of slightly more than 90% on average, and rents to keep increasing in line or above inflation for stabilized properties, supporting our expectation for low- to mid-single-digit organic sales growth. Nonetheless, in light of the uncertain business environment in Mexico, we expect real estate operators to maintain prudent business strategies, including maximizing their current portfolios and lease structures, making no large bolt-on acquisitions, and recycling non-core properties to focus on cash flow retention. We also expect prudent and selective capital deployment strategies to expand existing tenants’ GLA (gross leasable area) under build-to-suit contracts. No incremental debt financing is expected. Thus, we expect modestly improved leverage metrics.

In the industrial sector, we believe Mexico remains an attractive and competitive export platform for multinational companies, and demand will continue to surpass current supply dynamics. Moreover, if approved, the USMCA could support additional fixed investments in Mexico and accelerate business opportunities for Mexican real estate companies. In addition, we see some emerging and growing industries gaining traction, such as logistics and distribution driven by e-commerce, but also medical devices, and aerospace manufacturing.

In the retail segment, we anticipate prudent consumer behaviors. A recent slowdown in retail could signal that consumption may be gradually cooling down. In fact, Mexico's nominal same-store sales has been slowing down in 2019 (+3.16% in year-to-date [YTD] September 2019 versus +5.38% during the same period last year), mostly driven by durable goods, and this despite a relatively low unemployment rate and sustained growth in consumer credit. In our view, Mexico’s policy uncertainty coupled with a weakening macroeconomic environment could easily extend and accelerate this gradual decline in consumption throughout 2020. Thus, under such an environment, we expect Mexican retailers’ same-store sales growth to be broadly flat in 2020 versus 2019. Although we currently do not consider negative growth to be probable next year, we will continue to monitor Mexico’s key macroeconomic indicators and external conditions and their effect on consumption trends. In this context, we expect Mexican retailers to adopt prudent strategies towards expansionary capital expenditures (capex), particularly in the opening of new stores.

In the office segment, absorption has been high over the past few years, particularly for first class office space. However, this trend could deteriorate due to the uncertain...
macroeconomic and business outlooks. Under adverse macroeconomic conditions, demand for office space could slow down, which in turn would put some pressure on rents and occupancy rates in that segment.

The macro improvements that we expected to come after presidential elections in Brazil in the end of 2018 did not come as fast as we had expected. Still, we have seen improvement from an operating indicator standpoint. Consumer confidence is improving gradually, and should further accelerate thanks to historically low interest rates, which we expect to be 5% for 2020. In addition, GDP should improve to 2.0% in 2020, from 0.8% expected for 2019. Consequently, retail sales are likely to rise in 2020, which will contribute to malls’ revenue growth as most rental contracts consider the higher of a fixed amount or a percentage of tenants’ sales.

Brazilian retailers continue investing in opening stores to expand their footprint. We expect operators that focus on the more resilient and higher-income segment to keep their high occupancy rates thanks to their active management of tenant mix in order to adapt to shifting consumer preferences. Moreover, in order to mitigate the global industry trend of shopping mall closures, the largest mall operators have been diversifying business lines to a more service-oriented portfolio. Thus, we forecast solid cash flow generation and low leverage during 2020.

On the other hand, the office and industrial segments are still recovering from the recent economic downturn in Brazil. Companies focused on high-quality offices at premium locations are likely to recover faster than the industry average, but this is not a rule. Rated premium office operators are still recovering from significant discounts granted during the financial crisis. Additionally, occupancy levels did not recover at a reasonable rate. We believe companies that are not able to reach sustainable occupancy levels above 90% will have to maintain their discounts to attract new tenants, which would in turn impair profitability and cash flow generation.
Global Real Estate

Key risks and opportunities

1. Retail sector may see more impact from e-commerce competition
Retail properties globally are seeing rent and occupancy pressure from store closures and weak performance of retail tenants resulting from intense e-commerce competition.

2. Political risks are rising across key markets in Europe, Asia, and LatAm
Growing risks from rent control in Berlin, Brexit, tension in Hong Kong, and policy uncertainty in Latin America could hurt prospects for the real estate sector in 2020.

3. Prolonged geopolitical and trade disputes can harm investor sentiment
Uncertainties around the U.S.-China relationship, trade disputes, and geopolitical risks will likely dampen global growth, with the manufacturing sector exhibiting growing weakness.

4. Lower cost of debt could drive M&A activity or other shareholder returns
We expect real estate issuers to shift focus towards growth vs. enhancing credit quality given access to low-cost debt.

5. Growth boosted by tailwind from e-commerce supply chain expansion
We expect industrial assets to outperform other property types in 2020 as the demand for industrial assets remains robust to support retailers’ expansion of their supply chain.

Retailers in the U.S. remain under distress from secular changes, including the impact of e-commerce and a shift from larger department store formats. While strip centers and high quality malls achieved relatively stable performance in 2019, lower productivity ‘B’ malls continue to underperform with negative same-property NOI growth and sequential occupancy declines. We recently lowered the ratings on lower productivity mall REITs CBL Associates to ‘B+’ and Washington Prime Group to ‘BB-‘ reflecting our expectations for same store NOI growth to remain negative in 2020.

In Europe, landlords we rate have been resilient against the gradual increase in e-commerce. We see some signs of market weaknesses that could erode retail landlords’ capacity either to generate organic growth or dispose of assets for deleveraging purposes.

As of mid-year, most of the 12 retail landlords we rate still reported positive rental growth on a like-for-like basis. Yet the contribution from rental renegotiations and renewals, on top of the indexation effect, was significantly weaker as of June 30, 2019, than previously. We believe companies will rely more on indexation to generate revenue growth in the coming quarters and potentially generate lower organic growth overall if premises are renewed or re-let at significantly lower rents. In our view, landlords may be affected if retailers’ current credit deterioration continues in Europe, with higher bad debt and potentially a negative impact on rent and occupancy. Retailers are carrying more debt leverage (4.26x in 2018 versus 3.99x in 2013 on average for food and discounters) and achieving thinner margins (9.21% in 2018 versus 9.74% in 2013). Over the same period, the rent burden as measured by the occupancy cost ratio has continuously increased. This will likely hinder their ability to absorb further rent increases.
In terms of asset valuations, the retail property companies we rate reported declines in asset valuations ranging between 0.5% and 1.5% for the last six months. Although the tightest risk premium (Unibail Rodamco Westfield; URW) culminated at 435 basis points (bps), a new all-time high, the devaluations came from an increase in capitalization rates used by independent real estate appraisers. This uplift was largely but not fully offset by rental increases. The percentage of devaluations reported as of June 2019 seem relatively homogeneous across markets, locations, and asset types. Still, the benchmark disposals reported by REITs were achieved with price premiums over book value. The premiums, however, were lower than in the past (5%-8% in 2019 versus 10%-15% in the previous years). We therefore believe retail REITs may be finding it less easy to repay their debt because it is becoming more difficult to sell non-core retail assets above book value and use the proceeds for deleveraging. Moreover, we remain concerned that further yield expansion, if not offset by capex or rental uplifts, may put debt-to-debt plus equity ratios under pressure at a time when debt-to-EBITDA ratios are generally decreasing. For the time being, however, the average cushion under loan-to-value covenants remains adequate (at 15% or more) and manageable, in our view.
In APAC, retail landlords are finding it challenging to grow net rental income due to stressed and struggling retailers in combination with changing consumer habits. The landlord would either have to accept lower rents or incur higher vacancies. This is amid an increasing trend across APAC’s developed consumer-oriented economies of store closures and retailer defaults. In Japan we expect continued weak consumer sentiment post the consumption tax hike that is likely to harm retailers. We believe weaker-quality retail offerings will be more adversely impacted. It will make it more difficult to access competitive debt financing compared to other retail peers that have demonstrated a robust resilience to changing consumer needs. Managers of retail REITs who are unable to defend their retail catchment areas will likely also pay more for debt-funded capital expenditure to improve their market position, relative to those managers who own flagship retail assets.

**Political risk is rising in key property markets across Europe, Asia, and Latin America**

In the U.K., Brexit uncertainties continue to affect the commercial and residential real estate markets. In the event of a disruptive Brexit, we expect London office prices to fall by up to 10% over the next 24 months. We believe Brexit will give many companies, especially financial services that are already under pressure, to contain costs, more reason to consider reducing office space in London. We note, however, that supply conditions remain tight in London, with new-build supply forecasted to be limited, which should contain to some extent any potential increase in vacancy rates. As far as residential markets are concerned, we anticipate house prices to remain broadly flat in 2019 across the U.K. with some low-single digit recovery in 2020. We would expect a more significant decline, however, in the event of a disruptive Brexit. Regionalization seems to be more and more pronounced with the Midlands and North of England, as well as in Scotland and Wales, performing well, while the drop in prices is more significant in the South of England, especially in London.

In October 2019 the Berlin senate finalized its draft law for tighter rent regulation with a proposed rent freeze for five years in the German capital, which will likely pass the House of Representatives at the beginning of 2020. The law foresees an absolute rent ceiling, linked to the rental mirror (Mietspiegel) of 2013, and based on the construction year and residential asset type where materially higher rents could be adjusted downwards. We believe like-for-like rental income and valuation upside potential would become subdued for landlords in Berlin and, as a result, landlords would lower their investments in the assets, leading to a possible deterioration of the quality of the capital’s residential stock. We believe the risk of similar laws in other large German cities is low; however, Berlin’s move may encourage further rent regulation discussions.

Increased rent regulation could affect other property markets in EMEA. In France, for example, an amendment has been voted in October 2019, to increase by 20% the tax rate on offices located in Prime locations of Paris (such as the Central Business Districts). Although most of this charge will likely be carried by tenants, this may partly subdue interest from potential new tenants and investors and somewhat hinder landlords’ capacity to increase rent and generate organic growth.

In Asia, Hong Kong has faced substantial social unrest. Despite the substantial disruption to Hong Kong’s everyday commerce, we believe the rated real estate companies’ diversified and defensive portfolios, coupled with their low leverage, are somewhat resilient. The financial stance of the Hong Kong real estate developers and property leasing and rental companies provides headroom to absorb the financial disruptions. The developers currently have an average ratio of 2.5x debt-to-EBITDA as of year-end 2018, and the landlords have an average funds from operations (FFO)–to-debt ratio of 25%—levels that leave ample headroom at current ratings. The business composition of most property leasing and rental companies is also well balanced across office, retail, hotel, and residential development, with no particular reliance on a single tenant or sector. Rated companies also have a long record of weathering price slumps.
thanks to their high margins and good flexibility to time and price project launches. However, the adverse impact on tourism, hospitality, and retail will have spillover to our rated portfolio. Among rated companies, IFC, Hysan Development Co. Ltd., Hongkong Land, and Swire are more impacted given their exposure to protest areas or their positioning in the higher end—and more discretionary—retail market. Link Real Estate Investment Trust, SHKP, and Nan Fung International Holdings Ltd. are less exposed given their geographic diversity and focus on mass-market retail.

In Latin America, we recently lowered our growth outlook for the major economies for 2019 and 2020. This is mostly due to ongoing weaknesses in domestic demand, unfavorable domestic political dynamics, and volatile external conditions. In Mexico, we expect another year of sluggish economic activity, with GDP growth of 1.3% in 2020 from 0.4% expected for 2019. This reflects falling fixed investment due to delays in public investments, but also due to the lack of private investment amid the absence of policy direction under the current administration. Moreover, external conditions remain challenging with rising trade tensions and geopolitical risks that could further undermine our 2020 growth prospects. The ratification of the USMCA is still at risk, due to political polarization and the 2020 presidential election in the U.S. A significant delay in ratifying the treaty that would replace NAFTA could generate another round of uncertainty over trade and investment relations between the U.S. and Mexico. The ratification of the USMCA has been further complicated by the recent threat by the U.S. to impose tariffs on Mexican goods. In this context, the real estate sector's short and medium-term growth prospects are unclear. However, if the USMCA agreement is approved, the Mexican real estate sector as a whole could benefit. For Mexico's industrial, retail, and office segments, the trade deal could boost investment and support stronger manufacturing and logistics activities, but also improve business confidence and reinforce consumer sentiment.

In Brazil, we expect real GDP growth of 2.0% in 2020, stronger than the 0.8% forecasted for 2019, but there are still concerns around the administration's ability to pass crucial reforms to encourage greater investment in the country. If these uncertainties remain, industrial confidence could decrease in 2020, delaying the expected recovery in the office and industrial segments, because of lower occupancy rates and rent prices than we forecast.
Uncertainties around the U.S.-China relationship, trade disputes, and geopolitical risks will likely dampen global growth, which will impact the APAC real estate markets. This is manifest in subdued consumer spending and a cautious corporate sector. We expect this will continue to impact real estate activity in the gateway cities where our rated portfolio have exposure—particularly in Hong Kong.

As we reach the top of the real estate cycle, a negative sentiment toward European real estate is prevailing in the capital markets, reflected in their share prices, which are trading below their historical level and below their respective net asset values per shares. This is particularly the case for retail REITs, for which shares prices are strongly discounted. This raises the question regarding whether real estate companies will be able to maintain long-term access to funding and support from equity investors. On the debt side, bond markets remain open and investors are still showing strong appetite. Unibail Rodamco Westfield issued in July 2019 the lowest coupon ever for a 30-year bond. Refinancing risk is currently remote and interest coverage ratios should remain strong in general, if not strengthened, by decreasing interest rates. Liquidity surpluses are still material and higher than their long-term average. But we remain cautious that funding terms may become tighter for REITs over the coming years. A widening credit spread would place pressure on REITs that are most highly exposed to floating rates or facing sizable short-term debt maturities.

Chart 252
Share Prices Of Retail REITS Are Trading At Record High Discounts To NAV

While valuation remains fairly stable in the U.S., we’re seeing limited upside on valuation given expectations for slower growth. Across property types, multifamily and industrial assets continue to see capitalization rate (cap rate) compression, while retail assets, particularly power centers, are seeing cap rates widening modestly.

Low cost of debt means that REITs are able to debt-fund asset purchases or undertake debt-funded developments. Globally we are seeing speculative-grade issuers’ debt spreads widen as the demand for safer, investment-grade debt increases. The risk aversion becomes more pronounced at the lower end of the credit spectrum. It could present opportunities to acquire assets from weaker entities who are stretched to meet debt refinancing commitments. Furthermore, the availability of debt funding for the managers of investment-grade trusts will enable them to make value-accretive acquisitions and undertake developments.

Large institutional investors with considerable funds to deploy are attracted to higher yielding and long-dated investment opportunities when compared with risk-free assets. In addition, the depreciating APAC currencies relative to the US$ have also made asset...
acquisitions attractive to offshore investors. The rated real estate issuers own assets that provide stable and predictable income streams which are attractive to these funds. These investors have also provided the REIT managers with the opportunity to joint venture large and lumpy asset acquisitions. In addition, they have also been the purchasers of non-core asset disposals undertaken by the managers of our rated portfolio. We are also observing new debt investors participating in debt capital market offerings for our rated portfolio.

In Europe and APAC, net asset values are reaching a high point that, in some cases, is the opposite of REITs’ equity prices, which are trading largely discounted. While this may prompt trusts/companies to buy back shares to support their price, the negative market sentiment that currently prevails in the real estate market could affect REITs’ ease to raise funding going forward.

In Latin America (LatAm), although financing conditions have improved following the Federal Reserve’s monetary easing, we have recently seen various investment-grade real estate players refinancing through the issuance of international bonds at historically low rates. We expect future issuances will remain oriented towards refinancing instead of expansion or acquisition transactions throughout 2020. However, speculative-grade issuers might have difficulties tapping the international market, as investors are more selective and looking for LatAm issuers with more solid fundamentals amid sluggish regional economies and rising geopolitical risks. Moreover, we continue to expect most domestic central banks to maintain their reference rates and, in some cases (like Mexico), to lower them in 2020. In the case of Brazil and Mexico, we expect basic interest rates of 5.0% and 6.5%, respectively, at year-end 2020, which could also support local refinancing. Nonetheless, most of the LatAm real estate companies we rate currently have a well-laddered debt maturity profile, with limited maturities over the next two years. With the exception of only few players in the sector, most have maintained relatively low leverage, ensuring that debt service is not a cash burden during turbulent times. Moreover, most maintain strong or adequate liquidity positions with solid cash balances and undrawn committed credit lines available.

We expect industrial REITs will continue to outperform other subsectors, supported by strong re-leasing spreads. This is especially true for well-located properties in high-barrier-to-entry markets near major coastal ports, which demand price premiums. These locations benefit from robust demand fuelled by favorable e-commerce tailwinds and “last mile” delivery initiatives. Thus far, industrial demand has largely absorbed the new supply growth in most markets, which bodes well for the leasing up of (predominately speculative) development pipelines. However, land values are increasing and we would expect that our rated managers will continue to exercise financial discipline when bidding for new sites.

Growth remains healthy in the industrial sector given tailwind from e-commerce supply chain expansion
Other Regions

**In Israel**, the slowdown in the commercial centers segment continues due to structural changes in the retail sector, including growth in e-commerce, overseas shopping, and changes in consumption habits. In addition, the sector continues to suffer from an oversupply of retail space. In all regions, rent growth has slowed or even reversed, and retailer turnover declined in January–March. Average rents in Tel Aviv and the Central District decreased by 1.7% (after a 0.5% decrease in 2017); in the Southern Region rents decreased by 0.7% (after a 0.5% increase in 2017); and in the Northern Districts they increased by 1.3% compared with 2.5% in the previous year. In 2019 we expect the current trends to continue, forcing property owners to lower rents, partake in tenant improvement expenses, or reduce management fees. We expect Amazon’s gradual penetration into the Israeli market to exacerbate this trend, especially if it sets up logistic warehouses in Israel or nearby. In addition, anchor retailers that have so far avoided launching an online platform to avoid cannibalization are changing their approach. A notable example is Zara, which, despite its success in Israel, recently opened an online shopping site, which could reduce shopping traffic in malls. The office segment remains stable. This is particularly evident in Tel Aviv and the Central District, where, despite a large supply of new office space, rents increased by about 2% in 2018 (after a 0.6% increase in 2017). Rents in the rest of the country remain stable. We identify increased demand for cooperative workspaces, a model that seems to have become a trend, especially in light of the boom in the local high-tech industry. We also see solid demand from mature high-tech companies that rent entire floors in new buildings in the main business centers.

We expect demand for office space to remain strong and the construction momentum that characterizes a boom to continue, given the Bank of Israel’s forecast of 3.9% GDP growth in 2019, the low unemployment rate, and the increase in average wages in the economy.

**In the Gulf Cooperation Council (GCC) region**, geopolitical tensions have escalated and dragged on growth in addition to hydrocarbon production quotas and subdued oil and gas prices. Low confidence has moderated key growth sectors, such as real estate, and contained improvements in non-oil private sector growth. We do not expect a direct military conflict in the region; however, political volatility will remain high, which remains a risk to the region’s growth outlook. Still, we expect government incentives to prompt private sector activity will gradually strengthen domestic demand and large government projects will also add to growth; we expect GCC growth will average 2.4% over 2020 to 2022, compared to 1% over 2017 to 2019.

The general trends in rentals in GCC remain negative due to slow business activity and lower consumer spending, albeit each of the countries has a different pace of decline and unique internal pressures. In Dubai there is oversupply across all segments. While we believe Dubai Expo 2020, which could attract about 25 million visitors, will temporarily ease pressures for hotels and retail, it is unlikely to have a material long-term improvement on the real estate sector. Qatar’s real estate market is finally seeing some stabilization after many quarters of rental rate decline following its boycott by neighboring countries. In Saudi Arabia, while new supply isn’t material, downward pressures on rents can be seen as an increasing number of foreign workers leave the country due to expat and dependent taxes. The Saudi government has announced--as part of Vision 2030--a number of reforms intended to grow international tourism, develop an entertainment sector, and add more women to the workforce, which will likely help fuel real estate growth.
Sector developments

The introduction of IFRS 16 in APAC and Europe is progressively being rolled out. It requires lessees to recognise assets and liabilities for most leases. With the present value of future cash outflows by the tenant being discounted at their borrowing rate, this commitment will be recorded on the lessees' financial statements. We expect large retail tenants in APAC, which currently enter into long term leases, may reconsider the term of these leases given the IFRS balance sheet liability that may eventuate. This could introduce more volatility into a landlord's weighted average lease expiry. Whilst long-term leases are common for retail tenants in APAC, and particularly for supermarket operators, it also applies to corporates who lease industrial space on long lease terms. The sizable capital expenditure spent on fit-outs, particularly for distribution centers, and proximity to transport hubs results in agreed leases with a number of option periods. Likewise, corporate tenants whose leases allow for multiple option periods may reconsider the terms of these leases if they are required to recognise an outsized liability on their balance sheet.

Related Research

- Hong Kong Protests Push Local Firms Into Unfamiliar Turf, Oct. 9, 2019
- Europe's Retail Property Market Is Showing Signs Of Weakening, Sept. 26 2019
- Australian Property Seminar: Signs Of Life In A Slowing Economy, Sept. 11 2019
- Taiwan Top 50 Corporates: Trade Tension And Slower Global Growth To Weigh On Credit Strength, Sept. 4, 2019
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- Are Australian Corporates Prepared To Battle Disruptive Forces?, May 28, 2019
- Real Estate Disruption: Can Traditional Office Landlords Co-Work With Flexible Office Space Players? April 9, 2019

This report does not constitute a rating action.
Industry forecasts

Global Real Estate

Chart 253
Debt to capital (adjusted)

Chart 254
EBITDA interest coverage (adjusted)

Chart 255
Debt / EBITDA (median, adjusted)

Chart 256
FFO / Debt (median, adjusted)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Cash, debt, and returns

Global Real Estate

Chart 257
Rental revenue growth

Chart 258
Return on capital employed

Chart 259
Fixed versus variable rate exposure

Chart 260
Long term debt term structure

Chart 261
Cash and equivalents / Total assets

Chart 262
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Industry Top Trends 2020
Retail and Restaurants

Competitive trends intensify, putting pressure on margins

What’s changed?

Risk of recession shades outlook for consumer spending. An even tougher road ahead as global GDP growth slows and the odds of a recession increase.

Tariffs and other geopolitical tensions amplify challenges for retailers. Trade tensions and geopolitical issues are weakening top line and margins.

Importance of sustainability has increased. The social and environmental agenda is gaining traction, with more focus on plastics, supply chains, and environmental policies. Demand for fresh foods and organic produce is also increasing.

What to look for in the sector in 2020?

Consumers’ shopping behaviors and expectations continue to rapidly evolve. Consumers’ price-sensitivity and desire for convenience are setting the bar ever higher for competitive pricing and a seamless and an efficient supply chain.

Amazon will continue its onslaught across the sector. E-commerce continues to disrupt traditional brick-and-mortar retail, with Amazon dominating the field in many countries, and Alibaba leading in China.

Many retailers are struggling to find a competitive footing. Retailers need to invest and innovate to adapt to consumers’ expectations. They will have to take a hard look at their business models to differentiate themselves from competition.

What are the key medium-term credit drivers?

Combination of lukewarm top line growth and higher costs pressure margin. Margin pressure will continue due to consumers’ search for value, the shift to less profitable online sales, necessary price investments, and tariffs. Retailers with enough levers to pull should maintain their credit quality.

Higher capex spend into improving omnichannel appeal. Those who can’t translate investment into earnings will see credit quality deteriorate.

Speculative-grade default rates in some regions to remain near 10%. With a high number of ratings in the CCC+ and lower categories, the expected default rate is much higher than the broader corporate universe’s expected rate of around 3%.
The dominance of speculative-grade ratings—the 'B' category in particular—is consistent across regions. Most regions have more negative outlooks than positive, reflecting secular challenges. In the U.S., the share of ratings in the range from 'CCC+' to 'CC' remains high at around 15%, reflecting continued distress in the sector. Furthermore, downgrades in the U.S. outnumbered upgrades by nearly two times in 2019. The negative bias and rating trends have been in place since 2016, as illustrated by the number of defaults.
Against the backdrop of increasing risk of potential a recession, we expect our default rate of speculative-grade issuers to continue at close to 10%, where it’s been since 2017. For context, we forecast the U.S. default rate across the broader corporate universe to reach 3.4% in 2020.

Ratings on U.S. restaurants also reflect challenging secular changes, with many in deep speculative grade, and a net negative bias of 20%. However, there has only been one restaurant default in the last three years (Burger Boss).

In Canada the majority of outlooks are stable, with the group split between the well-established investment-grade issuers, and speculative-grade issuers that face significant online competition. In 2020 we anticipate ratings pressure on the smaller companies while the larger companies allocate capital expenditures (capex) to bolster their position in the domestic market.

In Europe, the Middle East, and Africa (EMEA), outlooks are increasingly negative, with 25% of the portfolio negative versus 10% in December 2017. Many of the stable outlooks are at a lower rating level following downgrades. Further, we have seen credit measures deteriorate even for relatively stable ratings. Some large investment-grade companies, like Metro, Auchan, and Carrefour, have undertaken significant asset sales to offset the impact of weak trading and significant restructuring costs on their financial metrics. Weakening consumer confidence due Brexit uncertainty is impacting many UK non-food retailers. Since January 2018 there have been more than 30 downgrades in EMEA retail and two defaults each in 2018 and 2019.

In Latin America the majority of our ratings remain in the 'BB' category with a stable outlook, partly due to sovereign constraints. About 25% of the companies carry a negative outlook, but just one reflects liquidity risks.

Unlike in other regions, in Asia-Pacific (APAC) our net outlook is still neutral (i.e., we have close to an even number of positive and negative outlooks). The majority (87%) of our ratings have a stable outlook after several downgrades and a few upgrades in 2019. The rating universe in this region is split into two groups, one for strong investment-grade ratings in developed countries such as in Japan, Australia, and South Korea, and Chinese e-commerce retailers; and another for speculative-grade ratings in developing countries including China. In 2019 we took more actions in the investment grade category than in the speculative grade category, mostly stemming from company-specific issues such as strong (or poor) operating performance, mergers and acquisitions (M&A), high capex, or liquidity. We expect this trend to continue.
Retail and Restaurants

Key assumptions

1. Slowing GDP growth

In the U.S., we expect GDP growth to slow to 1.7% in 2020, down from 2.3% in 2019, driven by the ongoing trade dispute with China, waning effects of last year's fiscal stimulus, and a slowdown abroad. Canadian growth will remain almost unchanged at 1.5% in 2020 from 1.4% in 2019 to reflect slowing U.S. growth and higher household debt. In Europe, we expect GDP growth to slow further to 1.1% in 2020 and return to trend growth of 1.3% in 2021 and 1.4% in 2022. Similar to this year, net trade is unlikely to add to growth as trade tensions remain on the agenda. In Latin America, Brazil's recovery remains sluggish but we expect growth of 2% in 2020, up from 0.8% this year. The benefits of presidential elections in Mexico and Brazil during 2018 will probably materialize in 2020 in Brazil, while in Mexico the benefits will probably take longer to accrue. Uncertainty around the U.S.-China trade tensions is dampening business investment in APAC as well, particularly in China, and we expect China's GDP to slow to upper 5% from a little above 6% this year.

2. Consumer spending will grow but at a slower pace

In the U.S., households remain strong with relatively low leverage and strong labor markets. Household leverage as measured by debt-to-disposable income has fallen to levels not seen since 2001 after peaking in 2007. The “wealth effect” is at a cyclical high, supported by home prices and the stock market. Job gains and solid wage growth are likely to bolster consumer spending. Still, we expect consumer spending to slow to 2.2% in 2020 from 2.6% this year. In EMEA, household consumption and construction will remain the main pillars of growth. Unemployment remains low, inflation will be contained, and lower borrowing costs will incentivize household consumption, both on consumables and larger spending, like housing. In developing countries in APAC, particularly in China, urbanization and increasing middle-class consumers will likely boost incomes of households, but the pace will be slower, because the broader region (including Japan and South Korea) are highly exposed to global trade tension, and consumer sentiment is weaker than in the previous year.

3. Top line and margins will continue to be pressured

Except for online retailers such as Amazon, most retailers will continue to be challenged by the secular shifts we explain above. In addition, our base-case forecast of slowing GDP growth will make competition even more fierce. We expect pockets of stability in niche markets such as auto parts retailers, discounters, convenience stores, and home improvement retailers, while the credit deterioration is likely to continue in apparel-focused segments like department stores.

We do not expect the challenges from the ongoing disruption and secular headwinds to abate. Key trends include:

- Continued growth in online sales;
- Retail business models will have to evolve to keep pace with consumer expectations;
- Increasing focus on value and high price sensitivity due to transparency afforded by the internet;
- Competition for consumers' wallet share from autos, rent, health care, technology, and experiences.
Internet sales, although increasing faster than the sector in general, still only account for around 10% of total U.S. retail sales, yet e-commerce and its biggest players have a disproportionately large impact on the traditional retail sector. Amazon’s free one-day shipping for prime members, including for $1 items, at the expense of its margins, demonstrates its commitment to taking share across the board and, especially, may jeopardize dollar stores’ good position with consumers searching for value. The company also recently announced free grocery delivery to its members. For traditional grocers, prepared foods may be one of the few advantages they retain over online and delivery shopping options, but here they face competition from restaurants, where 50% of food is consumed in the U.S. In our view there are few if any remaining strongholds in retail that are safe from Amazon’s reach.

Chart 270
E-commerce as a percentage of U.S. Retail Sales

E-commerce penetration is low in Canada, less than 5% of retail sales, but retailers are not immune to increasing competition and companies have used their expanding store brand portfolio as a strong defensive mechanism. In Canada too, food retailers have shifted their focus from growing square footage to online marketing and prepared foods, similar to the U.S. To defend against increasing online penetration from both domestic and U.S. peers, participants continue to invest in e-commerce while addressing customer perceptions regarding convenience. The Canadian grocery market is still competitive but EBITDA margins are defendable because of rational competition and reduced freight costs. At the same time rising food inflation and expanding store-brand products support margins.

While most leading European retailers have developed their own e-commerce and mobile channels, Amazon continues to grow and dominate the non-food retail market in Europe. Its share of all non-store sales reached 40% in Germany and close to 30% in the U.K. For European retailers, long-term competitiveness will depend on an ability to meet increasingly demanding customers on fulfillment as well as product variety. Food retailers in Europe face severe challenges, as customers progressively reduce their basket sizes or do top-up purchases from specialized grocery retailers, resulting in decreasing store traffic. Hypermarkets in Europe have underperformed significantly as consumers favor smaller convenience stores. With the exception of the U.K., online grocery purchases remain a relatively small percentage of the overall food retail market in Europe. The longstanding intensifying competition from larger domestic competitors, and German discounters entering premium private-label categories, will also continue to shrink food retailers’ margins.
With a very fragmented retail market, Latin American companies should continue consolidating, opening stores, and developing e-commerce. The largest share of retailers are controlled by the informal market and mom-and-pop shops. As with the rest of the world, large retailers have been implementing an omnichannel approach. However, in developing economies customers depend on credit, which is usually offered only in stores. Large retailers in the region we rate are also investing in big data and new technologies to bolster their digital presence. Nevertheless, we expect the penetration of online purchases to remain low, mirroring limited internet access in Latin American households. Still we have some outliers, such as Magazine Luiza, who continues to open stores across the country while it expands online sales significantly. The company has converted 50% of its gross merchandise volume to e-commerce thanks to marketing strategies in all income segments and integration with brick-and-mortar stores.

In APAC the penetration of online retail continues to increase and become more significant even though the degree varies by country. In China, the world's largest e-commerce market, we believe retail e-commerce sales will reach about one third of total retail sales in 2020, and continue to take share from traditional retail. Rapidly expanded mobile infrastructure (soon to be 5G) has propelled a generation of new consumers to leapfrog traditional shopping and go straight to online purchases. E-commerce retailers are also investing in omnichannel and we expect to see more alliances or acquisitions between online and offline retailers in China than in other APAC countries. This includes China's second-largest e-commerce player JD.com's alliance with Walmart. Through 2020, we have a somewhat cautious stance on overall operating performance for APAC retailers because slowing economies and U.S.-China trade tensions is likely to depress consumer sentiment in the region.

To bridge the physical and digital gap, some traditional brick-and-mortar retailers are entering into partnerships with tech companies to create a connected and seamless “phygital” retail experience, spanning online, mobile, and brick-and-mortar. Retailers have to experiment with store models and customer flows in-store, and invest in employees for better customer service. In Europe we see many retailers extending partnerships with each other, technology companies, and other intermediaries, to include buying alliances, supply chain, and delivery partnerships. Examples of this include Carrefour's buying alliance with Systeme U and Tesco, Auchan with Alibaba in China, and Casino with Amazon and Ocado. We also expect store-in-store and experiential concepts to continue, enabling retailers to share the rent burden or better utilize surplus physical space. U.S. department stores, such as J.C. Penney with its offering of yoga and Nordstrom's New York store with seven restaurants, have been at the forefront of this trend.

Technology and systems that improve stock availability while maintaining nimble inventories and overall minimized transaction time for consumers--such as fast checkout, seamless access to a shopping basket across mobile or desktop platforms, smart search engines, speed of delivery--will remain top priorities for transformational investments in 2020.
Key risks and opportunities

1. Continued shift to e-commerce/changing behaviors

Unfortunately for retailers, consumers continuing to spend does not ensure smooth sailing. Rapidly changing shopping habits, including the shift to e-commerce, mean retailers have to innovate quickly and effectively while they compete with bigger, better-capitalized players like Amazon. Furthermore, consumers’ entrenched expectation that they can purchase goods at a discount limits retailers’ pricing power. Fortunes will diverge as the larger players who can afford to invest or reduce prices will benefit from consumers’ evolving shopping behaviors. For smaller or routine purchases like grocery shopping, we expect convenience, proximity stores, and click-and-collect formats (like “drive” in France) to perform better than larger formats like hypermarkets. This trend may be reinforced as consumers increasingly favor fresh and local produce.

2. Geopolitical risks and tariffs could weaken pricing

Tariffs will increase the pressure on retailers, exacerbating a difficult situation for issuers who don’t have the financial flexibility to absorb the supply chain shock. While the extra costs on goods imported from China are clearly bad news for retailers in the West in general, we think that if all these tariffs are imposed as scheduled, the fallout for domestic retailers won’t be the same in all cases. The first tranche (designated by the U.S. government as List 4A tariffs) went into effect Sept. 1, while the second tranche (List 4B) is scheduled to be implemented on Dec. 15. The impact is likely to evolve into a survival of the fittest for U.S. retailers, as we see an increasing divergence between weak retailers and strong ones, whose operating performance and credit metrics will likely hold up better (For more detail, see “Will Tariffs Drive More U.S. Retailers Off The Cliff?” , Oct. 7, 2019).

3. Global economic downturn could make things worse

In the U.S., the broader economy is not likely to provide offsetting support to the sector. Despite wage growth and low unemployment, some indicators suggest a modest slowdown in consumer spending. The Consumer Confidence Index in the U.S. has been at high levels, bouncing between 120 and 135 for the last year, but trending downwards in recent months.

Continued shift to e-commerce/changing behaviors

We expect mobile payments to become more prevalent in global retail, particularly in emerging economies, where many people in rural regions do not have access to banking services. While the majority of mobile payment providers are fin-techs from outside the retail industry, some of the offline retail giants in the U.S. and Japan have their own mobile payment services. This trend will spur e-commerce growth further by providing data regarding consumer behaviors, preferences, and buying patterns for their merchandizing.

Geopolitical risks and tariffs could weaken pricing

In Europe, an escalation of trade disputes and a hard Brexit would deepen the slowdown in world trade. Positively, the European Central Bank’s (ECB’s) new stimulus package should support financing conditions, preventing the slowdown from intensifying.

While our base case remains that the U.K. will not leave the EU without a deal, we continue to assess potential no-deal Brexit-related risks on EMEA-based retailers. Almost all retailers that we rate have some level of contingency planning, the net effect of which will serve to reduce—but not eliminate—the more extreme effects of a hard Brexit.
on U.K. based retailers. Over the medium to longer term, Brexit, particularly in the event of leaving without a deal, would lead to a fundamental re-evaluation of U.K. retailers' operational strategy and priorities. Not least, business supply chains will gradually have to adapt to maintain competitiveness, depending on the level of tariffs and degree of friction at the border.

Global economic downturn could make things worse

Declining confidence in their future economic situation may have caused consumers to cut spending in September, the first month since February in which retail trade sales declined. In our U.S. downside economic case, in which GDP slows to 1% in 2020, consumer spending would slow to 1.7%. In such a case, we would expect the already weak subsectors such as department stores and specialty retail to be hurt significantly as more consumers look for bargains at big box retailers, dollar stores, and Amazon.

Chart 271
US Consumer Confidence Index (Seasonally Adjusted)

Source: The Conference Board (conference-board.org)

Chart 272
US Retail Sales

Seasonally adjusted; Source: U.S. Census Bureau

In the eurozone, economic growth slowed to 0.2% in the second quarter of 2019, after 0.4% in the first quarter, on the back of persistent external weakness. Resilience in the
labor market is supporting household consumption, but the recession in the manufacturing sector is starting to weaken the services sector and lower companies’ employment expectations. The latest data suggest that industry weakness is intensifying. In September the manufacturing Purchasing Managers’ Index (PMI) was 45.7, its lowest level since October 2012. The ECB has therefore eased monetary policy by reducing the deposit rate by 10 basis points to negative 0.5%, and has announced the resumption of a net asset purchase program from November 2019.

As their higher ratings indicate, investment-grade retailers seem to be better positioned to withstand a more difficult operating environment. They are generally larger, more diversified, and benefit from purchasing and pricing power economies of scale. They generally also have stronger cash flows and more solid balance sheets, with easier and less costly access to the capital markets than their spec-grade counterparts. We believe ratings at the spec-grade level are more likely to suffer along with the weaker economy. These companies tend to be smaller and highly leveraged, which results in less margin for error on operating shortfalls. To navigate more difficult economic and credit conditions, we expect borrowers to be more cautious with their financial policies to preserve liquidity and flexibility.

In APAC, we believe the greatest risk over the next six to nine months is the strategic conflict between the U.S. and China. The dispute is dampening sentiment among investors as well as lenders, consumers, and companies. Other risks include breakdowns in market liquidity and property markets, and the longstanding overhang of China’s high debt leverage.

China is going to remain under fairly substantial downward pressure. We now expect the government to substantially reduce the growth target for next year perhaps to 5.5% or 6% or make it much more flexible. The Chinese slowdown is going to continue through next year and into 2021 as well. In China the slowdown is being felt across most sectors, upstream, midstream, or downstream. No major sector stands out as particularly weak or extremely resilient to the slowdown.

