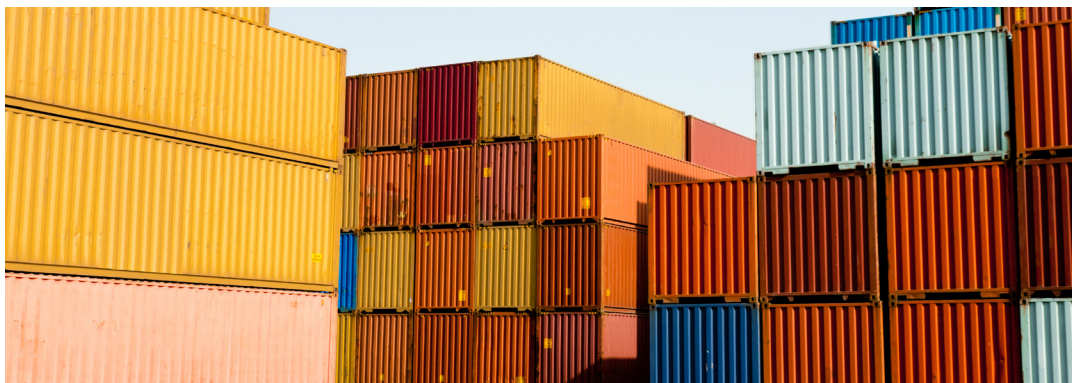


Industry Top Trends 2022

Transportation

Passenger And Freight Remain On Different Recovery Trajectories



This report does not constitute a rating action.

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What's changed?

A bumpy takeoff for airlines. Robust recovery of air traffic in major domestic markets shows pent-up demand for leisure travel. But new COVID-19 variants and related restrictions hobble business and international travel.

Too much of a good thing? Freight transportation struggles to handle the surge in demand. Still, despite supply-chain disruption, these companies' higher volumes and rates are more than covering rising fuel and labor costs.

Transportation equipment leasing is mostly faring well. Marine cargo container leasing and some car renters are booking record profits. Aircraft leasing proved resilient in the downturn and emerged more important than ever.

What are the key assumptions for 2022?

Economic recovery continues, but more slowly. Global GDP growth will slow to 4.2% after 2021's 5.7% snapback from the pandemic. Inflation pressures persist into 2022, reflecting strong demand for goods and supply chain problems.

Oil prices ease at high levels. Prices remain above pre-pandemic levels, creating cost inflation for airlines. Freight transportation companies are mostly able to pass these on to customers.

Inflation and central bank tightening will push up interest rates. Many transportation companies benefited from government aid or accommodating capital markets, but borrowing looks likely to get more expensive.

What are the key risks around the baseline?

For airlines, still the virus. Continued uncertainty could hinder--or worse--recovery if a seriously dangerous variant spreads.

Labor cost inflation and higher fuel prices. Strong or recovering demand outpaces cost inflation, but that could change if expenses continue rising and demand cools.

Capital markets turning less generous. Companies that built up liquidity are well positioned, but smaller or weaker ones could suffer if credit tightens.

