

## Industry Top Trends 2021

### Global Transportation Infrastructure

Uneven And Protracted Recovery From Unprecedented Shock



#### What's changed?

**Air travel will be the slowest subsector to recover, and remain weak in 2021.** After a watershed 2020, next year will still be strained due to rising COVID-19 cases and renewed public health restrictions in many countries. The first half of the year is likely to be the most anemic, with some recovery in the last six months, assuming a vaccine allows for the easing of travel restrictions.

**Road traffic is recovering faster than air due to user preferences and essential travel needs.** Heavy vehicle traffic volumes have proved generally more stable than passenger.

#### What are the key assumptions for 2021?

**Air traffic will be down 40%-60% in 2021, with recovery to pre-pandemic levels from 2024.** This assumes a vaccine is widely available in the middle of 2021 as per current consensus among health experts.

**Recovery of road traffic will vary across regions in timing and extent.** We expect toll road revenue will be down 10%-40% in 2021, depending on region, traffic composition and the type of road. Still, Asia-Pacific and Latin America should generally recover to pre-COVID levels in 2021.

**Ports will be resilient to further restrictions and track economic trends in various markets.** Volume drop in 2020 was limited, and ports could outperform our expectations if economic conditions improve faster.

#### What are the key risks around the baseline?

**Delays in global deployment and social acceptance of a vaccine in 2021.**

Additional lockdowns will hinder social and economic normality, hurting transportation infrastructure. Geopolitical events such as Brexit add uncertainty.

**Rising counterparty risk to failing or consolidating airlines.** This raises questions about future tariff increases for airports as well as the speed and success of other airlines to take over vacant slots.

**Structural change to mobility trends.** Acceleration of remote working, virtual business meetings, online shopping, and blended teaching could affect the future usage of transportation infrastructure.

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# Shape Of Recovery

Table 1

## Sector Outlook Heatmap

	Sensitivities and structural factors			Shape of recovery			
	COVID-19 sensitivity	Impact if no vaccine in 2021	Long-term impact on business risk profile	Revenue decline – 2021 vs 2019	EBITDA decline – 2021 vs 2019	Revenue recovery to 2019 levels	Credit metric recovery to 2019 levels
<b>Airports</b>							
Asia-Pacific	High	High	Negative	30%-40%	30%-40%	2024	2024
Europe	High	High	Negative	40%-50%	> 50%	2024+	2024+
Latin America	High	High	Negative	20%-30%	30%-40%	2024	2024
North America	High	High	Negative	40%-60%	NA*	2024	NA*
<b>Toll roads</b>							
Asia-Pacific	Moderate	Moderate	Low	>=2019	>=2019	2021	2021
Europe	Moderate	Moderate	Moderate	10%-20%	10%-20%	2022	2022
Latin America	Moderate	Moderate	Moderate	>=2019	>=2019	2021	2021
North America	Moderate/high	Moderate/high	Moderate	10%-40%	NA.	2022 to 2025	NA
<b>Ports</b>							
Asia-Pacific	Low	Low	Neutral	0%-10%	0%-10%	2021	No impact
Europe	Low	Low	Neutral	0%-10%	0%-10%	2021	No impact
Latin America	Low	Low	Neutral	>=2019	>=2019	2021	No impact
North America	Low	Low	Neutral	-	-	-	-

\*Airports in North America are either rated as international public finance or project finance. Source: S&P Global Ratings.

S&P Global Ratings believes there remains a high degree of uncertainty about the evolution of the coronavirus pandemic. Reports that at least one experimental vaccine is highly effective and might gain initial approval by the end of the year are promising, but this is merely the first step toward a return to social and economic normality; equally critical is the widespread availability of effective immunization, which could come by the middle of next year. We use this assumption in assessing the economic and credit implications associated with the pandemic (see our research here: [www.spglobal.com/ratings](http://www.spglobal.com/ratings)). As the situation evolves, we will update our assumptions and estimates accordingly.

This report does not constitute a ratings action.

# Cross-Sector Outlook

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## Revenue and traffic trends

We expect 2021 to be a recovery phase for all the subsectors in transportation infrastructure. The recovery will be uneven across subsectors and regions, and subject to the pandemic's evolution, government COVID-19-related containment measures, consumer behavior, and the availability of a vaccine.

Delay in deployment and effectiveness of a vaccine in 2021 is the key risk for all subsectors. Additional lockdowns will hinder social and economic normality, with direct hits to airports, roads, car parks, and railways, and indirect hits to ports. In this scenario, the stability of ratings will depend on financial flexibility, sustainable reduction in operating expenditure, and counterbalance measures for liquidity preservation.

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## Airports

Airports will remain highly exposed to a potential resurgence of COVID-19 and the downside risk of a delay in the deployment and effectiveness of a vaccine. Compared with the past decade, the pandemic has increased the focus on sustainability.

Commercial revenue, which had risen to 40%-55% of most airports' revenue mix pre-pandemic, is likely to be even more heavily hit than aeronautical revenue. The commercial segment has been strained by both a drop in volume and the lower purchasing power of passengers. This is particularly the case in more vulnerable economies, such as Latin America (LatAm). Real estate portfolios should safeguard some stability for some airports in Europe, the Middle East, and Africa (EMEA).