**While Amazon dominates e-commerce in the West, local player Alibaba leads in China**

The brick-and-mortar retailers in the U.S. and Europe are suffering the so-called “Amazon Effect.” In fact, we forecast Amazon’s growth rate to be 2x to 3x the broader U.S. retail sector. However, the competitive landscape in APAC is somewhat different where regional players have meaningful presence, and we believe this trend is set to continue. Not only do consumers prefer local flavors but also language barriers, business practices, or logistics, have created several entry barriers. In APAC, Amazon’s biggest presence is in Japan, dominating the e-commerce market together with Rakuten Inc. In South Korea, not so much. Moreover, Amazon lost competition with Alibaba (through its marketplace Tmall) and withdrew from China e-commerce in early 2019. Even in Australia, where there is no language barrier, local supermarkets have meaningful presence. Actually, the withdrawal of U.S. and European players from APAC countries is not a new phenomenon, and we have seen it often in brick-and-mortar retail. Having said that, even though Amazon has less presence in APAC does not mean the competition there is less intense.

The domination of these larger players have also spawned some smaller retailers to develop large e-commerce platforms. And many existing players, including Amazon and Alibaba, offer substantial IT services to the smaller players.

We believe a wider portfolio of services allows APAC’s regional players to create a solid ecosystem—in particular, financial services (including digital payment systems). In China, Alibaba dominates the market, backed by overwhelmingly strong mobile payment platform “Alipay”. Rakuten also offers various financial services to customers.
Lease accounting changes have no impact on retailers' ratings

Although retailers’ financial statements have been significantly impacted from the recent lease accounting changes that came into force from 2019, our view of the creditworthiness of the retail sector (like for all sectors) has not changed because of these new standards. There was no change to the underlying credit fundamentals of these companies, and we viewed the distinction between operating and finance leases as substantially artificial. As a result we already adjusted the reported amounts of all our rated companies to eliminate the operating versus finance lease distinction by capitalizing lease obligations that corporate issuers account for as operating leases. We will generally accept the balance sheet treatment for companies that capitalize all leases on their balance sheet, such as U.S. Generally Accepted Accounting Principles (GAAP) and IFRS filers, by including the reported lease obligations in our adjusted debt. For those entities not required to capitalize operating leases on the balance sheet, we will continue to adjust reported metrics for operating leases. In certain circumstances we may adjust the amount added to adjusted debt to better reflect the lease leverage.

As the vast majority of retailers lease their stores, the impact of the lease accounting change has been significant and, in some cases, the reported balance sheet lease obligation has been higher than the present value of the obligation that we previously calculated. In a few cases, such as the Canadian retailers Loblaw Company Limited, Canadian Tire Corp., and Alimentation Couche-Tard, we revised the ratio thresholds in our outlook statements.
Industry forecasts

Global Retail and Restaurants

Chart 273
Revenue growth (local currency)

Chart 274
EBITDA margin (median, adjusted)

Chart 275
Debt / EBITDA (median, adjusted)

Chart 276
FFO / Debt (median, adjusted)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.

U.S. and Canada

In the U.S., the aggregate data masks pockets of weakness versus stability and in rare cases, extreme strength (hello again, Amazon). For the entire retail and restaurant sector, we expect mid-single-digit top line growth and modest margin expansion, which will lead to incremental deleveraging. But excluding Amazon, top line is closer to low-single digits and margin expansion is nil. Drilling into the vulnerable brick-and-mortar retailers, we expect many companies to continue to report flat or declining same-store sales and further store closure announcements in 2020. This underpins our expectation of very weak (<2%) top line growth in the department store and apparel segments.

Revenue and net store openings for other retail segments (grocery, discounters and restaurants) will vary from issuer to issuer but in total be 2-3 points better than GDP growth. Wage pressure, commodity and freight costs, and, for some, tariffs will pressure margins in some segments. We are watching the ongoing escalation of tariffs between the U.S. and China and believe the bigger retailers with more sophisticated operations
will fare better. Retailers’ margins will also continue to be pressured due to the requisite investments in omnichannel capabilities in order to effectively compete.

EMEA

Across various regions in EMEA we expect anemic top line growth with several retailers undertaking extensive and in some cases multi-year restructuring programs. Non-Food retail sales has mostly been driven by volume, reflecting significant price competition and discounting. Weak volume growth also reflects lukewarm consumer confidence and macroeconomic uncertainties across the eurozone, with Brexit clouding the outlook further. Our base case remains that the U.K. will not leave the EU without a deal. A no-deal Brexit would likely push the U.K. economy into a recession next year and create further rating headwinds, particularly for more cyclical sectors.

From a margin standpoint, for both food and non-food retailers the moderate price rises have been offset by input cost and wage inflation (in some countries, like the U.K., wages in 2019 are the highest they’ve been in over a decade). The margins are therefore pressured from the multi-level impact of weak top line, higher costs, and significant spending on restructuring and repositioning operations. Furthermore, we factor in continuing inter-period volatility in operating performance due to one-off factors like weather, holidays, or sporting events.

No subsector is truly immune to the disruption and we expect these trends to continue and even intensify over 2020. Department stores, apparel retailers, and casual dining restaurant sectors will be most challenged. In the U.K., for instance, both rated prominent department stores--Debenhams Plc and House of Fraser--have defaulted. The apparel subsector continues to be challenged, with children's clothing retailer IKKS and New Look also making it to the list companies defaulting.

Latin America

In Brazil, we expect somewhat stronger organic revenue growth in 2020 compared with previous years, as political uncertainties are diminishing, consumer confidence is improving, and credit granting is increasing. Growth will come from a combination of same-store sales and organic expansion from large, well-capitalized retailers mainly in department and specialty stores. In restaurants, we expect large operators to continue consolidating the market and improving operations with more attractive brands and efficient operations. We expect the companies to continue orienting to the omnichannel strategy, and lower inflation should allow for costs and expenses to stay under control and therefore not pressuring profitability and cash flow generation. As a result, we forecast reduced leverage for rated retailers in the region, even despite increasing capex to support expansion plan.

Mexico's nominal same-store sales has been slowing down in 2019 (+3.16% in year-to-date Sept. 2019 versus +5.38% in the same period last year) mostly driven by durable goods, despite relatively low unemployment rates and sustained growth in consumer credit. Mexico's political uncertainty coupled with a weakening macroeconomic environment could easily extend and accelerate this gradual decline in consumption through 2020. Thus, we expect Mexican retailers' same-store sales growth to be broadly flat in 2020 versus 2019. Although we currently do not anticipate a contraction in same-store sales for next year, we will monitor Mexico's key macroeconomic indicators and external conditions, and their effect on consumption. In this context, we expect Mexican retailers to adopt prudent strategies towards expansionary capex, particularly in terms of new store openings.
APAC

We expect retail sales growth continue to be in the mid-single digits in China, low-single digits in Australia, and almost flat in Japan. However, the prolonged and intensified trade tensions in China, Japan, and South Korea, softening housing markets and stagnant growth in wages in Australia, and volatile stock and currency markets could weigh on the sales growth. Thus the profitability of offline retailers is likely to remain flat, given a consumer preference for price discounts amid a weakening economy, weaker consumer sentiment, severer competitions across retail formats, and rising labor costs. In addition, competition with online retailers is mounting.

Retailers need to further invest in physical stores to remain competitive. In addition, the need to also invest in e-commerce infrastructure will increase their financial burden. To achieve this, the capex needs remain high for APAC, therefore the debt to EBITDA is likely to remain above 3x.

Speculative-grade issuers in emerging markets, including China, still face higher funding costs, leaving less headroom for their EBITDA interest coverage ratios to absorb increasing interest expenses. However, liquidity risk for rated companies is lower because of completed refinancing.

Related Research

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- Will Trade Be The Fumble That Ends The U.S.'s Record Run?, Sep. 27, 2019
- Weakest Links Reach A 10-Year High, Oct. 17, 2019
- The Expansion Of The 'B-' Segment Is Feeding Growing Vulnerabilities, Sept. 25, 2019
- High Ridge Brands Defaults, Pushing This Year's Corporate Default Tally To 92, Oct. 24, 2019

This report does not constitute a rating action.
Cash, debt, and returns

Global Retail and Restaurants

Chart 277
Cash flow and primary uses

Chart 278
Return on capital employed

Chart 279
Fixed versus variable rate exposure

Chart 280
Long term debt term structure

Chart 281
Cash and equivalents / Total assets

Chart 282
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Industry Top Trends 2020

Technology

Cautiously optimistic despite trade headwinds

What’s changed?

Information technology (IT) Forecast. We expect IT spending to grow in the 2%-3% range in 2020, an improvement from 2019 but modestly below that of our expected 2020 global GDP growth, based on strong software growth, which continues to benefit from the ongoing software as a service (SaaS) transition, and mostly stable IT services environment. Hardware growth will continue to face hurdles because delayed or canceled purchases occur more often as business uncertainties rise. In addition, software continues to replace some hardware functions, but we expect to see pockets of growth returning to some end markets including smartphones and servers.

What to look for in the sector in 2020?

Semiconductor recovery. After three years of memory-driven volatility, we expect a more benign semiconductor environment through 2020, with an overall growth rate near 3%. We believe memory revenue will be roughly flat year over year as both dynamic random access memory (DRAM) and NAND flash memory gradually recover throughout 2020, and that non-memory will return to growth near global GDP levels after a down year in 2019.

Potential China slowdown. China’s economy has slowed through 2019 and could slow further amid a bitter trade war between the U.S. and China, hurting consumer demand for IT products ranging from smartphones to semiconductors used in autos in the world’s largest market. Technology (tech) disputes could also motivate aggressive investments in China with growing support from the Chinese government, aggravating oversupply for some devices and components.

What are the key medium-term credit drivers?

U.S.-China trade conflict. Tech companies have been able to mitigate most of the impact from tariffs and the Huawei Technologies Co. Ltd. ban so far, but it’s also clear the escalating U.S.-China trade conflict has added to business uncertainty and weaker IT growth expectations. Without a resolution, we expect IT spending to be dampened over the next 12 months or so and tech companies to continue to explore ways to maximize supply-chain flexibility so as to lessen any impact from ongoing U.S.-China trade risks.
Ratings trends and outlook

Global Technology

Chart 283
Ratings distribution

Chart 284
Ratings distribution by region

Chart 285
Ratings outlooks

Chart 286
Ratings outlooks by region

Chart 287
Ratings outlook net bias

Chart 288
Ratings net outlook bias by region

Technology

Key assumptions

1. IT spending will improve in 2020 despite macro headwinds

After a muted 2019 IT environment, we expect IT spending to grow between 2% and 3% in 2020, or modestly below that of global GDP growth, as strong software and stable IT services spending offset a difficult hardware environment, but we expect certain pockets of growth such as smartphones and servers.

2. Semiconductors will return to growth after a weak 2019

The semiconductor industry is having its worst year since 2001 due mainly to a difficult memory market but also to a general pullback in demand after a strong 2018. We expect a modest recovery in 2020, with overall revenue growing nearly 3% as memory (both DRAM and NAND) stabilize then gradually recover through the year and nonmemory grows in line with global GDP.

3. Financial policy mostly intact despite heavy share repurchases

U.S. technology companies more than doubled their share repurchases in 2018 from 2017, and in the first half of 2019, buybacks also rose year over year. Balance sheets have weakened as a result, but we have not taken significant rating actions because we believe financial policies remain mostly sound in the case of large share repurchasers such as Apple Inc. and Cisco Systems Inc. We downgraded some companies where financial policy was less transparent, such as Oracle Corp. We expect elevated share repurchases to continue over the next year or so but financial policies to remain consistent through 2020.

IT spending will improve in 2020 despite macro headwinds

This year is proving to be an onerous one for global IT spending due to lingering trade concerns, recessionary fears across certain countries, and tough year-over-year comparisons with the relatively healthy spending environment in 2018. Against this backdrop, and despite the proposed 15% tariff on list 4B, which we think will have the biggest impact on the tech sector because it includes many major tech products such as smartphones and notebooks and is due to go into effect in the U.S. in December, we expect global IT spending to grow 2% to 3% in 2020. This is modestly below S&P Global’s real GDP growth forecast of 3.3%, in comparison to what is likely to be flattish IT spending for 2019.

We have seen signs of weakening enterprise spending in the second half of 2019, which we believe will persist into early 2020 in the absence of a U.S.-China trade resolution. General economic weakness and potential recessionary signals from U.S. and Germany, as well as Brexit concerns, are also likely to keep companies from investing aggressively. At the same time, we still expect overall growth in 2020 due to good, albeit slowing, IT spending in China and modest growth in the U.S. Investments by hyperscale cloud providers should improve in 2020 from 2019 levels, albeit at a far lower pace than in 2018. Service provider spending, by both telecommunications providers and cable operators, should be relatively flat year over year in 2020.

We believe the software industry will remain the best performing segment with respect to overall IT spending, given the recurring nature of the products and ongoing transition to a subscription-based model. IT services, which is a trillion-dollar business according to International Data Corp. (IDC), should also grow near global GDP levels as firms with legacy contracts continue to experience decreased revenue more than offset by the
progress of rescaling the labor force and rotating toward digital services offerings. Hardware sales should get a modest boost from accelerating cloud spending by hyperscale cloud service providers after a period of inventory digestion in 2019, but enterprise IT hardware spending should continue to be pressured due to increasing workload migration to the cloud, which will in turn result in pricing pressure. IDC expects cloud-related spending (inclusive of public and private cloud and managed cloud services) to remain robust at about 18% in 2019 and a 15% compound annual growth rate over next four years.

Our 2020 IT spending forecast assumes that list 4B tariffs, which includes $155 billion of technology goods, is implemented on Dec. 15, and that the trade war between the U.S. and China continues. We believe most U.S. technology companies can manage the tariff impact within our ratings by moving some manufacturing out of China, increasing prices, negotiating concessions in the supply chain, and absorbing some of the impact themselves. However, an increase in the list 4B tariff rate to 30% from 25%, for example, or an export ban on key technology products, would be more disruptive and could pressure ratings for companies without good cushion to their downgrade thresholds.

Below we discuss the outlooks for key technology products.

Table 3

<table>
<thead>
<tr>
<th>Revenue Growth Forecasts</th>
<th>2019E Growth Rate</th>
<th>2020E Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global GDP</td>
<td>3.2%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Global IT Spending</td>
<td>+ Mid-single digit %</td>
<td>2-3%</td>
</tr>
<tr>
<td>Revenues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT Services</td>
<td>+ Mid-single digit %</td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>+ High-single digit %</td>
<td>+ High-single digit %</td>
</tr>
<tr>
<td>Semiconductors</td>
<td>- Mid-teens %</td>
<td>3.0%</td>
</tr>
<tr>
<td>Network Equipment</td>
<td>+ Low-single digit %</td>
<td>+ Low-single digit %</td>
</tr>
<tr>
<td>Telecom Equipment</td>
<td>+ 3-5%</td>
<td></td>
</tr>
<tr>
<td>External Storage</td>
<td>Flat</td>
<td>Flat</td>
</tr>
</tbody>
</table>

Source: S&P Global Ratings

Table 4

<table>
<thead>
<tr>
<th>Shipment Growth Forecasts</th>
<th>2019E Growth Rate</th>
<th>2020E Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC</td>
<td>Flatish</td>
<td>[-3.4%]</td>
</tr>
<tr>
<td>Smartphone</td>
<td>[-1-2%]</td>
<td>+1-2%</td>
</tr>
<tr>
<td>Server</td>
<td>-6-7%</td>
<td>+3-4%</td>
</tr>
<tr>
<td>Hard Disk Drive</td>
<td>[-10%]</td>
<td>Flat</td>
</tr>
<tr>
<td>Printers</td>
<td>[Low-to-mid single digit %]</td>
<td>[Low-to-mid single digit %]</td>
</tr>
</tbody>
</table>

Source: S&P Global Ratings

Software

We expect the software industry revenue growth to remain resilient in the high-single-digit percentage area in 2020, consistent with growth in 2019 and with our forecast for the industry’s long-run growth rate, which is above our expectation for global GDP and IT spending growth, since software applications spur automation and improve efficiency broadly across the global economy. Software-as-a-service (SaaS), which represents about one-third of the total software market, should continue growing at about 20% as it takes share from on-premises software, which we expect to remain nearly flat, as well as on-premise hardware, because the SaaS providers will host the application and data. The SaaS model is popular with customers because they find lower total ownership costs, because the SaaS provider can more efficiently manage technology hardware and maintenance. They also find lower up-front costs and less-complex implementations, making it easier for new customers to purchase. In addition, customers can more easily
scale applications across their enterprises, get quicker access to the latest updates, and
have more predictable software expenditures as they shift the spending to operating
expense budgets from capital expenditure budgets. Software providers, for their part, can
bring product innovations to market faster, gain recurring and predictable revenue, and
win more small and midsize business customers through the lower up-front costs.

**IT services**

We expect GDP-like revenue growth in worldwide IT services in 2020, reflecting modest
overall IT spending balanced with higher investments in digital projects and an ongoing
decline of legacy workloads. As the cloud becomes mainstream, more enterprise clients
are refining their approach to migrate to and operate in the cloud, and they require the
expertise of IT service providers. IT vendors with deep client relationships, the “know-
how,” and speed to execute will deliver better top-line results. At the same time, more
automation and faster application delivery take place once in the cloud and eliminates
the work functions traditionally supported by IT service providers. As a result, traditional
IT service providers will need to modernize their approach to remain relevant, therefore
increasing or even maintaining the existing revenue base comes at a price.

**Smartphones**

We expect the smartphone market to grow by 1%-2% in 2020, led by adoption of 5G
smartphones toward the second half of the year. The slowdown of shipments in
developed markets such as China and the U.S. will persist through the rest of 2019,
driving units lower by 1%-2%, underpinned by longer refresh cycles and ongoing
uncertainty about the U.S.-China trade tension and U.S. ban on Huawei. However, we
expect shipments to rebound modestly beginning in 2020 as Android shipments return to
growth with a cheaper and wider selection of models and as Apple Inc. releases its new
5G model in the fall, offsetting the slower iPhone demand in 2019, which was mainly led
by China. As core features such as battery life, speed, and camera receive similar quality
improvements across models, we expect mid-tier phones, such as those made by Huawei
Technologies Co. Ltd., Samsung Electronics Co. Ltd., Xiaomi Corp., and Google LLC, to
experience growth at more affordable average selling prices (ASPs) while high-end
phones, such as the new iPhones, continue to see weakness in price-sensitive markets
such as India.

**PC**

Solid enterprise/commercial demand for personal computers (PCs) propelled by Windows
10 upgrades and, to a lesser extent, pull-in demand, resulted from planned U.S. tariffs on
notebooks imported from China beginning Dec. 15, led us to a flattish year-over-year unit
shipment expectation for 2019. This is better than the 1%-2% decline we expected a year
ago. Based on comments from Microsoft Corp. and other PC makers, Windows 10
upgrades should continue to provide tailwinds to PC unit shipments until the first quarter
of 2020. Our forecast calls for PC unit shipments to be down about 3%-4% in 2020, in line
with IDC’s forecast. We believe that the three largest PC vendors—HP Inc., Dell
Technologies Inc., and Lenovo Group Ltd.—will continue to gain share from other vendors.

**Server**

Server market growth in 2019 will likely be down in the mid-to-high single-digit area, a
reversal from the over 30% growth seen in 2018, as a result of hyperscalers absorbing the
large server purchases and further optimizing utilization, enterprise customers slowing
their spending for servers and consolidating their data center footprint, and DRAM prices
falling precipitously throughout the year. The confluence of hyperscalers increasing
server spending to meet demand, and richer server configurations slower
macroeconomic environment and a continued decline in DRAM prices through the first
half of 2020 lead us to expect server market growth in the 3%-4% range in 2020.
External storage

We expect that external storage systems revenue will remain flat in 2020 following a year of flat revenue growth in 2019. Whereas performance in 2019 represented the digestion of a strong year of mid-teens percentage growth in 2018, 2020 will be marked by macroeconomic and trade concerns that we expect to weaken business confidence and IT spending growth. Given the cyclical nature of the storage market, we expect it to underperform IT spending overall. We also expect all-flash arrays to continue taking share from hybrid and hard disk drive (HDD)-only systems, as NAND price declines narrow the cost of flash relative to HDDs. We are seeing that large cloud providers prefer to leverage their scale to custom build storage infrastructure instead of purchasing it from major vendors such as Dell, Hewlett-Packard Enterprises, and NetApp Inc., so the adoption of the hybrid cloud approach—whereby some workloads remain on premises rather than shifting to the cloud—is critical for the viability of the external storage market. Meanwhile, we expect enterprise customers, who have traditionally been major purchasers of external storage systems and have growing storage needs, will leverage technology to optimize their storage capacity.

Networking equipment

We expect the networking equipment market to be modestly positive in 2020, reflecting the continued buildout of the cloud and the demand for faster speed on the switching side. However, the routing segment has been challenged in recent years due to pricing declines. Service providers will continue to invest in 100G/400G capacity to meet higher bandwidth demand, but we are cautious of uneven carrier spending patterns, even though it appears to be relatively healthy in 2019 in both U.S. and Europe. Beyond 2020, 5G rollout should provide a slow but consistent tailwind.

Mobile telecommunications equipment

After several years of decline, we expect the mobile telecommunications equipment market will rebound in 2019 with 3%-5% growth, followed by low-single-digit growth in 2020 and beyond. The improvement is coming from additional capacity and coverage investments in 4G, with 4G networks already reaching about 75% of the world’s population by the end of 2018, and gradual deployments of 5G. While spectrum and 5G-compatible smartphones are starting to become available, investments in 5G have already started, primarily in South Korea, China, Japan, and the U.S. We expect the first 5G use cases will be surrounding enhanced mobile broadband given the higher speed it provides. Over time, we expect 5G investments to intensify given that it offers lower latency and other capabilities supporting more advanced use cases, including Internet of Things applications for autonomous driving, smart cities and smart manufacturing, and virtual or augmented reality. As these use cases mature, their network demands will require a dense buildout of small cells using higher frequencies to boost performance. This profusion of point of presence could materially move equipment sales in the next decade. However, we expect 5G coverage will be initially limited to narrow urban footprints, or delivered through a less dense network using lower frequencies over the next three to four years.

HDD

We expect HDD revenue to be flattish in 2020 following a decline of approximately 10% in 2019, reflecting a gradual recovery in demand primarily from enterprises and cloud providers, where the long-term revenue opportunity for HDD lies. In 2019, enterprise HDD represents about 40% of total HDD revenue. The price premium of client solid-state-driives (SSD) to client HDD has declined significantly because of oversupply in flash memory components over the past year. This further accelerates SSD adoption in PCs and peripherals replacing HDDs over the next few years. Concurrently, enterprises and consumers continue to shift data storage to the cloud serviced by capacity HDDs, which
Industry Top Trends 2020: Technology

will continue to be the less expensive alternative to SSD for several years. IDC estimates that enterprise SSD price premium to capacity HDD will decline to approximately 8.1x in 2023 from 11.3x currently. Therefore, it would be imperative for HDD vendors (i.e. Western Digital Corp. and Seagate Technology PLC, each with about 40% market share) to continue their progress in capacity HDD production while preserving profitability.

Printers

Worldwide printer units declined in the mid-single-digit percentage area through the second quarter of 2019. We expect mature market conditions and the long-term structural decline in printers to persist in 2019 and 2020 due to digitization of content and documentation, leading to global printer sales declines in the low-to-mid single-digit percentage area over this period. We expect struggles at some large global vendors, who are more exposed to developed markets such as the U.S. and Europe, will likely weigh on industry performance in the next 12 months or so. This will force vendors to continue to pursue new revenue and profit growth strategies, such as expanding service revenue, profit-centric selling, and cost restructuring. We think the effect of HP Inc.'s revenue model change, which will begin to phase out discounts for printer models that are capable of using non-HP supplies while retaining subsidies on models that only work with HP-branded supplies, is likely to create some uncertainty, but do not expect an immediate impact on printer industry performance in the next 12 months or so.

Semiconductors will return to growth after a weak 2019

S&P Global’s view of the semiconductor industry became less favorable through 2019 as we lowered the industry forecast twice in 2019: first in February, reducing the growth rate to negative 7% from negative 2%, then again to negative 14% in July based on expectations for deeper declines for both the memory (negative low-30% area) and non-memory (negative 4%) segments. This would mark the worst industry decline since 2001; however, it comes after two years of double-digit industry growth in 2017 and 2018. The headwinds the industry faces, DRAM and NAND oversupply, and weakening trends across automotive, industrial, and smartphone end-markets have not abated while trade and macroeconomic concerns have heightened through 2019. We expect double-digit revenue declines to persist through the second half of this year, but cautiously assume the pace of monthly declines will decelerate by year-end.

After three years of memory-driven industry volatility, we now expect the operating environment to gradually stabilize through 2020, contributing to 3% growth for the overall semiconductor industry, with the memory segment flat for the year and non-memory up 4%. We believe memory demand and supply will gradually reach some level of balance toward the second half of 2020 based on capital spending cuts made by leading suppliers through 2019 and price elasticity that should spur NAND demand. Based on this view, and assuming status quo on the trade front, we expect relatively benign ratings activity through 2020.
We currently forecast the non-memory segment, which includes analog, logic, microcontrollers, and microprocessors, to increase 4% year over year in 2020. We generally expect the non-memory segment to be correlated with global GDP given the diverse end market it serves and believe that recovery is likely in 2020 after an expected mid-single-digit percentage decline in 2019. End markets remain challenged due to the trade uncertainty, but we expect improvements in certain markets such as servers and smartphones in 2020 after declines in 2019. Industrial and automotive end markets remain weak, as indicated by Texas Instruments Inc.’s recent earnings announcement, but we expect that chip content will continue to increase in these segments and that the excess inventory that plagued the industry in 2019 will not be a factor in 2020. Hyperscale cloud providers are starting to gradually ramp up demand again after a weak first half of 2019, and we expect this trend to improve in 2020, as indicated by Intel Corp. in its recent earnings. 5G-related spending should also provide a boost to the non-memory segment based on Taiwan Semiconductor Manufacturing Co.’s recent announcement that it will raise its capital expenditure forecast by nearly 40% to near $15 billion, in part to accommodate expected 5G smartphone unit growth.

After experiencing strong growth in 2017 and 2018, the memory segment entered a period of price erosion in 2019, in which we suspect revenue will have declined more than 30% as a result of a sharp decline in ASP from supply-demand imbalance. Going into 2020, we expect the memory segment to be flat year over year, with industry fundamentals improving from the first half to the second half of the year. We expect memory prices to further correct and bottom out, which should be offset by some increase in bit growth, stemming from rising server demand (DRAM) and 3D NAND and high-speed chip testers (NAND). Overall, with major memory makers cutting investment plans, we expect a recovery in NAND from early to mid-2020 as supply/demand balance improves, while the recovery in DRAM will likely be in effect from the second half of 2020.

On the margin front, we expect NAND profitability to remain depressed (though recovering modestly), because we expect weak ASP to persist through 2020. As a result, we cannot rule out the possibility of persistent negative margins for major NAND producers next year. As for DRAM, we suspect there was significant profitability deterioration in 2019 and believe the extent of ASP decline will be somewhat less in 2020, which should lead DRAM makers to record flattish profitability in 2020.

We note that we have not taken material rating actions in the semiconductor space despite the weak industry performance in 2019. Our ratings analyses assumes that
semiconductor companies will experience some volatility through industry cycles, particularly memory issuers and, to a lesser extent, non-memory issuers. This in turn might lead to ratings that appear conservative in relation to a company’s performance during an industry expansion such as in 2017 and 2018 but look more appropriate during the current downturn.

Beyond the next two or three years, we maintain a cautious view of the semiconductor industry due to the ongoing U.S.-China trade tensions that are accelerating semiconductor investments in China, especially in the memory segment. We note, however, that major output and semiconductor sufficiency by China will take several years, especially due to the lack of access to key intellectual property and manufacturing expertise.

Financial policy mostly intact despite heavy share repurchases

As expected, U.S. technology companies rated by S&P Global, mostly investment-grade, ramped up share repurchases after the passage of the revised U.S. corporate tax code in late 2017, more than doubling buybacks to $258 billion in 2018 from just $101 billion in 2017. The pace of repurchases slowed somewhat in the first half of 2019 to $127 billion from a peak of $146 billion in the second half of 2018 but still exceeded that of the first half of 2018. The aggressive pace of buybacks has significantly exceeded that of cash flow generation and has weakened the industry’s balance sheet but we believe the issuers’ financial policies remain mostly sound.

We did not take rating actions on large issuers such as Apple Inc. and Cisco Systems Inc. despite their sizable share repurchases and declining cash balances because we view their revised financial policies and projected credit metrics to be in line with the current ratings. These issuers do not have leverage based on our policy of netting surplus cash against debt but as cash balances decline, we assume that both issuers will have adjusted leverage, but still within the bounds of our downgrade triggers. Other lower-rated investment grade issuers, such as Applied Materials Inc. and Lam Research Corp., are also reducing their cash positions but we also view their financial policies and operating performance to be consistent with the current ratings.

Two noticeable rating actions that were fully or partially the result of a change in financial policy were on Oracle Corp. and Qualcomm Inc. We downgraded Oracle on July 2019 to 'A+' with a negative outlook from 'AA-' with a stable outlook after several quarters of aggressive share repurchases that pushed the company into a net debt position and adjusted leverage that exceeded our downgrade trigger. The negative outlook reflects Oracle’s lack of clear financial policy and the risk that the buybacks will continue to exceed cash flow over the next 12 months or so. We lowered Qualcomm Inc.’s rating on July 2018 to 'A-/ A-2', with a negative outlook, from 'A/ A-1', on CreditWatch with negative implications, after the company terminated its purchase agreement to acquire NXP Semiconductors N.V. and announced its intention to repurchase up to $30 billion of shares, tapping into the overseas cash that became accessible because of the revised U.S. corporate tax code.

We believe most technology issuers have remained committed to conservative financial policies set forth before the U.S. corporate tax code was revised. We recognize that their balance sheets were artificially bloated before the revision and that they would shrink once overseas cash became accessible. Looking ahead, technology issuers’ balance sheets will continue to weaken over time as “excess” liquidity is returned to shareholders but it is important to note that investment grade issuers’ balance sheets in the technology sector remain stronger than the rest of the U.S. corporate issuers we rate. As the industry continues to mature and cash flow become less volatile over time, we expect the industry’s balance sheets will look more like that of the rest of the U.S. corporate sector.
Key risks and opportunities

1. Trade tension is the biggest risk to IT spending

Global trade concerns have lingered for almost two years and have noticeably harmed global GDP growth. Both tariff- and non-tariff related actions have been disruptive to tech companies, adding to business uncertainties, and resulting in the decelerating IT spending growth. We do not expect a quick resolution of these global trade disputes, which could harm not only hardware and semiconductor companies but also software and IT services providers over time.

2. China's IT spending growth could decelerate

China's economy has slowed through 2019 and could slow further amid a bitter trade war between it and the U.S., hurting consumer demand for IT products ranging from smartphones to semiconductors used in autos in the world's largest market. Tech disputes could also motivate aggressive investments in China with growing support from the Chinese government, aggravating oversupply for some devices and components such as display panels.

3. Credit quality remains weak in the ‘B’ rating category

Deteriorating credit quality and rising leverage over the past few years and increased recession risk will likely lead to further downgrades among lower-rated credits. While we do not see a significant maturity wall or systemic refinancing risk over the next 12 months, companies in the ‘B’ rating category or lower are more likely to experience operational volatility due to unfavorable business market conditions.

Trade tension is the biggest risk to IT spending

Global trade concerns continue to add to business uncertainties, which are resulting in noticeably slower global GDP and IT spending growth. In 2019, U.S. and China announced tariffs on almost all imports from each other, with the round with the most impact likely to come from the 15% tariff on $300 billion of China imports, which would include major technology products such as smartphones, notebooks, wearables, tablets, videogame consoles, etc. If implemented, this would have a much larger impact on the U.S. tech sector than the existing tariffs. It could raise costs substantially for manufacturers or prices for consumers on major tech products that represent a high proportion of overall U.S. IT spending and include more finished goods, which are more expensive than intermediate goods, at a time when global business confidence is increasingly fragile and enterprise IT spending is slowing.

Since early 2018, when the U.S.-China trade concerns led to tariff discussions, tech companies have had time to devise plans to not only mitigate potential near-term (in the next 12 months) tariff issues but also assess longer-term risk management strategies. While we have observed that the impact from the existing tariffs has so far been relatively muted for tech companies, because these companies have either been able to reallocate certain manufacturing activities to places where there are existing facilities and skilled labor, i.e. Southeast Asia and Mexico, from China or been successful in passing along the higher costs to customers without significantly affect demand, we do not expect U.S-China trade tension to be eradicated. We believe, over the longer term, larger tech original equipment manufacturers’ (OEMs) will diversify their currently China-based U.S-bound supply chain operations to other regions and also actively develop a strategic presence in emerging markets with strong growth prospects for risk mitigation.

Non-tariff-related actions, such as restricting certain foreign companies, such as Huawei Technologies and Hangzhou Hikvision Digital Technology Co. Ltd. (Hikvision), from...
purchasing parts and procuring services from U.S. companies without the U.S. government's approval, also have hurt the tech sector. Many U.S. tech companies such as Micron Technology Inc., Qorvo Inc., Qualcomm, Broadcom Inc., Lumentum Holdings Inc., Analog Devices Inc., and Marvell Technology Group Ltd., cite Huawei as their major customer. Seagate, Western Digital, Intel Corp., and NVIDIA Corp. are also components suppliers to Hikvision. At the same time, Apple, which reported 17% of its total revenue in fiscal 2019 came from Greater China (including Hong Kong and Taiwan), could see market share erosion in Mainland China as the trade war continues and its revenue and profitability worsen should there be rising protectionism that leads to Chinese consumers favoring local brands smartphones or boycotting of U.S. products.

Elsewhere, the U.S. and the European Union are locked in another trade battle, with the U.S. threat of tariffs on foreign automakers, in particular, having the most impact on the tech sector, because the rising electronic content in cars makes the auto end market increasingly important to tech. Meanwhile, Japan and Korea have threatened to remove each other from their respective lists of preferred trading partners. The most direct impact on the tech sector from this is the possible disruption to tech supply chains and trade restrictions on semiconductors, specialty chemicals used for electronics, and optical fibers.

As global IT spending appears to slow because of trade uncertainties, we anticipate sales and margins at OEMs, part suppliers, contract manufacturers, distributors, and value-added resellers will suffer. If protracted, we could see business performance of software and IT services companies weaken as well.

**China's IT spending growth could decelerate**

Amid escalating trade tensions between the US and China, we believe there is potential risk that the pace of deceleration in the Chinese economy could quicken, hurting global demand for key IT products ranging from smartphones to semiconductors used in automobiles. China accounted for about 36% of global semiconductor consumption by value in 2018, according to IC Insights Inc., for example. China has taken a bigger hit from the full-blown trade war than the U.S. through 2019. The country's GDP growth slowed to 6% in the third quarter of 2019, with demand for key consumer durable items associated with hardware and semiconductors falling materially. We expect China's GDP to slow down further to 5.8% in 2020 from 6.2% in 2019. Such a slowdown could particularly pressure the cash flow and liquidity of highly leveraged companies in China that focus on the domestic market for smartphone, TV, and other IT hardware, potentially leading to an increasingly negative rating outlook bias for hardware companies in China.

In addition, tech disputes with the U.S. have motivated the Chinese government to aggressively promote advanced manufacturing and increase its support for capital investments in China. This, coupled with slowing demand, could continue to suppress the prices of commoditized products such as display panels, hurting other technology companies in the Asia-Pacific region with high exposure to the Chinese market or its competitors. Nonetheless, the cash flow impact is likely to remain manageable based on these companies' more advanced technology for premium products and significant business diversity. Furthermore, the Chinese government's acceleration of implementing 5G mobile communications, as part of its strategy to pursue technological leadership and stimulate growth, could also spur hardware demand for network infrastructure and 5G-capable smartphones, thus slightly alleviating demand risk in the mobile communications market. While Chinese internet companies' growth could be hurt by further economic deceleration, the government's stimulus, aimed at boosting domestic consumption, and increasing digitalization of the economy could ease the pressure.
Credit quality remains weak in the 'B' rating category

We see rising risk of more downgrades to the 'CCC' category due to the rising number of 'B-' ratings over the past few years: 'B-' ratings currently comprise about 40% of our speculative-grade ratings on U.S. tech companies. The credit deterioration has been fueled by greater risk tolerance among investors and management teams over the past few years and financial sponsors that are embarking on leveraged buyouts and endorse debt-funded acquisitions. In our recent study ("The Tech Scan: Why Credit Quality Is Faltering In The U.S. Tech Sector," July 8, 2019), we observed that leveraged buyout credits tend to underperform our expectations, which means those companies also fell short of management’s expectations due to idiosyncratic credit issues. Moreover companies that have engaged in merger and acquisition and leveraged buyout transactions have seen significant deterioration in credit quality, with leverage rising over 10x on average from 8.5x during the 2016-2018 period.

Among all the downgrades (through Nov. 1, 2019) in the U.S. tech sector, 13 of the 17 companies were in the 'B' rating category or lower (one default) with nine of them hardware companies despite the hardware subsector representing only 25% of our U.S. tech coverage, much lower than 42% in our software subsector. This is particularly concerning for investors amid rising recession risk because downgrades are more likely among weaker-rated credits. While we don’t see a near-term (in the next 12 months) maturity wall in technology leveraged loans with a three-to-five year runway, high debt and weak FOCF generation will likely limit companies’ financial flexibility if economic and business conditions weaken. These lower rated companies are more vulnerable to negative rating actions, including defaults, in “normal” times, let alone in a late cycle environment where global GDP growth is decelerating, risk of U.S. recession is about 35% (according to S&P Global economists), and global IT spending growth is expected to be 2%-3% (S&P Global Ratings technology sector forecast), lower than our global GDP growth expectation of 3.3% in 2020.

Table 5
Recent Rating Actions for ‘B-’ or below

<table>
<thead>
<tr>
<th>Date</th>
<th>Company</th>
<th>Subsector</th>
<th>Rating at Date</th>
<th>Previous Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>28/10/2019</td>
<td>Rackspace Hosting Inc.</td>
<td>Services</td>
<td>B/Stable</td>
<td>B+/Negative</td>
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<tr>
<td>16/10/2019</td>
<td>Cohu, Inc.</td>
<td>Semiconductor</td>
<td>B/Stable</td>
<td>BB-/Stable</td>
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<tr>
<td>28/08/2019</td>
<td>Optiv Inc</td>
<td>Services</td>
<td>CCC+/Stable</td>
<td>B-/Stable</td>
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<tr>
<td>23/08/2019</td>
<td>Riverbed Parent Inc.</td>
<td>Hardware</td>
<td>CCC+/Negative</td>
<td>B-/Negative</td>
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<tr>
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<td>CommScope Holding Co Inc.</td>
<td>Hardware</td>
<td>B/Stable</td>
<td>B+/CW.Neg</td>
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<tr>
<td>13/08/2019</td>
<td>Casa Systems, Inc.</td>
<td>Hardware</td>
<td>B/Stable</td>
<td>B+/Negative</td>
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<tr>
<td>24/07/2019</td>
<td>SciQuest (Jaggaer)</td>
<td>Software</td>
<td>B-/Stable</td>
<td>B/Stable</td>
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<tr>
<td>16/07/2019</td>
<td>4L Technologies Inc.</td>
<td>Hardware</td>
<td>CCC/CW.Neg</td>
<td>B/Stable</td>
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<td>29/05/2019</td>
<td>CommScope Holding Co Inc.</td>
<td>Hardware</td>
<td>B+/Stable</td>
<td>BB-/CW.Neg</td>
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<tr>
<td>15/05/2019</td>
<td>Skillsoft (Evergreen Skills</td>
<td>Software</td>
<td>CCC-/Negative</td>
<td>CCC+/Stable</td>
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<td>16/04/2019</td>
<td>Lexmark International Inc.</td>
<td>Hardware</td>
<td>CCC/Negative</td>
<td>B-/Negative</td>
</tr>
<tr>
<td>09/04/2019</td>
<td>Casa Systems, Inc.</td>
<td>Hardware</td>
<td>B+/Negative</td>
<td>BB-/CW.Neg</td>
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<td>05/04/2019</td>
<td>Curvature, Inc.</td>
<td>Services</td>
<td>CCC/Negative</td>
<td>CCC+/Stable</td>
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<tr>
<td>02/04/2019</td>
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<td>Hardware</td>
<td>B-/Negative</td>
<td>B/Stable</td>
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<td>02/04/2019</td>
<td>Sungard Availability Services Capital Inc.</td>
<td>Services</td>
<td>D/--</td>
<td>CCC+/Stable</td>
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Source: S&P Global Ratings
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Global Technology

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Source: S&P Global Market Intelligence, S&P Global Ratings calculations
In the quest for faster networks amid slow growth, financial policy is key

What’s changed?