Ratings trends and outlook

Global Transportation

Chart 1

Ratings distribution by region

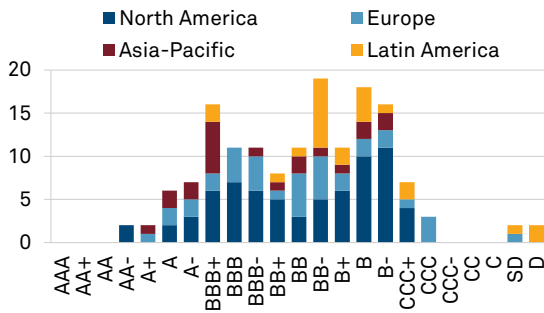


Chart 2

Ratings distribution by subsector

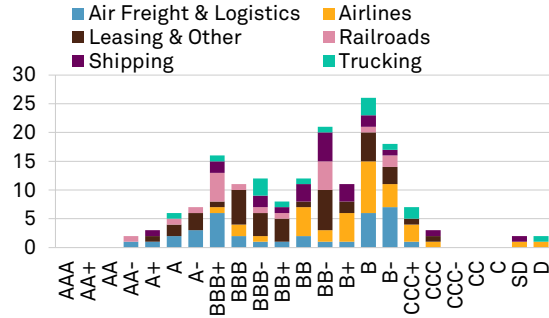


Chart 3

Ratings outlooks by region

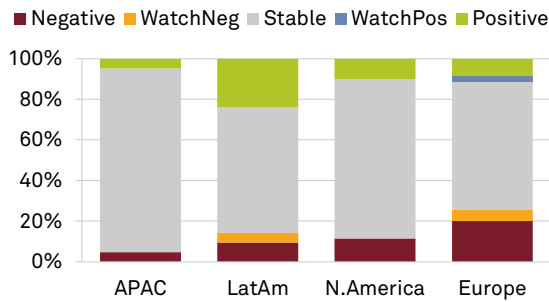


Chart 4

Ratings outlooks by subsector

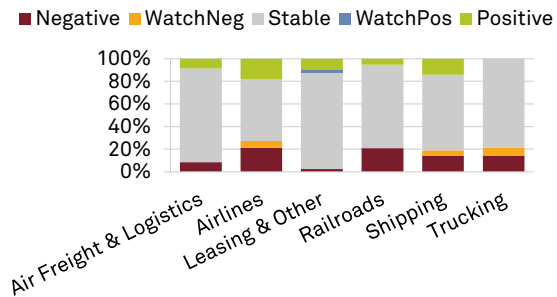


Chart 5

Ratings outlooks net bias by region

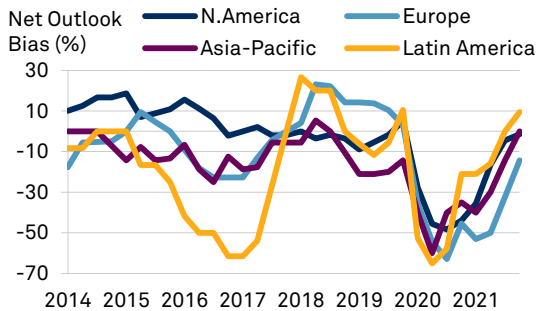


Chart 6

Ratings net outlook bias by subsector

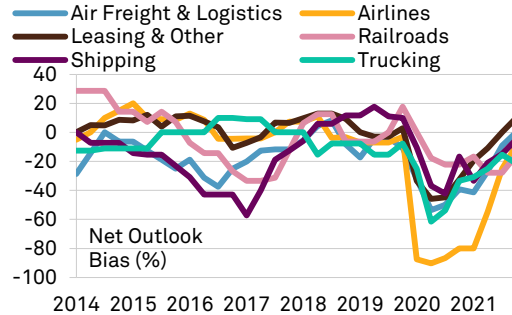


Chart 7

Ratings outlooks

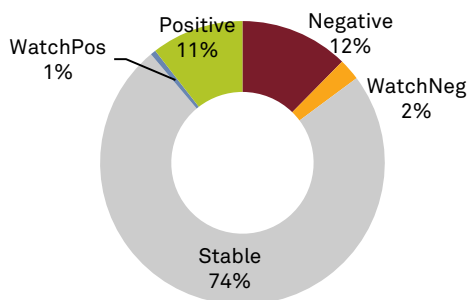
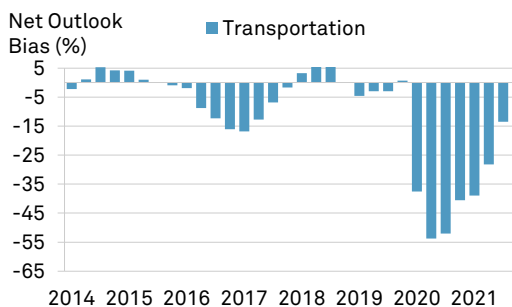


Chart 8

Ratings net outlook bias



Source: S&P Global Ratings. Ratings data measured at quarter end.

Airlines

Ratings trends and outlook

Airline ratings remain mostly at pandemic downgrade levels, but outlooks vary by region. A significant recovery in U.S. domestic travel shifted airline outlooks to stable or positive, but the recovery in traffic--and outlooks--is at an earlier stage in Europe. Upgrades, when they occur, are most likely for low-cost airlines whose customer base--mostly short-haul leisure travelers--have returned to the skies earlier. Large network airlines, with greater reliance on business and long-haul international traffic, have further ground to make up and have stable or negative outlooks. A return to 2019 ratings, where possible, is likely to take several years in most cases.

Main assumptions about 2022 and beyond

1. Air traffic continues a bumpy recovery, but still below pre-pandemic levels

The recovery in air travel varies dramatically by region and type of passenger. Leisure travel, either in large domestic markets or closely integrated regions like Europe, leads. Business travel is lagging but should continue a gradual upward trend with more widespread vaccinations and better economic conditions. Long-distance international travel is harder to project, because it is most vulnerable to health conditions and restrictions.