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## Ports

Ports' performance has been resilient and should track economic trends. Except for cruise and car transshipment, we expect a full recovery in volumes for both containers and bulk cargo, aligned with that of global trade.

Container trade is likely to remain resilient as global economic conditions recover slowly. Bulk cargos such as coal, iron ore, oil, and steel could face some variability subject to global pricing trends.

Tariffs increase could be restrained amid pressure on businesses and temper earnings improvement. Landlord ports with property portfolio in the precinct will be less affected by the pandemic, as seen in 2020.

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## Roads

The recovery of revenue will differ substantially in timing and extent across regions. We still expect full recovery of light vehicle volumes by end-2021 for most toll roads operators, with the exception of those in North America and some toll roads Italy and Spain.

The pandemic's impact on working arrangements may permanently alter traffic patterns. New office/remote work arrangements and more flexible office hours will affect both daily traffic levels and intraday traffic flows. Moreover, managed-lane and other congestion-relieving roads will see lower traffic volumes because of less congestion on free alternative roads.

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## Parking lots

We have negative outlooks on European parking lot operators; most long-term off- and on-street concessions; and North America parking lot project financings. At the same time, the ratings on the project finance for P3 parking remains investment-grade, despite a huge volume decline. This reflects cash injections, liquidity support, or revenue credit enhancement. In EMEA, the negative view is due to generally high financial leverage following years of inorganic growth to offset expiring contracts. We also consider that many of the expenses associated with operating in the car parking industry are relatively fixed (personnel cost and fixed lease or concession fee payments).

Volume recovery for parking lots will be gradual, particularly for assets close to airports and railways stations. Assets in city centers could suffer as a result of unemployment, change in commuter habits, and lower purchasing power.

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## Railways

Pandemic-related travel restrictions, remote working, and train-capacity constraints due to social distancing will prevent rail travel recovering to pre-pandemic levels before 2023 at the earliest in some European countries.

Volumes in 2021 are likely to reach 70%-80% of 2019 levels. We expect rail travel to recover faster in countries with populations that are conscious of climate change; as will regional rail and freight services.

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# Airports

## Ratings trends and outlook

Over 80% of global airports we rate have negative outlooks or are on CreditWatch with negative implications. We may lower the ratings or revise the stand-alone credit profiles depending on each airport's liquidity, financial headroom, and consistent ability to reduce cash burn. Downside factors include heightened exposure to airline counterparty risks and long-haul and business traffic, as both are likely to recover at a slower pace, despite our expectation of that a vaccine should be widely available by mid-2021.

Recognizing the long-term nature of airports and their often regulated/contracted tariffs, our analysis places more emphasis on 2021-2023, rather than only 2020. We expect air traffic to recover to pre-pandemic levels by 2024, at the earliest. Its long-term growth rate might be lower due to the scaling-back of business and people's rising desire to offset the carbon footprint.

## Main assumptions about 2021 and beyond

### 1. Air traffic will be 40%-60% lower in 2021 than the 2019 baseline.

This assumes a vaccine is widely available in the middle of 2021, as per current consensus among health experts.

### 2. Recovery will vary significantly among regions and airports.

Asia-Pacific (APAC) will recover faster, supported by domestic and short-haul traffic in China, Australia, and India. We expect North America and LatAm to follow a similar path, whereas EMEA should recover more slowly. The recovery depends on the likelihood and duration of further lockdown measures, the implementation of internationally coordinated testing and quarantine protocols, and the speed of success of the aviation industry in rebuilding consumer confidence.

The pace of recovery will also depend on the type of traffic and airlines' mix. The first to recover will be airports that rely primarily on passengers visiting friends and relatives; leisure, origin and destination (O&D); and short-haul traffic. Domestic gateways and primary international hubs with a share of O&D traffic are in a more advantageous position than secondary hubs and regional airports.

Retail and car parking revenue will be linked to traffic, while the property portfolio should support earnings

To date, outside of the U.S., we have seen little direct government support to airports. In the U.S., the Coronavirus Aid, Relief, and Economic Security Act (also known as the CARES Act) approved by Congress on March 27 provided significant support and liquidity to the aviation industry. While \$50 billion was addressed to airlines, it also provided nearly \$10 billion to almost all commercial service U.S. airports. These airports came into the pandemic with very strong cash positions and bondholder protections such as debt service reserve accounts. Accepting federal aid required airport operators to adopt similar workforce-retention requirements and most airports granted rate relief to airline tenants and concessionaires, an allowable expense under Federal Aviation Administration rules.

Airport operators have also been applying grants to meet debt-service requirements, operating and maintenance expenses, and eligible capital costs. They often spread their use of grant proceeds over one-to-three fiscal years. While providing an important source

of liquidity, the federal grants are a short-term fix to a longer-term problem of weakened demand that we see extending beyond our outlook horizon.

Recovery in Australian and New Zealand (NZ) airports will first come from their larger proportion of domestic traffic (50%-85%), as highlighted by NZ's fast ramp-up in domestic traffic. Yet, international traffic will be an important lift to earnings and to restore retail and ground transport revenues. We observe a similar recovery path for air traffic, both domestic and international, in China, India, and LatAm countries.