5G has launched. 5G services launched, notably in South Korea, the U. S., China, and Switzerland. Indications from South Korea paint an encouraging picture of consumer take-up, but we believe monetization in most countries is less clear cut.

A trade war has broken out and economic risks are rising. Telecom companies have exposure to the weakening economy through lower business-to-business revenues, and reduced consumer spending on content, and connected devices.

Telcos are taking a break from M&A. Some pending transactions have yet to complete, but we expect more muted M&A in North America and Europe, as companies are digesting previous deals and the pipeline of targets is drying up.

What to look out for in the sector in 2020

More 5G launches and spectrum auctions. We look for evidence to gauge consumer demand for 5G, and examples of compelling and commercially ready use cases. However, costly spectrum auctions could add to ratings pressure.

Leverage reduction. We expect leverage reduction to be a priority for the sector, with free cash flow being the main driver. However, pressure from shareholders for generous payouts and capital expenditure (capex) remain a risk.

Competition may increase risk to credit metrics. Some countries in Asia and Europe have seen new mobile entrants, sometimes encouraged by government policy, and U. S. mobile players are taking on cable with fixed-wireless access.

What are the key medium-term credit drivers?

The challenge of cashing in on data growth. Monetizing explosive data growth--through tiered pricing in mobile, the up-selling of higher broadband speeds, and new industrial use cases--remains the sector’s pivotal challenge.

The need to deliver on past M&A. Companies’ ability to integrate acquisitions and deliver promised synergies will be key to sustaining credit metrics and ratings.

The continued expansion of over-the-top (OTT) options. Fragmented direct-to-consumer content propositions could allow cable to reestablish itself as an aggregator, but profitability from this is weak relative to historical levels.
Ratings trends and outlook

Global Telecommunications

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

We expect stable ratings for most issuers in the sector globally, but the outlook bias has turned more negative over the past 12 months across all regions. This is apparent in Asia-Pacific (APAC), where some issuers are confronted with increased competitive pressure, and in Latin America, where some issuers are facing sovereign-related rating constraints and macroeconomic headwinds. In North America, ratings pressure remains centered on wireline, where a secular decline persists, and on data center segments, where the shift to the cloud has slowed colocation growth and hurt margins for smaller, highly leveraged operators.
North America
Rating trends in the U.S. were largely negative in 2019, with 19 downgrades and only three upgrades. We expect the negative rating trend to continue, as more than 20% of rated issuers either have a negative outlook or are on CreditWatch negative. We expect rating trends in cable to be relatively stable as broadband growth offset the loss of lower-margin video customers. Ratings pressure could come from secular industry declines in wireline; integration missteps in acquisitions among data center and fiber providers; and slowing growth. Ratings trends in Canada, however, remain stable given the rational competition among the national telecom players. Improving trends for regional wireless players and constructive broadband trends continue to support ratings stability among the smaller operators.

Europe
We expect stable ratings for the vast majority of issuers in Europe. With less than 15% of ratings on negative outlook or CreditWatch negative, Europe has a more balanced mix of outlooks than the other regions, and the highest percentage of stable outlooks, at over 80%. Although competition remains intense in many markets, most regulatory headwinds for telecom pricing have now abated, and companies’ credit metrics should see some improvements from continued cost-saving efforts. In some cases, further support may come from leverage-reduction measures such as disposals, for example, of tower assets. We also have stable outlooks on most cable companies. We expect cable companies to display faster revenue and EBITDA growth than telcos, albeit accompanied by higher capex intensity. However, capex intensity should moderate as larger network upgrades approach completion. We think these factors will provide cable companies with greater organic deleveraging capacity than telcos.

Latin America
The region’s net negative outlook bias is at about 20%, while stable outlooks are close to 80%. Political uncertainty and expectations for weaker economic growth across the region in 2020 could negatively weigh on credit metrics over the next 12 months, and exacerbate downside risks on ratings. In 2019, the outlook revision to negative on the sovereign ratings of Mexico and Argentina also triggered similar rating actions on some operators from those two countries. Yet, stable outlooks on the vast majority of issuers reflects resilient operating performance, supported by still-healthy demand in the wireless subscriber base, fixed-line broadband access, and mobile data usage.

Asia-Pacific
We are seeing gradually increasing downward pressure on APAC telcos’ creditworthiness, with a negative outlook bias of over 20%. This is mainly attributable to stiff competition and ongoing large capital spending needs for advanced network deployment in many APAC markets. Despite growing data consumption, competition remains intense, with deeper cuts in wireless tariff pricing in India, Australia, Singapore, Japan, and Taiwan.
Global Telecoms

Key assumptions

1. No end in sight for data consumption growth, but telcos’ ability to cash in remains uncertain

We think mobile and fixed data growth will continue apace, but operators’ ability to convert this into incremental revenue is still uncertain. This could change in the medium term as high data consumption may put a premium on network quality.

2. Fixed-mobile convergence will increase, but at an uneven pace

We believe that convergence will ultimately conquer most European and some Asian telecom markets, but the future of convergence in the U.S. and Latin America is less clear cut, partly because of fewer integrated operators in these markets.

3. High capex is here to stay

Global capex will remain high, driven by 5G-related spending on spectrum, site expansion, and fiber backhaul. This is in addition to ongoing high investments in fixed broadband networks to replace copper with fiber in regions such as Europe and Latin America.

The industry is heading for modest growth and leverage improvements in 2020

We expect the global telecom and cable industry to show low-single-digit revenue growth and modest improvements in profitability in 2020. For telcos, growth mainly relies on still-rising mobile and broadband penetration in some regions, and the up-selling of mobile data and broadband in certain countries. Cable operators should continue to grow faster than telcos, mainly thanks to broadband, but growth continues to slow down as a result of pressure on TV revenues. We expect all players to maintain focus on costs, supporting a very gradual expansion of EBITDA margins. The combination of cost-cutting and leverage reduction through free cash flow should help to support a modest reduction of S&P Global Ratings-adjusted debt to EBITDA next year.

No end in sight for data consumption growth

We expect demand for data will continue to grow strongly, both in mobile and fixed networks, forcing operators to maintain high network investments despite mixed prospects for monetization. While unlimited data is prevalent in fixed plans, speed tiering and regular price increases have allowed for some monetization of data growth. In mobile, the success of more-for-more strategies involving migration to larger data allowances have varied by market. We believe intense competition has increased the commoditization of data, as evident from more unlimited plans, as has the ability to offload to Wi-Fi.

In consumer markets, video will remain the pivotal growth driver, with surging consumption of streaming or on-demand services, the proliferation of online and mobile gaming, improved resolution of existing video-based content, and, further down the line, augmented and virtual reality applications. We think these trends will initially benefit fixed-line consumption where we see the bulk of consumption and device proliferation occurring. This could be good news for cable operators in areas where they compete with copper-based infrastructure due to the superior headline speeds of cable networks. However, fiber investments by telcos will continue to reduce this advantage in the medium-to-long term.
In the medium term, businesses of all sizes will contribute increasingly to mobile data growth as they move toward digitization, such as through smart factories in manufacturing, intelligent fleet management in logistics, or smart metering and grid management by utilities. Network equipment vendor Ericsson estimates that mobile data traffic will grow at a compound annual rate of 30% over 2018-2024. While mobile operators have struggled to convert data consumption into revenue growth, many are counting on increases in 5G-reliant devices, and that speeds ten times faster than 4G will drive a step-change in consumption that will finally deliver on the more-for-more promise. But will it? We believe that 5G and Internet-of-Things (IoT) trends may improve mobile prospects over the medium term, increasing the position and pricing power of operators with leading network quality.

**Fixed-mobile convergence will increase, but at an uneven pace**

Fixed-mobile convergence will be increasingly important in Europe, Canada, and parts of Asia-Pacific, but will continue to play a limited role in the U.S. and Latin America for the time being. In our view, convergence occurs mainly in markets with intense competition and the presence of one or more integrated operators with meaningful mobile and fixed-network assets. Although convergence often involves some form of discounting, it can reduce customer attrition rates in competitive markets by 50% or more compared to selling the same services separately. This better shields the customer base against poaching by aggressive competitors, and lowers subscriber retention costs, which often outweigh negative revenue implications. In Europe, this rationale, plus the potential for capex synergies between fixed and mobile networks that become more significant in the preparation for 5G, has motivated a number of fixed-mobile mergers in recent years, and most markets have at least two on-net converged players.

We believe the situation will remain different in the U.S. and Latin America for some time. Here, fewer players have extensive high-speed fixed broadband as well as mobile network coverage, and competition is mainly focused on marketing fixed and wireless services separately. U.S. cable operators are expanding into mobile through access agreements with wireless carriers, while wireless players like Verizon and T-Mobile are attempting to make inroads into in-home broadband using fixed-wireless technology. This could pave the way to convergence in the long term, but we think this will evolve only slowly. In Latin America, full convergence in key markets like Mexico and Brazil is held back by regulation, and we don’t expect this to change in 2020.

**High capex is here to stay**

Capex in the industry is already high at more than $250 billion globally, as per our projections for 2019, and we forecast that it will stay at similar levels in 2020 and beyond. Pivotal drivers are the ramp-up of 5G investments across several regions, combined with ongoing significant spending on fixed network upgrades in others. 5G requires additional spectrum, and a significant number of new antenna sites, as well as fiber upgrades for base-station backhaul. In 2019, a number of countries sold newly allocated mid-band and high-band spectrum, and we expect more frequencies in these bands to be auctioned over 2020-2021. However, spending on 5G-related network equipment and cell sites will partly be offset by lower investment needs for 4G, the roll-out of which is mostly complete, with about 75% coverage of the global population at this point (see the chart below). Over time, 5G will also generate savings, as it will help telcos to avoid capacity upgrades that would be necessary under 4G to cope with surging data traffic. In fixed line, we think investments will remain high in Europe and Latin America, where telcos continue to upgrade from copper to fiber-based networks. For cable operators, however, we think capex intensity should gradually level off, as major investments in higher broadband speeds come to an end.
Overall capex masks some regional variation. In North America, we expect capex growth to slow down in 2020 because operators have scaled up their 5G and mobile capex in 2019 more quickly than we anticipated. We project that capex in Europe will remain high next year, as the region steps up its 5G roll-out later than the U.S. and APAC, while fixed network upgrades will require continued high capex. In APAC, we expect capex to grow modestly in 2020 amid the deployment of 5G in Korea, Australia, Japan, and China. In Latin America, we think capex intensity will stay at around 15% of revenues, with spending mostly on upgrades and expansions in both fixed and mobile networks, including the build-out of the 4G/4.5G band and fiber.

Key risks and opportunities

1. 5G can unlock new opportunities for growth—in the longer term

New uses cases related to IoT and industrial applications enabled by 5G can significantly expand telcos’ addressable market, offering an escape from anemic growth in more traditional telecom services.

2. A focus on leverage reduction could benefit credit quality

Companies in the sector are making efforts to reduce leverage, with free cash flow being the main driver. However, pressure from shareholders for generous payouts and capex spikes could pose a risk for some.

3. Deteriorating economic conditions could put credit metrics at risk

A pronounced downturn could weigh on revenues, earnings, and cash flow from operators’ business-to-business segment and lead to lower consumer spending on content, fewer connected devices, and migration to cheaper mobile and broadband plans.

5G can unlock new opportunities for growth in the longer term

We believe 5G has the potential to significantly expand the market for telecom operators, although we are convinced that new revenue opportunities will take time to develop. 5G will enable a broad set of new use cases outside faster mobile broadband and fixed-
wireless access that derive from IoT applications and the digitization of entire economic sectors. This may spur the evolution of a diverse range of digital ecosystems, such as smart grid management in utilities, new models of factory automation in manufacturing, intelligent management of port operations in logistics, or smart agriculture. Consultancy firm Strategy Analytics predicts that the number of connected devices will more than double to 50 billion by 2030, compared with 22 billion in 2018. Many applications will run at least partly over public fixed and mobile networks, whereas large manufacturing plants or mining or logistics facilities may rely entirely on private enterprise networks.

We think telcos have the chance to tap into this pool of value, but need to develop the right capabilities and solutions if they want to be more than mere providers of low-revenue SIM cards for robots. In addition to the ability to implement data transmission with guaranteed quality parameters over public networks, it will require a broader offering of connectivity, IoT platform solutions, and (private) network management services. One of the challenges is that operating and pricing models in this space are still nascent, and the distribution of roles and value between telcos, equipment vendors, independent software and solution providers, and industrial end users remains fluid. As a result, material future revenue opportunities continue to lag the need for upfront investments in networks and products, which may strain credit metrics in the interim.

A focus on leverage reduction could benefit credit quality

We think management teams are putting increased priority on reducing leverage, and for many issuers there is some room to do so through free cash flow. Moreover, we expect M&A activity to slow as companies digest recent acquisitions. For example, in the U.S., several large operators are deleveraging, including Verizon, AT&T, and Comcast. We also expect that some telcos will take a more prudent approach to capital allocation as macroeconomic uncertainty grows. In Europe, disposals of tower assets may provide an additional means of lowering debt, and some U.S. issuers may use noncore asset disposals for debt reduction. As a result, we foresee that headroom under the current rating thresholds will improve in 2020 for a number of issuers. In Canada, national players will continue to balance ongoing capex and shareholder returns, keeping leverage metrics elevated.

Leverage reduction could be undermined by spectrum auctions that turn out to be more costly than expected, a faster ramp-up of 5G or fiber capex, or, in some regions, mounting pressure for higher shareholder returns. In Europe, Canada, and Latin America, the effect of 5G roll-out on credit quality should be contained by our expectation of slower roll-out, which smooths the capex profile, but risks remain, particularly in the U.S. and APAC. In Europe, where several operators are saddled with high debt, financial policy discipline has mostly been maintained so far, but this could be reversed if equity investors successfully demand higher distributions to compensate for lackluster share price performance. Likewise, in the U.S., pressure from an activist shareholder pushed AT&T to formalize a three-year capital allocation plan. While the plan includes a modest reduction in leverage, it also comprises a large share repurchase program, which will allocate 50%-70% of free cash flow to stock buybacks.

Deteriorating economic conditions may put credit metrics at risk

Our economists have scaled back their growth expectations across the board for the next year in an environment of high global trade tensions. We believe a pronounced global economic slump could exert pressure on telecom and cable company ratings, especially in conjunction with other factors such as a worsening competitive environment. Although the industry is only moderately cyclical, issuers are exposed to weaker macroeconomic conditions through their business-to-business (B2B) segment. In a downturn, we would expect to see issuers affected by lower demand for work-related mobile data usage and handsets due to lower activity levels and reduced employment, bankruptcies of small and midsize enterprises, and cost-cutting by larger enterprise clients weighing on spending
for fixed and mobile connectivity, as well as IT solutions. On the consumer side, recessionary developments could constrain, or even undo, successful prepaid to postpaid conversion, curb revenue upside from the up-selling of premium mobile and broadband subscriptions, and accelerate cord-cutting trends for video.

Given high total telecom debt of $1.5 trillion globally, we cannot dismiss refinancing risks. However, many issuers in the sector have successfully refinanced over the past 12 months, reducing the amount of debt falling due within the next year and terming out their debt maturity profile, and we see limited risks of significantly rising interest rates in most regions. Nonetheless, a severe economic crisis accompanied by dislocations in the capital markets could impair access to credit, particularly for around 50 issuers in the sector rated 'B' or lower.

North America

Key assumptions

1. Robust demand for data is proving difficult to monetize

Wireless carriers will likely struggle to grow ARPU in light of unlimited data plans and emerging competition from the cable industry, and wireline operators will continue to be harmed by the limitations of copper infrastructure. While cable operators should benefit over the next year, longer-term questions linger around the ability to raise prices if competition from 5G fixed wireless comes to fruition.

2. A better revenue mix and cost-cutting could improve margins

Wireless carriers should see an improved mix of higher-margin service revenue as customers keep their devices longer. We expect growth in high-margin broadband to continue to offset headwinds from rising programming costs for cable operators. However, wireline companies will likely continue to experience profitability compression from top-line declines.

3. Capex growth could pause in 2020

We expect wireless operators' ratio of capex to revenue to increase slightly to 14.8% in 2020 from 14.5% in 2019, with a more significant pickup possible in 2021. Cable operators will likely experience lower capex requirements as DOCSIS 3.1 buildouts are largely complete and video subscriber declines.

Despite industry challenges, U.S. companies' credit metrics should improve

Overall, we expect modest revenue growth in U.S. wireless, mid-single-digit percentage declines in wireline, and solid mid-single-digit revenue growth in cable. For U.S. telcos, postpaid customer growth as subscribers migrate from prepaid plans and relatively stable ARPU trends should support modest topline growth, whereas secular industry pressures continue to affect wireline. Cost-cutting initiatives, including network virtualization, and lower upgrade rates should also benefit margins. In cable, we expect that broadband revenue and contributions from commercial services will outpace video subscriber declines. Greater contributions from broadband and lower revenue from video should also enable modest margin expansion for the cable providers, though wireless startup costs will likely prevent significant improvement. We expect that U.S. telco and cable issuers will continue to prioritize leverage reduction, although the pressure of returning cash to shareholders, network investments, or the purchase of spectrum licenses could constrain leverage improvement in the longer term.
Robust demand for data is proving difficult to monetize

While the demand for data and mobile video continues to grow at a rapid pace, the ability to monetize this growth has become more challenging, primarily due to competition.

In wireless, we expect service revenue growth for carriers will moderate at around 1%-2%, based on slower customer growth and weaker ARPU trends because of mature industry conditions. That said, there is a lot of uncertainty heading into next year. While competition from cable in the wireless industry via mobile virtual network operator (MVNO) agreements has been somewhat muted, it could intensify with Altice USA's entrance into the market with low price offerings. Additionally, approval of the T-Mobile/Sprint merger and DISH's potential entry into the wireless market could affect overall industry performance.

Among the U.S. wireline providers, we expect revenues to decline to the mid-single-digit percentage range due to broadband market share losses to cable, and voice access line losses to wireless substitution. Revenue from business services continues to contract due to competition from cable, especially among small-to-midsized business customers, and the increasing adoption of cloud-based networking technologies--such as software-defined wide area networks (SD-WAN)--which carry lower price points. As a result, we expect business revenue to decline around 3%-5% for the industry overall.

We expect U.S. cable operators to grow revenue by 4%-6% in 2020, driven by predictable broadband growth. Cable continues to enjoy an advantage for in-home broadband over incumbent phone companies that haven't deployed a fiber-to-the-home service. Most U.S. cable providers have upgraded their networks to DOCSIS 3.1 and can offer speeds of up to 1 gigabits per second to their customers. In contrast, phone companies that use digital subscriber lines for broadband service can typically offer up to 100 megabits per second (Mbps) with fiber to the node. Over the next two-to-three years, we believe that customers migrating to faster internet tiers should drive continued ARPU growth. That said, the prospect of wireless entering the cable broadband market via 5G fixed wireless could change the competitive landscape. While we believe that cable will still be able to offer a more competitive product, the threat of 5G fixed wireless could make it difficult to monetize increasing data demand in the longer term. Verizon has already deployed 5G fixed wireless in certain markets and is able to offer 300 Mbps to customers at a lower price than cable.

The Canadian telecom market remains very competitive. As Shaw’s Freedom Mobile grows, it has accelerated changes in the wireless market such that national incumbents have started offering unlimited data plans and equipment installment plans in 2019. We do not anticipate any material ARPU growth for the next four-to-six quarters. On the wireline side, telcos’ fiber infrastructure expansion combined with internet protocol television (IPTV) offerings have started bearing fruit, with subscriber additions ahead of the cable companies' counterparts in 2019. However, broadband growth continues to offset video and telephony subscriber losses for all players. Overall, we expect revenue growth to be supported by growing subscribers (both wireless and wireline) and increasing wireline ARPU. As a result, we expect consolidated topline revenue to grow 1%-3%, but EBITDA to be higher at 3%-5%, as companies focus on cost control and operating efficiency. With a significant portion of fiber capex behind the carriers, we expect an improvement in consolidated capex intensity for the next few years, excluding spectrum auctions.

A better revenue mix and cost-cutting could improve margins

Despite intense competition and mature industry conditions, we expect some margin improvement as companies look to reduce costs and shift to more profitable products and services. In wireless, we expect some margin improvement due to low device upgrade rates, although this is dependent on take-up rates for new 5G handsets as they come to the market. Carriers have benefited from consumers keeping their handsets longer as the
incremental benefits of newer devices have diminished. Furthermore, we expect companies to focus on cost-reduction initiatives. Already, Verizon is embarking on a $10 billion expense reduction plan, and with pressure from an activist shareholder, AT&T is looking to reduce expenses by about $6 billion over the next three years. If T-Mobile and Sprint are able to get regulatory approval for their proposed merger, potential cost synergies are substantial at about $6 billion.

Notwithstanding the erosion of their linear video customer base, U.S. cable operators should see a modest margin improvement as growth from high-margin broadband services more than offsets the loss of lower-margin linear video and wireless startup costs for the larger cable operators, including Comcast, Charter, and Altice USA. We project high-margin broadband growth of 8%-10% from a combination of subscriber growth of 3%-5% and ARPU increases of 5%-7%, resulting in a modest improvement in industry-average EBITDA margins to about 40% in 2020 from around 39% in 2019.

In contrast, U.S. wireline companies are saddled with a high fixed costs and face secular industry declines. Over the past several years, these companies have pursued M&A to drive cost savings and preserve margins. However, as synergies wind down from recent acquisitions, we believe these companies could experience weaker profitability due to topline pressures, lower subsidy revenues, and limited M&A opportunities.

**Capex growth could pause in 2020**

We expect modestly higher capex in wireless over the next year as carriers densify their networks and deploy fiber for backhaul, but the lack of new mid-band spectrum could push meaningful capex growth into 2021 or 2022. However, if the T-Mobile-Sprint deal is approved, this could accelerate capital spending by the combined company and push DISH to deploy its spectrum aggressively next year. Overall, we project a slight increase in capex to revenue of about 14.8% in 2020 from 14.5% in 2019.

**U.S. Telecoms Capital Expenditures**

Cable operators are benefitting from lower spending on customer-premises equipment as customers migrate away from traditional video and self-installations increase. We expect scalable infrastructure to decline as operators pause the upgrades of networks following the completion of DOCSIS 3.1. This will be partly offset by mobile-related capex as cable operators build a retail presence. However, we believe that cable operators could purchase mid-band spectrum in the upcoming auctions to pursue a traffic-offload strategy involving selective buildouts in denser markets to complement their MVNO agreements. If so, this could result in elevated capex after 2020.
Key risks and opportunities

1. The benefits from 5G investments are uncertain

We question consumers' propensity to spend more money for incremental increases in speeds on mobile devices over the near term. Nevertheless, in the longer term, we believe there are significant IoT and enterprise opportunities that are difficult to quantify at this time and will require meaningful capital outlays to realize.

2. A recession could take a toll on telcos' credit quality

S&P Global Ratings' economists have increased their forecast of the risk of a U.S. recession to 30%-35%, which could pose a risk for telecom operators that have exposure to small businesses. Higher borrowing costs and refinancing risk could pose a threat for issuers in the 'B' category, which now represent about 60% of our rated universe.

3. A T-Mobile-Sprint merger could have meaningful industry ramifications

The outcome of this merger could have varying impacts on issuers across telecom subsectors. We believe the competitive intensity should improve in wireless as the industry shifts to three nationwide providers from four. The merger is modestly negative for tower operators in the near term, although accelerated 5G builds could offset decommissioned sites. We view the transaction as largely negative for cable, as it would strengthen T-Mobile's 5G fixed wireless capabilities.

The benefits from 5G investments are uncertain

In the U.S., we have a cautious view on 5G, based on our expectation for accelerated deployments. We believe that the acquisition of spectrum licenses and higher capex to support 5G network deployments, which includes small cell and fiber builds, could constrain leverage improvement at a time when the carriers are trying to reduce debt and improve credit metrics. We also expect that the demand for mid-band spectrum such as the C-band will be strong, since in our view, these licenses will likely serve as the foundation for 5G deployments.

At the same time, we believe that revenue opportunities associated with 5G will be slow to materialize in the near term since we question consumers' propensity to spend more for faster data speeds on their devices, and most of the IoT and enterprise opportunities are likely several years away. While 5G fixed wireless offers some potential to monetize investments at an early stage, the technology is still unproven and is unlikely to offer a comparable product to cable. That said, fixed wireless broadband could capture some share if it is able to compete on price, which may appeal to more value-conscious consumers.

From the cable perspective, we believe that the risks are still several years away and remain highly uncertain. However, if wireless operators are able to deliver on targeted speeds and the number of homes passed, it could harm cable's ability to grow earnings and cash flow in five years. For example, if Verizon is able to achieve at least a 20% penetration rate across 30 million homes and T-Mobile is able to achieve its goal of 9.5 million in-home broadband customers by 2024, we estimate this could take about three-to-four million customers from each of Comcast and Charter. Perhaps more importantly, this could also limit ARPU growth and cause EBITDA to flatten or even decline five years from now. Still, we do not incorporate this level of stress into our forecasts yet because it is not clear if Verizon will be able to achieve advertised coverage and reliability using mmWave spectrum, while T-Mobile's 5G plans hinge on acquiring Sprint's mid-band spectrum. In addition, cable has a substantial cost per bit advantage as in-home non-
video data consumption averages over 400 gigabytes (GB) per month today, which is a higher order of magnitude than average wireless usage.

**A recession could take a toll on telcos' credit quality**

We project that U.S. GDP growth will weaken to 1.7% in 2020 from 2.3% in 2019 and estimate the risk of recession at 30%-35%. While the U.S. telecom and cable sectors held up well during the 2008 financial crisis and recession, we believe the effects of lower barriers to entry and changing technologies could be exacerbated in an economic downturn. A greater risk is that tightening credit market conditions increase borrowing costs and refinancing risk. As issuers have moved down the rating scale over the past couple of years, we now rate about 60% 'B' or lower. These issuers could find it difficult to access capital as debt comes due.

Wireless carriers have benefited from prepaid subscribers migrating to postpaid plans as credit quality has improved over the past couple of years, as well as increased penetration of second handsets among business customers. If the economy fell into another recession, we believe these subscribers could move back to more affordable prepaid plans that provide carriers with lower ARPU and margins. Furthermore, business customers would likely reduce headcount in a recession, which could pressure subscriber metrics and service revenue.

We also expect that more people would cut the cord in video, which could hurt topline performance for both cable and satellite video providers. The impact would be more pronounced for satellite TV operators since they lack a broadband hedge.

Telecom issuers with a lot of exposure to small-to-midsize business and enterprise customers could be hurt in a downturn since there is a greater correlation between telecom spending and economic growth for business customers than for residential. These customers may be more likely to adopt less expensive networking technologies such as SD-WAN, which could exacerbate topline pressures.

**A T-Mobile/Sprint merger could have meaningful industry ramifications**

We believe a merger between T-Mobile and Sprint could have significant ramifications across multiple sectors. We believe the transaction would be positive for T-Mobile if it is able to successfully integrate Sprint, although this is by no means an easy task given the size and complexity of the combination. In addition to a very strong spectrum portfolio, T-Mobile's postpaid market share would improve to about 28% from 16% today, giving it substantially greater scale to compete with AT&T and Verizon. Furthermore, targeted synergies of about $6 billion could enable an EBITDA margin improvement to the low-to-mid-30% range in the longer term.

While we believe the transaction is neutral for DISH in the near term since it has capacity to purchase Sprint's prepaid customers and spectrum in three years, the longer-term capital spending requirements are significant and achieving scale economies could be difficult in a mature industry. Furthermore, we believe DISH's lack of experience in wireless could make it challenging to compete against more established players and adding more spectrum does little to increase long-term revenue visibility. In our view, DISH will need find a partner with deep pockets in order to build out a 5G network that could cost $10 billion.

For the large U.S. cable operators, we believe that Altice will benefit from the extension of its MVNO agreement to T-Mobile's network. However, Comcast and Charter could be hurt by incremental competition from T-Mobile's 5G fixed wireless product, which could be more formidable than Verizon's given its strong spectrum position on a pro forma basis. Additionally, conditions are in place to prevent cable from making a back-door purchase of DISH's wireless assets.
For Verizon and AT&T, we believe the transaction could be positive over the next three-to-four years as T-Mobile undertakes a massive integration. The longer term credit implications are more uncertain. On the one hand, competitive intensity should improve as the industry shifts to three nationwide providers from four. At the same time, T-Mobile will have a robust and balanced portfolio of spectrum licenses, including low-band and mid-band spectrum, which it could monetize by keeping prices low. While we believe the odds are against DISH, if it is able to find a partner to help fund the buildout of its network and profitably grow its subscriber base, it could become a viable fourth competitor, which could be disruptive.

**Europe**

**Key assumptions**

<table>
<thead>
<tr>
<th>1. There is no respite from fierce competition</th>
</tr>
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<tbody>
<tr>
<td>We expect competition among telecom carriers and with cable operators to remain intense in 2020, with aggressive challengers in a number of mobile and broadband markets such as Italy, Spain, and France. This caps upside on credit metrics.</td>
</tr>
</tbody>
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<table>
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<tr>
<th>2. For capex, it remains &quot;spend or die&quot; for European operators</th>
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<tbody>
<tr>
<td>Although we don’t think that 5G will prompt a big surge in capex given only gradual deployment, we believe capex will stay high at 17%-19% of sales for telecom carriers, given ongoing fixed network upgrades and further spectrum auctions. Coming out of a period of major network upgrades, cable players should see a modest capex decline.</td>
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<table>
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<tr>
<th>3. Carriers will continue to eye asset spin-offs</th>
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<tbody>
<tr>
<td>Unlike in North America, most European towers are still owned by operators, but skyrocketing multiples may be too attractive for many operators to say no. High multiples provide some room for leverage reduction even after adjusting for the resulting lease liabilities.</td>
</tr>
</tbody>
</table>

**Slow growth continues, but European credit metrics are broadly stable**

We forecast flattish revenues for European telecom operators and modest topline growth of 1%-2% for European cable in 2020. For telcos, growth mainly rests on the success of up-selling mobile data and better broadband packages, offset by tough pricing conditions and the ever-shrinking legacy of fixed voice revenues. We expect cable growth to come from the remaining potential for share gains in broadband and expansion in the small-to-midsized business segment, but TV cord-cutting represents a headwind. For telcos as well as cable operators, continued cost-cutting, including from the digitization of operations, should enable a modest EBITDA margin uplift. Combined with some retained free cash flow, this should see credit metrics improve slightly, except for operators that have closed or may close material M&A transactions, like Deutsche Telekom, Vodafone, and Telenor.

**There is no respite from fierce competition**

Competition in most European telecom markets remains intense, and we don’t foresee this changing fundamentally in 2020 as penetration for most services is near or at saturation, and there are at least three-to-four players with comparable offerings across nearly all segments. We continue to regard competitive dynamics in broadband as somewhat more benign than in mobile, but we observe clear distinctions between different countries.
Four-player mobile markets in Italy, France, and Spain are characterized by the presence of aggressive challengers that disrupt pricing with value offers, often with unlimited data. This caps the revenue potential for the entire market and removes upside from data monetization. In contrast, we observe more rational behavior in Germany, for example, which moved from four to three players several years ago, and some of the smaller three-player mobile markets. In these markets, operators are often able to achieve modest mobile service revenue growth thanks to tiered pricing based on data allowances or mobile speeds. However, as part of the 2019 spectrum auction in Germany, one of the existing MVNOs acquired spectrum and is planning to build out a fourth network, which could prove deleterious for ARPS in the medium term.

In broadband, competition between telecom and cable operators remains strong, reinforced by slowing penetration growth in many larger countries. Cable players are trying to take advantage of higher headline speeds in Germany and the U.K., where incumbent telcos mainly rely on fiber to the cabinet and advanced copper networks so far. However, as telecom operators continue to upgrade their networks to fiber to the home (FTTH), we expect the speed advantage of cable to diminish. In some markets like Spain, challengers are building over existing FTTH and high-speed cable networks with own-fiber infrastructure, which is likely to fuel competition between different fixed-line infrastructures.

Recently, cable operators have opened their networks for broadband service providers in several markets. In Germany and the Netherlands, this was imposed as part of merger clearance proceedings, whereas in Belgium it was mandated by the regulatory authority. This could benefit mobile carriers like Telefonica Deutschland or Orange Belgium by giving them an alternative to accessing the incumbent’s fixed network, but ultimately increase broadband competition. In spite of these developments, we believe that incumbents, cable, and other challengers alike are able to charge some mark-up for higher speeds in most markets. This, combined with increasing multiple-play penetration and the up-selling of IPTV, should support modest service revenue growth.

For cable, we think growth dynamics will continue to shift. Although we project that cable will continue to take broadband market share from telcos, the size of the incremental gains is flattening. At the same time, competition from incumbents' IPTV and OTT propositions drives higher video churn. We think this will force operators to shift their quest for growth toward the small-to-midsize business segment, focusing on connectivity as well as IT services, or toward footprint expansions, which carry capex implications.

**For capex, it remains "spend or die" for European operators**

We see little room for European telecom operators to materially reduce their capex in the near term, and expect capex intensity to stay at 17%-19% of sales over 2019-2021, similar to what we observed in 2016–2018. This is primarily driven by a combination of continued spending on fiber roll-out in fixed networks, and incipient 5G investments. For cable, we project a step-down in capital intensity as the upgrades of cable networks to DOCSIS 3.1 technology and node-splitting programs--which caused higher spending levels in 2016-2018--are nearing completion. However, expansion projects to pass more homes and unlock growth opportunities will keep capex intensity slightly above that of telcos (adjusted for vendor financing), like Virgin Media in the U.K.
We think the capex impact of 5G will be more muted than for the U. S. and APAC, mainly because we expect Europe to be a fast follower rather than an early adopter of 5G. This is due to the difficult experience of operators with the monetization of 4G services, high competitive intensity that limits the potential for premium pricing, and the fact that spectrum is yet to be made available in some countries. While six countries have made significant 5G launches to date, with the exception of Switzerland all have been limited to a handful of cities thus far. The slower ramp-up will allow companies to fund 5G investments by re-allocating budget away from 4G, thereby smoothing the capex profile.

In Switzerland, for example, Swisscom has been able to launch broad 5G coverage without increasing its capex guidance. In addition, ongoing investments in fiber deployment should reduce the need for 5G-related backbone upgrades. Spectrum costs, however, create some uncertainty. Generally, we believe less clear-cut monetization opportunities should promote rational bidding in remaining auctions. In our view, more expensive mid-band (3.6GHz) auctions in Italy and Germany at €0.36 cents per megahertz pop (/MHZ/POP; cost per megahertz divided by the number of persons in spectrum license coverage area) and €0.17 cents /MHZ/POP are outliers that were mainly caused by the auction design. Even these prices were still 70%-85% lower than 3G auctions in these countries.

Ongoing investments in last-mile fiber remain an important driver of high capex in Europe, though with some variation between countries. Of 28 EU member states, 20 had achieved more than 80% next generation access coverage with intermediate speeds (>30 Mbps) in 2018, and the focus continues to shift to fiber deepening and costly FTTH deployment in many countries. In France and Italy, FTTH roll-out remains in full swing, whereas Germany and the U.K. are lagging, with less than 10% fiber-to-the-premises (FTTP) coverage. However, we think these markets will increase FTTH spending in the next three years. Spain is an outlier to a certain extent, with FTTP reaching about 77% at this stage, which should support a gradual reduction in fixed-line spending in the medium term. Outside the top five markets, FTTH roll-out is ramping up in countries such as Greece, and continues at a significant pace in a number of midsize markets like the Netherlands.

**Carriers will continue to eye asset spin-offs**

We believe European telcos will increasingly be tempted by the high multiples that telecom infrastructure is attracting, notably mobile towers, and to a lesser extent, fixed-line networks. These assets often fetch valuations that are 2x-3x higher than those for...
vertically-integrated operators, driven by expectations about efficiency gains that could result from independent ownership and shared infrastructure. As per our estimates, less than 20% of European mobile towers are owned by independent tower companies, compared with well over 60% in the U.S.

Chart 309
Over €90 billion of towers still housed in European Telcos

We estimate that European telcos’ captive towers could be valued as high as €90 billion based on recent valuations. Although tower disposals would result in additional lease liabilities for operators that we include in our adjusted debt, high valuations could yield a net deleveraging effect in a number of cases. At this stage, we do not expect such transactions to result in upgrades, given the still-moderate impact on overall group credit metrics, but they can increase financial flexibility and headroom under our rating thresholds. However, the rating implications will also depend on whether asset disposals weaken operators’ ability to differentiate their services from those of competitors. For towers, this can be the case for sites that are in key locations where competitors lack coverage and have difficulty replicating the same service quality due to space limitations, for example, in dense urban areas, or legal restrictions such as emission limits or permit issues. We typically view the differentiation benefits of fixed-broadband networks as greater than for passive tower real estate, mainly because of the strong link between the network and the ability to offer better speeds and service quality to end customers, especially where regulated access to the network is limited.
Key risks and opportunities

1. Convergence can mitigate the fall-out of fierce competition

Fixed-mobile convergence could allow operators to contain churn and protect profitability in the face of strong competition. Integrated fixed-mobile operators may also have a cost advantage in the roll-out of 5G.

2. Financial discipline under fire from shareholder pressure

Following several years of discipline on distributions, operators could face mounting pressure to make up for underperforming share prices with higher payouts. This could deplete headroom for issuers close to our downside thresholds.

3. Brexit, trade tensions, and an economic slowdown could create a perfect storm

Although telecom and cable is not a cyclical sector, uncertainty around Brexit, trade disputes, and weakening economic sentiment increase the risk of a European recession. This could weigh on business-to-business revenues and consumer spending on content and premium mobile and broadband subscriptions.