2. Fuel costs are higher

Many airlines outside the U.S. hedge their fuel purchases, which slows, but does not fully offset, rising costs. U.S. airlines hedge much less but have somewhat greater ticket pricing power in a consolidated industry. Still, airlines' main source of revenue, leisure passengers, are more price-sensitive than business travelers, so pricing power has its limits even in concentrated markets.

3. Liquidity, the lifeblood of airlines, is mostly ample

Many airlines in North America and Europe used government aid and debt-raising in receptive capital markets to bolster liquidity to record levels. This provides a cushion against weaker or more-prolonged recovery.

The recovery in air traffic (measured by revenue passenger miles or kilometers) depends on health conditions and is subject to uncertainty. The omicron variant will result in weaker-than-expected first-quarter results, but there is pent-up demand to support strong summer travel. We anticipate North American airlines' traffic will reach 80%-90% of 2019 levels, slightly higher in the U.S., with its large domestic market, and lower in Canada. The European airlines' traffic will reach only 50%-65% of 2019 levels, because virtually all of it is international and subject to government policies and restrictions. We foresee Europe-North America traffic at a similar 50%-65% of 2019 levels. International flying to, from, and within Asia remains very depressed, mostly because of stringent anti-virus policies in some major markets, such as China and Japan, and we expect these routes will lag recovery elsewhere in 2022. The large domestic markets in Asia--China, Japan, and India--have recovered more significantly.

Fuel normally accounts for 15%-30% of airline operating costs, with the proportion mostly a function of fuel prices. Retirement of older, thirstier planes during the pandemic, delivery of new technology models that average 20% more fuel efficiency than the versions they replace, and depressed long-distance international flying cushion the effect of higher prices somewhat. Although airlines can partly offset this by raising fares,

doing so requires healthy demand for air travel and fuel prices that don't escalate too quickly. Unfortunately, the recent run-up has been rapid, so even when raising ticket prices is possible, fares cannot adjust as quickly as expenses. And competitive conditions affect the equation as well. In Europe, low-cost giant Ryanair is using its strong balance sheet and the struggles of higher-cost competitors to expand market share by keeping fares low, even if that means lower near-term profits. By contrast, Southwest Airlines, the leading U.S. low-cost airline and world's largest overall, has gained share but its pricing actions have been less aggressive than Ryanair's.

A long-term cost risk is labor expense, the largest operating item, at 25%-35% of the total. Employees at most rated airlines belong to unions and pay or benefit gains are determined in contract negotiations. But employee sacrifices during the pandemic, from unpaid leave to dealing with crowded flights and sometimes unruly passengers, are building pressure for greater compensation. And there are long-term shortages in some markets for pilots and mechanics. We foresee rising costs for several years, which will trim the benefits of expected recovering revenue.

Credit metrics and financial policy

Credit measures mostly remain well below pre-pandemic levels and support the current, lower ratings. In our 2022 base case scenario a large, investment grade low-cost airline Southwest Airlines should generate strong ratios, but that is mainly because we net its large cash holding against debt; absolute earnings and cash flow are still well short of 2019 levels. Ryanair's S&P Global Ratings-adjusted funds from operations (FFO) to debt will rebound to close to 25% in fiscal 2022 (ending March 31) and subsequently to at least 35% in fiscal 2023, which falls significantly behind the above 200% pre-Covid levels. Airline managements face the tricky task of determining when to shift from a focus on maximum liquidity to beginning the long process of deleveraging. In a few cases, such as easyJet, large equity offerings help that along, but most of the progress in credit ratios will be based on better earnings and cash flow, rather than significantly reduced debt.

Key risks or opportunities around the baseline

1. There is pent-up demand for travel

When passenger fears and government restrictions ease, leisure travel has snapped back strongly. And each successive wave of infections appears to have a lesser effect on travel plans, reflecting more widespread vaccination and fewer far-reaching government restrictions. The return of business travel and long-haul international is more subject to virus uncertainty, and the latter vulnerable to travel restrictions.

2. What if "the new normal" is slower growth?

Some business travel, particularly for intra-company events, is likely lost permanently to virtual meetings. How much client relationship travel will return is uncertain--we anticipate most, but not all. Long distance international travel may see some permanent damage from periodic health restrictions, geopolitical tensions (Chinese overseas travel appears at particular risk), and rising ticket prices.