The property portfolio has held up well for Australian and NZ airports to cover their substantially restrained operating costs. We don't anticipate any direct government support at this stage. Still, subsidized flights on certain routes and financial support to airlines air traffic control should support the sector as a whole. In Europe, many airports have benefited indirectly, thanks to the state support provided to the aviation industry in general, and to airlines and companies providing services at airports.

Also, in the case of regulated airports, the regulators, pressured by the airlines, have so far not been inclined to pass onto customers the traffic risk for which normally airports are remunerated in their cost of capital. Given the segment's over-performance in previous years, regulators are looking to shareholders to take their share of the risk-and-reward balance. We see governments' policies in Europe as discouraging short-haul travel via environmental taxes, and we expect more passengers and corporations to reduce flying due to the high carbon footprint.

## Credit metrics and financial policy

Most airports still have a rigid cost base, so our revised low passenger traffic assumptions will weigh heavily on cash flow coverage metrics and squeeze profitability. Similarly, for North America's not-for-profit airport operators, weaker demand combined with an anemic passenger recovery will carry over to lower coverage, higher airline costs, a diminished rate-setting environment for aeronautical revenue, and weaker non-aeronautical revenue performance.

We also see some airports taking more aggressive mitigating actions to 'right-size' their organizations with large-scale redundancies, renegotiation of supplier contracts, and investment in IT and automation. Scaling down of investment budgets could significantly limit cash burn.

Some of the Australian, NZ, and European airports have taken covenant waivers for 2020-2021. Other airports do not expect to be in breach of their covenants due to strong cost controls and reduced interest expense by restructuring their swaps. Good access to debt markets during these uncertain times has enabled airports keep good liquidity for the near term.

The protracted recovery means that most European airports will not see a recovery to 2019 ratios over our outlook horizon, since leverage increased in 2020 to fund cash burn. The focus on re-sizing operations and scaling down capital expenditure (capex) could result in free operating cash flows breaking even or turning positive in 2021. For example, the budgets of rated European airports are down by about €10 billion compared with pre-COVID levels over 2020-2023, or 40%-50% in relative terms. We expect state aid will be provided to only a few European airports due to the segment's abundant liquidity and uninterrupted access to the capital markets.

## Key risks and opportunities around the baseline

### **1. Pressure on commercial revenue might stimulate innovation.**

Commercial revenue (the share of which has risen to 40%-55% of most airports' revenue mix) will likely be even more heavily hit than aeronautical revenue. This is because airports will continue to waive minimum guaranteed income clauses and the negative effect of lower purchasing power of the passengers. At the same time, airports are likely to come up with innovative solutions for generating commercial revenue, applying digitalization (click & collect), low-cost solutions (mobile units), and re-thinking the use of terminals' space.

### **2. Airports may move to a more variable cost structure.**

The pandemic may stimulate airports to become more efficient and scalable by capitalizing on new digital technologies to limit virus transmission and improve the passenger experience. It will also help them retain leaner organizations, triggered by a scenario of lower passenger numbers.

### **3. Airlines' financial condition will influence the level of charges.**

Airports are more likely to offer discounts to ensure passenger footfall, discouraging regulators from raising charges. What is more, the bargaining power of low-cost airlines might rise as their short-haul model and focus on low fares place them in a more favorable position in a recovery.