Convergence can mitigate the fall-out of fierce competition

We view the bundling of fixed, mobile, and TV services as a tool for operators to counter the impact of aggressive competitors. With converged subscribers more than 50% less likely to churn, it is harder for challengers that focus on mobile or broadband to gain customers with low pricing. Despite the negative revenue effect from bundle discounts, convergence is usually EBITDA-accretive due to lower subscriber acquisition and retention costs. Convergence is well-advanced in markets like Spain, Portugal, France, and the Netherlands, whereas convergence penetration in Germany and the U.K. is much lower. It will take time, but we believe convergence will gradually gain momentum in these markets, too.

For Europe, we think the combined ownership of fixed and mobile assets is advantageous for operators, despite the fact that regulatory access obligations often hand alternative providers an opportunity to offer the full range of services without owning the assets. This mainly relates to the greater commercial flexibility and more favorable economics that come with asset ownership. Another consideration may be the increased value of integrated networks on the road to 5G, which will require much denser mobile networks and fiber backhaul than with 4G, increasing the synergies of holding both networks within the same company. We think all of these factors have spurred converged M&A deals in recent years, such as BASE-Telenet in Belgium, Vodafone-Ziggo in the Netherlands, Vodafone-Unitymedia in Germany, or the attempt to merge Sunrise and UPC in Switzerland.

Financial discipline under fire from shareholder pressure

European telecom operators have exercised discipline in recent years when it comes to shareholder returns. With few exceptions, dividends have either remained stable, or increased at much lower rates than historically. Vodafone has even cut its dividend this year by 40% and DT by about 15%. Our base case assumption at this point is that this discipline will be maintained. We forecast that dividends as a percentage of free operating cash flow will come down from just under 100% to less than 70% by 2021.

However, we are cognizant that the sector has underperformed the wider equity market significantly, with European telecom stocks trading around multi-year lows. This implies a risk of shareholders stepping up pressure on management teams to loosen the reins on
payouts. In cases where metrics are close to our downside thresholds, giving in to shareholder demands could deplete any remaining headroom or even precipitate a downgrade.

**Brexit, trade tensions, and an economic slowdown could create a perfect storm**

We project European GDP growth to drop to 1.4% in 2019 and 1.6% in 2020, compared with 2.3% in 2018. Risks to growth are on the downside as uncertainties over Brexit and global trade remain unresolved, and the fact that telecom and cable is less cyclical does not mean that the industry will be completely shielded from protracted economic weakness or a downturn. Being economies that are very open to foreign trade, many European countries could be affected by a further escalation of global trade tensions. This remains a key downside risk to growth especially if the industry recession translates into weaker demand in services. Political uncertainty at home in the shape of Brexit is another risk to watch out for. These developments could directly affect telco revenues in the B2B segment, or consumer's willingness to spend on premium mobile and broadband subscriptions, or higher-value content. That said, in an environment of subdued inflation, we expect monetary policy to keep interest rates low for an extended period of time, which reduces refinancing risk for issuers.

European issuers may also be affected by the evolving debate about possible bans on Chinese equipment vendor Huawei, whose equipment is used in many European networks today. Most European countries have so far opted for a principles-based approach to network equipment security that does not formally exclude any vendors, but requires equipment to meet certain standards. We think the fluid nature of the discussion, as well as the steps necessary to comply with security standards, may create uncertainty for operators, delay investment decisions, and increase roll-out costs, particularly if companies decide to swap existing equipment.

**Latin America**

**Key assumptions**

1. **Data usage will continue to grow**

   We think incremental wireless data usage, fixed-to-mobile substitution, and continued demand for broadband access should fuel low- to mid-single-digit revenue growth.

2. **Capex spending on 5G technology is limited**

   5G will not be a major capex driver in the near term. We expect capex to stay at around 15% of revenues, driven by network upgrades and expansions in fixed and mobile networks.

3. **Financial management will emphasize low leverage and liquidity**

   We believe financial discipline will support leverage reduction in 2020-2021. In addition, issuers will focus on foreign-exchange risk management and liquidity.

**Latin American telcos are in good shape to weather a difficult 2020**

We consider that macroeconomic conditions in Latin America will be a key driver of the sector’s growth, and headwinds to economic activity in key markets will have direct implications on demand. In our view, however, telcos are generally well equipped to withstand a scenario of sluggish growth, particularly because low leverage and sound liquidity provide comfortable financial flexibility. We project low- to mid-single-digit
revenue growth, spurred by higher mobile data usage, wireless subscriber growth, and demand for broadband. We expect EBITDA margins above 30%, which is credit-positive, and we expect this to continue over the next couple of years. In particular, margins will be supported by higher-margin mobile postpaid and broadband service revenues. However, a contraction of EBITDA margins below 30%, within the context of relevant downside economic risks, could trigger increasing pressure on leverage metrics.

Chart 310
LatAm Key Financial Indicators

Source: S&P Global Ratings

Data usage will continue to grow
We expect data consumption will continue to grow, particularly as the region catches up with other parts of the world in terms of service penetration among both consumers and businesses. Mobile penetration remains relatively low in Latin America, at about 70%. We expect an increase in 4G and 4.5G wireless coverage across most operators, which is likely to drive higher data usage and revenue in the next few years. In 2019, the region reached the milestone of 450 million internet users, which represents a penetration rate of about 70%. For 2020, we expect internet subscriber growth in the low single-digit area. Corporate IT and data communication penetration is still relatively low and we expect it to increase in coming years, underpinned by cloud and security services. Penetration growth, however, could be constrained by weak economic growth in the near term.

Capex spending on 5G technology is limited
We project capex to stay at around 15% of revenues, as Latin American countries are slower to roll out 5G services than mature markets. Brazil’s local regulator has announced that frequencies for 5G could be auctioned in the second half of 2020, in the 2.3 gigahertz (GHz), 700 MHz, and 3.5 GHz bands. Commercial operation could begin in 2021, although the new regulatory framework is yet to be approved by Congress. Telefonica has already conducted 5G trials, but we expect sizable near-term investments in fiber optics coverage, considering that broadband remains the most relevant business in the fixed segment.

For the rest of the region, we generally don’t anticipate significant 5G investments in the near term because operators are still in the process of enhancing 4G networks, and we expect a 5G adoption rate of only 10% by 2025. For example, for Mexican operator America Movil, we expect capex allocations to focus on the expansion of fiber, 4.5G technology, and network virtualization. In Chile, we expect capital investments to be
mostly driven by the deployment of the 4G long-term evolution (LTE) network and increased fiber optic coverage.

Financial management will emphasize low leverage and liquidity

Financial discipline has increasingly become a common theme across the region, with an increased focus on reducing leverage. While dividend distributions and share repurchases have slightly increased in recent months, we consider that these type of payments to shareholders will depend solely on performance, and companies would be ready to adjust as necessary, on a case-by-case basis. In addition, companies have been quite proactive in terms of liability management, not only to reduce their cost of debt, but more importantly to extend their debt maturity profiles to mitigate refinancing risk. This was particularly evident in markets affected by political cycles marked by presidential elections, such as Brazil, Mexico, and Argentina. Some issuers have also protected leverage metrics and liquidity by reducing their exposure to foreign-exchange risk. We expect continuity of this general financial policy framework.

Chart 311
LatAm debt maturity profile (% of total debt)

Although the bulk of our rated portfolio companies have very healthy liquidity, liquidity will remain a priority in 2020. We believe that refinancing risks have been largely mitigated, but we think liability management will continue as market conditions permit. Issuers will also continue their efforts to manage the exposure to exchange-rate fluctuations.
Key risks and opportunities

1. Sovereign risk can constrain the ratings on telcos

Low economic growth and political risks have undermined sovereign credit quality in some countries, which will continue to weigh on the credit ratings of important players in the region.

2. Regulatory initiatives could foster growth in some markets

Several countries in the region are preparing or implementing legislation that could be favorable for the sector and improve its growth potential.

3. Selected M&A will continue, but with limited risks to credit metrics

While M&A activity is likely to continue in 2020, we consider that the telcos' financial policies will still prioritize low leverage.

Sovereign risk can constrain the ratings on telcos

We expect weaker GDP growth of 0.9% in 2019 and 1.8% in 2020 for Latin America, which is very low growth by historical standards (the 10-year average is about 2%), and compared with other emerging markets that are averaging 4%. The political environment has also affected investor sentiment in several of the region's largest markets. In Argentina, the opposition's win in the October presidential election and a recent change in policy direction could hamper domestic demand, as financial conditions tighten. We now see the Argentine economy contracting 3% in 2019 and 1% in 2020. Brazil has made progress on key reforms, including pensions, but it has become clear that these changes won't be enough to fix the country's short-term fiscal challenges and slow economic activity. A lack of policy direction and controversial decisions in Mexico act as a drag on the already fragile investor confidence, and has already started to affect consumer spending. And more recently, social unrest in Chile could dent the country's short-term growth prospects.

Such slow economic growth and political risks have undermined sovereign credit quality in some countries, which is a factor that will continue to weigh on the credit ratings of important players in the region. For instance, the negative outlook on America Movil mirrors the negative outlook on Mexico, as we rate the company only one notch above the long-term foreign currency sovereign rating on Mexico. In the case of Telefonica Brasil, we can rate the company above the Brazilian sovereign long-term foreign currency rating of 'BB-', but the rating is limited by Brazil's transfer and convertibility (T&C) assessment of 'BB+', since the company's operations are concentrated in that market. In the same way, we cap the rating on Telecom Argentina at the level of our T&C assessment on Argentina, because only 5% of the company's revenues and EBITDA come from foreign operations. We believe this wouldn't be enough to cover the company's full foreign currency commitments if the sovereign were to further restrict access to foreign exchange and thereby erode Telecom Argentina's capacity to service its foreign debt.

Regulatory initiatives could foster growth in some markets

We expect some regulatory changes for 2020 that could improve the sector's growth potential. In Brazil, the change in the fixed-line segment from a concessions model into an authorizations scheme is still being implemented. Argentina recently carried out a regulatory push to promote infrastructure sharing. In Mexico, we don't expect significant regulatory moves in 2020 because the federal government's austerity policy has reduced the annual budget for the telecom regulator, which in our view limits the regulator's capacity to enhance the existing framework in the near term.
In Brazil, the government continues to discuss a bill (PLC 79) that would allow fixed-telephony concession holders to migrate to the authorization regime. We believe that the bill is positive as the authorization regime is less strict about coverage, regulatory requirements, and price controls. This regulation aims to re-focus capital investments on broadband services, instead of requiring investments in fixed voice telephony. This initiative has been pending since 2017, but it seems that Congress could soon approve the bill.

Slow regulatory updates are holding back the sector’s full convergence in key markets like Mexico and Brazil, and we don't anticipate the approval of significant pro-convergence regulations in 2020. Argentina is one of the few large markets that has been recently pushing convergence, and Telecom Argentina holds a strong market position following its merger with Cablevision last year. In Chile, operators are also focusing on bundling packages of fast broadband and TV, and keeping up the upgrade from asymmetric digital subscriber line to ultra-fast broadband to protect market share.

**Selected M&A will continue, but with limited risks to credit metrics**

In 2019, consolidation increased across the region, led by America Movil’s acquisition of Nextel’s subsidiaries in Brazil. On top of this, America Movil pursued growth opportunities in Central America to further strengthen its footprint in that region. Axtel in Mexico has divested certain noncore assets, and recently signed a $175 million agreement under which Equinix Inc. would acquire three data centers that serve two strategic cities in Mexico.

Brazilian Oi S.A.’s financial difficulties stemming from higher-than-expected disconnections and consequent revenue declines in fixed lines over the past few quarters has led the company to consider divesting several assets in the next two years totaling Brazilian real (R$) 6.5 billion-R$7.5 billion. Some operators in the region may also consider monetizing part of their portfolio to boost shareholder value, improve return on capital, and utilize their telecom infrastructure more efficiently. This could raise important M&A opportunities for incumbent players as early as 2020. While M&A activity is likely to continue in 2020, we consider that the telecom players' financial policies will still prioritize low leverage, limiting the potential for large debt-financed acquisitions.
Asia-Pacific

Key assumptions

1. Growth in data usage is strong, but monetization prospects are uncertain

We expect mobile data usage to continue to rise, but operators' ability to convert this into incremental revenue and earnings is still uncertain given intense competition in many markets.

2. Investment needs for advanced networks remain significant

We expect still-high capex in 2020 amid 5G roll-out and continued network upgrades, as well as spectrum spending. Large capital investments are likely for 5G networks in Korea, Australia, Japan, and China.

3. M&A is likely to continue

We anticipate ongoing M&A activities in APAC as operators seek economies of scale and cost synergies given saturated telecom markets and increasing needs for network investments.

We expect revenue to grow, but credit quality is coming under pressure

We forecast a low-single-digit revenue increase for APAC telcos in 2020, supported by continued growth in mobile data usage and steady but moderating regional GDP growth. However, we expect modest pressure to continue on profitability, due to stiff competition, with deeper cuts in wireless tariff pricing. Competition remains intense in many countries, with major operators using aggressive pricing strategies and the entrance of new operators. This, combined with the ongoing large capital spending needs for advanced network deployment such as 5G, could gradually increase downward pressure on credit quality for APAC telecom operators.

Growth in data usage is strong, but monetization prospects are uncertain

We expect mobile data usage in APAC to continue its strong growth. Major drivers include more affordable plans, growth of data-intensive use cases such as video, and enhanced handset capabilities, including the launch of 5G smartphones in many developed countries in particular. For instance, in South Korea, where a commercial 5G wireless service was launched in April this year, the average mobile data usage per user for 5G smartphones recorded 26.6 GB in September 2019, compared to 9.8 GB for LTE users during the same period (source: Ministry of Science and ICT of Korea). For developing countries, increasing high-speed network coverage and rising smartphone adoption is still driving rapid growth in mobile data consumption.

However, it is uncertain whether telcos will be able to convert the data usage growth into incremental revenue and EBITDA. This is because the ARPU growth rate remains pressured in most APAC countries by competitive pricing dynamics in the market. We forecast that modest pressure on ARPU and profitability will continue as mature markets, increased commoditization of services, and regulatory interventions are likely to prevent meaningful improvements in competitive conditions.

Investment needs for advanced networks remain significant

We expect capex to modestly increase in the region in 2019 and remain high in 2020, amid the deployment of advanced networks such as 5G. In our view, large capital investments for 5G networks are likely to continue in developed countries such as Korea, Australia,
Japan, and China. In particular, we expect Korean telecom operators' capex to increase 20%-30% in 2019 and remain elevated in 2020, as the country was the first to commercialize 5G wireless services globally in April 2019, and is still expanding service coverage across the nation. Compared to Korea, we believe Chinese and Japanese operators have relatively more room to flexibly manage investments without significantly increasing capex. Meanwhile, we expect ongoing sizable capex in developing countries such as India, Thailand, and Indonesia, due to continued investment in 4G LTE networks, and for acquiring 5G spectrum.

Chart 312
APAC telcos’ capital expenditure

![Capex and % of revenue graph]

Source: S&P Global Ratings

M&A is likely to continue

We expect M&A activities to continue in APAC in 2020 as operators pursue cost synergies, economies of scale, and 5G readiness through convergence and industry consolidation. In recent years, consolidation activity has increased across APAC. Telecom carriers pursued mergers to realize scale benefits and synergies from combined resources to deal with increasing competition in the respective wireless markets.

In 2018, Vodafone India and Idea Cellular completed their merger to counter intense competition from new entrant Reliance Jio (Jio). However, the transaction didn’t succeed in easing competition in the industry, which remains intense and pushed Vodafone-Idea Ltd. into third place behind Jio and Bharti Airtel. In Australia, TPG and VHA announced merger plans in 2018 to take on market leaders Telstra and Optus, with the focus on realizing scale benefits and preparing for 5G rollout. However, the merger has been opposed by the Australian Competition and Consumer Commission and is pending in the federal court for a final ruling. Another key merger between Axiata and Telenor’s Asian operations has been called off due to deal complexities. However, we believe that Axiata is still exploring other options, including consolidating country-specific operations, which could pave the way for more consolidation in the region.

Mergers of telecom and cable or media companies also continue in certain advanced markets. In South Korea, two of the country’s three mobile operators are pursuing the acquisition of cable TV operators (SK Telecom Co. Ltd. of Tbroad and LG Uplus Corp. of CJ Hellovision) to strengthen their competitiveness in the pay-TV business.
Key risks and opportunities

1. Competition is intensifying, with aggressive pricing and new entrants
Major operators in India, Singapore, Philippines, and Taiwan are adopting aggressive pricing strategies to maintain their market positions, resulting in profitability pressure. Given some governments’ initiatives to encourage competition, the entry of new operators could further intensify competition in Japan, Singapore, and Australia.

2. Although positive in the longer term, 5G could be credit-negative initially
5G has had a positive impact on wireless ARPU and subscriber numbers after its launch in South Korea, but it came with higher marketing cost and capex. This can be slightly credit-negative initially, but in the medium-to-long term, may be offset by further ARPU growth and the development of new 5G use cases.

3. The economic downturn could take a toll on smaller operators
Substantially weaker economic conditions could curtail consumer spending on content and connected devices, and access to capital markets could tighten. We think this poses risks, particularly for the ratings on some smaller operators in emerging markets.

Competition is intensifying, with aggressive pricing and new entrants
Major operators in India, Singapore, Philippines, and Taiwan are adopting increasingly aggressive pricing strategies to defend their market positions, which has resulted in profitability pressure in these markets. Furthermore, following government initiatives to promote competition in recent years, new operators have entered the markets in Japan, Singapore, and Australia.

In India, after the entry of Jio in September 2016, incumbent mobile service providers Bharti Airtel and Vodafone Idea are facing stiff competition and a tariff war. Jio is set to become the largest player by revenues after almost three years in operation, but the industry might have shrunk by 35% since Jio's launch. Competition in Singapore is also intensifying due to the impending commercial launch of the country's fourth licensed telecom operator, TPG Telecom. Tariffs in Singapore have already fallen substantially across the board in the past two years, following the influx of MVNOs. In Australia, competition in the highly competitive mobile market has further intensified since TPG Telecom won the license in 2017 to become Australia's fourth mobile operator.

In Japan, Rakuten Mobile became the country's fourth mobile operator, receiving a mobile license in April 2019. The company plans to launch its mobile services in 2020, and aims to use new network technology to gain a significant cost advantage over rivals. Rakuten's entrance comes at a time when Japan's telecom market already faces increasing price competition after years of pressure from the government. The government-mandated operators cut tariffs sharply, which resulted in market leader NTT Docomo reducing some rates by as much as 40%. Also, in Philippines, the entry of Dito Community slated for 2020 will disrupt the long-held duopoly in the country, which could intensify price competition as we expect Dito to compete on prices, given the weaker coverage at its inception.

Though positive in the longer term, 5G could be credit-negative initially
5G is making rapid progress in developed markets in APAC. In South Korea, 5G uptake has been strong since the commercial rollout in April 2019, aided by operators’ extensive marketing. The success comes despite a limited rollout focusing on dense urban areas. Over three million subscribers (representing close to 5% of total wireless subscribers)
have opted for 5G services in the first five months after launch, and we expect Korea's 5G subscriptions to further increase to around five million by the end of this year.

**Chart 313**

**Cumulative 5G Subscribers In Korea**

![Cumulative 5G Subscribers In Korea](image)

*Korea switched on 5G services to general consumers from April 05, 2019. Source: Ministry of Science and ICT, S&P Global Ratings.

Despite aggressive tariff plans to promote initial 5G uptake, South Korean telecom carriers have recorded a modest rebound in ARPU in recent quarters, halting the downward trend over the past few years. We expect ARPU to further improve for Korean telcos over the next 12-24 months as data consumption grows at a faster pace, aided by 5G speeds and the pricing of larger 5G wireless plans at a premium to 4G plans. That said, despite increasing ARPU, Korean telcos like SK Telecom and KT Corp. have reported a drop in profitability since the 5G launch, driven by higher marketing expenses and subsidies on 5G devices. Together with higher capex from further 5G development, this will likely result in a modest increase in debt over the next one-to-two years.

**Australia** is the second country in APAC to launch commercial 5G services. The country’s leading operator Telstra launched 5G mobile services in May 2019 and has started building out coverage in 10 cities, while the second-largest player, Singtel Optus, has launched 5G fixed-wireless broadband services in several cities. Both companies remain relatively aggressive in their 5G buildouts and plan to expand their network over the next 12 months.

Australian telcos are also very keen to grow their 5G-based fixed wireless broadband business, so that they can bypass non-profitable national broadband network (NBN) resale. At present, the telcos need to pay high fixed-line-network access charges to government-owned National Broadband Network (NBN) for its provision of broadband services, which continues to pressure earnings. We do not expect 5G fixed wireless broadband networks to completely replace NBN in the near-to-medium term, given the heavy capital spending requirements and some players' stretched financial positions. Still, over the longer run, we expect technological advances and high mobile network investment to slowly tilt the balance in favor of 5G wireless broadband services. Although we expect Australian telcos to remain relatively aggressive in their 5G buildouts, 5G capital spending is unlikely to be a large lumpy step-up, given our view of a gradual 5G evolution.

**Japan** also plans to launch 5G commercial services by the spring of next year, ahead of the 2020 Summer Olympics in Tokyo. Earlier this year in April, the Japanese government allocated spectrum to the four mobile operators in the country. Although the investment
In 5G network and infrastructure will result in increased capex for the telcos over the next one-to-two years, we do not expect a significant jump in the incumbents' incremental capital outlays thanks to the advanced nature of their current network, with nationwide fiber optic and 4G LTE. Still, we foresee Japanese players' revenues and earnings coming under pressure over the next one-to-two years amid intensifying competition, with a new entrant and regulatory pressures lowering tariffs.

China’s three state-run telecom operators, China Mobile, China Telecom, and China Unicom launched 5G mobile services in early November 2019 in 50 cities including Beijing, Shanghai, and Shenzhen. The initial response in China has also been strong, with close to 10 million subscribers registering before the launch. We believe China will continue to expand its 5G network aggressively as it plans to extend coverage to all 300 plus cities by the end of 2020, and remains committed to gaining global leadership in developing 5G technology. We do not expect the high investments to weigh on the financial metrics of the Chinese incumbents, which remain well-positioned to endure the high capital spending thanks to their strong financial resources, particularly for the largest player China Mobile.

The economic downturn could take a toll on smaller telecom operators

We project APAC GDP growth to slow to 5% in 2019-2020, down from 5.5% 2018, and our economists see macroeconomic risks increasing. Substantially weaker economic conditions could curtail consumer spending on content and connected devices. This could hurt some smaller emerging-market telecom operators that are already struggling with high competitive intensity in their respective markets. Additionally, certain smaller players may also be affected by the ongoing trade and technology conflict between the U.S. and China. In APAC, many operators use network equipment from Chinese vendors such as Huawei and ZTE, owing to their attractive pricing, good technology, and vendor pricing support. However, a ban on Huawei could increase operators’ equipment costs and delay technology upgrades. Furthermore, tighter access to credit markets could increase the cost of debt and refinancing risks, particularly for smaller operators in emerging markets.

Related Research

- Credit FAQ: Why Telecom Companies Across Europe Are Selling Their Towers, Oct-11-2019
- Credit Implications From AT&T’s New Capital Allocation Plan, Financial Outlook, And HBO Max Launch, Nov 7, 2019
- How "Green" Are Telecom Green Bonds?, Sep 9, 2019
- Webcast Replay: Huawei Ban’s Credit Impact on Telecom and Technology Sectors, Jul 13, 2019
- Bans On Huawei Will Hit Tech Harder Than Telecom, But Not Enough To Move The Ratings. Jun 12, 2019

This report does not constitute a rating action.
Industry forecasts

Telecommunications – Fixed and Wireless

Revenue growth (local currency)

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Cable and Satellite

Revenue growth (local currency)

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EBITDA margin (adjusted)

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EBITDA margin (adjusted)

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Debt / EBITDA (Weighted Average, adjusted)

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Debt / EBITDA (median, adjusted)

Chart 319

FFO / Debt (median, adjusted)

Chart 21

FFO / Debt (median, adjusted)

Chart 22

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. OEMs—Original equipment manufacturers. FFO—Funds from operations.
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Cash and equivalents / Total assets

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Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Transportation

Slowing global economy and trade raise risks for transportation

What’s changed?

A coordinated cooling of major global economies. S&P forecasts global GDP growth of 3.3% in 2020 with eurozone growth slowing to less than 1.5%, a one-in-three chance of a U.S. recession, and Chinese GDP growth of less than 6%.

Some freight transportation sectors feeling the pressure. A slowing global trade has reduced the growth of marine container shipments and negatively affected package express companies.

Airlines are faring better but the outlook is cloudy. Relatively healthy conditions in the consumer and service sectors have so far supported passenger demand, though global traffic growth has cooled from the above-trend rates in recent years.

What to look for in the sector in 2020?

Fuel price volatility ahead. The U.S./Saudi confrontation with Iran could cause temporary oil price spikes. Tighter marine fuel regulations will likely increase prices for various transport fuels in the first quarter of 2020.

Global supply chains pull back and diversify. U.S.-China trade tensions are leading corporates to diversify their manufacturing sourcing away from China, potentially changing freight transportation patterns.

Brexit uncertainty continues. Despite U.K. and EU assurances that flights will continue post-Brexit and airlines preparations to minimize any such disruption. Unforeseen developments could lead to some short-term traffic disruptions.

What are the key medium-term credit drivers?

Will the slowdown turn into a recession? Our modeling indicates that lower fuel prices and (in some cases) scaling back on share buybacks should cushion downgrades somewhat, though earnings will still take a hit.

Environmental and technological change add uncertainty. The electrification of some modes of transportation, is likely over the long term, though the credit risks are relatively less formidable than for auto manufacturing.

Labor costs rising. Shortages in key labor groups—pilots (less so in the EU), aircraft mechanics, and truck drivers—have pushed up compensation in some markets.
Ratings trends and outlook

Global Transportation

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Ratings distribution by region

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Ratings outlooks

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Ratings net outlook bias

Airlines

Key assumptions

1. Global air traffic growth slows to about 4% per year
Airline traffic expanded rapidly in recent years (7%-8% annual growth) buoyed by relatively healthy consumer spending in most major economies, manageable fuel prices, and the spread of low-fare, low-cost airlines. We expect growth to continue to cool for the remainder of 2019 and beyond but remain fairly healthy and close to the long-term expected trend of 4%-5% per annum.

2. Shipping fuel regulations will likely raise jet fuel prices in Q12020
The Jan. 1, 2020, implementation of the International Maritime Organization’s (IMO) low-sulfur fuel requirements will lead to shifts in oil refinery production and have a temporary indirect effect on the prices of other transportation fuels, including jet fuel. We expect this pressure to ease after the first quarter of 2020, though airlines may be challenged to pass through the increased costs amid a softer global economy.

3. Boeing’s 737 MAX returns to service (finally)
While the timing of its regulatory clearance keeps getting pushed out, we assume Boeing Co.’s 737 MAX aircraft will return to service sometime in early 2020, likely starting in the U.S. and continuing in phases around the globe thereafter. The grounding of the 737 MAX has hurt the affected airlines but helped constrain industry capacity growth somewhat, which is boosting load factors to record levels and helping improve ticket pricing.

The global airline industry has outperformed relative to overall economic growth and the performances of some other transportation sectors in recent years, though the results vary by region. For example, airlines operating in North America, a relatively mature and consolidated market, have generated most of the profits, though the airlines in Europe and Asia have reported lower but still respectable earnings. Airline bankruptcies (not rated) have ticked up, but in most cases these appear to reflect company-specific missteps (e.g. overly aggressive growth) as much as they do weak regional or market conditions. Still, the extremely competitive European airline industry could benefit from further consolidation and capacity reductions. Our stable outlook on Latin American airlines, particularly in the largest market of Brazil, reflects growing demand and rational adjustments to capacity but continued exposure to exchange rate and fuel price volatility.
Key risks and opportunities

1. The economic slowdown could turn into an outright recession
The weakness in manufacturing could negatively affect consumer confidence and spending and become a drag on travel demand. The airlines appear better positioned, particularly in North America, to withstand this than in the past due to their more-prudent capacity decisions, the less aggressive strategies by the big low-cost airlines (Southwest and WestJet), and their ability to save cash by cutting back on share repurchases. These conditions apply to a lesser extent in most other markets.

2. Airlines are preparing for Brexit but uncertainty remains
The airlines we rate have been thoroughly preparing themselves to minimize any disruptions from a Brexit scenario. Both the U.K. and EU have given repeated assurances that flights will continue post-Brexit. In our view, it is in both parties’ interests to ensure smooth air traffic. In September 2019, the U.K. and EU updated their temporary air services agreement for the 12-month period ending Oct. 31, 2020, to allow flights between the two areas under a no-deal scenario. However, the agreement does not allow majority U.K.-owned and controlled airlines to operate intra-EU services after Brexit. Indeed, all airlines with EU operating licenses will be need to be majority owned and controlled by EU nationals.

3. Upside potential for some airlines
Some large airlines are bucking this trend as we have upgraded IAG and subsidiary British Airways, Deutsche Lufthansa, Air Canada, and United Airlines in recent years and have a positive outlook on the latter two companies as of this date. Their better operational performances and prudent financial policy decisions have been the key factors behind their improvement.

There has been much discussion about whether airlines, particularly those in the consolidated North American market, are fundamentally more stable and less cyclical than in the past. Our view continues to be that the airlines in some regions have definitely improved thanks to their increased pricing power from consolidation, the spread of ancillary fees (e.g. baggage charges) that appear to be more stable than base fares, their management teams’ focus on more careful capacity growth and maximizing their return on investment, and the less aggressive growth and pricing by the large low-cost airlines. That said, airlines remain sensitive to economic conditions, vulnerable to changing oil prices (if they do not hedge, as most big U.S. airlines do not, unlike their European counterparts), at periodic risk from terrorism and war, and face gradually increasing labor costs. What would this mean in a normal recession? We would expect materially lower (but still positive) earnings, some downgrades, but no bankruptcies among the large airlines. That would be a marked improvement relative to the last two recessions, which forced most of the North American airline industry into bankruptcy and set a rather low bar for improvement.

Other markets are seeing some of the same positive trends but often to a lesser degree. For example, Europe has more airlines that we rate in the investment-grade category than North America (currently four) but its industry consolidation is not as far advanced and the large low-cost airlines (such as Ryanair) are growing (and pricing their fares) more aggressively than their North American counterparts. In other regions, such as Latin America, many airlines have to contend with the added challenge of managing the mismatch between the currencies in which they sell their tickets and the large component of their costs denominated in U.S. dollars (for fuel and aircraft). Accordingly, a
potential further strengthening of the U.S. dollar against other currencies, which might occur amid a geopolitical or economic crisis, could pressure these airlines’ liquidity.

The airlines that we rate have been preparing themselves to minimize disruptions ahead of the U.K.’s departure from the EU. For example, low-cost carrier easyJet PLC has set up a European subsidiary in Austria that has an air operator’s certificate in the EU member state. This will enable easyJet to continue to fly intra-EU routes, provided that the airline is majority owned and controlled by EU nationals. easyJet has been proactively engaging with EU-27 member state investors and has achieved just over 50% ownership and control by EU nationals. We believe it can maintain this level, if necessary, via provisions in its articles of association that allow for restrictions on voting rights or forced share sales by non-EU national investors.

However, uncertainty remains as to whether the U.K. and EU will reach an air services agreement before their temporary agreement expires. Nevertheless, we expect that both parties would at least extend the temporary agreement if necessary to minimize any disruption to air connectivity between the blocs. Despite planning for such a scenario and taking steps to address any predictable risks, we believe air traffic could be disrupted by unforeseen and difficult-to-predict developments, particularly under a no-deal Brexit scenario. Regardless, we believe any disruptions would likely be short-term in nature.
Shipping

Key assumptions

1. Dry-bulk charter rates will remain at healthy levels in 2020

Dry-bulk shipping rates came under pressure in the first months of 2019 due to a combination of factors, including a disruption in iron ore trades following the collapse of Vale S.A.’s tailings dam in Brazil. However, this negative trend reversed during the second quarter of 2019 and we forecast that dry-bulk rates will stabilize at their current recovered levels in 2020 on balanced demand and supply conditions as commodity imports from China stabilize and the global fleet expands at just a low single-digit percent rate.

2. Tanker charter rates will remain on a positive trajectory

We expect that supply and demand in the oil shipping industry will continue to gradually rebalance, which should support a cyclical upturn for tanker rates in 2020. Despite relatively high fleet growth at the start of 2019, tanker rates have been robust this year and remain higher than in 2018. We expect deliveries of new tankers to decline in 2020 and anticipate that the IMO’s new low sulfur regulation will help curb the supply of ships while buttressing tanker rates.

3. Container liners will largely recover IMO 2020 related fuel cost inflation

Container liners will either pass through or return future bunker cost increases or decreases (typically closely linked to crude oil price movements) to their customers via higher or lower freight rates. We also assume that our rated container liners will pass through any IMO 2020 compliance-related bunker costs with a time lag of a few months.

At the start of 2019, dry-bulk charter rates suffered heavily from the disruption of iron ore trades after the collapse of Vale’s tailings dam and were further weakened by weather-related supply issues in Australia and subdued demand for major dry-bulk commodities from China (the world’s largest importer). Nevertheless, the average rate for a one-year time charter for a large Capesize vessel recovered to more than $21,000 per day between July and October 2019, which compares with about $15,000 per day in the first half of the year as per Clarkson Research. We expect rates to stabilize at about their recovered levels in 2020 as commodity imports to Asia (in particular China) recover while the vessel order book sits at close to its 15-year low.

For product tankers (which carry refined petroleum products and chemicals), we anticipate a moderate recovery in rates in 2019 thanks to an improved supply and demand balance. In 2020, tightening oil-product inventories, a continued shift of refining capacity to the Middle East and Asia and away from major importers, and additional volumes stemming from the IMO 2020 regulation should boost demand. This, combined with slowing fleet growth (with the slimmest order book among shipping sectors) will lead to a further moderate uptick in product tanker rates.

Containership owners are benefiting from a low order book (about 10% of the global fleet) thanks to relatively muted new order activity since 2015. Combined with funding constraints and the IMO’s 2020 fuel regulation, the industry’s tightening supply-and-demand balance will likely underpin moderately better charter rates in 2020.
Key risks and opportunities

1. The IMO's 2020 low-sulfur regulation will shake up the industry

Most shipping companies will meet the stricter IMO 2020 requirements--to cut sulfur emissions to 0.5% as of January 2020--predominantly by using low-sulfur-compliant bunker oil or cleaner alternative fuels. However, with prices for these compliant fuels expected to rise, their earnings stability and ultimate survival (particularly for smaller, more vulnerable players) will depend on their ability to effectively pass through increased fuel costs to their customers.

2. Sluggish trade volumes and additional trade tariffs

Sluggish demand trends, most notably stemming from the ongoing U.S.-China trade dispute, and additional trade tariffs could impede the rebalancing of supply and demand conditions.

3. Supply fundamentals continue to improve

Year to date, the scrapping of vessels has been higher than last year and we expect more scrapping in 2020, particularly for drybulkers and containerships, as IMO 2020 becomes effective. This, combined with significantly diminished shipyard capacity and scarce funding, will reduce supply growth and better position shipping companies to cope with rather sluggish demand trends. The significant ordering of new vessels remains a risk to this fragile balance in the medium term because a vessel ordered today would not likely be delivered before mid-2021 depending on the shipping segment.

Ship owners can meet the Jan. 1, 2020, IMO requirement by using cleaner bunker or alternative fuels, which we expect will become more expensive than the currently widely used heavy fuel oil, or by investing in approved equivalent methods, such as exhaust gas cleaning systems (commonly known as scrubbers). However, these are costly and, if stricter regulations are put into place, there is no guarantee that they will continue to meet regulatory requirements.

Although increased vessel capital and operating costs will likely translate into higher freight rates over time, shipping is a competitive, cyclical, and often thin-margin business and companies may have to bear some of these costs on their own, particularly in the short-term. Negotiating power in any freight market comes down to simple fundamentals of supply and demand and frequent oversupply in this industry remains an enduring issue. The shipping companies' exposure to this risk varies depending on the nature of the contracts with their customers and other factors. We believe the larger industry players, such as A.P. Moller-Maersk A/S, CMA CGM S.A., and Hapag-Lloyd AG, will have the most success in passing on these costs due to their better bargaining power with their customers and the protective pricing mechanisms embedded in contracts covering close to half of their transported volumes. The recovery of fuel cost inflation will likely come with the typical time lag of a few months and, as such, the companies' liquidity must be strong enough to cover this extra working capital need. Smaller players will likely struggle if they lack the necessary bargaining power and liquidity buffer and may find it difficult to continue to operate.
Railroads

Key assumptions

1. Operating efficiency improvements should continue

Following the successful implementation of precision scheduled railroading (PSR) at the large Canadian railroads and CSX, the North American Class I railroads have adopted these operating efficiency initiatives. Because of this, their operating ratios (operating expenses divided by operating revenues) have improved in recent quarters despite the lower volume of carloads. Most railroads are still in the early stages of implementing PSR as they look to minimize customer and network disruption. Therefore, we believe their operating efficiency will continue to improve in 2020 as their PSR implementation progresses.

2. Volumes will remain pressured by lower GDP growth

Many railroads saw declining carload volumes for most of 2019 due to a combination of lower freight demand and increased competition from trucking. Lower GDP growth and reduced industrial output in the U.S. pressured North American railroad volumes, while flooding in the Midwest contributed to reduced agricultural volumes. Given the ongoing uncertainty regarding international trade, we expect their carloads to decline somewhat further in 2020 as GDP growth continues to slow.

3. Shareholder returns remain high

With improved profitability and lower capital spending needs, we expect most North American railroads to continue to return capital to their shareholders through higher dividends and ongoing share repurchases. In recent years, the railroads’ free cash flow was supported by a lower federal tax rate and reduced capital spending. We do not expect the railroads to experience materially higher tax expenses or capital expenditure in 2020, which should support increased shareholder rewards.

Although their volumes have declined somewhat in 2019, the profitability of the North American railroads has continued to improve as they have begun to implement PSR. We expect the railroads to continue to work through their PSR implementation in 2020, which should help support their profitability as volumes remain soft. PSR should also help limit their capital spending requirements. As railroads run fewer—but longer—trains at higher speeds, the need for additional railcars and locomotives declines. Barring an unexpected increase in fuel costs or an economic recession, we expect that the railroads will be able to support shareholder returns in line with those of recent years in 2020.

The freight railroads we rate in South America, mostly in Brazil, carry commodities to ports for export and benefit from high utilization and a favorable pricing environment. They have completed substantial investment spending, though there is potentially additional capital expenditure associated with their bidding for government-granted concessions to operate. Railroads in Mexico continue to benefit from demand to move agricultural products and autos, in particular. We do not expect the recent trade pact (successor to NAFTA) agreed to by Mexico, Canada, and the U.S. (but not ratified by all) to significantly affect cross-border moves if implemented.
Key risks and opportunities

1. Excess trucking capacity persists
Following a prolonged period of tight trucking capacity in the U.S., supply has begun to exceed shipping demand, leading to reduced truck pricing. This makes railroads less competitive with trucks for the freight they carry in containers and trailers. If truck pricing continues to remain low, railroads may lose some business to truckers and might be less able to increase their rates, especially for intermodal traffic, which would pressure their revenue.