3. Environmental, social, and governance (ESG) factors are on the radar

In 2021, ESG concerns spread from Europe to airlines and investors more widely around the globe significantly. Emission regulations are not onerous over the next few years but will likely tighten thereafter. Many airlines have converged on a target of net zero carbon dioxide (CO₂) emissions by 2050, an ambitious goal that will require new technology, alternative fuels, and potentially expensive offset payments.

Airlines are stepping up their efforts to offset or limit the impact of their emissions and communicate their actions to the public. However, they don't face an easy task. Although aviation produces a relatively small slice (less than 3%) of global CO₂ emissions, they are difficult to reduce because aircraft are already very efficient and air traffic has grown faster than global GDP. Over the past year, many airlines, global airline alliances, and global aviation trade groups committed to achieving net carbon neutrality by 2050, but just how they will accomplish this remains uncertain. Regular, ongoing technology advances and replacement of older planes will help some. A larger contribution could come from sustainable aviation fuel (SAF)--biofuels made from plants, waste, or algae that are blended into regular jet fuel (or potentially replace it). Demonstration projects provide confidence that this is possible, but production would have to scale up dramatically and these fuels cost much more than regular jet fuel. With that in mind, some airlines and airline groups are lobbying for government support to help accelerate this effort. Hydrogen has been suggested, by Airbus in particular, as another fuel option, although this is not nearly as far along as SAF and would involve more significant engineering changes to aircraft and infrastructure. So far, electrification appears feasible only for fairly small, short-range aircraft. If these various initiatives are insufficient, airlines acknowledge they will likely need to buy carbon offsets, paying for projects such as reforestation or carbon capture.

All this implies higher costs and ticket prices. That, in turn, is likely to slow global traffic growth. There are still powerful forces propelling traffic gains, including expansion of the middle class in Asia. But in mature markets such as Europe and North America, traffic growth will slow further and could even level off or turn negative. Greater public and government awareness of environmental issues, and the availability of a well-developed high-speed train network in Europe have prompted some consumers to reduce flying and seek to convince others to do likewise. These trends might not follow to the same extent elsewhere, where distances are greater and, for developing countries, rising wealth implies a greater propensity to travel, but even a moderate shift in sentiment implies gradual erosion of growth rates.

Shipping

Ratings trends and outlook

The global container shipping industry is booming, with freight tariffs and charter rates reaching record highs. This is resulting in much stronger-than-expected earnings and credit metrics for the container liners and containership tonnage providers.

Consequently, we've taken many positive rating actions in the sector over the past 12 months, and more are likely to follow.

Ratings and outlooks on some tankers and dry bulk shipping companies changed last year for different reasons, among them depressed charter rates constraining cash flows and liquidity in the oil and petrochemicals shipping segment, and favorable dry-bulk shipping rates and credit quality-accretive acquisitions in the dry-bulk sector. Our stable outlooks incorporate our expectations of another subdued year for tanker owners, but solid trading conditions in dry-bulk shipping, and any significant deviations from our forecast could prompt rating actions. Negative outlooks, on the other hand, might turn into downgrades if potential liquidity shortfalls are not addressed in a timely manner or trading conditions fare worse than expected.

Main assumptions about 2022 and beyond

1. Container liners' 2022 earnings could moderate, albeit from record highs

We forecast a continuation of worldwide container trade in 2022 largely consistent with global GDP growth, and particularly fueled by robust transpacific trade. If the pandemic's impact on global logistics and infrastructure bottlenecks eases from late 2022 at the earliest, average freight rates will moderate. The omicron variant could, however, further delay normalization of worldwide supply chains and container shipping flows.

2. The dry-bulk shipping sector is in good shape for 2022

A continuing structural rebalancing of supply and demand, supported by the Chinese government's stimulus measures (for example, the accelerating infrastructure investments), combined with more subdued global fleet growth at low-single-digit rates, points to a year of firm and profit-making charter rates (likely extending into 2023 on account of contained supply growth).

3. The recovery in oil shipping is protracted and bumpy

Soft trading conditions and subdued prospects for a significant rebound in tanker charter rates persist, and the omicron variant and resulting mobility restrictions might delay the oil consumption recovery. Supply-demand could return to equilibrium (at best) this year, with crude tanker deliveries outstripping last year's levels.