## Ratings Trends And Outlook

### Global airports

Chart 1

#### Ratings Distribution

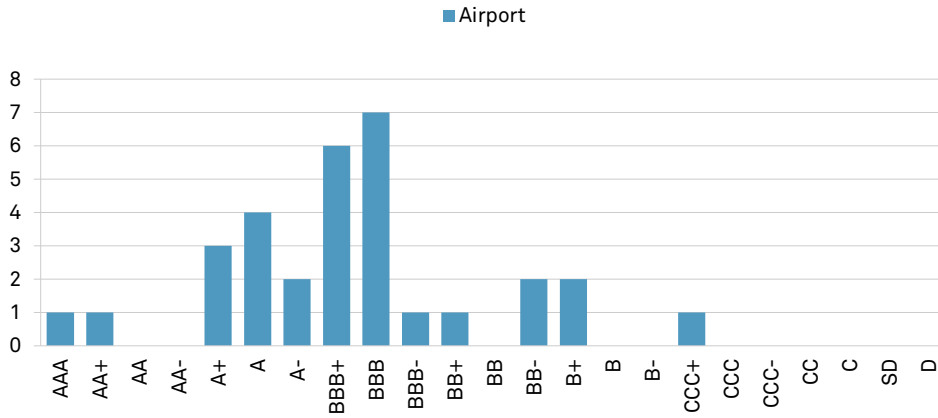


Chart 2

#### Ratings Outlooks

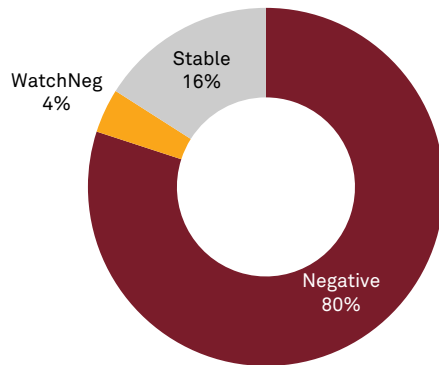
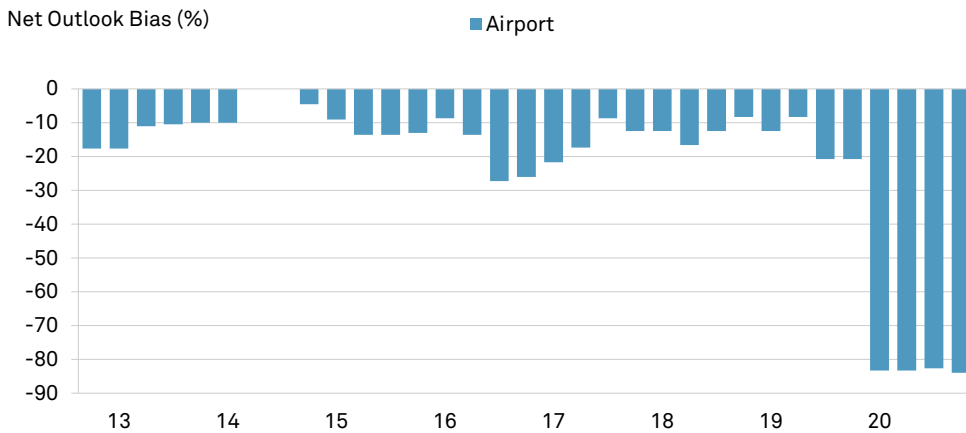


Chart 3

#### Ratings Outlook Net Bias



Source: S&P Global Ratings. Ratings data measured at quarter end. Data for Q4 2020 is end October 2020



## Industry Credit Metrics

### Global airports

Chart 4

Debt / EBITDA (median, adjusted)

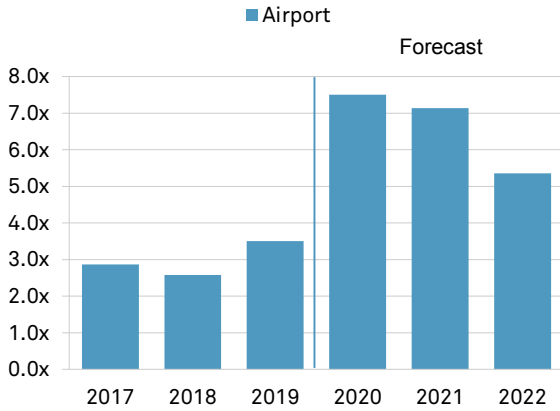


Chart 5

FFO / Debt (median, adjusted)

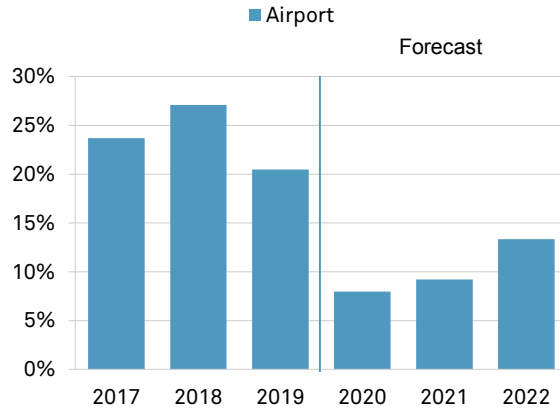


Chart 6

Cash flow And Primary Uses

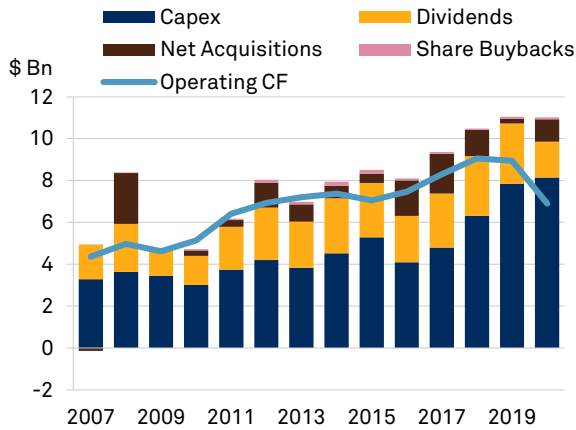


Chart 7

Return On Capital Employed



Source: S&P Global Ratings, S&P Global Market Intelligence. Most recent (2020) cash flow and ROCE figures are using last 12 months (LTM) data. All non-forecast 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

## Ratings trends and outlook

The global port sector is experiencing a moderate impact from the pandemic because the ports stayed open for business during the lockdown months and trade is affected less than services. The key challenges from any new restrictions in 2021 will come from (1) supply-chain disruption; (2) demand contraction; and (3) logistical bottlenecks as ports clients struggle with distribution.

## Main assumptions about 2021 and beyond

### 1. Volumes to rise in line with global trade growth at about 6% in 2021.

Container volumes to follow economic performance in their catchment areas, typically at 1x multiple of GDP. Similarly, we expect dry bulk volumes of grains, proteins and metals to follow global trade recovery. At the same time, we anticipate a secular decline in coal and crude oil volumes, boosted by the energy transition toward lower greenhouse gas emissions.

Origin-and-destination ports could see less impact than transshipment, which fluctuates with the economic cycle. Furthermore, landlord ports are more resilient due to a portion of relatively more stable, long-term contractual revenues. Port terminal operators have generally lower margins but have more ability to cut costs.