2. Improved operating efficiency leads to increased share repurchases
If railroads are able to realize a greater-than-expected improvement in their profitability from operating-efficiency initiatives, or if the implementation of PSR leads to greater-than-expected reductions in their capital spending requirements, the companies would likely increase their shareholder rewards. While they would likely fund a higher level of share repurchases and dividends, at least in part, with internally-generated cash, we would expect the railroads to also issue additional debt. This could lead us to reassess their financial policy.

3. Operating-efficiency improvements make rail shipments more attractive
As part of the PSR implementation, companies are revising their schedules, increasing their speeds, and providing greater visibility into their customers' shipments. These improvements could make railroads a more compelling option for some shippers that previously used other transportation modes or were dissatisfied with their rail options. However, PSR also tends to offer less flexibility in scheduling trains to accommodate customer preferences, thus shippers' choices will likely vary from case to case.

We expect carload volumes to decline somewhat in 2020 as lower economic growth, soft industrial output, and increased trucking capacity persist. Although consumer demand has remained strong, railroads have a greater exposure to commodities and the raw materials used in industrial applications than other forms of transport. Moreover, intermodal shipments, which are more exposed to consumer goods, face increased competition from trucking, where carriers have reduced their rates in response to excess supply. To date, railroads have been able to partially offset some of their declining volumes by raising rates. While we expect rail volumes to remain pressured in 2020, we believe the railroads will still be able to realize rate increases, which should help support their revenue.

PSR has now become a common practice among most North American Class I railroads. Initially implemented by chief executive Hunter Harrison at Canadian National, Canadian Pacific, and CSX, these operating-efficiency initiatives focus on developing more uniform and tightly scheduled train operations to minimize the amount of required assets, crews, and operating costs. Therefore, the operating ratios (operating expenses, including depreciation, as a percent of revenue) of the railroads have improved to record low (favorable) levels across the industry. We expect their operating ratios to continue to improve in 2020 as the companies work to further implement PSR by consolidating their trains, increasing network speeds, and closing terminals. As their asset requirements decline, their fuel costs remain mostly flat, and their significant capital investments--such as for positive train control--taper off, we expect the railroads to continue to focus on shareholder returns. Nonetheless, we believe significantly higher share repurchases are unlikely and expect the industry to focus on returning a level of cash that is consistent with prior years.
Transportation Equipment Leasing

Key assumptions

1. GDP and trade growth decline from recent levels

Slowing GDP growth will continue to dampen the demand for, and pricing of, leased marine cargo containers and railcars. In addition, truck lessors could experience weaker demand due to excess trucking capacity in the U.S. However, these sectors have the ability to reduce their capital spending to meet weaker demand and have started to do so, which is supporting their relatively stable utilization and cash flow.

2. Demand for aircraft leasing remains strong

Although we expect the growth in air traffic to moderate from its recent 7%-8% annual levels, it should still lead to continued strong demand for aircraft. This demand is driven by a variety of demographic factors, including young people and retirees spending more of their disposable income on travel and higher income levels among the growing middle class in countries like China and India.

3. Access to capital remains readily available

Most transportation assets are very financeable on both a secured and unsecured basis. With the decline in capital spending, there has been less need for capital in certain sectors. However, the availability of capital for aviation assets remains abundant on both a secured (particularly aircraft-backed securitizations) and unsecured basis (mostly by leasing companies), especially for companies we rate as investment grade. We expect these trends to continue in 2020.

There has been reduced demand for equipment that transports freight due to weaker economic growth and trade tariffs, which is an environment we believe will likely persist into 2020. Typically, lessors enter into shorter-term leases at lower lease rates during periods of weaker demand in the expectation that, when demand recovers, they will be able to renew their leases with higher pricing and for longer terms. This, along with their reduced level of capital spending, allows them to maintain high utilization. True to form, this situation has played out in the current environment. For the most part, the earnings and cash flow of the lessors have held up. Thanks to their reduced capital spending, some companies are generating positive free operating cash flow and using the proceeds for share repurchases.
Key risks and opportunities

1. The “freight recession” could be prolonged

The demand for certain equipment types that transport freight could remain subdued, particularly for railcars, trucks, and marine cargo containers. This previously occurred during the financial crisis of 2009-2010. Over that period, transportation equipment lessors reduced their capital spending and used their free cash flow to reduce debt such that their credit metrics actually improved despite the decline in their revenue.

2. Lower lease rates and residual values if the grounding of the 737 MAX continues

Many aircraft lessors have already leased out some of the MAX aircraft that are currently grounded, which means they continue to generate lease revenue. However, they have hundreds more on order to be delivered through the mid-2020s. Thus far, there have not been any material order or lease cancellations. But, the longer the grounding persists the more difficult it will become to place MAX aircraft on lease, potentially reducing aircraft values and ultimately leading to impairment charges for the aircraft lessors.

3. Access to capital tightens

Transportation equipment leasing is very capital intensive and the sector relies on having access to capital. Even during the financial crisis, most lessors maintained access to capital, albeit at higher rates. In addition, many lessors have well-laddered debt maturities and substantial unencumbered assets, which they could use as collateral for secured financings if necessary.

The credit ratios of transportation equipment lessors tend to be countercyclical. Even during periods of prolonged economic weakness, similar to what we saw during the financial crisis, we would expect these companies to generate strong cash flow, reduce their capital spending, and use free cash flow to reduce their debt (in some cases while continuing to repurchase their shares). In this kind of environment, their credit metrics have remained relatively consistent or even improved. With the exception of aircraft lessors that have large order books, the lead time for ordering new assets is relatively short. In addition, in past economic upturns shortages of transportation equipment led to high lease rates and longer lease terms. For those aircraft lessors with large order books, we believe the long-term trend for increased passenger travel and the need to replace older, less cost-efficient aircraft will support continued strong demand.

The credit quality of many of the customers of these lessors tends to be weak (particularly the shipping lines and airlines). However, lessors often collect security deposits and/or maintenance reserves to mitigate this weakness and typically incur relatively low write-offs when a customer defaults and they have to repossess their equipment. For example, over the last two years there have been a large number of airlines that have shut down, yet aircraft lessors have generally been able to repossess and re-lease their aircraft in a relatively short period of time. While we expect further airline insolvencies due to the weakening economy, competitive industry conditions, and--for some companies--a mismatch between the revenue they generate in local currencies and the large percentage of their costs paid in U.S. dollars, we don’t expect these factors to have a materially negative affect on the aircraft lessors we rate.
Related Research

– Boeing Co. Outlook Revised To Negative From Stable On Reports It May Have Misled FAA On 737 MAX; Ratings Affirmed, Oct. 22, 2019

This report does not constitute a rating action.
Industry forecasts

Global Transportation

Chart 334
Revenue growth (local currency)

Chart 335
EBITDA margin (adjusted)

Chart 336
Debt / EBITDA (median, adjusted)

Chart 337
FFO / Debt (median, adjusted)

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Cash, debt, and returns

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Fixed versus variable rate exposure

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Long term debt term structure

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Cash and equivalents / Total assets

Chart 343
Total debt / Total assets

Source: S&P Global Market Intelligence, S&P Global Ratings calculations
Utilities - Asia Pacific

Burning issues include resets and renewables

What's changed?

Renewables drive capex. Utilities in much of the region will need to invest to broaden the energy mix. This burden will hit at a time of slowing energy demand.

Subsidy ride ends in China. The country's renewables sector will have to get by largely on market competitiveness, as major subsidies for development and generation head toward expiry. However, incentives for first dispatch will continue to boost offtake versus coal.

India's investments to slow. Leading power companies in India will see less frantic investments over the next two years as demand slows and the existing gap in network narrows.

What to look for in the sector in 2020?

Regulatory resets. Australia and several Southeast Asian countries face regulatory resets at a time when governments are worried about consumption, given slowing GDP growth. Pressure for lower tariffs could mount.

Narrowing headroom. While outlooks are stable for developed-market utilities, we expect financial headroom to narrow. This is due to declining returns combined with limited scope to reduce investments.

Coal-fired generation. The sector's competitiveness in China will continue under pressure from softer demand and market reforms. Across the region, pressure to phase out and decommission remains high as renewables supply grows.

What are the key medium-term credit drivers?

Energy mix. China's targets on renewables remain the region's most ambitious in terms of transition. Elsewhere energy-mix changes are also key issues, with fossil fuel first on the chopping block in oversupplied markets.

Financing costs for coal. We expect investors to shy away from fossil fuels as "green" mandates become increasingly important. Coal is particularly vulnerable to rising costs as a result.

Climate-related calls. The politics of climate change could lead to big changes in Australia's gas development, China's nuclear agenda, and still high demand for gas.
Ratings trends and outlook

Utilities---Asia Pacific

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Ratings distribution

Chart 345
Ratings distribution by country/region

Chart 346
Ratings outlooks

Chart 347
Ratings outlooks by country/region

Chart 348
Ratings outlook net bias

Chart 349
Ratings net outlook bias by country/region

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

Utilities--Asia Pacific

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Debt/EBITDA (median, adjusted)

Chart 351
FFO/Debt (median, adjusted)

Chart 352
Cash flow and primary uses

Chart 353
Return on capital employed

Source: S&P Global Ratings, S&P Global Market Intelligence. All figures are converted into U.S. dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO--Funds from operations.
Australia and New Zealand

Key assumptions

1. Lower returns for regulated utilities

Low interest rates imply lower regulated returns on utilities (network/pipes) where resets are scheduled over the next two to three years. There could be small increases in unregulated/contracted income for some players based on select market opportunities.

2. Margin pressure for Australian unregulated power sector

Low to flat demand, retail price regulation, still-high gas and wholesale electricity prices, and weakening profitability of the baseload coal plants will weigh on margins in Australia. Largely stable operations for New Zealand integrated players based on mean hydrology.

3. High capex for regulated utilities based on approved regulatory allowances

We expect regulated utilities to outperform their allowances for growth and replacement capital expenditure (capex) over the next few years as they see efficient ways to execute them. Projects associated with integrated-system planning are still outside of our assumptions as these are yet to be approved. In contrast we expect only modest increases in capex for the Australian integrated generators/retailers. New Zealand will see some uptick in new generation investment with three players having announced new windfarm or geothermal projects.

Key risks and opportunities

1. Nature of investments will evolve for regulated utilities

External factors will have a greater influence. Rapid growth in renewables, decentralized generation including rooftop solar, and potential for increasing use of batteries will continue to challenge market rules and regulators to determine the focus of investments. We expect growth of the existing regulated asset base to be in the low single digits over the next five to 10 years, as capex plans are closely scrutinized.

2. Negative intervention risks for Australian integrated utilities.

Still-high energy prices (gas and electricity) and costs to end consumers could lead to further negative intervention by the Australian government. Therefore earnings risk remains high for the sector in Australia with greater pressure on smaller players. In New Zealand, pricing pressure is more likely to come from possible excess supply should the energy-intensive Tiwai aluminum smelter close. Tiwai is currently subject to strategic review by its owners and will have to give 12 months' notice prior to its closure.

3. Lower returns to hurt shareholder returns and limit ratings headroom

Expected lower returns of capital over the next two to three years will diminish shareholder returns. If interest rates remain low, we also expect some erosion in the financial headroom for most rated regulated entities. This could limit their ability to undertake large transmission projects being planned or grow in the unregulated/contracted space without adequate shareholder support.
Our rated portfolio of 22 utilities in Australia and New Zealand includes 14 entities that derive the majority of their cash flows from regulated operations. This includes regulated electricity networks (with no exposure to demand) and regulated gas networks (with some exposure to gas volumes). Quite a few face regulatory reset in the next six months to two years—March 2020–June 2021—and our forecasts factor in lower rates of returns in line with the current interest rate environment.

The lower returns will reduce revenue but will be largely offset by lower cost of debt and interest expense. As such, the negative pressure on the cash flow leverage metrics—funds from operations to debt—will not be material enough to affect the ratings. All the rated entities in Australia and New Zealand have built some headroom in the lead-up to the reset in anticipation of lower returns.

New Zealand utilities have already established returns under resets that begin from April 2020. This provides them cash flow visibility to 2025 particularly due to their transition to the revenue cap mechanism.

We expect Australian regulators will remain focused on containing electricity prices for the end consumer. In our view, this will result in more scrutiny of operating costs and capital investment over the next reset period. Growth in the regulated asset base is likely to reduce significantly compared with past resets. Overall, we believe the rated entities will strive to operate within the approved allowances for operations and capex as they have done in the past.

S&P Global Ratings estimates Australia’s real GDP will increase 2.4% annually in both 2020 and 2021. Given the revenue cap for electricity networks, GDP will have limited influence. Gas consumption is largely weather-driven for network owners and hence likely to have minimal correlation to GDP.

### The renewables challenge

The rapid growth of renewable power output threatens the profitability of coal-fired plants in Australia. This will continue to stir debate on whether some dominant but aging coal-fired plants could be decommissioned ahead of schedule due to their declining profitability. Although the earliest coal plant closure is expected in 2022/2023 (Liddell), the government’s decision to underwrite new generation investment continues to present uncertainties for the sector as the details of how this will be implemented are unclear.

Nonetheless, in the past year, wholesale power prices have not shown the backwardation (decline) that the market expected. This was due to high volatility of renewable output, peak demand outside of intraday periods, and several outages of coal-fired plants. Also, backwardation of pricing could be pushed out further with brakes on a few renewable projects due to network constraints.

The above factors, together with regulation of retail pricing, mean earnings pressure remains high for the Australian integrated utilities. Lower churn rates and lower marketing costs will reduce the cost to serve, but these will be at the margin. All the rated entities have estimated the impact of regulatory pricing for the next year or two and the impact is factored into our forecasts for the sector. However, the unknown is how the retail pricing will be adjusted after 12 months from July 2020.

Ongoing drought and high gas prices are also negative for the sector and the option of gas-fired plants to support reliability appears increasingly expensive. Entities with shorter-term gas contracts will be more exposed due to gas pricing.

The recent curtailment of several solar and windfarms has prompted a debate on transmission pricing approach for new projects. Proposals by market regulators do not appeal to the proponents of renewable projects and this space will get some clarity over the next 12 months.
New Zealand

The largely renewable (about 80%) based New Zealand power market is benign given the balanced demand and supply to date. Hydrology risk is factored into our assumptions using mean hydrology as a starting point and assessing the impact of deviations. Rated entities maintain headroom in their finances to manage the hydrology risks, which can lead to some wild swings in cash flows. Intense retail competition has been a feature of this market, keeping pressure on margins.

The New Zealand market could see some excess power and pressure on prices should the Tiwai smelter choose to close down. The smelter accounts for about 13% of power consumption in the country; however the earliest full-year impact is more likely in fiscal 2022. If Tiwai closes, and the three major renewable projects (including geothermal and wind) announced were to progress as planned, then the New Zealand market will likely see more thermal units close, taking the renewables generation to more than 95% of supplies.

Australia

Several gas development opportunities exist in the Australian market. However, whether they can go forward is unclear, given that various regulators and state governments have a moratorium on development of gas resources. Also, high gas prices have led a few players to propose plans for liquefied natural gas (LNG) import terminals, but the progress on design, planning, and implementation has been delayed in the absence of clear energy policies. Likewise, large gas resources (Narrabri, Gallilee, Beetaloo) have been identified but yet to progress, subject to economics and government approvals. Progress of these could then lead to new gas pipelines to connect them to existing grids.

On the network side, the market regulator has identified multiple large-scale transmission lines across the various eastern seaboard states. This is expected to occur in three phases over multiple years to support the grid in adding more renewables and moving power efficiently across the grid. Given the billions of dollars under consideration for these projects, we believe the start of any large-scale development could be a year or two away before it is approved and implemented. Such transmission projects are most likely to be completed by the incumbent transmission operator and eventually roll into their regulated asset base.

Financial policies

The outlook is stable for rated sector companies in Australia and New Zealand. Most of the rated entities have a strong focus on maintaining investment-grade credit profiles, financial buffers, and financial policies. We do not expect this to change over the next 12 months. Further, we expect supportive shareholder behavior or management approaches to dividend distribution to preserve their credit quality and liquidity.
Industry credit metrics

Utilities - Australia and New Zealand

Chart 354
Debt/EBITDA (median, adjusted)

Chart 355
FFO/Debt (median, adjusted)

Chart 356
Cash flow and primary uses

Chart 357
Return on capital employed

Source: S&P Global Ratings, S&P Global Market Intelligence. All figures are converted into U.S. dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
China and Hong Kong

Key assumptions

1. Slowing economy will weigh on energy demand

Slowing growth together with tightened policy and funding conditions on the property sector will weigh on electricity demand in China. In Hong Kong, civil unrest is weighing on the economy.

2. Profit margins may compress across the board

We expect tariff cuts in China’s power sector to compress profit margins of both generation companies (gencos) and grid companies (gridcos) in 2020. Coal gencos will be increasingly exposed to market competition while renewable producers will lose subsidies. Partly mitigating the above are the value-added-tax (VAT) cuts beginning 2019 and the softening coal prices.

3. Clean-power additions will keep capex elevated

In China, gencos are spending both to meet regulatory power-mix requirements, and also ahead to rush renewable projects to completion before subsidies on such development activities are ended in 2021. Hong Kong’s spending on power infrastructure will be compensated by raising tariffs.

Slowing economy will weigh on energy demand

S&P Global Ratings estimates China’s real GDP growth will slow to 6.2% in 2019 and 5.8% in 2020, from 6.6% in 2018. This together with a clampdown on policy and funding for the property sector will weigh on electricity demand. In China, the secondary industry dominated by manufacturers consumes roughly two-thirds of electricity, with 25%-30% of total electricity consumed by the top-four energy-intensive sectors.

We expect electricity consumption to rise by 4%-5% over 2019-2020, compared with 8.6% in 2018. Softer demand may squeeze coal power more than renewable energy, which is protected by prioritized dispatch to the grids. Under China’s renewable portfolio standard (RPS), gridcos are incentivized to first offtake the pre-set minimum quota of renewables in each province. In addition, scheduled commissioning of mega hydropower plants such as Wudongde and Baihetan with full capacities of 26.2GW and a few new nuclear power projects in 2020/2021 will pressure coal power in the eastern coastal provinces.

As cleaner energy relative to coal, natural gas is supported by Chinese policy and its consumption will continue to grow faster than GDP. Nevertheless, we estimate that growth will decelerate to 10%-12% for 2019-2020, from the high teens in 2017-2018. The tapering effect of coal-to-gas conversion in northern China, and the slowing economy, will slow down new connections as well as gas sales.

In Hong Kong, we estimate the economy will increase a mere 0.2% in 2019, and recover modestly to 1.6% in 2020. This is down from 3.0% growth in 2018 and due mostly to the impact of civil unrest. That said, we expect the consumption of electricity and gas is more affected by temperature and major infrastructure developments in this city. In our base case, we assume no growth of sales in electricity and gas in 2019 and modest growth in 2020.
Margins will likely narrow

Potential tariff cuts in the power sector will compress profit margins across the board, from gencos to gridcos in 2020. On-grid tariffs for coal power are likely to fall by 3%-5% against the backdrop of softer demand and accelerated market-based sector reform. Some mitigation is likely in the way of VAT cuts in 2019, and continued softening coal prices in 2020 as more capacity comes on stream.

We expect tariffs and subsidies for approved solar and wind power projects operating before April 2016 will continue to be paid largely on time. However, subsidy delays for later projects will continue to jeopardize the operating cash flows and liquidity of developers. Moreover, subsidies for new solar and wind capacities have been reducing in recent years, and since 2019 some pilot projects are even subsidy-free. From 2021, all new capacity for onshore wind power and utility-scale solar power should be subsidy-free and achieve tariff parity with coal power, followed by offshore wind in 2022.

Tariff resets in the second regulation period of 2020-2022 may pressure the profitability of gridcos, in our view. The gridcos have already felt the pinch on returns since China began to regulate transmission and distribution (T&D) tariffs on the model of permitted returns. In the second regulation period of 2020-2022, regulators will likely be more stringent in the supervision of the regulated asset bases, capital expenditure (capex) and operating expenses of gridcos. This could translate into lower tariffs, and a decrease in operating cash flows if volume growth is also moderating at the same time.

Gas utilities which operate the city-gas distribution networks will be facing the issue of timely pass-through of higher import costs of liquefied natural gas (LNG) and new piped gas to customers. China’s reliance on gas import has been increasing over years. Imported LNG and piped gas together provides over 45% of China’s natural gas. Upstream suppliers in China have also raised the costs by converging the city-gate gas prices in peak and nonpeak seasons, and prices for households and commercial and industrial (C&I) users.

Under a regime introduced in 2017 by China’s top planning body-- but implemented with different timing by local governments-- returns on city gas distribution are capped at 7% and have a mechanism to adjust for input costs. However, execution lacks transparency, and timely pass-through in the event of large cost hike, especially households, is untested. Especially at the time of slowing economy, the governments tend to intervene and require the energy price cuts for social and political considerations. Furthermore, connection fees charged on new customers, a significant source of profit, is now under scrutiny due to a new policy to cap the return on 10% of costs. Overall, we expect the gas utilities will face margin pressure, although the impact may be moderated by increasing volumes.

In Hong Kong, the regulatory framework insulates two integrated power companies from both volume and price risks. The track record on permitted returns and cost pass-through is good, and in line with terms specified in the scheme of control agreements (SoC) signed with the Hong Kong government. The latest15-year SoC agreement commencing from 2019 reduced the rates of return by 20%, and the lower returns and cash flows have been factored in our current rating analysis.

Although the regulation on the gas utilities in Hong Kong is light, the cost pass-through record is so far satisfactory.

Capital expenditure remains elevated for a cleaner generation portfolio

Elevated capex for China’s major gencos in 2019-2020 relates to fast expansion of their renewable capacities, especially wind power, either through new builds or acquisitions. Plans to remove the renewable subsidies are also accelerating spending.
We expect large state-owned genco groups to keep an eye on new opportunities of investing in clean energy assets (renewables and hydro power) outside China such as in Europe and South America. In contrast, private renewable developers constrained by their stretched liquidity and limited financing capabilities will stick with lower capex and investment plans. They may even look to sell some capacity to state-owned buyers, or earn service income from building or operating the plants rather owning them.

In China’s oligopolistic T&D sector, State Grid Corp. of China (A+/Stable/--), will be more disciplined in domestic-market capex in light of decreasing returns. The company is likely to spend less than its average level in recent years. In contrast, China Southern Power Group (A+/Negative/--) will continue to invest heavily in upgrading distribution and rural power networks and to support key infrastructure projects, such as in the Greater Bay Area of Guangdong province. We expect large gas utilities to keep a stable capex in pipeline construction to accommodate organic growth. In the meantime, they will also deploy capital to expand into the integrated energy business as a new growth driver.

Hong Kong-based power utilities plan their capex in accordance with the government’s five-year development goals. In addition to maintenance, they are also spending on building up new gas-fired facilities to meet Hong Kong’s 2030 fuel mix target. CLP Power Hong Kong Ltd. (A+/Stable/A-1) and Hongkong Electric Co. Ltd. (A-/Stable/--) are jointly investing in the Hong Kong offshore LNG terminal project, which involves the use of floating storage and regasification unit technology for the first time in Hong Kong. This is approved capex and as such is entitled to permitted returns and compensation via base tariff hikes if necessary.

Key risks and opportunities

1. Coal takes the most heat in deregulation

Coal-fired power is the most deregulated segment, with nearly 50% of offtake traded on a market basis rather than through set tariffs. Across the value chain, upstream and downstream will deregulate the most, while China will tighten some regulations on midstream power T&D.

2. 2020 is a critical year in the run-up to on-grid parity on renewables

Prices for renewables and coal power will likely converge in most regions of China in the next one to two years. Once subsidies are pulled as planned, China’s renewables sector will be pressured to further improve cost competitiveness, which we believe is positive for the sector’s long-term and sustainable growth. The impact on operating cash flows from subsidy-payment delays remains a chronic issue.

3. National pipeline initiative will shake up the natural gas industry

The company leading this initiative will likely be incorporated this year, leading to a restructuring in the natural gas supplies and bigger spending on related infrastructure. We expect China’s gas prices will fluctuate more frequently with global trends. Meanwhile, city gas companies may be compelled to invest in upstream assets, and if so, large capital spending could expose gas utilities to very different risk profiles.

Deregulated power market pressure coal the most

China’s ongoing power sector reform aims to deregulate the upstream generation and the downstream retail market, while tightening the regulation on the midstream power transmission and distribution. It aims to liberalize the electricity price for C&I use which
accounts for 60%-70% of total power consumption in China. Electricity prices for public welfare, such as households and agriculture, will continue to be regulated.

Reforms are accelerating, especially for coal power. Nearly 50% of coal power is traded on a market basis, mostly via direct power sales (DPS) to large industrial users on the arm-length basis. DPS prices are generally 10%-20% cheaper than the benchmark on-grid tariffs for coal power. China is also pushing ahead to set up provincial electricity spot trade markets on a pilot basis.

In 2020, the benchmark tariffs for coal power will be replaced by a base tariff plus a floating adjustment mechanism. This will further open up the market for the general (i.e., smaller) C&I companies which can purchase coal power on the new terms from January 2020. The direction on coal power tariffs will be downward in the near term, given falling coal prices and softer demand. Indeed, in announcing the new tariff mechanism, Chinese officials already alluded to the expectation that of no upward adjustment in 2020 and tariffs for general C&I would move downward only. (see “End Of Benchmark Tariffs May Zap Profits For China’s Power Generators,” Sept. 30, 2019).

In a more liberalized generation market, we expect inefficient coal-power supply will be phased out by market forces, and those units with high efficiency and low costs may stand out. Under policy incentives, the gridcos will prioritize dispatch of renewables, and fossil-fuel-based power will compete on the cost basis.

**Renewables on-grid parity is coming but subsidy delays may persist**

China targets to remove its national subsidy for new capacity of onshore wind power and utility-scale solar power from 2021, and offshore wind power from 2022. Hence, on-grid tariff parity of renewables with coal power is likely to happen in most regions of China in the next one to two years. Once subsidies are pulled, China’s renewables sector will be pressured to further improve cost competitiveness, which we believe is positive for the sector’s long-term and sustainable growth. The returns on renewables will be lower but normalized and free from the negative impact on operating cash flows from subsidy-payment delays, a chronic issue.

National renewables subsidies have already been reducing in recent years against the backdrop of technology upgrades and declining investment costs. From 2017 and 2019, the on-grid tariffs of on-shore wind power were cut by 15%-30% and utility-scale solar power by 35%-40%. The reductions also relieve fiscal burdens, given snowballing subsidy obligations due to rapid growth of renewables in recent years.

2019 and 2020 are critical years for China’s renewables sector in the run-up to on-grid parity. In 2019, a bidding process was introduced for new subsidized solar power capacity, subject to a total limit of RMB3 billion allocated for this year by the Ministry of Finance. In addition, previously approved subsidized wind power projects are required to speed up the construction in due course, otherwise the subsidy will be forfeited. China also launched the pilot subsidy-free program in 2019-2020. Subsidy-free projects will benefit from prioritized dispatch to grids ahead of all other generation and fixed on-grid tariffs under a 20-year power purchase agreement with gridcos. There have been 22.79GW subsided projects and 20.76GW subsidy-free pilot projects approved so far this year, which may contribute to the installation in 2019-2020.

We don't expect a quick fix for the prolonged delay of renewable subsidies. In the backdrop of slowing economic growth and policy goals to lower costs for manufacturers, the government has ruled out the possibility of increasing the levies on C&I consumers. Those levies are the key source of funding renewable subsidies, and we estimate the accumulated deficits exceed RMB200 billion. By the end of 2018, only 29% of solar power and 76% of wind power operating capacities were covered by the national renewable energy subsidy catalog and receiving subsidies.
For the projects operating since April 2016, unpaid subsidy receivables are a drain on operating cash flows. Significant interest expenses further stretch their cash flows as most projects are financed by 70% or above debt. Most developers, especially solar power, aggressively expanded capacity during 2016-2017 to take advantage of high tariffs. Private developers are particularly saddled with subsidy delays and liquidity stress because of their narrow financing options and high funding costs.

**Looming national pipeline company is to shake up the natural gas market**

The long-awaited formation of national pipeline company (NPC) is likely to be officially announced soon. This is a big step and will shake up the industry. NPC is expected to consolidate all the cross-regional backbone gas transmission pipelines owned by the three state-owned oil majors. China National Petroleum Corp. (CNPC; A+/Stable/--) currently owns nearly 70% of long-distance domestic natural gas pipelines and is the sole importer of piped gas.

Domestic pipeline construction is well below government targets. The underdevelopment of infrastructure may constrain the sector growth, especially after China imports more LNG and the piped gas from Russia (East line) and Turkmenistan (Line D). NPC is tasked with raising long-term funds by introducing strategic investors and public offering and speeding up the pipeline construction.

NPC will also accelerate the market-based natural gas pricing reform. In the midstream sector, China will enhance the regulation on monopolistic gas transmission by NPC and the transmission tariffs. Ultimately, natural gas prices will be driven by the demand and supply on a market basis.

In anticipation of the NPC, city gas utilities, especially those major players with a national presence and increasing free operating cash flows, may invest in upstream asset to secure gas supply and stabilize costs. That said, we believe gas supply will still be dominated by oil majors in China. We expect LNG terminals, non-conventional gas production, or overseas oil and gas assets would be likely target investments by city gas companies. However, upstream business may require large capital spending and expose gas utilities to very different risk profiles. Recently, we placed our ‘BBB+’ issuer credit rating on ENN Energy Group Co. Ltd. on CreditWatch with negative implications as a result of a shareholder restructuring, partly aimed at vertical business integration within the ENN group.

City gas utilities may face increased fuel cost volatility as natural gas prices are gradually liberalized after NPC is formed. Because of significant gas imports, China’s domestic natural gas price will be linked more closely with the world price and will see more cost fluctuation. Currently the government intervenes on domestic gas prices to suppress them and reduce the frequency of adjustments. CNPC has in the past suffered huge losses for importing costly gas outside China. Hence the rising cost fluctuation will test pass-through policies, and we see this to be a major uncertainty for Chinese gas utilities.

Kunlun Energy Co. Ltd. (A/Stable/--) is likely to sell off its transmission assets, namely four Shaanxi-Beijing pipelines, and its LNG terminals to NPC. Midstream transmission and LNG terminals account for about 50% and 20% EBITDA respectively of the company, and the contribution from LNG terminals is increasing. This divestment could have credit implications, subject to the pricing and group business strategy.
Industry Trends

Acquisitions by state-owned buyers is not the elixir for private developers

Merger and acquisition activity is heating up in China's renewable energy sector. In many transactions, state-owned energy groups are seeking to buy either assets or shares of private renewable energy developers. They are spearheading portfolio upgrades to cleaner fuel because the state-owned gencos have much strong market positions, government support, and funding capacities. Meanwhile, many private companies are facing liquidity or funding stress. We revise our outlooks on two private solar developers to: placing our 'CCC+' issuer credit rating on Panda Green Energy Group Ltd. on CreditWatch with negative implications, and revising the outlook on our 'B+' rating on GCL New Energy Holdings Ltd. (B+/Negative/--) to negative. Both companies face liquidity stress. Their outlooks depend on whether their asset/share divestment plans can materialize and can materially improve their cash flows. China Huaneng Group Co. Ltd. (A-/Stable/--) is proposing to acquire 51% in Hong Kong-listed GCL New Energy, but the transaction is subject to many hurdles including multiple approvals of various regulators.

In a similar case, a major waste-to-energy (WTE) company in China, China Jinjiang Environment Holding Co. Ltd. (CJE; BB-/Positive/--) completed in August 2019 its change of company control from a private group to the state-owned Zhejiang Energy Group Co. Ltd. We changed its rating outlook to positive, to reflect our expectation that the new SOE shareholder will help improve CJE's access to funding, lower its financing costs, and assist its business development in a competitive WTE market.

Nuclear power is on the rise

China has the world's fastest-growing nuclear generation fleet. Unlike other markets, China has never halted its expansion of nuclear power plants (NPPs) since the first NPP started in 1985. China has established a complete supply chain and accumulated rich experience and a skilled work force in the design, construction, project management, and operation of NPPs. By 2018, China's total installed nuclear power capacities reached 44.6GW, ranking third in the global nuclear league table. That said, nuclear power accounted for only 4.2% of electricity generation in 2018, well below the global average of about 10%.

The credit quality of nuclear companies such as China General Nuclear Power Corp. (A-/Stable/--) reflects the balance between their ambitious investments and state support. In addition, State Power Investment Corp. Ltd. (SPIC; A-/Stable/--), one of China's five largest power generations groups ("Big Five"), also made a break-through in commissioning its first majority-owned nuclear power projects in October 2018. We expect SPIC will significantly improve its cash flows and profitability in 2019, benefiting from its sizable and growing clean energy portfolio.

All new nuclear projects must be third-generation (G-III) reactors to ensure safety and security. In 2019, three new nuclear projects have been approved for construction. We gauge China may prioritize to use its self-designed G-III reactor, HPR1000, in new projects to avoid unexpected technology boycott from other nations.

Nuclear power will be cost-competitive in China compared to most generation options in the foreseeable future. Although renewable energy will continue to see cost declines and lead capacity growth in China, the bottlenecks of resource constraint and intermittent nature of their supply will constrain renewables unless there is breakthrough in energy storage. In addition, construction costs of HPR1000 reactors will be going down when construction starts on more projects of this design, thanks to the learning-curve effects, modulized production, and higher localization of equipment. Higher facility utilization hours and longer design life of G-III will also support its cost competitiveness.
Financial Policy

The financial policy of Chinese utilities, especially the state-owned gencos, is generally less supportive to ratings due to their debt-driven growth strategy. The Big Five have grown their capacities significantly in the past decade to address growing energy demand, and their stubbornly high capex led to high leverage. Their ratios of total liabilities to total assets (gearing ratio) all hover above 80%. On the other hand, profitability and cash flows are volatile and vulnerable to fuel cost swings due to tardy tariff adjustments by regulators.

The Big Five are under great pressure to deleverage. The State Assets Supervision and Administration Commission (SASAC) has set targets for each central-government owned enterprises to lower their gearing ratios by 2020 and closely supervises their investment plan and profitability. For example, China Huadian Group (A-/Stable/--), and SPIC aim to achieve gearing ratio targets of 70% and 75% respectively by 2020.

The Big Five also employ various measures to deleverage, such as introducing strategic investors, public listing of operating assets, debt for equity swaps, and issuing perpetual bonds (perps). S&P Global Ratings treats those perps as debt because they are either senior in the capital structure, or provide high step-up coupons and short call periods—conditions that do not meet our criteria for equity treatment.

In our view, high capex will continue to weigh on the Big Five’s leverage and credit strength, and their deleveraging efforts will pay off only if the companies keep improving profitability and recapitalize their balance sheet with real equity finance.

Ratings Trends

We see slightly increasing negative bias in the Chinese utilities, but most ratings remain on stable outlook partly attributable to the strong government support. Private renewable developers which are saddled with subsidy delay and limited financing capabilities have more negative outlooks.
Industry credit metrics

Utilities - China and Hong Kong

Chart 358
Debt / EBITDA (median, adjusted)

Chart 359
FFO / Debt (median, adjusted)

Chart 360
Cash flow and primary uses

Chart 361
Return on capital employed

Source: S&P Global Ratings, S&P Global Market Intelligence. All figures are converted into U.S. dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO--Funds from operations.
South and Southeast Asia

Key assumptions

1. Moderate demand growth in line with GDP growth
   Slowing economic growth will result in moderating demand growth for South and Southeast Asian countries. Increasing share of renewables will put extra downward pressure on coal-fired power plant operators in India.

2. Regulatory stability for most markets
   Indonesia is most at risk of continued intervention and delayed compensation on suppressed tariffs. India’s regulatory settings remain solid but some weaker states and distribution companies may have trouble making timely payments.

3. Lower capex, with more focus on distribution than generation
   While spending by major Indonesian utilities remains steady, we foresee significantly slower spending by major Indian utilities. Indian capex on generation will be led by renewables. Moderate capex and leverage to continue to be for Singapore and Malaysia.

Slowing GDP cycle, combined with slower structural drivers

We expect moderating electricity demand for South and Southeast Asian countries. This is in step with slowing growth rates in the region. Structural drivers are also waning, with narrowing gaps in electrification.

In India, weaker industrial demand and falling auto sector volumes will weigh on electricity demand. We expect demand to increase by about 5% in 2020, lower than nominal GDP; we also see increasing downside risk to GDP growth in India. In addition, we expect greater variations in peak demand and average demand loads, as rising temperatures support stronger demand in summer. An increasing share of renewables in the energy mix will continue to put downward pressure on plant load factor for coal-based power plants like NTPC Ltd. (BBB-/Stable/--).

Indonesia is likely to register electricity unit demand growth of about 5%, largely in line with the GDP growth. Our estimate is lower than the 6.86% annual growth expected under the government’s National Electric Generation Plan 2018–2027.

We expect similar trends of growth in line with GDP growth for more developed markets like Malaysia and Singapore.

Regulatory stability with some risk of intervention

We expect broad regulatory continuity in the South and Southeast Asia region. However, we notice rising risks of intervention.

Perusahaan Perseroan (Persero) PT Perusahaan Listrik Negara (PLN; BBB/Stable/--)-- Indonesia's dominant power utility--will continue to remain dependent on the government for timely payment of subsidies. This is because regulatory tariffs do not fully recover the cost plus 7% margin under PLN’s tariff framework, and electricity prices have not been adjusted since 2015. However, in addition to subsidies, pre-election tariff caps put in place in 2018 have been extended for 2019 and the government has yet to compensate PLN for the deferred compensation. This is putting further pressure on cash flows.

In India, regulated utilities continue to enjoy fixed tariffs with return on equity and cost recovery. At the same time, payment delays from weak distribution utilities remain a
long-standing weakness. However, some states, such as Andhra Pradesh, are delaying payments, attempting to renegotiate executed contracts, and resorting to curtailment. While we expect contractual sanctity to be upheld by the courts, we believe any signs of contractual renegotiation by distribution companies will have a long-term negative impact on cash flow visibility and the power sector outlook in India.

Malaysia is building on its track record of semi-annual tariff adjustments for Imbalance Cost Pass-Through (ICPT) which is an important step for stability in cash flows of integrated power major Tenaga Nasional Bhd. (BBB+/Stable/--) . Tariff resets in the Philippines continue to be delayed, though we still expect the cost pass-through mechanism to be maintained for Manila Electric Co. (BBB-/Stable/--) on the next reset.