Container freight rates are edging up across most trade lanes, with no signs of a sustained moderation, contrary to our previous expectations. Uninterrupted strong demand for tangible goods, accompanied by significant and widespread congestion in major maritime ports and disruption of logistical supply chains, are tying up containership capacity and boosting ocean tariffs. According to Clarkson Research, the Shanghai Containerized Freight Index (SCFI) reached a new high on Jan. 2, 2022, of 5,100 points, more than 4x the elevated average in 2020 and more than 6x the pre-pandemic 2019-year average of 810 points. The movement of essential goods, strong pickup in e-commerce, and shift in consumer spending to tangible goods from services have supported global container volume recovery since June 2020, with volumes recording a strong nearly 7% growth in 2021 (likely outpacing global GDP growth). This has been

particularly fueled by flourishing transpacific trade, following a 1%-2% year-on-year contraction in 2020. Port congestion remains severe. From September-November 2021, an average of 36%-37% of global containership fleet capacity was in ports (significantly outpacing the 2019 average of 31%), according to Containership Port Congestion Index published by Clarkson Research, with China and the U.S. West coast remaining congestion hot-spots. This has stimulated a surge in containership ordering (lifting the containership order book to 23% of the global fleet as of December 2021, from an all-time low of 8% in October 2020) and might trigger a flood of ship deliveries in 2023 and 2024. That said, containership supply growth is unlikely to surpass demand growth in the coming quarters, propping up freight rates.

We now forecast that freight rates could start normalizing (from current all-time highs) from late 2022 at the earliest, provided the pandemic's impact on container shipping eases. Thereafter, as overall industry capacity increases and vessels on order are delivered from 2023, ocean tariffs might face a further correction and ultimately stabilize at profitable levels that are likely above the pre-pandemic 2019 base, according to our base-case scenario. Still, our forecast is subject to mounting uncertainties. Omicron's enormous transmissibility results in rapidly escalating cases and absenteeism from work (as employees are out sick or in quarantine) in many countries in Europe and in the U.S. We also believe that omicron presents a serious challenge to China/Hong Kong local authorities given their zero-COVID stance. Mobility restrictions, port closures, and lockdowns of cities in the region might protract or even aggravate the already severely strained situation along global supply chains.

Dry bulk shipping displays solid fundamentals. The Chinese government's stimulus measures to prop up the country's economy amid the pandemic translate to a need for dry bulk commodities (China is by far the largest global importer of commodities). Global imports of major bulk commodities such as iron ore, coal, and grain (accounting for close to two-thirds of dry bulk volumes) are softening after a mid-2021 peak but will remain healthy and underpin low-single-digit global trade growth, as forecast by Clarkson Research. Simultaneously, global demand for minor bulk commodities (one-third of dry bulk volumes) is solidifying, and new ship supply is dwindling. Bulker fleet growth will shrink in 2022, underpinned by the current all-time-low order book (accounting for 7% of the global dry bulk fleet, about the lowest level in three decades, according to Clarkson Research) and muted new ship ordering the past few years. In our view, industry demand growth will moderately exceed supply growth in 2022 (as in 2021), potentially stretching into 2023. Consequently, dry bulk charter rates should stabilize at profitable levels, but fall off the high 2021 base, which we incorporate in our base-case scenario. Based on expected demand-and-supply conditions, we forecast an average one-year time charter rate (T/C) for Capesize vessels of \$26,000/day in 2022 and \$23,000/day in 2023, compared with \$26,500/day in 2021 and \$14,800/day in 2020, as per Clarkson Research.

Tanker rates for shipping crude oil and refined products began to decline from mid-2020 due to sluggish oil demand from pandemic-related disruptions and the subsequent effects on the global economy, and have remained subdued since then. An average T/C rate for a very large crude carrier plunged to \$20,000/day in 2021 (from \$40,000/day a year earlier), while the average spot rates were loss-making based on Clarkson Research data. There are signs, such as very low (well below historical averages) inventories of crude oil/refined products and shrunk floating storage at the lowest level since February 2020, pointing to a forthcoming rates recovery after a six-quarter slump. However, the U.S. Energy Information Administration's most recent global oil consumption forecast of close to 4% growth, buoyed by demand from non-Organization for Economic Cooperation and Development countries, has been most recently threatened by the omicron variant, rising infection cases, and reimposed mobility restrictions, in particular across Asia and Europe. Meanwhile, an agreement by OPEC+ in early December 2021 to ease crude oil production cuts could boost global oil supply and worldwide energy trades unless the output policy ends up being adapted in response to the pandemic's adverse impact on oil

consumption. Although the new tanker orderbook is at historical 30-year lows (with crude tankers accounting for 8% of total global fleet and product tankers for 6%, according to Clarkson Research), its front-loaded nature could be a drag on rates recovery in the near term amid the mounting demand-side uncertainties.