## Credit metrics and financial policy

For the largest European ports we rate, high profitability, balance-sheet flexibility, and liquidity buffer could help weather the economic headwinds in 2021. Leverage will increase due to heavy investments in innovation, resilience to climate change, and mitigation of cyber risk.

In APAC, we expect the credit profile for Australian and NZ ports to remain steady owing to the landlord port model in Australia and stable demand for key products in NZ. In both countries, we project container volumes for 2021 will be down 10%-15% and bulk volumes to be broadly flat.

In LatAm, ports have benefited from increased exports—boosted by local currency devaluation—in particular for grains, proteins, and other food-chain supplies during a favorable harvest year. This partially offset lower volumes of imports and vehicle transshipments, resulting in relatively stable credit metrics.

## Key risks or opportunities around the baseline

### 1. Pressure from shipping lines alliances and cargo consolidation.

Ports are exposed to the increased bargaining power of shipping line alliances. Harbor dues could stay flat or decline due to fierce competition by shipping lines.

### 2. Trade with China remains a key factor.

Broader sovereign relationships with China and resultant trade patterns, as well as post-COVID-19 demand globally, have the potential to influence both container trade and bulk/commodity trade.

## Ratings Trends And Outlook

### Global ports

Chart 8

#### Ratings Distribution

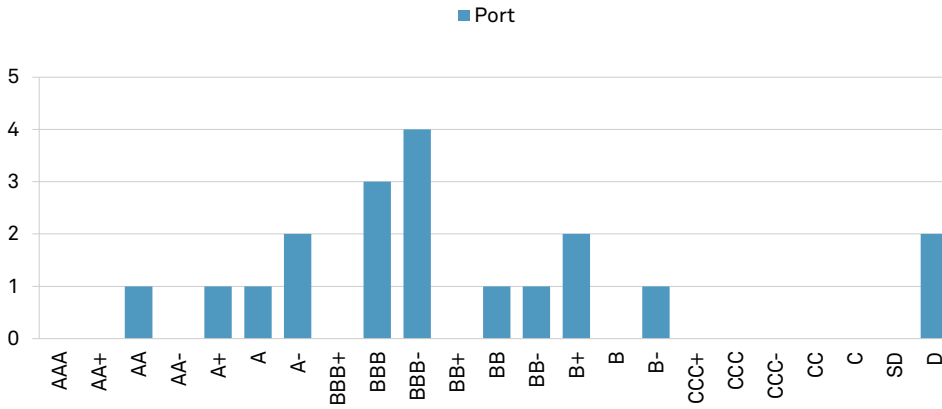


Chart 9

#### Ratings Outlooks

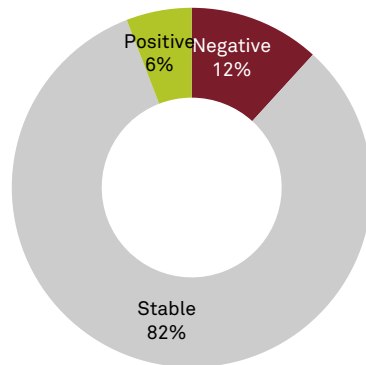
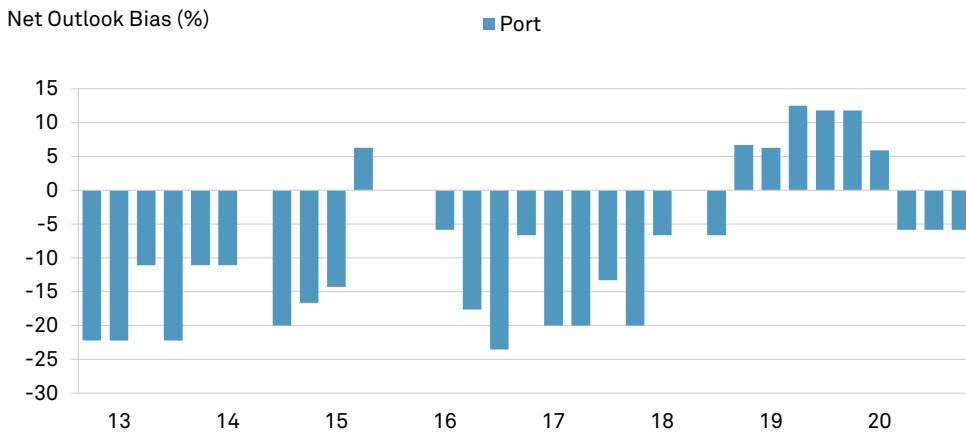


Chart 10

#### Ratings Outlook Net Bias



Source: S&P Global Ratings. Ratings data measured at quarter end. Data for Q4 2020 is end October, 2020

## Industry Credit Metrics

### Global ports

Chart 11

Debt / EBITDA (median, adjusted)