**Slowdown in capex investments, more T&D, less generation**

We are seeing clear signs of lower capex in some of the larger markets like India and Indonesia . Generation capex is expected to decline with slower demand growth and near 100% electrification levels (though actual levels are disputed). Further, we expect greater investments to strengthen networks through capex in transmission and distribution (T&D) systems.

In India , renewables lead capex while spending at coal-based plants is largely to meet replacement needs for base load rather than growth. We expect NTPC and Power Grid Corp. of India (BBB-/Stable/--) to invest capex of US$3 billion-US$4 billion each in fiscals 2020 and 2021, compared with US$4.5 billion-US$5 billion annually in the past two years.

PLN in Indonesia will likely maintain annual spending of Indonesian rupiah (IDR) 90 trillion on investments, with some potential for under spending planned budgets. Capex in mature markets like Singapore and Malaysia is likely to be driven by replacement and refurbishment needs.

**Key risks and opportunities**

1. **Delayed deleveraging in India and Indonesia**

   While declining, investment spending remains high, especially in Indonesia. The market continues to fund Indian power firms despite high debt to EBITDA, offering little incentive to deleverage. Subsidies support Indonesia market leader PLN, offsetting other pressure on cash flows.

2. **Energy transition and higher refinancing risks**

   Countries including India and Thailand will be investing in renewables or other alternatives that are cleaner than coal. Thailand may pursue hydro projects in neighboring countries. Over time, we expect coal-fired generators will face refinancing risk as investors show preferences for "green."

3. **Expansions into new markets and new segments**

   Many electricity producers are seeking to expand their renewables portfolio. In India, we see acquisition of operating assets as the preferred route. Notable also are investments in new markets for some regional players, or lateral moves into transmission or other segments of the electricity delivery chain.

**Delayed deleveraging in India and Indonesia**

We believe leverage will remain high for most rated utilities in India and Indonesia. This is due to investments for growth (even if lower), lags in cash flows during the investment phase, and no significant improvement in operating performance. Regulatory surprises remain a recurring issue.
Renewables in India continue to be funded at or above 6x debt-to-EBITDA ratios as they pursue growth opportunities. We have not seen any signs of sponsors/issuers taking measures to improve financial discipline and reduce existing high leverage. This is despite operating underperformance due to resource risk. Potential working capital pressure due to payment delays by distribution counterparties is also rising. Large market leaders like NTPC and Power Grid Corp. of India are likely to maintain high single-digit ratios of funds from operations (FFO) to debt supported by the regulatory framework.

In Indonesia, PLN's ratio of FFO to debt will remain at 7%-8%, bolstered by subsidies. We expect modest leverage for Singapore and Malaysian utilities with existing strong financials and moderate capex investments.

Energy transition and higher refinancing risks

In our view, an energy transition is underway in the region as key markets shift away from fossil fuels. That said, the pace and impact differ widely.

In India, renewables are now more competitive than coal plants. However, falling tariffs, reducing returns, and increasing payment delays create uncertainties for growth.

Setting up new fossil fuel-based plants in Thailand remains challenging due to social and environmental concerns. Operating facilities in neighboring countries for large hydro and thermal power plants will thus remain crucial to reduce dependence on gas-based plants in Thailand.

Singapore is unlikely to have a large proportion of renewables (5% by 2030) and will remain dependent on gas. We do not see a very clear plan or traction in Malaysia and Indonesia to drive up renewable investments, though we see some uptick in interest and investments in Indonesia.

We believe refinancing risks will keep rising for coal-based plants. This is in line with global trends in investor preferences for green and clean. OECD banks have become cautious and, in some cases, selective in refinancing existing exposures. Investors are also becoming more cautious about long-term refinancing for coal-based power plants. In the medium to long term, coal plants will likely bear higher costs for debt.

Expansions into new markets and segments

Slowing growth, new technologies, and energy transition can result in some rated utilities exploring new investment opportunities. For example, Indian renewable players such as Greenko Energy Holdings (B+/Stable/--), are exploring integrated projects with hydro and other technologies as a means to meet base-load requirements. We believe existing players prefer acquisitions of operating renewable projects to scale up, because this route lowers execution risks.

Tenaga in Malaysia has made small investments in new markets including India and Turkey. ReNew Power Ltd. (BB-/Stable/--), a renewable generation player in India, is exploring investments in the transmission sector, though primarily focused on Green corridors (supporting transmission of renewables). We believe these new markets and segments offer interesting growth opportunities for rated players. However, the ability of the companies to successfully expand in these new business areas can affect the stability of cash flows as well as leverage if risks are not appropriately managed. The impact will differ from company to company.
Industry credit metrics

Utilities - South and Southeast Asia

Source: S&P Global Ratings, S&P Global Market Intelligence. All figures are converted into U.S. dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Related Research

- Research Update: State Power Investment Corp. Ltd. Rating Affirmed At 'A-' On Strong Contribution From Clean Energy; Outlook Stable, Oct. 30, 2019
- Economic Research: Hong Kong Protests Push Local Firms Into Unfamiliar Turf, Oct. 9, 2019
- End Of Benchmark Tariffs May Zap Profits For China's Power Generators, Sept. 30, 2019
- Research Update: China Southern Power Grid Outlook Revised To Negative; 'A+' Rating Affirmed, Sept. 30, 2019
- Why India's Power Utilities Need Uday 0.0 Before 2.0, Aug. 19, 2019
- China Clears The Air On Solar And Wind Subsidies, April 16, 2010
- External Risks Could Overshadow Healthy Operating Conditions For South & Southeast Asian Infrastructure Companies, Feb. 11, 2019
- China's Subsidy-Free Renewable Energy Projects May Spur Debt Increase For Developers, Jan. 16, 2019

This report does not constitute a rating action.
Negative outlook in the face of strict regulations

What’s changed?

The sector outlook has turned negative. The main drivers are harsher regulatory resets on the back of lower cost of capital, sovereign pressure, and expansionist strategies. We believe credit quality may deteriorate as a consequence.

ESG matters more. Energy transition remains an impetus for investments in the sector. But there are now more considerations arising from regulators: excellent service quality is a prerequisite while affordability is the new mantra.

Lower interest rates, higher leverage? Cheap and abundant capital has pushed financial leverage up to boost returns. And regulators are concerned.

What to look for in the sector in 2020?

Investments continue to peak. Investments in the sector continue to increase well above historical averages as a result of the need to improve the reliability of an aging asset base, and to integrate new infrastructure for renewables generation.

Adapting to stricter regulations. Substantial cuts in remuneration combined with regulators’ demands for greater service quality may lead us to review the supportiveness of some regulations. And ultimately ratings.

Political pressure beyond regulation. With the rise of populism across Europe, affordability of public services is high on the political agenda. This, combined with nationalization or re-municipalization risk, further pressures utilities.

What are the key medium-term credit drivers?

There’s more differentiation among networks. Gas infrastructure assets are more at risk from energy transition policies and geopolitics. We also see electricity distribution networks becoming key enablers of energy transition.

Operating efficiency will increasingly influence ratings. Utilities face zero-tolerance on service quality, increasing complexity of operations, and tighter cost controls. Penalties emerge if they fail, operating performance is key.
Ratings trends and outlook

Utilities – EMEA Regulated

Chart 366
Ratings distribution

Chart 367
Ratings outlooks

Chart 368
Ratings outlook net bias

Industry credit metrics

Utilities – EMEA Regulated

Chart 369
Debt / EBITDA (median, adjusted)

Chart 370
FFO / Debt (median, adjusted)

Chart 371
Cash flow and primary uses

Chart 372
Return on capital employed

Source: S&P Global Ratings, S&P Global Market Intelligence. All figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO--Funds from operations.
Industry Outlook

Key assumptions

1. Macro-environment remains favorable

Cheap and abundant capital, low but positive economic growth, and voluntary environmental policies all point to favorable trends for the sector, and have clearly benefited past financial performance. The energy transition is accelerating investments to networks, which are notably achievable thanks to favorable financing conditions.

2. Stricter regulatory reviews, beyond remuneration cuts

The drawback of cheap capital is that regulators reflect this in upcoming tariff reviews – and will eventually even try to catch up on past gains. This leads to severe cuts to remuneration and ultimately jeopardizes rating stability. What’s more, regulators have also introduced more penalties related to operating performance, ESG indicators, and service quality, while control on costs is tightening. The challenge for utilities is to reconcile tighter remuneration with significant investment requirements.

3. Political risk, again and again

Given their crucial role in society, utilities have always been a target for politicians. With mounting populism across Europe, such scrutiny is not abating. Given the substantial cost of energy transition, affordability is a major theme, again pressuring remuneration. Any service quality issue places heavy financial pressure on operators, including their license to operate. The specter of nationalization and/or remunicipalization of networks is never far away.

The macroeconomic environment remains broadly favorable

Quantitative easing from the ECB has favored the utilities sector in recent years and we expect issuers to continue benefiting from the low cost of debt in 2020 (see chart 372). Cheap funding is key to delivering the considerable investments to be made in the sector over the coming three years.

Chart 373

Long Rate (10Y Avg)
Low but sustained economic growth (see chart 373) in Europe provides additional support to the sector, while inflation remains well under control.

We do not see Brexit being a major hurdle for U.K. utilities and we also believe that the sector remains largely immune to ongoing global trade wars, primarily owing to its inherent local activity. Major macroeconomic threats will scarcely affect sector performance, in our view.

More important is the continuous (and increasing) political focus on energy transition and environmental considerations. This plays a role at the European level, where the authorities have set ambitious targets that will require substantial investments in infrastructure over the coming decade. It’s also a national matter: governments have their own plans to fight climate change and utilities have a key role to play.
Some of our ratings on utilities are facing negative sovereign rating pressure, for example in Italy. This is because we view domestic utilities as closely linked to their local economies and we rarely disconnect their credit performance with that of the sovereign.

**More stringent regulatory reviews, beyond remuneration cuts**

Regulations have tightened for forthcoming regulatory periods. We have historically considered that European regulated utilities benefit from broadly supportive and stable frameworks that enhance their credit quality and ratings. During 2019, we have seen unexpected regulatory developments. Specifically, material remuneration tightening, risk of non-recoverability of certain costs, and asymmetrical incentive schemes for the forthcoming regulatory periods in several markets, could undermine the supportiveness of certain regulations in our view. We constantly reassess our view of European jurisdictions, based on new developments, and will continue to do so as final methodology frameworks and remuneration levels are publicly known.

Affordability and service quality are a growing focus. Regulators are proposing new regulations with an increasing focus on ESG factors, affordability, and a willingness to reflect the lower cost of capital in a low interest environment. This puts additional pressure on utilities, including greater costs and investments to meet more stringent requirements – eventually entailing cash flows. Overall we believe improvements in operating efficiency will become even more critical for cash flow performance and ultimately ratings. We believe we may therefore see more rating distinction among networks, depending on their ability to meet these more stringent requirements.

Ratings on U.K. utilities are under pressure. With regulatory reviews, Brexit, and political scrutiny over tariffs and service quality, U.K. water and energy utilities face several threats to credit quality (see "U.K. Utilities Are Feeling the Heat," published June 14, 2019, on RatingsDirect).

Spain announced remuneration cuts to electricity networks and uncertainty remains for the upcoming regulatory review of the gas sector. At the end of October, the Spanish regulator published its final determination on electricity networks, leading notably to a remuneration cut to 5.6% from 6.5%, broadly in line with propositions published earlier this year. While this will negatively affect the earnings of electricity network operators, we already factor this into our current ratings. The proposed reform on gas, however, remains uncertain and may have a more negative impact on our rated entities (see...
“Various Rating Actions Taken On Spanish Gas DSOs And TSOs Following Regulatory Proposal,” published July 25, 2019, on RatingsDirect).

Upcoming regulation in Sweden reveals ongoing tensions. Swedish electricity DSOs also face severe cuts in remuneration and potentially weakened ability to recover costs in the 2020-2023 regulatory period. This is mainly due to a planned decrease in weighted average cost of capital (see “Are Regulatory Framework Changes Threatening The Credit Quality Of Swedish DSOs?” published Aug. 21, 2019 on RatingsDirect). The regulator published in late October its tariff determination, although details were not communicated and we understand that most operators will appeal the decision in court.

**Political risk, again and again**

While regulators across the continent are generally insulated from political intervention, they remain subject to political pressure to reduce prices for consumers, but also improve service quality and environmental standards.

ESG risk factors have been high on the political agenda. This has attracted significant media coverage in 2019. Several utility companies have come under public pressure and been criticized by the public and politicians for mishandling these risks--for making excessive profits, lacking transparency, mistreating vulnerable customers, underinvesting in aging assets, and failing to protect the environment. As a result, utility companies are now subject to more stringent regulatory requirements, including for leakage reduction (water), lower service interruption (power), and better customer service generally. In parallel, ESG risk factors play an important role in investment decisions made by market participants.

Talk of renationalization of utilities is adding uncertainty. Opposition parties--for example the Labour Party in the U.K. and the Five Star Movement in Italy--are proposing to bring key utilities back into public ownership. This has raised significant concerns among private investors. Such a scenario is not our base case at this point. Nevertheless, if utility companies did move into public ownership, we would consider rating them as government-related entities (GREs). Our general analytical approach to GREs is to consider their credit quality as falling between the inclusive bounds formed by the GRE’s stand-alone credit profile (SACP) and the sovereign rating. Any uplift from the SACP depends on our opinion of the likelihood of sufficient and timely extraordinary government support of the GRE in meeting its financial obligations, which we derive from
our assessment of the GRE's role for and link with the government. Currently, there are significant uncertainties about the effect on the sovereign ratings, how utilities would be managed after a renationalization, whether it would affect their regulatory framework and whether a renationalization policy would render the sector less attractive to investors and ultimately hinder their ability to access capital markets to finance their capex.

Beyond talk of nationalization, we also see remunicipalization moves in district heating and local energy distribution networks. This means municipalities take back control of assets and operations at license renewal. While still too limited to call it a regional trend, we see this as an additional risk for the sector--again triggered by affordability, service quality, and environmental considerations.

![Chart 378: Negative Outlook Split by Rationale](source)

![Chart 379: Negative Outlook Split by Country](source)
Key risks and opportunities

1. Investment pipeline set to peak over the next three years

We see investments jumping from 2019 onward. This is first and foremost propelled by energy transition and the need to connect and manage huge new renewable power generation projects. Continuous network improvements, to maximize reliability, resilience, and safety, will also increase investment momentum. Uninterrupted service for power is more crucial than ever, while water leakages run counter to more stringent environmental targets. Utilities are no longer able to defer such investments. On top of this, there could be M&A risk.

2. Low cost of debt has pushed leverage up, weakening rating stability

For some time we have seen utilities’ financial outperformance being largely driven by financial engineering. In other words, more debt. This was helped by very low interest rates, which ultimately did not penalize cash flow metrics. Over the past two years, we have placed more focus on debt to EBITDA, in our analysis, to reflect this trend. And it is fair to say that stretched balance sheets have weakened the ability of certain utilities to cope with tariff cuts. This has increased pressure on ratings. Ultimately, financial policies will play a key role in rating transitions for the sector.

3. More differentiation across network types

Another key development is more differentiation between networks. On one hand, we believe that gas infrastructure is now less favorably positioned within energy transition, as reflected by the European Commission taxonomy. What’s more, mounting geopolitical tensions may further undermine the long-term viability of some gas routes in Eastern and Central Europe. On the other hand, we see electricity DSOs having a greater role to play in decentralized energy and energy management – to the extent they are sufficiently equipped to face these industry challenges.

The investment pipeline will peak over the next three years

We see investments in rated electricity networks rising to accompany energy transition and adapt to climate change. This includes:

- Connecting more renewables to the network and building substations for offshore wind farms.
- Building new transmission lines from remote, less dense areas, to high consumption zones.
- Upgrading networks to improve reliability and to manage the increasing intermittency of power sources.
- Improving network resilience (for example, shifting from overhead powerlines to underground cables).

For non-power networks, large investment programs refer notably to continuous network improvements to ensure a high degree of reliability, resilience, and safety.

We believe these additional investments support future earnings growth and expansion of the regulated asset base, which we view positively. At the same time, given the size of the proposed investment pipeline and affordability constraints set by regulators, we believe this pace of investment will pressure balance sheets and ultimately ratings. As for oil and gas, partnering may be an option when investment requirements become too weighty.
We also see risks related to the execution of the investment pipeline. Notably, we see potential constraints around the granting of building permits for the construction of the required substations. Permits will require local and federal coordination around planning and connection prioritizations, given the likely bottlenecks related to significant increases in demand for connections.

Besides the heavy investment program, we also believe M&A risk remains high. This is because some network operators see a benefit in reducing exposure to a single regulator or country. Apart from earnings diversification, there is also an attractive cost of debt. This has led utilities, especially in Southern Europe, to engage in acquisitions abroad (for example, Enagas acquired U.S. midstream company Talgrass) or in industries such as telecoms. While diversification has its benefits, moving away from supportive regulated activities generally weakens a utility’s business profile.

![Chart 380: Investment Split by Network type](source: S&P Global Ratings)

**Low cost of debt has increased leverage, undermining ratings stability**

With abundant market liquidity and five-year bond yields approaching zero-coupon for ‘BBB’ rated entities, the temptation to increase financial leverage at utilities is high. Interestingly, cash flow metrics move only gradually when debt increases, especially when older more-expensive debt is refinanced (and increased) at current market rates. This has happened in recent years, when the outperformance of some utilities mostly stemmed from more-indebted balance sheets rather than operating excellence.

The sector’s average leverage has therefore increased, exacerbated further by recent changes of ownership of networks, which were sold at very high multiples and typically financed by maximizing debt levels cheaply. So while the sector remains well entrenched in investment grade, we see rating headroom being significantly reduced at a time when regulated tariffs may be cut. This absence of financial buffers largely explains our current negative outlooks.

As the cost of debt is so low, our benchmark ratio for the sector (FFO to debt) may not fully reflect the additional stretch to balance sheets. Over the past two years, we have therefore put more emphasis on other credit metrics, notably debt to EBITDA. Between 2016 and 2021, we see this leverage ratio increasing to 5.1x, from 4.5x, for the sector. While this is largely embedded in our current ratings, it reflects generally higher debt tolerance and increasing pressure on regulated tariffs.
Interestingly, we have seen rising scrutiny from regulators on utilities’ balance sheet structures. The U.K. has always been at the forefront in this, with licenses to operate linked to investment grade ratings to ensure access to capital for the sector. Other markets have followed. In particular, Spain introduced a series of benchmark ratios to surveil credit quality.

More differentiation across network types

We are starting to see increasing differentiation across network types in the context of energy transition.

Gas networks may come under increasing pressure. Gas pipelines currently benefit from supportive regulatory frameworks or long-term ship-or-pay contracts. Ultimately, however, uncertainty about the future role of gas in the European fuel mix poses the risk of gas infrastructure becoming stranded assets over time. Concerns about gas supply diversification, transit, and geopolitical risk have resulted in excess infrastructure (including import pipelines, interconnectors, and LNG terminals), even when adjusted for seasonal demand peaks. Geopolitical risk is particularly salient for assets in the Ukrainian corridor, even more so after Denmark issued an environmental permit for Nord Stream 2. In addition, unlike electricity distribution and transportation, gas production and pipelines do not fit into the European Union’s taxonomy for meeting climate-related goals. This taxonomy aims to enable capital markets to identify and respond to investment opportunities that contribute to environmental policy objectives (see “The EU Green Taxonomy: What’s In A Name?,” published on Sept 11, 2019). We believe this could already start pressuring regulatory returns and investments in gas, more so than for electricity. Hydrogen or biogas could help reposition gas infrastructure in the long term given their more environmentally friendly footprint. But the technology is not yet there, notably to bring down costs. For hydrogen, electrolysis alone is still an energy-intensive process and, technically, existing natural gas pipelines can typically accept no more than 10%-20% hydrogen. As such, we do not think these future promising developments will fully offset the risks in the coming decade. While this is not yet reflected in regulatory frameworks and in our ratings, we believe this is a rising risk for the sector.

Electricity DSOs will play a more significant role. With increasingly diversified and localized energy production from wind and solar, electricity distribution companies are playing a greater role in energy transition. They must manage an increasing number of
connections of energy sources and be in a position to manage much more complex flows of energy in territories--from local and dispersed production sites to self-consumption. As such, they also have the crucial role (in most markets) of deploying smart meters. We believe the upscaling of IT capabilities and R&D efforts may increasingly differentiate the operating performance and positioning of network operators and eventually push for more consolidation to reach synergies. We view positively the EON–Innogy transaction in this context.

The Situation in Russia

We expect Russia’s regulated electricity companies’ credit metrics to be on a positive trajectory in 2019–2020. Although Russian tariff regulation remains politicized and frequently changing, we expect electricity transmission and distribution tariffs to increase at least broadly in line with inflation, and we expect the start of the new regulatory period for the country’s TSO Federal Grid in mid-2020 to bring no major surprises.
We believe that the program for the digital transformation of electricity transmission and distribution, which was approved by the government and board of state-owned power company Rosseti in late 2018, is unlikely to materially increase capital spending. This is because Russian utility companies aim to replace traditional projects with new economically efficient digital solutions. Companies will benefit further if the government approves network capacity payments, longer regulatory periods, and higher connection fees to support returns on digitalization spending. Although the government’s focus on national infrastructure projects implies large capital spending on electrification and raises the risk of stranded assets (unfinished construction is not part of regulated asset base), we expect companies to continue offsetting regulatory uncertainties via flexibility in maintenance capital spending. A potential increase in dividends (Rosseti plans to adopt a new dividend policy by the end of 2019) and acquisitions remain a risk given that they are not necessarily covered by tariffs, but should be manageable in light of the pending proceeds for the sale of non-core asset, InterRAO stake, due by end-2019.

Related Research

– The Energy Transition: Nuclear Dead And Alive, Nov 11. 2019
– The Energy Transition: Different Nuclear Energy Policies, Diverging Global Credit Trends, Nov 11, 2019
– The Energy Transition: What It Means For European Power Prices And Producers, Nov 7. 2019
– Spain's Stricter Utility Regulations Are In Line With Our Expectations, Nov 6. 2019
– Credit FAQ: U.K. Utilities Are Feeling The Heat, June 14, 2019
– Issuer Ranking: European Utilities, Strongest To Weakest, May 30. 2019
– A Trio Of "Special Situations" M&A In European Utilities And Their Rating Implications, April 18. 2019

This report does not constitute a rating action.
A stable and quiet year ahead, except for M&A. Utilities’ good operating performance and growing renewables capacity will boost cash flows. Financial policies aim at cash flow neutrality. Reduced exposure to liberalized activities further supports defensive earnings profiles.

Continued decline of renewable energy costs. Solar and wind are now achieving cost parity, accelerating investments even without subsidies. We also see a rise in power purchase agreements (PPAs), thereby enhancing growth prospects.

Supportive power prices. We foresee power prices across Europe stabilizing or slightly improving from current levels over 2020-2022, supporting credit quality. However, increasing price volatility remains a challenge.

Low interest rates may spur more M&A. Low interest rates sharpen utilities’ M&A appetite, notably for assets in the U.S. and Latin America. Investors’ search for yield also results in good disposal opportunities for renewables and regulated assets.

The role of gas is at a turning point. Lower gas prices and rising carbon prices have favored gas plants this year, resulting in higher load factors. The faster coal and nuclear phase-out offers a greater role to gas in the European energy transition.

Greening of balance sheets. Increasing investor focus on ESG factors will continue to spur the issuance of sustainable financing and influence investment strategies.
Ratings trends and outlook

Utilities – EMEA Unregulated

Chart 384
Ratings distribution

Chart 385
Ratings outlooks

Chart 386
Ratings outlook net bias

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

Utilities – EMEA Unregulated

Chart 387
Debt / EBITDA (median, adjusted)

Chart 388
FFO / Debt (median, adjusted)

Chart 389
Cash flow and primary uses

Chart 390
Return on capital employed

Source: S&P Global Ratings, S&P Global Market Intelligence. All figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO--Funds from operations.
Industry Outlook

Key assumptions

1. Sustained power prices ease downside risk

We see stable and credit-supportive power prices over 2019-2022. Support for prices comes from accelerated closures of less-efficient thermal plants, a potential gradual recovery of low gas prices, and sustainably higher carbon prices. Yet we believe that power prices are evolving with the massive transformation of the European power generation mix. The fast-growing share of renewable energy in most markets means more weather-dependent volatility in prices. Back-up solutions are required to ensure uninterrupted security of supply, while raising questions about affordability.

2. Power demand will remain flat for the next two-to-three years at least

Over the past five years, the drivers of power demand have changed, and unlike in previous decades, no longer correlate with economic and demographic growth. An increasing push for energy efficiencies and deindustrialization in some countries is resulting in declining or flattish power demand across Europe. Mild winters do not help. But the electrification of industries, heating, and transportation mean demand may start to surge five years from now.

3. Gas is finding a (fragile) place in the energy transition

Due to their historically less attractive cost position, and overall power oversupply in Europe, gas-fired plants were not favored in the early years of the European energy transition. With gas prices down and carbon prices up, together with more coal and nuclear plant closures, load factors are improving. Gas could play a balancing role in a system with more renewable energy, thanks to its flexibility and lower carbon intensity. But while it is easy to imagine an improving remuneration scheme for this balancing role, adverse European taxonomy may inhibit this brighter future.

Sustained power prices in Europe ease downside risk

We see stable and credit-supportive power prices over 2020-2022. A combination of factors support this view:

- A gradual recovery of low gas prices and sustainably higher carbon prices. This is because gas is now the price setter in many European power markets.
- An acceleration of closures of less efficient thermal plants, thereby easing the oversupply in European markets. This is due to political willingness to phase out the more polluting coal and lignite plants, but also to profitability considerations, as operators unilaterally decided to shut plants down, for example in the U.K., with the closure of the Longannet large coal plant, and in Spain. Germany also plans a coal and lignite phase-out.
- A gradual nuclear phase-out. This is happening in Germany, where reactors will continue to close until 2023; France, with Fessenheim in 2020; Sweden, with Ringhals 1 and 2 in 2019-2020; and likely Belgium by 2023. Spain has also decided on a gradual exit over 2025-2036.

In addition, rated utilities’ future cash flow generation is secure thanks to their generally long-one-to-three year-hedging strategies. EBITDA from merchant activities is largely secured by hedging large volumes over the next two years at similar prices to those in 2018-2019. Sustained power prices after 2020 and beyond will only provide greater assurance on utilities’ cash flow profiles.
This being said, many of the large European utilities we rate have significantly reduced their merchant power exposure by selling part of their generation fleet and investing heavily in long-term contracted or subsidized renewable energy projects, thereby protecting themselves from power price volatility. The sensitivity of their credit quality to power prices has therefore fallen significantly.

Large baseload producers remain most exposed to power price fluctuations. These producers include notably EDF, Verbund, Uniper, Fortum, CEZ, and Statkraft. Any significant change in power prices can have implications for producers’ EBITDA, cash flow generation, and ultimately, the ratings. For these players, key credit success factors include long-term hedging, low financial leverage to cope with earnings volatility, or more protective regulation. This includes upcoming regulatory changes for nuclear energy in France or the implementation of successful capacity markets.

**Table 6**

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Source: S&P Global Ratings, S&P Global Platts

* These are assumptions used in S&P Ratings’ base case and include a mix of hedges contracted by rated generators and forward prices

**Power demand will remain flat for the next two-to-three years at least**

As part of its energy package, the European Commission has favored energy-efficiency measures to fight carbon dioxide (CO2) emissions. In accordance with the 2015 Paris Agreement on climate change, the EU has set ambitious energy-efficiency targets, primarily pushing for an annual energy reduction of 1.5% by 2030. For residential housing, this means more energy-efficient home appliances and lighting (sometimes reducing consumption by up to 80%); insulation and heating pumps from new or renovated units; and improved energy management through smart homes and smart meters. For industrials, this means new industrial processes, the development of circular consumption solutions, and more proactive energy management.

These initiatives, together with deindustrialization trends in some markets, have led to flat power demand in Europe in recent years. It is fair to say that recent mild winters have not supported demand growth, but we believe this trend is unlikely to change in the coming two-to-three years. On the contrary, we believe that energy-efficiency measures will continue to play a key role in demand patterns.

That said, new growth drivers may emerge over the coming decade. European economies will only achieve decarbonization targets through a significant increase in the electrification of transportation (for example, electric vehicles and trucks), of industries (including the replacement of fuel-based plants), and of heating (such as the replacement of coal or fuel in heating networks). Currently, about 85% of heating sources come from fossil fuels, representing a huge potential for electrification. Additional demand may also come from an increase in data centers across the continent. Yet such electrification will take time to implement, due to implied costs, and sometimes, immature technologies. In addition, this only makes sense from an environmental perspective if the generation mix has itself turned green, which will also take time.
Gas is finding a (fragile) place in the energy transition

Early, but fragile, signs of a changing role for gas in the energy mix emerged in 2019. Bearish gas spot gas prices in Europe due to global liquid natural gas (LNG) oversupply were more than twice as low as last year’s prices. This, together with higher CO2 prices in Europe, favor gas-fired plants’ economics. Although some European utilities may still have oil-linked gas-purchase contracts (about 25% of the European gas market in 2018) or hedges with locked-in historically high gas prices, these will gradually expire. EU targets to increase renewable energy generation, together with the planned phase-out of coal and nuclear in some countries such as Germany, leave open the issue of the appropriate baseload to complement intermittent renewable energy and ensure grid stability. Gas could play that role as its CO2 emissions are twice as low as those of coal, while large and underutilized European LNG terminals address geopolitical concerns about gas supply diversification.

However, in the longer term, the balancing role of gas with renewable energy may be challenged by other technologies, such as pumping hydro, carbon capture and storage (CCS), or batteries, when such technologies become commercially attractive and widely available. At this stage though, we see a global shortage of lithium being a major obstacle for a material increase in battery storage. Interestingly, if CCS becomes commercial, it could help to retain gas or even coal in the fuel mix without compromising climate targets. Even if this scenario is remote and uncertain, we see that it could pose a risk of gas infrastructure and gas-fired generation assets becoming abandoned over time.

Therefore, we see the highest potential in areas where a greater use of gas does not imply large capital expenditure (capex) needs, including idle gas-fired capacities and opportunities for quick coal-to-gas switching. We could see gas plants eventually monetizing this balancing or back-up role over time—even though such a role may be less evident in some oversupplied markets that favor other energy sources such as renewables and nuclear—such as in France.
Last but not least, we note that the current draft of the EU green taxonomy does not include traditional gas extraction or transmission and distribution activities, or gas-fired power generation, as it emits more than 100 grams of CO2, which could limit the availability of capital for new gas-related projects.
Key risks and opportunities

1. Renewables remain the sector focus

The growth of renewable energy has been the major investment theme for some time. But now it's different. Subsidies are playing less of a role in driving investments. Yet they have achieved their ultimate goal: the cost of wind and solar power has fallen so much that it has reached parity in many markets. Zero-subsidy bids will soon become the norm and sponsors' and politicians' growth ambitions remain intact. The next challenge will be to deal with merchant risk. Here again, the market already has a plan: PPAs.

2. The low cost of debt tempts companies into M&A

Quantitative easing by the European Central Bank (ECB) first favors the richest. Luckily, large integrated utilities are part of this group, being largely investment grade. The cost of financing this year reached record lows, both for senior debt and hybrid instruments. We believe this gives utilities great opportunities to accelerate growth, notably in the U.S. and Latin America. Alternatively, institutional investors' hunt for yield may facilitate sales of more mature assets at attractive multiples. That's why we think M&A could shake up our ratings in the coming quarters.

3. Financial policies point to stable credit metrics and greener balance sheets

While the sector has proved its ability to rapidly restore credit metrics in a downturn, we do not foresee much improvement in this better environment. In most cases, financial policies favor increased investments and shareholder remuneration over debt reduction. Interestingly, however, we see increasing use of green debt instruments. Investors are increasingly attuned to ESG matters, a trend that we believe drives investment strategies further toward renewables, and more generally, sustainable long-term growth.

Renewables remain the sector focus

As in recent years, investments over 2020-2021 will be heavily geared toward renewable energy. What's more, we see such investments escalating beyond current plans given the many investment opportunities globally. Two key factors explain this investment strategy across the sector:

- First, European energy policies continue to favor the energy transition and allocate large budgets to greening the power capacity mix. As such, specific remuneration schemes (such as contracts for difference) continue to play a key role in promoting investments in renewable energy, notably in less mature segments such as offshore wind. That said, such support mechanisms are reducing. This is an important sign of the maturity of the sector, but also a political relief, as these subsidy schemes are costly and weigh heavily in the debate about the affordability of the energy transition.

- Second, and this is a major recent development, the costs of wind and solar power have continued to fall dramatically, to the point of cost parity in certain markets, so that subsidies are no longer needed. Industry experts expect costs to fall further, offering the sector great growth prospects. With no specific remuneration scheme defined, future renewable assets may be more exposed to the volatile merchant power market.

As competitive auctions become the norm and investor appetite is high for the asset class, competition is increasingly fierce in the sector. As a result, returns are reducing significantly, leaving little buffer for performance deviation. Such deviations are most likely to happen for renewables and during construction, notably in offshore and operations, if weather conditions are not forecast accurately. We believe this is a growing risk in the sector, which may affect financial performance.
A further impetus for the replacement of existing thermal assets with green energy assets is increasing customer awareness, notably industrial customers, who are trying to reduce their carbon footprint and manage their energy bills. The emergence of corporate long-term PPAs in Europe could start to fuel growth in a more secure way. We see an increasing number of initiatives in this domain. While pricing may be well managed, volume commitments are still uncertain, due to their intermittence and intraday availability. But the sector is working on solutions, including bundling portfolios, combined with storage or the use of another energy source. In all cases, a key success factor is the ability to access strong energy trading capabilities—which large integrated players have.

So far, a large part of the investment pipeline remains backed by long-term contracted or subsidized remuneration schemes, which is credit-positive. What's more, we see the largest operators as being immune to resource risk thanks to their large and diverse portfolios, their generally large and diverse customer base, allowing them to pass on price fluctuations, as well as their trading capabilities. On the contrary, smaller or emerging players may face higher risks, due to the relatively high costs of building a large portfolio today.

Chart 393
Capex Split of Top 14 EMEA Utilities in 2018

Source: S&P Global Ratings, Annual Reports

Chart 394
Aggregate CAPEX Ambitions among the Top 14 EMEA Utilities until 2025

Source: S&P Global Ratings, Annual Reports
The low cost of debt tempts companies into M&A

The ECB’s quantitative easing measures and the abundance of liquidity have largely favored the sector. The cost of debt—both senior debt and hybrid capital—is at a historic low. For entities with large debt maturities this year and next, this represents a significant potential reduction in financing costs. For others, liability management through debt exchange was the way forward. As a result, we see the average cost of debt reducing further this year and next in most cases, thereby boosting cash flows.

Aside from this, we believe such low rates reduce the cost of capital and accelerate growth and transform portfolios, notably through M&A. In Europe, EON-Innogy-RWE and Fortum-Uniper are the two largest ongoing transactions. Yet we believe that most eyes are turned toward the U.S. and Latin America. In both regions, renewable energy and infrastructure assets can offer solid growth opportunities, while European assets may prove too expensive due to greater competition. Large transactions may affect credit quality, depending on the amount of debt in the financing package. As such, we see M&A as the major rating driver for the sector this year.

Conversely, we believe that European renewable energy and infrastructure assets attract significant interest from institutional investors in search of yields and secured assets, driving valuations up. As such, we may see continuous disposals of more mature assets to benefit from these high multiples.

Financial policies point to stable credit metrics and greener balance sheets

We believe that in most cases, rated utilities will use any balance sheet headroom for additional investments or higher shareholder remuneration, rather than for debt reduction and credit rating improvement. Apart from a few exceptions, like Naturgy Energy Group, we see most headroom usage skewed toward investments. As such, we do not see much rating improvement stemming from strengthening balance sheets in the coming two years. Yet we take a positive view of the greater flexibility these entities have over the use of their balance sheets, which provides more of a buffer in our ratings.

Another interesting financial policy development is the growing importance of ESG in the capital structure. Historically, the energy sector has been ahead of many other sectors in tapping the green bond market, given the nature of its business and its investments in renewable energy projects. Yet we have seen an acceleration of green instruments being issued in the sector this year, both bonds and loans, and in different markets, including the hybrid market. Enel’s recent bond issuance—in both the U.S. and Europe—linked to the UN’s sustainable development goals highlights the evolution of sustainable financing in the sector. We believe that the sector’s growing focus on ESG, combined with increasing investor awareness, is influencing utilities’ strategies. Investments are increasingly focused on the energy transition, including renewable energy and infrastructure, while more polluting thermal generation assets may be cast aside to achieve a greener environmental footprint.
Russia shows diverging trends

Russian electricity generation companies are enjoying high capacity revenues after completing major capex under capacity supply agreements (CSAs), which guaranteed returns on investments in government-approved thermal projects. The high revenues have resulted in substantial deleveraging, which has driven our ratings on Russian electricity companies upward to the level of the 'BBB-' foreign currency rating on Russia.

The gradual expiration of old CSAs in 2019-2021 and the introduction of lower returns for the new CSA-2 modernization campaign that started in 2019 should reduce revenues. However, Mosenergo and Territorial Generating Company No. 1 should retain solid headroom above funds from operations to debt of 60% and generate healthy positive discretionary cash flow. This is because their appetite for new investments remains limited, and the 50% dividend payout target that is typical for Russian government-related entities is manageable. Rushydro has yet to complete some of its strategic capex projects for 2019-2020, following several delays caused by organizational bottlenecks, but is set to deleverage from next year.
The key risks for Russian nuclear energy champion Atomic Energy Power Corp. (AEPC) stem from its participation in a large number of complex and costly new international nuclear projects, notably the Akkuyu nuclear power plant project in Turkey, with an estimated cost of about $20 billion for the construction of four 1.2 gigawatt units. Still, AEPC enjoys a net cash position and ongoing equity contributions from the Russian government for domestic and international new builds. The government’s recent decision to bring forward the commissioning of some domestic nuclear units due to a lack of demand, together with a delay in regulatory approval for the Finnish Hanhikivi nuclear power project---of which AEPC owns 34%---reduce the near-term pressure on AEPC’s cash flows.

Despite the ratification of the Paris Agreement in September 2019 and ongoing discussions about Russia’s new energy strategy, we expect the electricity generation mix to remain broadly stable over the coming decades. Gas will dominate, with relatively solid shares of hydro and nuclear power and only a marginal share of solar and wind power (see chart below). In Russia, gas and nuclear generation costs remain well below those of renewable energy generation, and the government’s energy policy focuses on the security of supply rather than on environmental targets. In addition, CSA-2 effectively favors existing technologies by focusing on the modernization of traditional thermal capacity. Russian utility companies therefore face less near-term pressure to invest in renewable energy, but we could see such pressure to build over time if local regulations tighten or if environmental issues become increasingly important for the competitiveness of Russia’s exports.