Credit metrics and financial policy

Credit trends vary widely across the shipping sector. Extraordinary freight rate conditions in container shipping are translating into record-strong earnings and free cash flows, lower net debt, and expanding headroom under credit metrics (for external growth or to absorb potential unforeseen setbacks) for container liners and containership tonnage providers/lessors, which we reflected in our multiple upgrades and positive rating outlook revisions. For example, most recently and for the fifth time, A.P. Moller - Maersk A/S lifted its 2021-EBITDA guidance to an unprecedented and unsustainable \$24 billion (from \$6 billion pre-pandemic in 2019). Container liners will likely see a moderate correction in earnings in 2022 while credit measures' strength will ultimately depend on the magnitude, timing, and use of discretionary cash flows. Dividends and share buybacks are accelerating but in a balanced manner, closely tied to cash flow and within our rating guidelines. Growth capex for new and greener ships or engine retrofits is gathering pace, but it will be closely linked to the trade volume trends. Container shipping has been through several rounds of consolidation in recent years. Notably, the five largest container shipping companies together have a market share of about 65%, up from 30% about 15 years ago. Therefore, mergers and acquisitions (M&A) in container shipping are unlikely. Instead, the top container liners will pursue their focused expansion into logistics, the supply chain, and freight-forwarding sectors to broaden and enhance their service offerings and get closer to customers.

Dry bulk shipping credit measures will have improved and exceeded our expectations in 2021, thanks to firm charter rates at profitable levels, disposals of older ships, and repaid debt from excess cash flows. Credit measures could strengthen further in 2022 absent any unexpected discretionary spending.

As anticipated, sluggish oil shipping rates had a bearing on tanker operators' credit metrics, in particular those with high exposure to swings in spot rates. Still, a subsequent moderate rebound in credit ratios is likely in 2022. Higher-rated energy shipping companies can weather the period of soft tanker rates, thanks to their prudent long-term and fixed-rate charter contract coverage.

M&A activity will likely be limited in the oil and dry bulk shipping subsectors, and we expect any expansion to be through direct acquisition of new ships and second-hand vessels (frequently from ship owners and operators in financial distress). Still, some operators might decide to merge their fleets to realize cost efficiencies, a stronger bargaining position, and enhanced capacity for further growth. There have been several recent mergers among affiliates, and larger, publicly listed companies could target smaller, struggling companies.

Key risks or opportunities around the baseline

1. A surge in new building threatening capacity

Given the shipping sector's historically poor supply discipline, the ordering of new vessels could intensify, destabilizing the generally improving, but still fragile, demand-and-supply industry conditions.

2. Failure of counterparties to deliver on charter agreements

Significantly longer time charters profiles at attractive rates prompted our 2021 upgrades of containership tonnage providers, assuming counterparties (mainly container liners) would be able and willing to honor their commitments. Unexpected amendments to- or nonpayment under the charter agreements could materially weaken ship lessors' credit measures and liquidity.

3. Environmental considerations

Environmental risks and a potentially large regulatory burden pose a material long-term challenge for the global shipping industry, which is responsible for about 2.5% of global greenhouse gas emissions, according to International Maritime Organization (IMO).

We see a risk that vessel owners, renowned in the industry for their historically poor supply discipline, could embark on an ordering spree in anticipation of sound times ahead, particularly in sectors with low orderbooks or promising prospects (such as dry-bulk and container shipping). This would disrupt diminishing deliveries of new tonnage, increasing industry supply and constraining charter rates. Still, assuming a typical lead-time between placing orders for ships and the ability of shipyards to deliver of currently 18-24 months, we expect a slowdown in supply growth (except for crude tankers) for at least the next few quarters, regardless of ordering activity. Furthermore, scrapping older tonnage remains a critical supply-side measure to correct excess capacity. Scrapping has slowed in recent quarters, typically happening when owners perceive possibly better times ahead or ship values are attractive. If new orders accelerate and scrapping does not reduce excess capacity, this will destabilize the industry, which is struggling to rebalance. On a positive note, we believe that increasingly stringent regulation on sulfur emissions and broader considerations about greenhouse gas emissions in general--particularly in the context of decarbonization--will likely result in uncertainty over costs and benefits of various new technologies and fuels, and should constrain orders, at least to a certain extent, in the near term.