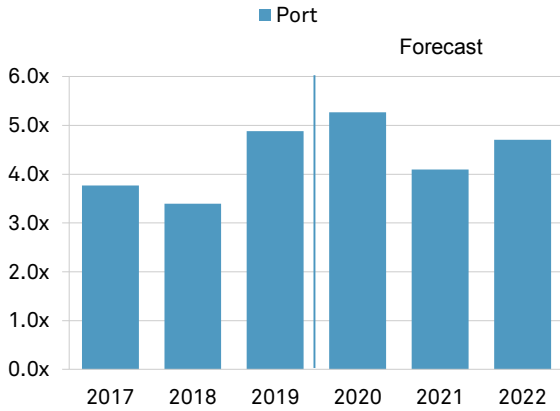


Chart 12

FFO / Debt (median, adjusted)

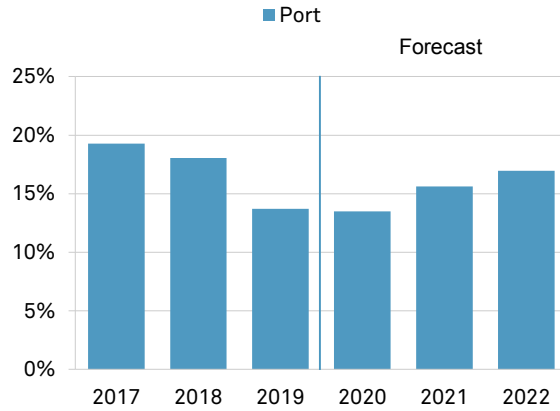


Chart 13

Cash Flow And Primary Uses

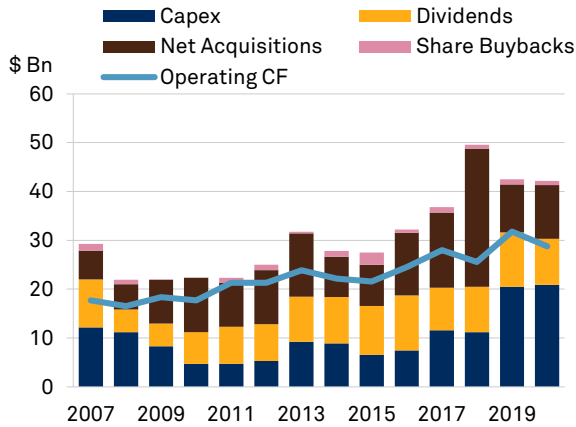
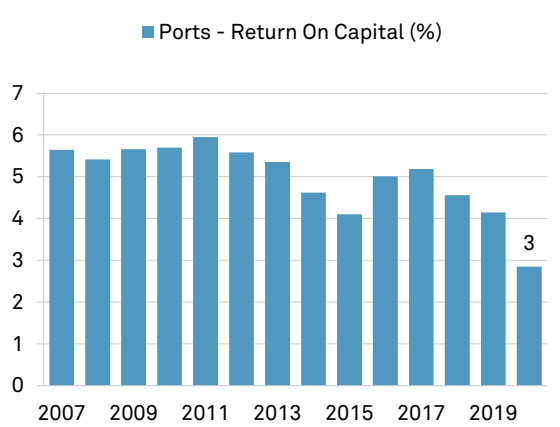


Chart 14

Return On Capital Employed



Source: S&P Global Ratings, S&P Global Market Intelligence. Most recent (2020) cash flow and ROCE figures are using last twelve months (LTM) data. All non-forecast 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

## Ratings trends and outlook

Although three-quarters of our ratings in this subsector still have stable outlooks, traffic and revenue performance varies by regions due to the severity of respective lockdown measures on light traffic and economic variables for heavy vehicle. Across the globe, we have seen a lower impact on heavy traffic.

The majority of toll roads operators in EMEA, LatAm, and APAC have a stable outlook. This reflects the sound headroom in most operators' financial metrics, and our expectation that traffic will resume substantially from the second half of 2021. In contrast, in North America, most toll roads have either negative outlooks or ratings are on CreditWatch with negative implications. While we downgraded 40% of our publicly rated P3 toll road operators since the start of the pandemic, our project finance portfolio largely remains investment-grade, bolstered by robust liquidity, hybrid revenue, and resilient commercial traffic.

## Main assumptions about 2021 and beyond

### 1. Traffic and revenue should return to pre COVID levels in most geographies by the end of 2021.

We expect the significant hit to toll road networks in Europe and North America to persist in the first half of the year, but anticipate a stronger performance in APAC and LatAm. This will benefit infrastructure groups with globally diverse income streams, such as Abertis and Vinci. Overall, in North America, we estimate toll road revenue will drop 10%-40% in 2021, depending on the type of road, with managed lanes and tolled roads that compete with toll-free alternatives lagging recovery. In contrast, we expect roads with heavy exposure to truck traffic to remain mostly resilient.

Traffic recovery will depend on the possibility of new restrictions, which should dissipate with a wider availability of a vaccine from mid-2021. Toll road traffic benefits from users preferring cars over public transport for health and safety reasons, and from our view that it may take longer for long-haul leisure trips to resume.

### 2. Higher capex in 2021-2022 as toll road operators catch up on investments deferred during the pandemic.

Concession grantors in some countries mandate higher investments to reinforce the safety of the network. We also expect the sector to resume committed and mandatory investments that were directly and indirectly impacted by mobility containment measures of the workforce during the peak of the outbreak, and by liquidity safeguards in the period.