Chart 395
Russia 2018 Electricity Generation

Source: Minenergo
Related Research

- The Energy Transition: Nuclear Dead And Alive, Nov 11, 2019
- The Energy Transition: Different Nuclear Energy Policies, Diverging Global Credit Trends, Nov 11, 2019
- The Energy Transition: What It Means For European Power Prices And Producers, Nov 7, 2019
- Spain's Stricter Utility Regulations Are In Line With Our Expectations, Nov 6, 2019
- Credit FAQ: U.K. Utilities Are Feeling The Heat, June 14, 2019
- Issuer Ranking: European Utilities, Strongest To Weakest, May 30, 2019
- ESG Industry Report Card: Regulated Utilities Networks, May 13, 2019
- The Italian Renewable Power Market: Up For Auction, May 6, 2019
- A Trio Of "Special Situations" M&A In European Utilities And Their Rating Implications, April 18, 2019

This report does not constitute a rating action.
Slowing economic growth affecting the energy growth trajectory

What’s changed?

Political and regulatory uncertainty will likely affect ratings. Political and regulatory uncertainty, especially in government concessions, currency exchange rate risk, and policies that often lack consistency. For example, in Mexico, indications that the government plans to be more involved with CFE in the generation sector is a different approach from the previous federal administrations, which left the bulk of generation to the private sector, and left CFE to focus on the transmission and distribution sectors.

In Chile, the recent temporary freeze on electricity tariffs might affect single-asset renewable projects, we expect large conglomerates to be in a position to absorb the negative impact this disruption has created. Finally, in Argentina and with a newly elected president (Mr. Alberto Fernandez), most of the questions related to the utilities sector rely on whether or not the new administration will modify the system and how radical the change could be. We believe that Fernandez’s administration may seek to dilute planned tariff increases that were expected to follow CPI, lessening the burden on households’ disposable income but hampering the system’s operating performance.

What to look for in the sector in 2020?

Large privatizations. A few large state-owned players, namely Eletrobras in Brazil and ISA in Colombia, are in their respective government’s agenda for privatization, as they seek to improve their respective government’s fiscal numbers.

Development of project pipelines. Capital expenditures (capex) focused on deploying new capacity auctioned in the last two years.

Price volatility. Despite regulatory incentives for a shift to non-conventional renewables, we observed this year that the lower economic activity across the region reduced the demand for energy growth. This trend has ultimately driven energy oversupply in markets like Peru and Chile, causing short-term volatility in spot prices, which we believe will continue to pressure prices in 2020.

What are the key medium-term credit drivers?

Renewable growth. Across the region, non-conventional renewables to grow steadily.
Ratings trends and outlook

Utilities – Latin America

Chart 396
Ratings Distribution

Chart 397
Ratings Outlooks

Chart 398
Net Outlook Bias

Source: S&P Global Ratings
Industry credit metrics

Utilities – Latin America

Chart 399
Debt/EBITDA (Median, Adjusted)

Chart 400
FFO/Debt (Median, Adjusted)

Chart 401
Cash Flow And Primary Uses

Chart 402
Return On Capital Employed

Source: S&P Global Ratings, S&P Global Market Intelligence. All figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO--Funds from operations.
Industry outlook

Key assumptions

<table>
<thead>
<tr>
<th>1. Growth to slow across the region, driven by sluggish economies and uncertain political conditions</th>
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<tbody>
<tr>
<td>Our base case incorporates 1.6% GDP average growth for the six largest economies in the region (Argentina, Brazil, Chile, Colombia, Mexico, and Peru) in 2020, above the 0.7% growth in 2019, as the most relevant demand driver for energy consumption. This growth is mostly driven by the expected recovery of Brazil’s growth trajectory from 0.8% in 2019 to 2.0% in 2020.</td>
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<tr>
<th>2. Prices (contracts and spot)</th>
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<tr>
<td>In 2019, we observed that slower economic growth across the region reduced the growth of energy demand. This trend ultimately led to energy oversupply in markets like Peru and Chile, causing short-term volatility in spot prices, and we continue to expect prices to be lower in 2020.</td>
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<tr>
<th>3. Hydrology not a short-term concern</th>
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<td>We assume hydrology will be aligned with the track record of the last three years. Although we don’t forecast hydrology conditions in Brazil and Colombia (where the energy matrix is chiefly driven by hydro plants) to return to historical levels, we don’t expect a drought that would repeat the negative impact we observed in 2014-2016.</td>
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</table>

In Brazil, where hydrology plays a major role in the power industry because hydro plants represent over half of the energy matrix, our base case assumptions consider a Generation Scaling Factor (GSF) of 80.0% in 2019 and 82.5% in 2020, which is slightly below the historical average, but not as low as during the 2014-2016 drought. We estimate spot prices to average R$200 per megawatt hour (MWh) in 2019, and R$150/MWh in 2020.

In Chile, where the regulated market is experiencing an energy oversupply after demand growth didn’t materialize as expected, we estimate average spot prices of $50/MWh in 2019 and $45/MWh in 2020.

Differing from the rest of the region, spot prices in Colombia were affected by the delay in the start-up of the Ituango hydro plant after an accident at the plant early this year. The distribution companies were counting on the plant’s additional capacity of 2.5 gigawatts (GW) to meet their contracted demand, and as such, have relied on the spot market to fulfill obligations. We estimate average spot price of COP140/MWh in 2019 and 2020.
Key risks and opportunities

1. Changes in the regulatory framework

In Mexico, the government has indicated that it will pursue greater involvement in CFE in the generation sector, which, as noted previously, is a different approach from the previous federal administrations. In Chile, the recent temporary freeze on electricity tariffs might affect single-asset renewable projects, while we expect large conglomerates to be in a position to absorb the negative impact this disruption created. Finally, in Argentina with a newly elected president, most of the questions about utilities involve whether or not the new administration may seek to dilute planned tariff increases that were expected to follow CPI, lessening the burden on households' disposable income but hampering the system's operating and financial performance.

2. Lower refinancing costs and improving FFO

Lower basic interest rates improved from funds for operations (FFO) of utilities in both Brazil and Mexico in 2019, as the companies refinanced a large portion of their debt stock throughout the year.

3. Steady growth in renewables

Regulatory incentives in the region for non-conventional renewables have been driving wind and solar growth. In Brazil, we expect new wind and solar capacity to help expand the energy matrix and diversify it until 2027. Chile has a strong focus on renewable energy, illustrated by its regulatory target of achieving 20% of electricity from clean energy sources by 2025, and above 70% by 2050. Colombia executed its first long-term power-purchase agreement (PPA) auction for renewables, contracting 1.1GW of wind and solar capacity in September. Finally, in spite of regulatory challenges, Argentina is developing its Renovar program—which aims to grow the country's renewables—with an additional 259MW awarded in the third round of concessions in August 2019. Nevertheless, the investments are progressing more slowly than expected, considering that the financing is now limited.
Country highlights

Argentina

We expect 2020 to be a challenging year for Argentine utilities in light of increasing uncertainties about the application of the existing regulatory framework in a context of the volatile economy, exacerbated by the higher inflation and peso depreciation.

With a newly elected president (Mr. Alberto Fernandez), most of the questions related to the utilities sector rely on whether or not the new administration will modify the system and how radical it could be. We believe that Fernandez’s administration may seek to dilute planned tariff increases that were expected to follow CPI, lessening the burden on households’ disposable income but hampering the system’s operating performance.

In any scenario of a delay in tariff increase, all the utilities’ cash flow generation will decrease. Nevertheless, companies that are—to some extent—more diversified (such as Capex, TGS, and Pampa Energía) will be better positioned to deal with the changes. Distribution companies will be the most affected in this scenario, likely having significant cash deficits in 2020.

Brazil

We expect that utility companies will continue to take advantage of the lower interest rates in Brazil and strong appetite in the domestic capital markets to refinance their debt maturities at lower costs and improve their debt maturity profile and, therefore, their financial flexibility. In 2019, the Brazilian utilities issued almost R$20 billion in local debentures, taking advantage of the prevailing historic-low inflation and basic interest rates. For 2020, we estimate an additional R$30 billion of aggregate refinancing.

In addition, we believe the main development in terms of mergers and acquisitions (M&A) relates to the potential privatization of Eletrobras – Centrais Eletricas Brasileiras S.A. that could take occur in 2020. In addition, some state-owned utility companies could also be privatized in the next few years, which could bring new opportunities for a further consolidation of the sector.

As the country gradually recovers from the 2014-2017 recession, the pipeline of new capacity remains modest, with the two new energy auctions performed this year totaling

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**Brazilian Energy Matrix - Expansion plan 2019-2029 (GW)**

- Coal + Diesel
- Nuclear
- Solar
- Distributed Generation
- Biomass
- Gas
- Wind
- Hydro

Source: EPE, PDE 2019-2029
3.4 GW in new capacity, equivalent to a 2% capacity increase until 2025. This new generation will require over R$12 billion in investments in the next six years. In the transmission segment, a new 2,470 km auction is scheduled for December 2019, which will require approximately R$4 billion in capex, on top of the R$19 billion investment required to construct the combined 9,717 km of transmission lines auctioned in 2018.

Chile

Most of the players in Chile have been focusing on growing their renewable capacity to remain competitive in the country’s changing energy environment. Nevertheless, we continue to expect their debt levels to remain conservative, indicated by an average net debt to EBITDA of approximately 2x in 2019 and 2020.

Chile is focusing on renewable energy, illustrated by its target of achieving 20% of electricity from clean energy sources by 2025, and above 70% by 2050. In this context, certain customers—mainly mining companies—have started to prioritize low-carbon intensive sources. As a result, during 2019, we saw generators renegotiate some contracts with unregulated clients. The renegotiations also included the shifting of the price indexation to the CPI from coal prices and the inability to pass through potential carbon tax increases.

Contracts with regulated clients also suffered a price downward revision. In particular, the government recently announced that the 9.2% increase in electricity tariffs that was applicable since October this year has been voided. The tariff freeze applies until the end of next year and includes specifically the generation component of the electricity bill. For now, the transmission and distribution components are out of the scope of the ruling. We expect, in all possible cases, a marginally lower-than-expected cash flow generation in 2020. Nevertheless, the generators will receive the compensation from 2021 onwards when the electricity tariff will remain stable, instead of decreasing, as already established due to the entrance of renewable capacity.

We continue to forecast relatively low spot prices. In the past two years, they averaged $40-$50/megawatt hour (MWh) from about $100/MWh historical average, and we think it’s highly unlikely that they would return to the historical range. Besides the expansion of renewables, the installation of several base-load thermoelectric plants (coal and gas) and the expansion of transmission systems also contributed to the price decrease.

Colombia

Although some steps behind its Latin American neighbors, Colombia has made its first non-conventional renewable auction, resulting in eight wind and solar projects awarded that total 1,186 MW, with average prices of COP95,650/kWh (about $28/MWh). Those projects will represent about 5% of the country’s electricity matrix once operational, and will help diversify the country’s electricity matrix, which is currently about 70% hydro-based, and could also reduce the impact of the dry El Niño seasons.

In our view, the low prices for renewables are similar to the prices throughout the region. In addition to the technological advancement of equipment that’s reducing the investments required, demand for electricity is growing more slowly, which results in some mismatches between electricity supply and demand and thus lower prices.

We'll continue monitoring the evolution of hydroelectric plant Ituango’s construction, which has been delayed for several years. A further delay in the start of operations for the 2,456 MW plant could push spot prices upwards in the next few years. In addition, the potential sale of the government’s stake in Interconexion Electrica S.A. E.S.P. is on our radar, because we believe the Colombian government is willing to sell some of its companies to prevent a fiscal slippage.
Mexico

Although state-owned utility CFE has yet to announce its 2019-2024 business plan, there are clear indications that the government plans for the company to be more involved in the electricity market, specifically in the generation sector. The goal of the new administration is that the state-owned company drives the country's energy strategy.

In terms of new capacity over the next 12 to 24 months, we expect that most will come from combined cycle plants from private companies and CFE, mainly taking advantage of the upcoming and already in place pipeline network in Mexico. We expect CFE’s new capacity of this type of energy to be about 9,500 MW for the next 12 to 24 months. Additionally, we expect new renewable generation will come from private companies in the next year or two, with little participation of CFE.

Peru

We continue to expect low spot prices (at around $40/ MW in 2020 and 2021 from $45 and $43 in 2017 and 2018, respectively), considering that demand did not grow as expected, while new capacity entered the market.

This report does not constitute a rating action.
Industry Top Trends 2020

North America Merchant Power

Retail power and renewables are the only hedge against disruption

What’s changed?

Natural gas production. Natural gas production has continued to impress at 95 bcf/d now, up from 75 bcf/d in 2017. Future production expectations and low volatility have flattened the power supply cost curve and lowered energy margins.

The sustainability of matching retail load to wholesale power generation is key to credit quality. Despite strong margins, competition is limited for incumbent players and cash flow conversion continues to be high.

What to look for in the sector in 2020?

Significant retirements of coal-fired generation. These are likely to recommence in 2020 for cost reasons and as ESG concerns constrain refinancing potential.

Wind generation cost curve and installations. 2020 is likely to be strong as orders are placed ahead of construction deadline to qualify for production tax credits.

Offshore wind mandates are increasing. New York, New Jersey and Massachusetts have announced substantial offshore wind mandates as the LCOE declines.

Greening of balance sheets. Increasing investor interest on ESG factors may spur issuance of sustainable financing, influencing investment strategies.

What are the key medium-term credit drivers?

The ability to ratably hedge economic generation. In the short- to medium term, ratable hedging (a rolling hedge strategy that increases hedges consistently over time) gives predictability to cash flow and allows time to adjust its capital structure.

Ability to match retail load to wholesale generation. In the long term, this appears the only sustainable strategy and growth model.

The ability to diversify across markets. Some markets, like ERCOT show strength. While PJM’s energy markets could strengthen with reforms, our capacity price expectations are flat but could turn bearish due to secular load decline.
Ratings trends and outlook

North America Merchant Power

Chart 405
Ratings distribution

![Rating distribution chart](chart)

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

Chart 406
Ratings outlooks

![Ratings outlooks chart](chart)

Chart 407
Ratings outlook net bias

![Ratings outlook net bias chart](chart)

Source: S&P Global Ratings. Ratings data measured at quarter end. Data for Q4 2019 is end October, 2019
Compared to last year, our rating distribution in the IPP sector has strengthened in the ‘BB’ category where it had moved into (average ratings were ‘B+’ in 2018). Partly contributing to the move is the stable ratings of renewable portfolios and consolidation in the industry—for instance, the Vistra/Dynegy merger and the acquisition of TerraForm by subsidiaries of Brookfield. However, our investment-grade credit quality continues to drift lower, with pressure on the ‘BBB’ rated companies.

Ratings Outlook: 84% of our independent power producers (IPPs, or merchant generators) have stable outlooks. This compares with 78% last year, and 55% two years ago. Still, the improving outlook stability is more from capital structure corrections as IPPs have shed debt to counter the backwardation in expected future cash flows. The business outlook still reflects demand slowdown because of energy efficiency, behind-the-meter solar and distributed generation. In fact, energy margins remain under pressure as gas production continues unabated and the forward curve continues to flatten.

Forecasts: We expect flat to negative secular growth in 2020: We think power prices could strengthen in the PJM Interconnection should energy price reforms—long awaited—eventually arrive through FERC action (higher prices are not assumed in our forecasts currently). ERCOT will likely see some upside as demand is steady, retirements continue, and new supply is delayed. We expect California markets to continue to see the increasing impact of renewable deployment in the form of “peakier” ramp-on and ramp-off hours for solar generation (price spikes as a lot of solar generation drops off simultaneously), even as intra-day margins for conventional generation turn negative. We see the need for peaking gas assets in California through at least 2023, and are increasingly uncertain of reliable firm capacity from 2020.

Assumptions: While regional differences persist, on average we still expect IPPs to have weather-adjusted demand growth of about 0.25%. The one exception is the ERCOT market, which we expect to see grow at 1.0%, albeit this view could be upended by a potential slowdown in economic activity, the probability of which has inched up.

Risks and Opportunities: Regulatory risks had declined for nuclear generators after the 2nd and 7th circuit courts ratified the decisions of the District Courts on the zero emission credits (ZEC) litigation. However, some risks have emerged because of a potential referendum in Ohio and an investigation about lobbying activities in Illinois. We think regulatory risks have abated after PJM’s recommendation to the FERC to implement energy price reforms. However, the timing of such reforms is uncertain.

Industry Trends: We see IPPs that are making a strategic shift toward retail power businesses and/or contracting a meaningful proportion of their generation as the ones likely to successfully respond to the evolving commodity environment. On the other hand, IPPs with modest retail business, exposure to coal-fired generation, and limited regional (or fuel) diversity are vulnerable to further credit deterioration. Predominant market trends relate to the combined onslaught on power prices of depressed natural gas prices, proliferating renewables, and increasing distributed generation. Opportunities (or risks) are also emerging from offshore wind. Disruptive forces like energy efficiency and advancing battery storage add to these risks.
Industry credit metrics

North America Merchant Power

Chart 408
Debt / EBITDA (median, adjusted)

Chart 409
FFO / Debt (median, adjusted)

IPP's with merchant exposure are closer to 3.0x debt to EBITDA

Benefits more from deleveraging than cash flow improvement

Chart 410
Cash flow and primary uses

Chart 411
Return on capital employed

Focus in 2018/2019 was more on deleveraging rather than share purchases. That could change in 2020

Source: S&P Global Ratings, S&P Global Market Intelligence. All figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.

We expect ratios to stay flat or improve as companies aggressively shed debt concomitant with expected declines in future cash flows. We note that debt reduction is a stated objective for a number of IPPs. Two years ago, expectations for aggregate debt/EBITDA and funds from operations (FFO) to debt were above 4.0x and about 15%, respectively, for 2019. Now, companies are targeting levels closer to 3.0x and over 20%, respectively, for 2020. The business environment reflects risks to wholesale power margins, buoyed to an extent by countercyclical retail power margins. Aggressive cost cutting and the presence of many private equity sponsors (that emphasize cost discipline) have helped maintain financial ratios.
Industry outlook

Key assumptions

1. **Lower load growth rates.**
   
   Our load growth rate assumptions are materially lower than many sponsor assumptions because we see energy efficiency meaningfully eroding load growth. ERCOT remains the one exception where we expect robust growth to continue.

2. **Lack of demand growth affects capacity markets**
   
   Our capacity price assumptions across regional transmission organizations (RTOs) are influenced by the lack of demand growth balanced by near-term retirements. We see flat prices in ISO-New England (ISO-NE) and modest uplift in New York Zone J. In PJM, we expect a decrease in RTO prices but expect to see pockets of relatively elevated capacity prices.

3. **No meaningful pricing uplift until FERC reforms implemented**
   
   We expect energy price reform in PJM but have not factored in any uplift in prices until any FERC directed reforms are implemented. Retirements have favorably affected ERCOT prices.

Key risks and opportunities

1. **Retirement of legacy generation could offer power price upside.**
   
   We think incremental retirements of coal-fired generation announced in 2020-2021 will be a surprise as coal is rapidly becoming the fuel on the margin (highest variable cost) as gas production continues to impress.

2. **Weather dominated demand.**
   
   Regional risks pertain either to milder weather-influenced demand destruction, or negative demand trends, such as in the PJM and ISO-NE. As a market without a capacity price construct, ERCOT is significantly influenced by weather patterns.

3. **A sharp downturn in the global economy in 2020.**
   
   Historically, an economic slowdown has sent demand sharply lower by 5%-6%, which is meaningful enough to result in negative cash flow generation for some IPPs. A secular demand decimation would dominate credit concerns, especially if weather turns out to be mild too.
Credit Cycle Exposure

Our base case outlook for credit quality reflects our view that North American merchant power will remain stable despite a confluence of intensifying headwinds, largely because of a concomitant shedding of debt from balance sheets. These concerns are ameliorated by a trend towards lower capital spending, and instead focusing on business that are less capital intensive (e.g. retail power) and transition to a cleaner emissions profile.

Yet, there is increasing exposure to the developing credit cycle. Inflationary pressures are now accelerating and the yield curve has turned noticeably steeper. Companies that are still not hedged against wholesale power markets—through retail and renewable businesses—could yet see significant erosion in their current free cash flow positions. Nevertheless, we expect companies will continue to aggressively seek O&M cost reductions to generate free cash flow for capital allocation decisions that continue to include debt reduction.

Regional Risks Persist

- We see risks for capacity prices in ISO-NE and the PJM Interconnection as mostly demand-driven but there is also considerable supply re-entering in western PJM that is already under construction. We see the following factors as raising incremental risks for merchant financed assets in the western part of the PJM and the RTO region:
  - New generation supply (4.0 GW; Guernsey (RTO)--financial close; Jackson (ComEd)--under construction; and South Field (ATSI)--under construction).
  - Re-entry of subsidized nuclear units (3.0 GW).
- Legislative forces (nuke subsidies; Illinois capacity procurement) weigh on the sector.

In addition, weather and weaker load in the prompt year has cascaded into future year power prices. Natural gas prices at Tetco M3 are down, resulting in a 20% decline in power prices year-over-year (and of 3Q). However, gas prices are up modestly following the Enbridge gas pipeline explosion in Kentucky and the approach of winter.

In New England, capacity prices will be influenced by the fate of the Mystic units. If Mystic 8 and 9 retire, we would expect the Distrigas liquid natural gas (LNG) import terminal to shut down as well. The question is whether ISO-NE will once again hold Mystic 8 and 9 for fuel security (given pipeline bottleneck and winter blowout concerns). If these units were to retire given a weak load forecast, pricing for the forward capacity auction (FCA 14 in Feb. 2020) could be lower still--in the mid $3/kw-month area.

While ERCOT is witnessing tighter reserve margin from delayed supply and retirements, it is likely to see longer-term risks from higher renewable deployment, so competition is now between natural gas-fired generation and renewables generation. We also think renewables and batteries are going to be significant challenges for this energy-only market, especially since it has ideal conditions for both wind and solar. We think the risk here is that scarcity pricing can largely be shaved or shifted, and with no capacity markets, conventional generation can come under significant stress. ERCOT’s May 2019 CDR report has highlighted new renewable risk. In particular, cumulative solar shows an increase to 8.9 GW in 2021 from 1.9 GW in 2018. However, ERCOT power prices showed strong recovery towards the end of 3Q 2019, driven primarily by summer demand with real-time power price spikes on multiple days in late August/early September. ERCOT continues to demonstrate more constructive prospects for forward power than PJM due to continuing demand growth. Finally, the ongoing consolidation in the retail power industry continues to be supportive for IPPs in ERCOT.

California’s aggressive renewable portfolio standards and energy efficiency have resulted in its now-famous duck-shaped supply curve. With battery deployment, we expect renewables to dominate this market. Even as California’s duck curve has resulted in negative intraday spark spreads, these IPPs had not seen margins erode because of the higher demand peaks (and spark spreads) seen during solar ramp-up hours. However, with batteries coupled to solar photovoltaic (PV) systems, and units now having the ability
to peak shift for up to four hours (when intraday demand has subsided), those peak spark spreads could quickly disappear. Separately, we note that CAISO power prices were down 50% and 35% in SP-15 and NP-15, respectively, with lower gas prices in the SoCal Hub, which was down 60% year over year (YoY). However, the decline in spark spreads has stabilized.

The key issue for California is a looming capacity shortfall starting in 2020, following analysis conducted to assess reliability of a grid with an ever-increasing proportion of renewable capacity. The key period at risk is summer-evening, with reduced solar production during these hours. For 2020, CAISO is suggesting increased resource adequacy contracting, securing available import capacity, and extending the once-through cooling compliance date on critical units. Also, we no longer see the growing incidence of wildfires out west as an event risk and assess insurance coverages, and/or liquidity reserves to mitigate credit risks.

**Yet, opportunities emerge for merchant generators**

The chart below presents coal-fired generation as a proportion of aggregate U.S. power generation. Each dot represents the ratio in a month between 2002 and 2019. We have color-coded generation between 2002 and 2008 to show that the ratio during these years was steady at 50%. Every two years since have been color coded differently to show how the bottom fell out for coal fired power generation.

**Chart 412**

**Coal generation Vs Total Generation**

![Chart of coal generation vs total generation]

Source: S&P Global Ratings; Data from the Energy Information administration

In our opinion, 2020 represents the last stand for vintage coal-fired generation and will likely bring substantial changes to the resource mix in PJM. We expect to see numerous coal-fired generation retirements even though the capacity auction results are stronger. We note that West Virginia, Ohio, and Pennsylvania are the largest operators of coal-fired generation, with about 15 GWs of installed capacity each. We think about 50 GW coal-fired generation is at-risk in the PJM (about 40 MW of coal-fired assets are over the
Marcellus/Utica shales). Moreover, Midcontinent Independent System Operator (MISO) has a high number of assets that are smaller than 500 MW.

We know that the consumption of natural gas for power consumption in 2018 was about 13% more than in 2012, even as the weighted average price of natural gas was not materially different between those two years. We believe this increase is not just because of favorable economics, but because more coal-fired plants are being retired, for the following reasons:

- Investors are increasingly avoiding coal-fired exposure because of sustainability goals, and longer-term concerns about future carbon regulation
- Increasingly stringent environmental mandates, such as recent ones in Maryland and Illinois, have hastened the retirement of coal-fired assets.
- Operating costs are rising because of environmental compliance issues.
- There is more power available from renewable energy sources.
- Lower than expected demand that has affected coal-fired generation disproportionately as the marginal fuel in many regions.

While we do not know what companies plan for specific units in their fleet, based solely on their cost structure and location of operations, we think several plants are at risk and could be retired (Bruce Mansfield [2.5 GWs], Pleasants [1.3 GWs], Chalk Point 1 and 2 [670 MW], Dickerson [520 MW], Homer City [1.9 GWs], Waukegan [670 MW], and Will County [520 MW]). That said, the higher prices in ComEd resulted in higher cleared coal-fired capacity for NRG Energy. Conversely, tighter wastewater discharge standards (effluent limitations guidelines) could compromise Conemaugh (1.7 GWs) and Keystone (1.7 GWs). Overall, about 15 GWs of retirements have been announced through 2022 but we think this number could be much higher. This compares to the 55 GWs of coal retirements since 2012 and about 245-250 GWs of remaining coal-fired capacity nationwide as of June 2019.

Minimum offer pricing rule (MOPR) extension to existing assets should assist prices

Thus far, PJM’s ability to provide competitive impetus to the markets has been reasonably successful. We think the battle for the IPP model has moved to nuclear generation. In the past two years, a number of nuclear units have received state regulatory relief in the form of ZECs. That has raised the possibility that these subsidized units could distort future capacity auction outcomes, if left unmitigated. We note that the substantially higher outcome of the 2018 auction suggests that the subsidized nuclear units did bid in their full costs (and therefore, a MOPR-style mitigation may not be necessary). However, industry participants believe, and the FERC agrees, that an extension of MOPR to existing subsidized generators is required to eliminate the possibility of influencing future auction outcomes.

In April 2019, PJM submitted a filing with FERC stating that it planned to run its Base Residual Auction under the currently effective tariff. The FERC directed PJM not to run the auction until the Commission establishes a replacement rate that will send clear and certain signals to the market (see the ITT 2019 report for details on the MOPR issue).

Regardless of the final form of the order, from a credit perspective, the FERC has now directed PJM to refine rules that effectively mitigate the impact of subsidized existing generation on capacity prices. We note that in all its earlier decisions (the Long-term Capacity Agreement Pilot Program [LCAAP] in New Jersey, mitigation of Astoria Energy and Bayonne in New York, and its recent remand of the Mystic decision in New England), the FERC has tried to preserve the fundamental principles of supply and demand. We think an extension of MOPR to existing assets (including renewables) will buoy future capacity prices, all else being equal, because it will preclude any downward pressure on
prices should any of the subsidized units choose to bid below costs. In effect, the extension will serve as buyer-side mitigation rules.

**FERC’s decision on energy price reform in PJM is likely but timing still uncertain**

On Nov. 15, 2017, PJM issued a formal proposal for energy price formation. PJM’s proposal to the FERC allows energy market clearing prices to be set by inflexible units prospectively to avoid scenarios where the locational marginal price (LMP) is set below the marginal cost of a market clearing inflexible unit—generally because of the zero marginal cost of wind. Under current rules, only flexible units (natural gas units and renewables) can set the marginal price of power paid to all generators. This is an issue primarily for coal and nuclear power plants, which currently must often run “out-of-the-money” relative to their variable costs due to their operating constraints in certain hours even as they are required for reliability purposes.

PJM has also recommended using the extended LMP method for price formation (that means keeping dispatch unchanged) so that prices reflect the entire cost of the inflexible nuclear or coal-fired unit were it be needed on the grid. This allows all market participants to benefit from higher prices and for the flexible units to get uplift payments for the opportunity cost of not generating power. We believe addressing this inefficiency would increase market energy prices for power, all things being equal. PJM estimates the enhancements would increase wholesale energy prices by $3.5/MWh. This correction would be a significant development for large base-load nuclear units (and perhaps some efficient coal-fired units) that are struggling from increasing negative energy price events caused by increasing levels of wind generation on the grid.

We believe the FERC will ultimately pursue a dual path, allowing RTOs to move forward with their proposed price reforms while pursuing a longer-term solution on resiliency through a separate proceeding. Given PJM’s white paper, we see the development as favorable for nuclear generators like Exelon Generation but likely unfavorable for coal-fired generation.

**Ongoing investigations in Illinois and a referendum in Ohio could pose risks for unregulated arms of utilities to the benefit of IPPs**

While momentum for state policy action (see industry trend for details) is strong, there is some emerging risks. We note that Exelon Corp. (and subsidiary Commonwealth Edison) have received a grand jury subpoena this summer from the U.S. Attorney’s office for the Northern District of Illinois requiring a production of information concerning their lobbying activities in the state of Illinois. The issue is whether these investigations could impact the bills on energy legislation in the state.

In Ohio too, recently granted nuclear subsidies approved for FES’ Davis-Besse and Perry nuclear plants through legislation could come under risk with efforts to hold a statewide referendum.

### Industry developments

**Gas production continues to impress**

The shale gas boom has disrupted the electric generation business. Large shale gas discoveries and resurgent natural gas production have resulted from new drilling techniques, such as horizontal drilling and multistage fracturing. The marginal costs of production have declined as drilling rig efficiencies continue to improve and the disproportionate impact of sharply lower natural gas prices is now weighing significantly on power prices. This is because in most markets natural gas is the fuel that sets market prices for power generation. Since the beginning of 2017, U.S. natural gas production has
increased 25% to 95 billion cubic feet (bcf) per day from about 75 bcf/day, or just over 25% since the beginning of 2017 (see chart 413).

Chart 413

U.S. Natural Gas Supply And Demand

While gas demand during peak winter days has exceeded 135 bcf/day, we note that the area under the natural gas production line and demand has been increasing both from the number of months production has stayed above demand (excess supply affects the reference gas price and forward curve), as well as the increasing intra-month difference between the supply and demand (which causes increasing basis differentials during "off shoulder" months).

Not only has natural gas production increased dramatically over the past two years, but we expect it will stay this way through 2030 because of prolific shale plays. Barring a fracking ban from a change in energy policy, incremental gas production from the shales will keep the domestic natural gas market supplied so well that we do not expect forward prices to show much volatility above $3/MCF (chart 414).
Renewables generation has affected wholesale market pricing

Negative pricing events do occur in centrally organized electricity markets and are usually the result of excess generation due to must-run requirements, or due to transmission constraints. Typically, these events do not tend to distort annual average day-ahead or real-time wholesale electricity prices. However, more frequent negative pricing has now been observed in constrained hubs with relatively large renewable generation. These negative offers are enabled by the federal wind production tax credit (PTC), which is currently about $22-$23/MWh. Specifically, base-load and renewable generation is competing during off-peak hours when wind generation is the strongest and load is lower. In the off-peak hours, tax credits create an incentive for wind generators to bid negative prices. Some wind generators may be willing to operate and bid prices all the way down to negative $23/MWh to claim their PTCs.

As wind generation has proliferated, instances of renewables impacting all-hours pricing have increased. For example, across 14,700 hours since Jan. 2018, we’ve observed 203 hours with negative prices in PJM’s Nl-hub region and over 500 when prices were less than $10/MWh (see chart 415). PJM NI hub negative prices occurred mostly during early morning hours, driven by low demand, nuclear generation in the Chicago metropolitan region, and wind generation from the west. Congestion likely also contributed to negative pricing during this summer. In general, the highest frequency of negative pricing observed occurred in winter and spring.
The distressed nature of nuclear generation and state policy

Some economic theory would suggest that deregulation works best when competitive markets are left to decide the lowest-cost reliable provider. Lately, there is growing concern about the impact of state government intervention in wholesale markets. At the same time, there has been a structural shift in regulator awareness of the distressed nature of the nuclear industry and their willingness to act. This is because of a growing sense that the rapid growth in variable resources has made the grid less resilient. Some of this concern is valid. While renewable resources have disrupted the grid by displacing baseload units (see table 7), they are able to provide only interruptible power that potentially jeopardizes the reliability of the grid.

Table 7
Offered And Cleared Resources in Recent PJM Auctions

<table>
<thead>
<tr>
<th>Delivery Year</th>
<th>Data</th>
<th>Coal</th>
<th>% Cleared</th>
<th>Gas</th>
<th>% Cleared</th>
<th>Nuclear</th>
<th>% Cleared</th>
<th>Grand Total</th>
<th>% Cleared</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017/2018</td>
<td>Offered UCAP 50,920</td>
<td>65,539</td>
<td>97.8%</td>
<td>30,630</td>
<td>86.2%</td>
<td>178,839</td>
<td>93.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cleared UCAP 45,354</td>
<td>64,089</td>
<td></td>
<td>26,401</td>
<td></td>
<td>167,004</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018/2019</td>
<td>Offered UCAP 48,842</td>
<td>68,114</td>
<td>95.4%</td>
<td>30,788</td>
<td>89.1%</td>
<td>179,891</td>
<td>92.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cleared UCAP 44,560</td>
<td>64,979</td>
<td></td>
<td>27,432</td>
<td></td>
<td>166,837</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019/2020</td>
<td>Offered UCAP 49,158</td>
<td>73,576</td>
<td>95.2%</td>
<td>30,423</td>
<td>85.1%</td>
<td>185,540</td>
<td>90.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cleared UCAP 41,948</td>
<td>70,053</td>
<td></td>
<td>25,889</td>
<td></td>
<td>167,306</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020/2021</td>
<td>Offered UCAP 45,761</td>
<td>77,486</td>
<td>95.2%</td>
<td>30,358</td>
<td>90.3%</td>
<td>183,352</td>
<td>90.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cleared UCAP 38,498</td>
<td>73,761</td>
<td></td>
<td>27,391</td>
<td></td>
<td>165,507</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021/2022</td>
<td>Offered UCAP 44,936</td>
<td>77,514</td>
<td>96.5%</td>
<td>30,561</td>
<td>65.2%</td>
<td>186,505</td>
<td>88.1%</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Cleared UCAP 39,022</td>
<td>74,814</td>
<td></td>
<td>19,918</td>
<td></td>
<td>164,343</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: S&P Global ratings; PJM Interconnection

Lately, winners and losers have been decided by a variety of factors such as fuel diversity, clean generation, and reliability issues. In particular, decisions at the state level have been influenced by the need to preserve local generation assets because of the impact it has on regional employment and tax base.

The recent example of this is the aforementioned nuclear subsidies approved in New York and Illinois, through the states’ Clean Energy Standard (CES) and Future Energy Jobs Bill, respectively. These decisions were appealed by IPPs who argued that the programs were anticompetitive and impinged on the FERC’s authority. The state rulings were upheld in federal circuit courts, and the U.S. Supreme Court declined to hear further appeals. With these rulings, the momentum has clearly shifted in favor of nuclear generators and more requests for ZECs have been approved in New Jersey, Connecticut, and Ohio (the nature of the plans across states differ but the nuclear units are compensated for the "missing money" in some shape or form).

There are also state lawmaking efforts at various stages of development in Pennsylvania, another major nuclear generation state, which may lead to similar programs. The Illinois legislation is considering enacting laws where the state would procure clean capacity from zero emission generators for its PJM utilities load.

We note that there is nearly 34.5 GW of nuclear capacity in the PJM, only 7.0 GW of which has been currently subsidized. There are at least three locational deliverability areas (LDA) within the PJM that have large nuclear generation concentration. If capacity prices were to remain depressed, the ComEd (10 GW), and Southwest MAAC (1.7 GW) regions would have beleaguered nuclear units, potentially leading to retirement announcements. We note that nuclear generation accounts for roughly a third of total installed generation capacity in these regions.
Battery technologies are advancing

Battery cost curves continue to trend down. Since we have the clearest view of lithium-ion economics, we’ll take that as an example. First, when we think in terms of capital costs for batteries, units are in $/kWh because we expect batteries to be duration products for peak shifting (or peak shaving) solutions.

Utility scale battery economics are currently at about $275/KWh, or $1,000/KWh for a battery peaker plant that provides a four-hour peak shift (round trip efficiency losses will likely have this number at $1,300/KWh). Costs for the balance of the system are about $400/KW for equipment like inverter/rectifier, transformers, and power control equipment, and various safety equipment. So a utility scale battery would currently cost about $1,500/KW (275*4+$400)—we think those costs are comparable to the cost of building a natural gas-fired peaker plant in California. We note that five states (NY and NJ at 3 GW and 2 GW by 2030, respectively), including California (1.3 GW +0.5 GW by 2024), have aggressive mandates.

The declining costs curve of batteries should be a concern for IPPs that operate in that state because these economics imply that there will be no gas-fired peaker plant additions in California. The whole point of batteries is that they take electricity directly from the grid and do not draw electricity from wind turbines or solar panels. As a result, batteries allow combine cycle gas turbines (CCGTs) to operate as combustion turbines in peaker plants. This means that a 54%-56% thermal efficiency power plant is going to be able to provide peaking power attached to batteries, instead of the ISO calling upon 30%-32% efficiency combustion turbine. This, in itself, results in substantial carbon reductions and fuel cost savings. In fact, by turning all CCGTs into flexible peaker plants in addition to being baseload plants, batteries allow much more renewable penetration onto that grid.

Decarbonization in the power sector

State-level policies continue to provide incentives for the decarbonization of the sector, and these have been advancing in much of the Northeast, upper Midwest, and West Coast. Renewable portfolio standards have continued to not only strengthen (in terms of final goals) but also broaden to capture new asset classes, such as offshore wind (with PPAs in New England states) and battery storage. These enhanced standards coincide with improved economics for renewable generation, as well as a relatively long runway for the solar Investment Tax Credit, creating a renewable-heavy and demand-uncertain grid that requires more flexibility—weakening the long-term case for baseload generation such as coal and nuclear in wholesale markets.

As evidence of this, California signed into law a goal for 100% renewable energy by 2045. While we don’t anticipate that this will have significant credit impacts in the near term, this is likely to be a major disruption to the market. Currently, major IPPs continue to have stakes in California gas-fired assets, but over time these are likely to become less valuable as their economics decline while the economics of batteries improve, fueled in part by a state mandate. The most benefits accrue to hydro and geothermal assets in California; these help satisfy the renewable mandate while avoiding intermittency concerns that face solar and wind, and they’re likely to have improved access to cash-flow stabilizing PPAs in years to come.