Buoyant container shipping industry conditions are pushing charter rates and durations higher, benefiting those ship owners willing to gain visibility and secure cash flows. A shift towards multiyear contracts has contributed to our positive rating actions on containership tonnage providers. Long-to-medium-term time-charter profiles comprising noncancellable and fixed-price contracts at attractive rates should help to mitigate inherent industry volatility. This works if charterers (typically container liners) deliver on their commitments, which we incorporated in our base-case scenarios. The counterparty risk is relatively low, in our view, in times of flourishing industry conditions, inflated rates, and container liners generating windfall profits. However, it will rise when the industry cools off and rates fall far below the rates in the existing contracts, and if container liners' credit quality weakens, increasing the possibility of amendments to existing contracts, delayed payments, or nonpayment under the charter agreements. Some rated shipping companies were forced to amend charter terms or faced defaults under charters a few years ago during the last cyclical downturn.

Climate transition risk and long-term conversion to zero emissions will come at significant cost and affect all ship owners and operators, even if to slightly varying degree

depending on the nature of their contracts with customers and other factors. The IMO has set decarbonization goals to reduce the shipping industry's total greenhouse gas emissions by at least 50% by 2050 from the 2008 base, and to reduce CO2 emissions intensity (per transport work) by at least 40% by 2030, pursuing efforts toward 70% by 2050. While the 2030 carbon intensity goal appears attainable, long-term standards will demand an industry-wide shift to alternative/greener technologies and fuels and involve higher ship-running costs and lumpy investments in new vessels. According to Clarkson Research, the shipping industry's decarbonization goals demand around \$3.4 trillion worth newbuild orders from 2020-2050 to replace the existing fleet.

The transition to a more sustainable shipping industry is gaining momentum. Some shipping companies are exploring decarbonization measures such as using new technologies and carbon-neutral fuels (green ammonia and green methanol). Some others are investing in less-green liquified natural gas (LNG) technology, which we view as a transitional solution. Industry-leading players have initiated green fleet renewal programs, for example, stipulating that all owned new vessels will be methanol-enabled and dual-fuel capable. According to Clarkson Research's September 2021 report, the shift to alternative fuels proceeds, with 4.0% of the fleet on the water and 32% of the orderbook in global fleet tonnage terms capable of using alternative fuels or propulsion, predominantly LNG ships (about 28% of orderbook), with liquefied petroleum gas carriers (about 3%) and vessels due to use other alternative fuels (about 4%).

Railroads

Ratings trends and outlook

Our ratings and outlooks on most large North American freight railroads are mostly stable. Economic conditions remain strong, with high demand for freight transportation expected to continue through most of the year amid steady consumer spending and improving industrial production. Supply-chain-related disruptions, such as port backlogs and equipment shortages, should abate over the year, supporting operating efficiency. Nonetheless, freight transportation providers will likely continue to face labor-related challenges given the tight job market. We forecast debt-financed share repurchases will remain high, keeping credit metrics mostly stable.

Main assumptions about 2022 and beyond

1. Supply chain disruptions gradually ease

Import volumes are likely to remain elevated in 2022, albeit at more normalized levels following record numbers in 2021. Ports remain the main bottleneck, and upcoming contract negotiations at U.S. West Coast ports raise some risk of labor disruptions. Still, port throughput could benefit from extended operations and new initiatives, such as delay-related fees. More normalized seasonality, such as factory closures during the Lunar New Year holiday, should also allow ports to reduce container backlogs.

2. Railroads do not pursue further consolidation

Canadian Pacific Railway's (CP's) intended merger with Kansas City Southern (KCS) sparked speculation surrounding additional consolidation among the large North American railroads. However, we believe the Surface Transportation Board's negative response to Canadian National's (CN's) competing bid indicates that mergers would likely face more stringent regulatory review.

3. Package express volume growth remains strong

We expect 2022 volumes to reflect strong (albeit moderating) economic growth, the long-term rise in e-commerce, and consumer habits developed during the pandemic. Overall package mix is likely to rebalance towards business and industrial customers due to restocking and a shift in consumer spending toward services and in-store purchases, assuming easing pandemic restrictions.