### 3. Dividend distributions to remain high.

This reflects the available liquidity and general covenant-light facilities. State-guaranteed loans offered as pandemic help can restrict dividends in some cases. In contrast, we expect project financing for P3 toll roads in North America to continue to curtail distributions to preserve liquidity at the project level.

In Europe, we anticipate light vehicle traffic, which typically represents about 70%-80% of total traffic, to remain 10%-20% below pre-COVID levels in 2021 after a 25%-30% decline in 2020. Heavy vehicles will remain more resilient to mobility restrictions so we forecast traffic to remain 5%, on average, below pre-COVID levels next year. We also

anticipate increased capex for toll road operators in 2021-2022, reflecting the postponement of certain non-contracted or minimum investments during the peak of the pandemic. At the same time, we believe the use of state guarantees on new facilities drawn in 2020 will prevent dividend distributions in some jurisdictions, such as Italy, for the entities of the group headquartered in the same country.

## Credit metrics and financial policy

Credit metrics for European toll road operators should return to 2019 levels by 2022, since traffic recovery was hit by the second wave of COVID-19 cases. Traffic decline amid M&A activity has put pressure on operators that already had tight metrics such as global operator Abertis and Vinci. At the same time, the majority of road operators maintained a liquidity cushion of more than 1.5x sources over uses for the next 12 months, demonstrating solid access to both capital markets and bank loans.

Within APAC we generally expect credit metrics to be restored to pre-COVID-19 levels by the end of 2021. Traffic has rebounded strongly in the last quarter of 2020 as many countries in the region have removed “lockdown” arrangements, and travel patterns have reverted to around 90% of pre-COVID-19 levels in most countries.

In LatAm, most of the road operators have a larger cushion for credit metrics to absorb traffic declines, as many ratings were capped by the sovereign ratings on Brazil and Chile, respectively. In Mexico, a decline in light vehicle traffic was compensated by the steady performance of heavy vehicles that restrained the negative actions on our portfolio of project financing transactions. Most road operators in the region took measures to preserve liquidity, having been accustomed to deal with external turmoil. These actions include disbursing working capital lines, reducing capex and dividend payouts, and cutting operational expenses.

## Key risks or opportunities around the baseline

### 1. M&A opportunities to persist globally.

Toll road groups will look to replace cash flows from expiring concessions (e.g., in Spain), while the acquisition appetites of car park operators might reduce due to the hit by the pandemic.

### 2. Structural change to mobility trends.

Acceleration of remote working, virtual business meetings, online shopping and blended teaching could affect the future usage of transportation infrastructure. This could be mitigated by travel model switch from planes/public transit to cars. Wide adoption of electric vehicle could benefit roads; however, increased use of high-speed rail could impact traffic growth on certain interstate roads over the long term.

We anticipate that the pandemic will accelerate the need for sustainable and resilient motorway infrastructure to accommodate the changing mix of cars toward electric and hybrids. This could be compensated by either tariff increases or extensions of concession agreements, but these will be subject to increased political and public scrutiny. For instance, the French Senate commission on toll roads is reviewing the relationship between motorway companies and the state with the potential intention to rebalance contracts and stop granting extensions.