The regional greenhouse gasses initiative (RGGI) that subsumes Northeast states has attracted potential new entrants of late as the climate debate expands into state politics. Earlier this year, New Jersey’s Governor confirmed the state would enter the market, with its 20 million tons per year of annual emissions, adding to the 65 million ton per year market. A more interesting development has been the prospect for Pennsylvania to join the market, with its 80 million tons per year of annual emissions. We note that given its large natural gas lobby, it is politically easier for Pennsylvania to join a market with a $5-$6/ton carbon price than to approve subsidies for nuclear units.
In Illinois, Governor J.B. Pritzker has signed Senate Bill 9 (SB 9), aimed at ensuring safe closure of coal ash pits, into law in July 2019. We have noted that Vistra Energy has announced the closure of the Duck Creek, Havana, Hennepin, and Coffeen coal plants to meet the revisions to the multi-pollutant standards rule, leaving Vermilion and Edwards as two at-risk coal plants. Similarly, NRG’s Midwest generation fleet (Waukegan etc.) remain at risk.

Still, while we anticipate the decarbonization of the economy through the early part of the next decade, over a longer horizon, there could be a more serious challenge. In the early 2030s, a flurry of nuclear assets will be due for relicensing. Given the current weak economics of merchant nuclear assets, it’s not clear that there’ll be a strong incentive to renew these licenses. While there have already been five state-level subsidies for nuclear that have sustained a number of assets (and discussions of at least one more), absent these, there could be a wave of closures that, if replaced by CCGTs, as we’d expect, would potentially reverse the trend of decarbonization. However, by that time, depending on Administration, we could see another federal carbon reduction plan in place (but note that the Green New Deal requires closure of all nuclear units by 2030).

Emerging risks and opportunities from offshore wind

A climate study in New York has recommended embedding a per-ton price of carbon emissions in the state’s energy markets. The recommendation is intended align New York’s power markets and the goals set forth in the recently passed New York Senate Bill 6599, known as the Climate Leadership and Community Protection Act. However, on-peak power price declines in NYISO are affected by falling gas prices. Power prices and spark spreads in 2020-2022 are likely driven by rising concerns of pricing pressures from renewables and declining expectations for a carbon market, with Gov. Cuomo’s call for a 70% renewable target by 2030.

In fact, state-backed offshore wind targets continue to gain momentum after the most recent mandate in Virginia for 2.5 GW of offshore wind by 2026. Chart 12 presents the rapid growth in state mandates. This is largely because offshore wind technology now allows upwards of 10 MW turbines with lower installed costs (Chart 13), and LCOE estimates declining to about $90/MWh (without investment tax credits), still comparatively higher than the $65-$70/MWh range in Europe.

Offshore wind goals/mandates now aggregate 22.2 GW through 2035, with over 7 GW currently procured for operations by 2026. As these offshore wind projects commence operations over the next 10 years, we expect continued and increasing pressure on demand for natural gas. Assuming a one-for-one displacement of gas-fired generation with offshore wind, we could see up to 14% and 3% demand headwinds on a regional/national basis, respectively.
Hydro financings have also taken off

Recent hydro transactions in the U.S. private placement market are refinancings of existing assets. Although many of the existing hydro assets in the U.S. are at least 50 years old, they are considered perpetual assets that can operate indefinitely with proper maintenance and care. Over the past few years, many institutional investors have become comfortable with accepting merchant exposure of hydro projects in well-established U.S. power markets, especially those with a capacity payment construct like PJM, NYISO, and ISO-NE. Because hydro assets have minimal variable hours of operations and are capable of ramping-up to full load relatively quickly, they are usually at the lower end of the dispatch curve, unlike the traditional fossil fuel generators. Debt tenor for project financed merchant hydro power projects is usually between 10 and 15 years. Due to its perpetual nature, debt is usually structured as interest-only, with an
expectation that the outstanding bullet will be rolled over at maturity. In some cases, the debt structure may contain partial amortization. Smaller hydro projects are usually grouped together and financed as a portfolio, whereas larger projects with significant scale are sometime financed on a stand-alone basis.

**IPPs are relatively well ensconced north of the border**

Alberta remains the only Canadian province that has a fully deregulated electricity market and power market dynamics have changed there under a new government. Bill 18 was recently introduced to cancel the previously planned capacity market that was slated for 2021. If the bill passes, Alberta will remain an energy-only market, which might adversely impact those industry players that participate in the capacity market. The Alberta government has also discontinued the province’s Renewable Electricity Program (REP) under which PPAs were awarded to renewable power projects in a competitive auction process. As renewable power is becoming increasingly competitive, especially wind power projects, we find it likely that fully merchant renewable power projects in Alberta can thrive in a deregulated market.

Despite the discontinuation of the REP, Alberta’s plan to phase out coal remains on schedule for 2030. We rate two pure-play IPPs in Alberta, both which operate coal-fired power plants. TransAlta Corp. (BB+/Stable/-- ) is currently executing a coal-to-gas conversion project under which seven of its coal-fired generating units are to be converted by 2023. Capital Power Corp. (BBB-/Stable/-- ) has opted to implement a dual-fuel option at its predominantly coal-fired Genesee plant. Once completed, this would allow for up to 100% utilization of gas in lieu of coal. While these projects elevate capital expenditures (capex), in our view, as lower cost is associated with reworking existing plants vs new build, these IPPs have an advantage over new entrants.

In most provinces other than Alberta, a significant proportion of power generation is owned by provincial crown corporations. Therefore, provincial power markets tend to be vastly regulated. As a result, Canadian IPPs generally face relatively less risk than U.S. in our view.

Ontario, with ~41 GW of generating capacity, is Canada’s largest power-producing province and has had an energy-only wholesale power market since 2002. However, the majority of existing capacity is contracted (~61%) and another 32% is regulated through ownership by crown corporation Ontario Power Generation (OPG; BB+/Neg/-- ). The NO\textsuperscript{i}dependent Electricity System Operator (IESO), a statutory corporation that operates the electricity market and is the counterparty to the PPAs, is set to launch a new capacity auction in December 2019 to replace the Demand Response Auction and to enable competition between additional resources. However, the IESO has found there to be limited need for new capacity in coming years, despite major refurbishment programs underway at Ontario’s nuclear plants. Therefore, the new capacity auction process will not necessarily spur the construction of greenfield projects in Ontario.
Financial policy

Aggressive cost cutting and deleveraging

Free cash flow continues to be used for deleveraging as most IPPs see a backwardated EBITDA profile. Because of a long-term decline in wholesale power margins, most IPPs are now managing their capital structure to lower indebtedness. We see investment-grade companies looking to deleverage about 2.0x-2.5x, and even the high yield companies looking to bring debt levels about 3.25x-3.50x by year-end 2019 and to below 3.0x by 2020. For instance, two major IPPs—Vistra Energy and NRG Energy—plan to manage their business to net debt/EBITDA levels of 2.5x-3.0x. However, we see incremental impact on debt as some of these companies are also shuttering legacy coal-capacity, which has asset retirement obligation. We expect Vistra energy's financials to be influenced by incremental debt from the recent 2 GW retirements in Illinois, for which we do not impute debt as yet.

High cash flow conversion

IPPs are using a meaningful proportion of their excess cash flow to retire debt and are able to do so because of the currently high cash flow conversion rates (i.e., EBITDA to free cash flow (FCF; cash flow after capex and distributions) of above 50%). We note that the relatively high FCF conversion ratio is primarily attributable to significant EBITDA that comes from the retail power business, which requires very little capital investment (we expect cash flow conversion to be lower as competition intensifies). In addition, as these companies evolve their supply base from older, coal-fueled plants to newer CCGTs, their FCF conversion rate has continued to increase. CCGTs are less capital-intensive than coal plants and less expensive to maintain than, say, refinery assets, which tend to be older and more complicated than power assets, and require more maintenance capital.

Terming out of bank debt into the term loan B market

In the project finance market we are observing two discernible trends: refinancing of term loan As/bank loans into the term loan B institutional market, and progressively lighter covenants in inked loan documents. Because of fears that interest rates will increase further, we are witnessing high transaction activity, also because power markets have strengthened.

A number of transactions that we are currently seeing in the market are for assets that commenced commercial operations over the past two years and were originally financed in the bank loan/term loan A market. The bank loan market has historically borne construction risk better than institutional markets. Many of these single assets have commenced operations as power markets have turned for the better allowing them to be refinanced as term loan Bs. The recent wave of refinancing mostly include assets that started operations in 2017. However, we do not expect such refinancings to continue into 2020 largely due to the backward dated nature of these markets and uncertainty around price reform and capacity prices in PJM.

As capacity and energy prices show signs of coming off their troughs in some regions, lenders are becoming increasingly benevolent as relates to financial covenant requirements (e.g., incurrence tests and maintenance tests), which have continued to become lighter. We also see the market becoming more accommodating of structural revisions (e.g., allowed asset sales). This is in stark contrast to the financing environment a couple of years ago. As the environment turned weaker for merchant power in 2015–2017, we saw limited appetite for single asset financing, and instead saw a move towards portfolio financing. Examples of these transactions include Lightstone HoldCo. LLC, Eastern Power LLC, and Compass Power Generation LLC.
In 2019, it appeared that lenders were more accepting of less-diverse portfolios, suggesting that they believe that power markets are strengthening. Sponsors have also amended and repriced transactions where they have sought waivers for increasing leverage, or for lowering cash flow sweeps. Some of these original transactions closed as recently as six months ago. Strengthening capacity markets and strong summer pricing have been cited as reasons for the incremental debt capacity. Despite conflicting signals in the fundamental power market, it appears that the financing market is still able to attract global capital (from Japan, Korea, Israel and China, among others) although the appetite appears to be slowing down. This includes financings such as Frontera Generation Holdings LLC, St Joseph Energy Center LLC, and Kestral Acquisition LLC (Hunterstown).

Related Research

- Power Tennis, Or Power And Tennis: Serving Up The Limitations Of An Energy-Only Market, Sept. 9, 2019
- Can Independent Power Producers Be Investment Grade?, Sept. 4, 2019
- Unregulated Power: S&P Global Ratings' Evolving View Of Retail Power, May 14, 2019

This report does not constitute a rating action.
Industry Top Trends 2020

North America Regulated Utilities
A stable industry with a rising percentage of negative outlooks

What’s changed?

Negative credit bias. About 25% of all North America utilities either have a negative outlook or are on CreditWatch with negative implications.

California’s Investor Owned Electric Utilities. While wildfires remain operationally challenging for California’s utilities, we expect that the passage of SB 1054 into law adds sufficient financial credit enhancements to protect the utility’s credit quality over the next several years, absent near-term catastrophic wildfires.

Weak financial measures. These have weakened over the past three years and funds from operation (FFO) to debt has on average decreased by about 300 basis points (bps), in part due to tax reform, elevated capex, and leveraged acquisitions.

What to look for in the sector in 2020?

Large capital projects. Companies actively building new nuclear generation, liquefied natural gas projects, and interstate pipelines have all recently faced project delays and higher costs that could affect credit quality.

Environmental risks. Utilities with significant coal generation face higher regulatory scrutiny and environmental risks. Recent uncertainties regarding coal ash recoveries continues to highlight regulatory risks for coal generation.

Mergers and acquisitions (M&A). We expect that the pace of M&A activity may increase as companies search for growth. Furthermore, an increasing number of states passing Fair Market Value legislation may increase the acquisition of water municipalities.

What are the key medium-term credit drivers?

Minimal financial cushion. Most large and medium sized companies are managing cash flow measures at the rating downgrade threshold. This reduces the financial cushion they have to protect current credit ratings should unexpected events occur.

Regulatory and political risks. If the economy turns down, raising customers’ bills may become challenging. Political pressure to expedite carbon emission reductions and increase renewable investments could have repercussions for the customer bill. These pressures could increase the difficulties of managing regulatory risk.
Ratings trends and outlook

North America Regulated Utilities

Chart 419
Ratings distribution

Chart 420
Ratings outlooks

Chart 421
Ratings outlook net bias

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

North America Regulated Utilities

Chart 422
Debt / EBITDA (median, adjusted)

Chart 423
FFO / Debt (median, adjusted)

Chart 424
Cash flow and primary uses

Chart 425
Return on capital employed

Source: S&P Global Ratings, S&P Global Market Intelligence. All figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Industry outlook

Key assumptions

1. Growth is challenging
Due to conservation and efficiency, the electricity industry can no longer rely on traditional sales growth. While few utilities continue to benefit from strong new customer growth, most utilities are facing flat to declining sales growth. To achieve growth, many in the industry are turning to M&A, contracted assets, and other non-utility businesses.

2. Managing the customer’s bill
The utility industry has effectively managed rises in the customer bill over the past decade, benefiting from lower cost shale gas and historically low interest rates. However, capital spending remains robust and the industry must find savings from technology and process improvements to offset these higher costs.

3. Carbon Risks
Over the past decade the utility industry has taken significant steps to proactively reduce its reliance on coal fired generation and its associated level of carbon emissions. The industry is no longer the number one North America emitter of carbon and has reduced its coal fired generation by about 50%. Still, about 30% of utilities that generate electricity rely on coal fired generation, producing at least 50% of their electricity from coal. Additionally, about two-thirds of those utilities rely on coal fired generation for more than 70% of their total generation. Investors are increasingly focused on environmental issues and we expect the industry will continue to decrease carbon exposure by increasing its reliance on renewables, batteries, and natural gas.

Volume growth for many utilities has stagnated over the past decade, encouraging many companies to invest in higher risk large regulated capital projects, M&A opportunities, contracted assets, and other non-utility businesses to demonstrate growth. Each of these strategies has introduced various risks including rising leverage, higher business risk, project delays, and higher costs. We expect this trend to continue as long as electricity sales growth remains stagnant.

While conservation has flattened electric utility volumetric sales over the past decade, one area of potential growth is electric vehicles, which could increase utility infrastructure investments and higher volumetric sales growth. Some state utility commissions are allowing utilities to invest in charging stations while others have approved pilot programs to increase utility rate base investments. Charging an electric vehicle uses about the same electricity as running a typical central air conditioner for six hours, potentially growing a utility’s electricity volumes. Additionally, if the charging of electric vehicles is mostly done during off peak hours, minimal incremental infrastructure investments would be required to meet the additional load, providing a net benefit for the industry.

To shield the customer bill from the effects of rising capital spending, we expect utilities will continue to pursue technology to reduce costs. For example, many utilities have implemented automatic meter readers and are in the early stages of implementing drone technology. Furthermore, as battery technology improves and the cost of renewable electricity decreases, we expect the industry will further invest in electricity production from these carbon free technologies.
Higher coal ash costs may be a rising risk for a few electric utilities. Coal ash is a byproduct of burning coal. While the industry, in general, has effectively managed this risk, we are now seeing some cases of this risk escalating. Recently, the North Carolina Department of Environmental Quality ordered Duke Energy Corp. to fully excavate its remaining coal ash basins in the state. Duke estimates that the cost to comply could be as high as $5 billion over the next several years. It is conceivable that other utilities with significant coal ash exposure could face similar risks.

We believe utility investments in U.S. offshore wind will significantly grow over the next seven years and may lead to the installation of as much as 14 gigawatts of offshore wind capacity. If this capacity is installed it would equate to more than three-quarters of all the offshore capacity installed in Europe, which has been developing and installing offshore wind projects for the past three-decades. The potential growth is primarily driven by East Coast states looking to meet renewable and clean energy targets. Currently in the U.S. there is only one offshore windfarm online (Block Island Wind), but companies such as Avangrid, Eversource, Public Service Enterprise Group, and Dominion Energy could all have projects online by 2023. In general, we view offshore wind as having higher risk than traditional onshore wind projects due to its generally higher costs, complexity to build that can lead to cost overruns, possible siting and permit delays, and higher operational risks. However, the long-term contracted nature of these offshore wind projects with other utilities could mitigate some of the aforementioned risks.

The era of new North America nuclear power plant construction appears to be nearing its end. In 2017 SCANA Corp. abandoned its construction of two new nuclear units on increasing construction costs and further project delays. While Southern Co. is continuing with its nuclear construction projects, significant construction and execution risks exist and the company may face regulatory disallowances when they come online. Absent a new approach to nuclear technology, we do not expect another utility in North America to build a new nuclear generating facility.
Key risks and opportunities

1. Managing Regulatory Risks
Utilities have generally managed regulatory risk, consistent with an almost entirely investment-grade industry. Over the past decade, utilities have reduced their regulatory lag through the use of forward looking test years, formula rate plans, multi-year rate orders, increasing use of rider mechanisms, and decoupling.

2. When the Credit Cycle Turns
Our base-case outlook for credit quality reflects our view that most North American utilities would withstand a change to the credit cycle. However, in some cases, we expect that companies with minimal cushion at their current rating level could experience a downgrade. The ability to quickly pass cost increases to customers during a recession may increase the regulatory lag and weaken a utility’s financial measures, eroding the credit cushion for some utilities.

3. Capital Spending and Negative Discretionary Cash Flow
Annual capital spending for the industry remains robust at about $140 billion. The industry is primarily focused on smaller projects that enhance safety, reliability, productivity, and reduce carbon emissions. While spending at this level grows rate base and earnings, discretionary cash flow will remain negative. This requires the industry to maintain consistent access to the capital markets at competitive rates to fund the negative discretionary cash flow.

We expect that the generally stable North America utility industry will continue to have a relatively high percentage (15%-30%) of issuer credit ratings that either have a negative outlook or are on CreditWatch with negative implications. Companies are strategically managing their cash flow measures closer to the downgrade threshold with minimum cushion at the current rating level. An unexpected event such as a recession, wildfire, gas explosion, large project delay, or political interference, could all lead to a negative outlook or a downgrade.

For the industry to maintain its investment-grade credit quality, utilities must continue to manage regulatory risk and manage generally reduced authorized returns on equity (ROEs) and higher capital spending. Utilities have been able to improve their ability to consistently earn lower authorized ROEs by reducing regulatory lag through the use of forward looking test years, formula rates, multi-year rate orders, increasing use of rider mechanisms, and decoupling mechanisms. Another way some utilities have been able to increase their cash flow in lieu of lower authorized ROEs is by receiving a higher equity component within the regulated capital structure. These approaches highlight some of the tools that utilities have used to preserve credit quality despite the many challenges.

Although these tools work in many cases, their degree of credit supportiveness is often limited when a utility is facing operational risks, such as gas explosions or wildfires. In California, for example, customer fatigue from the constant de-energization (shutoff) of power lines is growing, which is increasing political pressure within the state. This may increase regulatory risk for some of the state’s utilities.

As part of the industry’s capital spending program, we expect it will continue to reduce its reliance on carbon-emitting fossil fuels. Over the past decade the utility industry has reduced its reliance on coal, but several individual utilities remain laggards. We expect utilities will continue to decrease their carbon emissions even if the utility operates in a state without renewable portfolio standards. Stakeholders are increasing their scrutiny...
of utilities with higher carbon emissions, possibly pressuring those utilities to expedite their decarbonization process.

While some utilities have increased their renewable portfolio to meet a state-specific standard, others have reduced their reliance on coal even while operating within a state without a renewable portfolio standard. Conversely, to contain rate increases some utilities without renewable portfolio standards are moving at a more measured pace to reduce their carbon emission. Some of these utilities operate in Alabama, Indiana, Kentucky, Mississippi, Montana, West Virginia, and Wyoming.

Related Research

- Credit FAQ: The Looming California Wildfire Season Prompts An Examination Of Investor-Owned Utilities’ Risks, June 7, 2019
- U.S. And Canadian Regulatory Jurisdiction Updates And Insights, May 14, 2019
- ESG Industry Report Card: Regulated Utilities Networks, May 13, 2019
- For Canadian Utilities, Credit Quality Will Depend On Executing Key Strategies, April 11, 2019
- Will California Still Have An Investment-Grade Investor-Owned Electric Utility? Feb. 19, 2019
Transportation Infrastructure

Will the transportation sector be resilient enough?

What's changed?

First effects of the China-U.S trade war. Robust year-to-date numbers notwithstanding, we have seen an impact from the China-U.S. trade war on those ports and airports that derive most of their revenues from container handling and air cargo, respectively.

Increased climate risk awareness. We have seen active decarbonization projects such as light rail and open road tolling, state or local initiatives to reduce emissions of infrastructure operators, and changes in climate that affect traffic levels.

What to look for in the sector in 2020?

Geopolitical factors/disruptions. Uncertainties regarding the U.K.’s exit from the European Union (Brexit) may weigh on transportation assets, principally, on U.K. airports’ that we believe could be the most affected.

Modifications of regulatory environments. We expect regulatory returns to be revised downward in Europe, as we observed already in other regulated sectors in this region. In Australia, however, no serious recommendations are being advanced to increase regulation of airports, and therefore we expect a stable scenario for 2020.

What are the key medium-term credit drivers?

Growing capex needs. Capital expenditures (capex) will remain significant, mainly to address capacity constraints, tightening emissions regulations, and digitalization, including continued conversion by roads to all-electronic toll collection.

M&A and investments in new jurisdictions. Merger and acquisition (M&A) activity is likely to remain high, particularly in EMEA and LatAm. The maturity of existing concession contracts in the upcoming years--specifically in EMEA--will lead major conglomerates to seek new opportunities, in particular in LatAm.

Greater pressure on contractor balance sheets. There has been higher risk transfer from the public sector to private entities (more precisely, to construction and operation contractors), which is pressuring the margin and balance sheet of these entities and thereby increasing the credit risk profile of some projects.
Cross-sector outlook

Revenue and traffic trends

Despite the still strong figures of 2019, the weakening economic environment resulted in a deceleration of traffic growth. The impact has been deeper in regions like Latin America (LatAm) and Asia Pacific, which experienced high-double-digit growth rates in past years.

A key credit driver for transportation assets will continue to be economic and, to a lesser extent, demographic trends, which have been favorable in recent years. A reversal of these favorable trends will adversely impact traffic.

We revised downward the correlation within GDP and traffic growth for Europe, the Middle East, and Africa (EMEA), Asia-Pacific (APAC) and Latin America (LatAm). In EMEA we expect multiples to fall to 1x or even below in 2020, from 1.0x-1.5x in 2019 and 2x-3x in 2018. In LatAm we expect the correlation to remain in the 1.5x-2.0x range in 2020 from 2.5x in 2019 on average. In APAC we expect it to be above 1.5x. These variables are subject to further modifications, particularly if a recession in the United States materializes or if airlines raise fares to cover higher fuel cost.

Airports

We expect modest growth across global and regional economies to continue to foster airport passenger growth in 2020 that will be below 2019’s figures. Main variables behind passenger volumes will include increasing traffic among low-cost carriers, incremental international tourism, and a shift from road transportation to air travel in some regions due to security concerns. On the flip side, the 737 MAX grounding, airline consolidations, and capacity constraints in some airports will moderate growth.

Ports

Overall we expect volumes to soften growth during the next couple of years and revenues growth to be slower.

We believe Australian ports are better positioned versus competitors due to the landlord port model in operation at major cities. This model provides stable underlying revenue from ground leases linked to inflation, with the port having modest direct exposures to trade flows. Notwithstanding this, we expect both container and non-container traffic (including motor vehicles) will continue to slow, albeit still at positive growth rates. The ongoing drought will also affect exports of certain product.

Roads

After many years of volume traffic growth in excess of economic expansion across the globe, we forecast revenue stagnation as the economies’ growth slows down.

Tolls will increase at inflation or slightly higher rates pursuant to concession agreements. In Chile, partly due to social turmoil, the Ministry of Public works (MOP) recently announced the elimination of the rates adjustment of 3.5% above Chile’s CPI for all urban toll roads starting in January 2020. The MOP will negotiate a compensation mechanism with each toll road, as established in their concession contracts. Potential compensation mechanisms include an extension of the concession or additional payments at the end of the concession, both of which we believe wouldn’t impact the toll roads' credit quality. We believe that under a more-stressed macro environment these measures could be replicated in other jurisdictions.
Airports

Key assumptions

1. Decelerating traffic growth
We project lower traffic growth for 2020 for all regions, driven by the slowing global economy and, to varying degrees, by the continued grounding of the Boeing 737 MAX, airline consolidations, and increased protectionism and isolationism concerning capacity constraints—over 200 airports globally require landing slot coordination.

2. Airport charges as a key driver for some regions
A pool of European airports will face material tariff cuts in 2020, including Flughafen Zurich AG. Some airports could see a double-digit tariff cut beginning next year.

3. Capital investments will vary widely across regions
The amount will be largely driven by volume growth, existing capacity utilization, and opening up to the private sector, such as in the U.S.

4. Rationalization of some hub airports
Airline consolidation has historically translated into rationalization of some airport hubs in North America, and more could follow at the margins, although runway and airspace capacity at peak hours limits the large network carriers. The remaining large U.S. legacy airlines run between 45%-53% of their total capacity through their top five airport hubs, with the exception of Southwest Airlines at 28%.

Key risks and opportunities

1. Terrorism, changing preferences and political risk could shift travel patterns
Growing trends of protectionism and isolationism have the potential to limit traffic increases. Under Brexit, for example, U.K. citizens would be subjected to passport controls in EU countries (and vice versa), adding delays and congestion at airports throughout Europe.

2. Investment pipeline is significant over the next three to five years
While these investments are critical to supporting competitiveness, it’s likely the companies incurring new debt to finance expansion costs will see weaker credit metrics along with increasing costs. As an example, Heathrow’s equity- and debt-funded expansion will cost around £14 billion between 2022–2026, and will raise the airport’s capacity to 142 million passengers and 740,000 air traffic movements (ATMs) by 2050, from the current 80.1 million and 480,000 ATMs.

3. M&A should create opportunities but could also challenge leverage
We expect M&A in 2020 to continue amid low interest rates and liquidity available.
Key industry developments and outlook

Geopolitical risk will remain a key driver, particularly in EMEA. Both the U.K. and EU have given repeated assurances that flights will continue post-Brexit. In our view, it is in both parties’ interests to retain air traffic. In September 2019 the U.K. and EU updated the temporary air services agreement for the 12-month period to Oct. 31, 2020, to allow flights between the two areas under a no-deal scenario. However, the agreement does not allow U.K. airlines to operate intra-EU services after Brexit. Furthermore, airlines with EU operating licenses are required to be majority-owned and controlled by EU nationals, which will exclude the U.K. after Brexit.

Airlines that we rate have been preparing themselves to minimize disruptions in such a scenario. For example, easyJet Plc, which accounts for over 40% of Gatwick’s traffic, has set up a European subsidiary in Austria that has an air operator's certificate in the EU member state. This will enable easyJet to continue to fly intra-EU routes provided that the airline is majority owned and controlled by EU nationals. EasyJet has been proactively engaging with EU-27 member state investors and has achieved just over 50% ownership and control, and can maintain this, if necessary, via provisions in its articles of association allowing restrictions on voting rights or forced sale by non-EU national investors. Uncertainty remains as to whether the U.K. and EU will reach an air services agreement before the temporary agreement expires Oct. 31, 2020. Nevertheless, we expect both parties would at least extend the temporary agreement if necessary to minimize disruption to the air connectivity between the two blocs.

Despite planning and taking steps to address predictable risks, in our view, unforeseen and difficult-to-predict developments could lead to traffic disruption, in particular under the no-deal Brexit scenario. However, we believe disruptions would likely be short-term. Disruptions could result from operational challenges such as additional border control requirements leading to longer queues at airports, in particular if customs resources are inadequate.

Chart 426
Aeronautical Revenues Participation (%)
Aeronautical regulatory reviews are also key threats to the stability of some regulated airports in EMEA for the next year or so. During 2019 we have seen a rise in populism across Europe, with debates about the affordability of public services pressuring the infrastructure industry as a whole. That said, falling interest rates mean the regulatory weighted average cost of capital (WACC) across all regulated sectors is falling. Also, the strong operational and financial performance of airports in recent years means their charges could be lowered to pull the return on capital in the regulated businesses down towards WACC.

In our view, giving back to customers is merited when airports have overperformed. However, lower airport fees could translate into lower profitability and increased volatility, which could weaken our assessment of an airport's business and financial risk profile. Also, lowering investor returns during a time when high capital expenditures are necessary may reduce investor appetite, especially if they believe they are not being sufficiently compensated for the additional construction risk. If this were not enough of a threat, the falling interest rate environment means that regulatory WACCs across all regulated sectors are falling. We have seen, for example, the Swiss regulator proposed a tariff cut of around 20% of Zurich Airport.

Capex spending will continue, and we anticipate expansions at a number of international airports. The Arturo Merino Benitez International Airport in Santiago, Chile, for example, should finalize the construction later next year that would allow doubling its current size. Other LatAm airports--Jorge Chavez in Lima, Ezeiza in Buenos Aires, Guarulhos in Sao Pablo, and Tocumen in Panama--have either already completed new terminals or will do so in the short to medium term. In Mexico, and due to the cancellation of the construction of the New Mexico City Airport in late 2018, we expect a shift in the strategy on how to address capacity constraints. The plan is to operate a system of three metropolitan airports to accommodate increasing demand in the capital city. This will include the construction and adequacy of an existing military base at Santa Lucia airport that should start construction soon (and is entirely financed with government proceeds), and the operation of the existing Mexico City and Toluca airports. In Brazil we expect a new round of 22 regional airports concession to continue to attract private investors, similar to the successful auction of 12 airports in March 2019 that attracted new European players, such as the Spanish operator AENA.

In Australia, we expect capital investments to increase in the near future as most airports are preparing for growth over the next 10–20 years, including new runway planning. High
airport congestion and continuing passenger traffic growth in countries like India, Vietnam, Philippines, and Indonesia will lead accelerated expansion plans or new airport development projects. Rated airports like Delhi International Airport Ltd. and GMR Hyderabad International Airport Pvt. Ltd. have nearly doubled their capex plans, expanding the airports three to five years before initial plans.

In South and Southeast Asia--projected to have the fastest passenger traffic growth till 2040 (as per World Airport Traffic Forecasts)--many governments are aiming to transfer a greater share of risks onto airport developers. Under a new public-private partnership (P3) model, the government of India has awarded six concession agreements for brownfield airports based on fee-per-passenger to be paid by the winning bidder. This exposes the airport operators to market risk due to changes in passenger traffic and price caps. But existing concessions benefited from assured returns on the regulated asset base, with full pass-through of costs and capital spending along with a "true up" mechanism if traffic volume was lower than anticipated. Thailand also finally awarded a $7 billion high-speed train project linking three airports, after drawn-out negotiations over concerns over distribution of risks, including for land acquisitions.
Ratings trends and outlook

Global Airports

Chart 428
Ratings distribution

Chart 429
Ratings outlooks

Chart 430
Ratings outlook net bias

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

Global Airports

Chart 431
Debt / EBITDA (median, adjusted)

Chart 432
FFO / Debt (median, adjusted)

Chart 433
Cash flow and primary uses

Chart 434
Return on capital employed

Source: S&P Global Ratings, S&P Global Market Intelligence. All figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
## Ports

### Key assumptions

1. **Increasing sensitivity to trade/tariff disputes**
   
   The impact of the trade dispute have been somewhat diluted by a buoyant first half of 2019; however, we anticipate volume will soften in 2020 due to slower U.S. and global economic growth, with trade or tariff disputes possibly further depressing cargo volumes.

2. **Solid business positions**
   
   In general, major container ports that we rate benefit from solid business positions serving regional markets, an operational model that transfers the risks of cyclicity in container flows to terminal operators, and strong management practices that buffer credit quality. Ports rated in APAC are also mostly contracted or regulatorily protected and, therefore, are less exposed to competition.

### Key risks and opportunities

1. **Trade disputes could impact volumes**
   
   There could be an impact on direct trade if absolute trade flows fall, and on relative trade if manufacturing patterns begin to shift. The latter has been the case for the Panama Canal, with a decrease in container volumes (from or to the U.S. and China, its two main relevant clients), but the steady flow of liquid natural gas (LNG) and liquefied petroleum gas (LPG) shipments compensated for the decrease of revenues.

2. **Pressure to stay competitive**
   
   Competition with other ports in accommodating large vessels has fueled terminal enhancements and long-term investments to add capacity and debt. North America East Coast ports are benefiting from the increase in large container ships and capacity enhancements to accommodate them, as well as congestion and rising costs of West Coast ports.

3. **Shipping companies consolidate cargo**
   
   We have yet to see increasing consolidation cargo among fewer shipping companies via vessel sharing and alliances for lower cargo volumes at ports.

Overall we expect volumes to soften growth during the next couple of years and revenues growth to be slower. We believe Australian ports are better positioned versus competitors due to the landlord port model in operation at major cities.

We expect origin and destination ports like in Indonesia and India to show greater resilience than transshipment ports in countries like Singapore. However, realignment of supply chain networks due to trade tariffs remains a wildcard and can impact trade flows within the region and globally.
Chart 435

**Chinese Ports YOY change**

Source: S&P Global Ratings, Panjiva

Source: S&P Global Ratings, Panjiva

Chart 436

**S&P Global Ratings Exposure**

Source: S&P Global Ratings, Panjiva
Chart 437

All Ports Exposure

Source: S&P Global Ratings
Ratings trends and outlook

**Global Ports**

*Chart 438*

**Ratings distribution**

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

**Global Ports**

**Chart 441**
Debt / EBITDA (median, adjusted)

**Chart 442**
FFO / Debt (median, adjusted)

**Chart 443**
Cash flow and primary uses

**Chart 444**
Return on capital employed

Source: S&P Global Ratings, S&P Global Market Intelligence. All figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
### Roads and Car Parks

**Key assumptions**

1. **Traffic levels are moderating**
   
   We expect traffic levels to moderate across all regions in 2020, even in North America, where recently expanded tolling technology is allowing for easier toll increases and congestion pricing, resulting in above-inflation-adjusted toll increases.

   Our forecasts include traffic growth in line with or slightly below economic activity in EMEA, North America, and APAC in 2020 and outpacing the regional GDP expectations in LatAm (we forecast the correlation to be between 1.5x and 2x in the latter’s case). The performance in LatAm is fueled by a more robust traffic performance on less mature assets that continue to benefit from new toll-road users and by the recovery in traffic volumes in Brazil as the economic activity recomposes after several years of recession.

2. **Demanding capital expenditures**

   We anticipate large investments in most regions due to economic stimulus programs, or potential disruption (electrification or, in the car park business, the development of electric vehicles and diversification of services provided). We expect these works to be compensated either through tariff increases or extension of concession terms, thus benefitting the contract duration of single-asset and portfolio asset operators. In Europe, we will see the “Plan de Relance Autoroutier” in France, which aims to modernize the motorway infrastructure while providing economic stimulus in the regions, and the European Fund for Strategic Investments to expand Spain’s road network. The major Australian cities of Sydney, Melbourne, and Brisbane are all also undergoing significant road-related construction to address the impacts of congestion in urban areas due to population growth. In many instances these additions to the road network are either enhancements to existing toll roads or new roads connecting to the network.

3. **Demanding capital expenditures**

   Competition from technology used by transportation network companies such as Uber and Lyft is beginning to destabilize the business model of carparks.
### Key risks and opportunities

1. **Technology enhancing the business model**

We expect continued evolution and implementation of technology in the toll sector, enhancing and expanding revenue collection, and maximizing strategies of infrastructure providers.

2. **Weather disruptions**

Unusually higher rain or snow days will likely continue to impact commuter traffic and car parks, and the increased severity and frequency of extreme weather events will require investments by operators to harden assets and upgrade design standards.

3. **Concessions coming to maturity and not retendered**

The decision from the grantor not to retender some toll-road Spanish concessions exposes operators to cash flow expiration. This is the case for Abertis portfolio, where Acesa and Aumar are expiring in 2019 and 2021. This contributes to the support company’s international expansion and signals that roads may no longer be privately managed when concessions come to maturity, reflecting political agendas/priorities. The main challenge for Abertis consists of replacing the existing high quality of cash flow from these concessions without having major implications to its credit fundamentals. The existing assets are located in a low-risk country, generate strong cash flows, and have no debt.

### Ratings Industry Developments and Outlook

Toll-road investments will remain high, particularly in countries such as Colombia, which is still developing its fourth-generation toll-road program, and Indonesia or Australia. Meanwhile, India is pushing hybrid model, with the government sharing 40% of the project development cost, to revive private sector investments.

This construction-related expenditure will see debt levels continue to increase and could see financial ratios weaken in the short term in advance of traffic coming on-line. However, in the case of some toll-road operators, including Transurban, financial ratios are largely unaffected as the operator has raised significant amounts of equity to fund construction and will then introduce debt over time as traffic revenues increase.

Lastly, we believe M&A will continue. In Europe it will be mostly related to those conglomerates that are exposed to loss of cash flows from concession expiration. Abertis, for example, announced on Oct. 11 the acquisition of a 50.1% stake into Mexican toll-road operator Red de Carreteras de Occidente for about €1.5 billion. We expect the transaction to support Abertis’ strategy in replenishing the loss of cash flows of some key Spanish concessions expiring in 2019 and 2021, although it adds pressure on tight financial headroom and increases exposure to soft currency and country risk. In this context, we expect Brazil to capture attention for the auction of at least five new federal concessions in 2020 and a new round of road concessions in the State of Sao Paulo, which includes a 1,273 kilometers of new concession--Piracicaba-Panorama road--requiring $3.5 billion capex, scheduled to be auctioned on Nov. 28, 2019.
Ratings trends and outlook

Global Roads and Car Parks

Chart 445
Ratings distribution

Chart 446
Ratings outlooks

Chart 447
Ratings outlook net bias

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

Global Roads and Car Parks

Chart 448
Debt / EBITDA (median, adjusted)

Chart 449
FFO / Debt (median, adjusted)

Chart 450
Cash flow and primary uses

Chart 451
Return on capital employed

Source: S&P Global Ratings, S&P Global Market Intelligence. All figures are converted into U.S. Dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.
Rail and Transit

Key assumptions

1. Falling ridership

We expect negative pressure on ratings in North America due largely to continued declines in ridership levels and ongoing pressures to support rising operational costs and find funding sources for very large capital investments.

Key risks and opportunities

1. Transit needs additional funding sources

We expect negative pressure on ratings in North America due largely to continued declines in ridership levels and ongoing pressures to support rising operational costs and find funding sources for very large capital investments.

2. Rail liberalization challenges operating models

The sector is preparing for the start of competition in EU domestic rail passenger markets from 2020. Rail companies are ramping up investments and operating expenditure in the attempt to defend their market position, which will add pressure to their already leveraged credit profiles, as well as their low profitability.

3. Decarbonization is a driver

We are seeing increasing investments in light rail being driven by government policies that favor less carbon-intensive transportation choices.

4. Upside from urbanization, downside from TNCs

Factors that have led to drop in ridership include eroded service levels, more people working from home, and competition with transportation network (TNC) companies. Urbanization and associated potential lower car ownership may be a plus, but pressure could continue if autonomous electric cars prove successful.

Related Research

– Why The Transportation Sector Is On A Fast Track To Get Greener, May 10, 2019
– The Road Ahead For Autonomous Vehicles, May 14, 2018

This report does not constitute a rating action.