## Ratings Trends And Outlook

### Global Roads and parking lots

Chart 15

#### Ratings Distribution

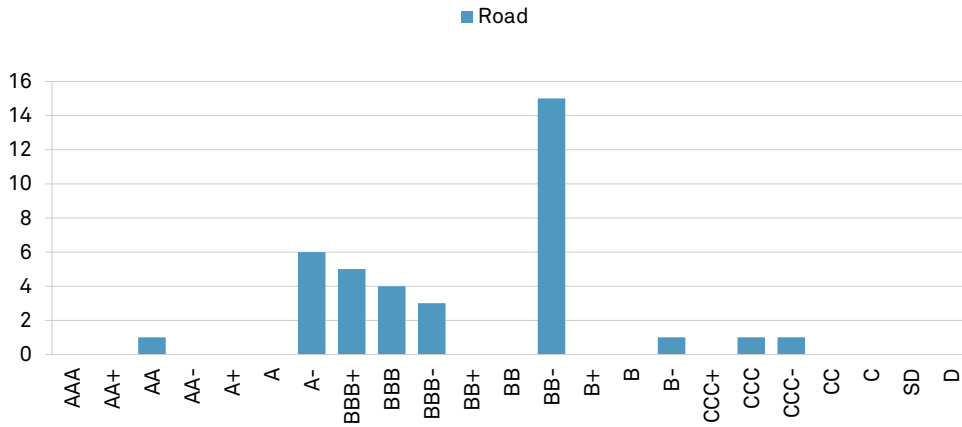


Chart 16

#### Ratings Outlooks

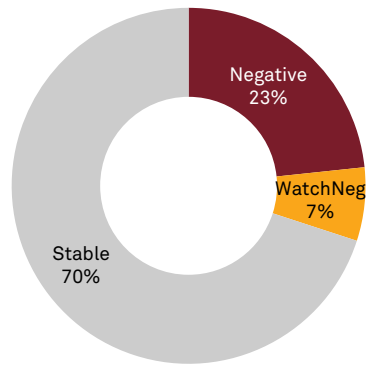
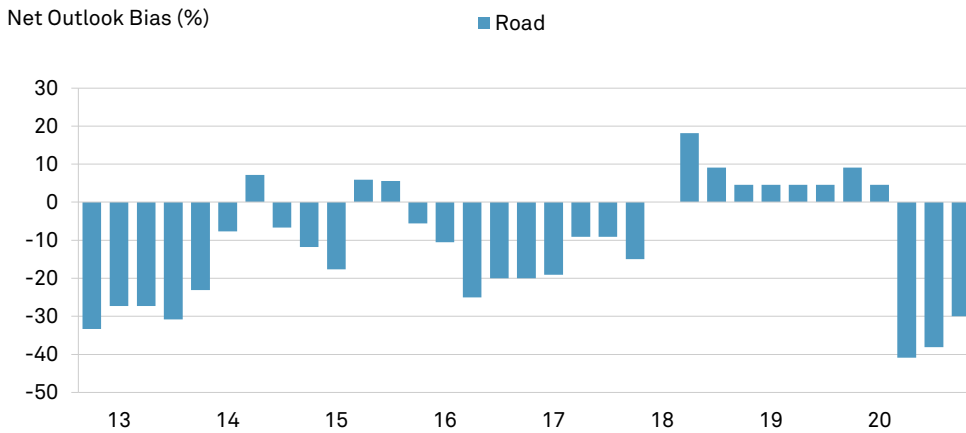


Chart 17

#### Ratings Outlook Net Bias



Source: S&P Global Ratings. Ratings data measured at quarter end. Data for Q4 2020 is end October, 2020

## Industry Credit Metrics

### Global roads and parking lots

Chart 18

Debt / EBITDA (median, adjusted)

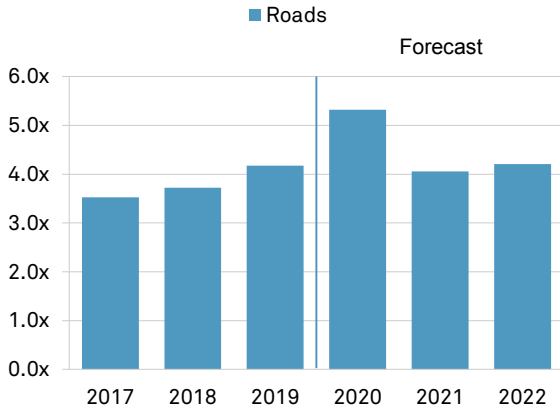


Chart 19

FFO / Debt (median, adjusted)

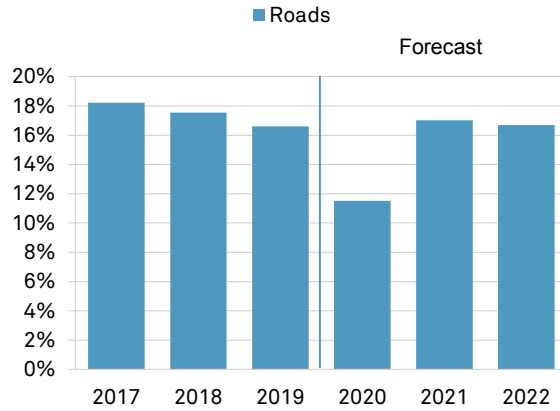


Chart 20

Cash Flow And Primary Uses

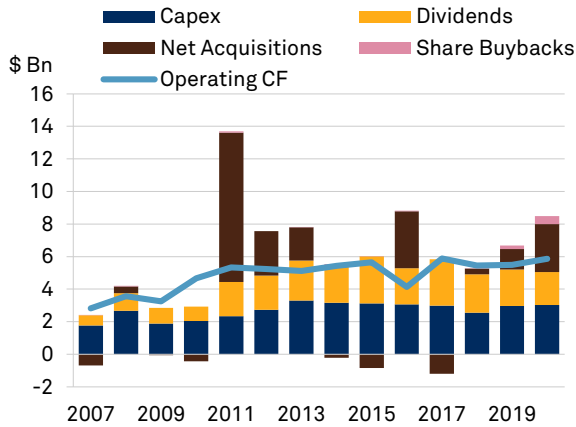
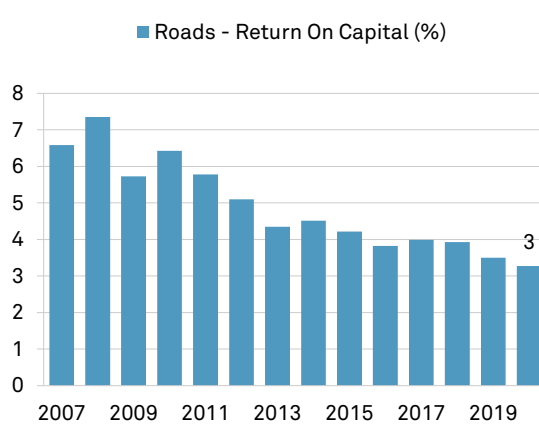


Chart 21

Return On Capital Employed



Source: S&P Global Ratings, S&P Global Market Intelligence. Most recent (2020) cash flow and ROCE figures are using last 12 months (LTM) data. All non-forecast 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

- [As COVID-19 Cases Increase, Global Air Traffic Recovery Slows](#), Nov. 12, 2020
- [European Rail Operators Are On A Slow Train To Recovery](#), Oct 22, 2020

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