Despite record container import levels in 2021, railroad intermodal volumes remained about flat from pre-pandemic levels due in part to supply chain disruptions. Congestion at ports (particularly the U.S. West Coast), caused by labor shortages, inadequate trucking and warehousing capacity, and equipment availability, contributed to railroads temporarily suspending or limiting intermodal service to work through volumes. Although import levels will likely remain high in 2022, we believe that seasonality should begin to normalize. Transpacific sailings typically decline around the Lunar New Year holiday when factories in Asia close. Unlike last year, we expect this will occur in 2022, providing ports with a chance to work on current backlogs. Throughput at ports should also benefit from extended operating hours and fines aimed at decreasing idle cargo, while trucking capacity should benefit from improved equipment availability. Therefore, we believe that these factors will gradually ease supply chain disruptions and support intermodal volumes for railroads and trucking.

CP and KCS's merger announcement in March 2021 led to an opposing bid from CN, as well as discussions around further mergers of Class I railroads. The main U.S. rail

regulator, the Surface Transportation Board (STB), rejected CN's proposed transaction structure and ruled that a transaction between CN and KCS would be subject to more stringent rules. We believe this indicates a high regulatory barrier for further consolidation among the large North American railroads. We also believe that smaller nonrail transactions, such as CSX's purchase of trucking operator Quality Carriers, might also decline amid continued investor focus on operating efficiency and CN's strategic review of its non-rail businesses.

We expect U.S. parcel volume growth to remain strong in 2022, driven by solid, albeit slowing, economic growth and consumer activity. E-commerce as a share of overall retail is likely to retreat some as consumers shift spending back to more in-store purchases and spending on services rather than goods. Still, we expect the long-term growth in e-commerce will continue, with spending remaining well above pre-pandemic levels. Business packages will also increase as a share of volumes if economic activity remains high and pandemic restrictions ease. Package express companies are sensitive to labor market tightness but largely met seasonal staffing needs and avoided widespread service disruptions during the holiday peak. FedEx and UPS announced price increases in late 2021 in response to cost inflation, and we expect higher rates coupled with cost containment measures and the benefit of high utilization to support continued robust margins for the package express companies.

Credit metrics and financial policy

Credit metrics should remain mostly stable in 2022. Railroads have benefited in recent years from implementation of precision scheduled railroading (PSR), a strategy aimed at improving overall operating efficiency. Cost savings and incremental cash flow associated with PSR have largely gone to financing large share repurchases. While we believe most railroads have already realized the majority of savings associated with PSR, we expect financial policy will continue to prioritize share repurchases in 2022. Nonetheless, repurchases on an absolute basis will likely decline from 2021. During the pandemic in 2020, most railroads suspended buybacks amid broader uncertainty, leading to elevated levels in 2021 when economic conditions stabilized. We also believe companies will finance a larger portion of repurchases with existing cash balances, which remain historically high.

Trucking companies should continue to benefit from elevated spot market pricing and robust demand. However, operators also face significant wage increases, as the industry continues to face a driver shortage. We expect this will somewhat offset any improvement in credit metrics.

Key risks or opportunities around the baseline

1. Financial policy becomes more aggressive

In 2021, Union Pacific (UP) increased its share repurchase targets, and CN announced a review of its capital allocation policy following its failed merger attempt with KCS. This could lead other railroads to reassess financial policy and increase shareholder rewards. Greater-than-expected debt-financed share repurchases could lead to weaker credit metrics and pressure ratings. Package express companies also face similar risks, although their priority is investment needed to support growth and efficiency.

2. Regulations affect pricing or network efficiency

The Biden administration has requested federal regulators evaluate mandates around commuter railroads and reciprocal switching. While the outcome of any regulatory changes is uncertain, these changes could lead to reduced network efficiency and decrease train speeds for freight railroads. Reciprocal switching could also lead to reduced pricing power in areas where railroads face limited competition.

3. Supply chain issues linger

The global semiconductor shortage continues to weigh on auto production. Meanwhile, the tight labor market and continued waves of infection could disrupt operations in certain areas. Moreover, union contracts are due for renewal at southern California ports. These issues could lead to lower volumes and operating results for railroads in 2022.

Financial policy remains a key factor in our ratings on railroads and package express companies. UP revised its financial policy in 2021 and increased its share repurchase targets, financed with incremental cash flow from continued operating efficiency improvements. Similarly, CN announced a review of its financial policy objectives, with a goal of increasing capital return to shareholders, prompting us to revise our outlook to negative. If debt-financed shareholder rewards increase beyond our expectations or outpace cost savings associated with improved operating efficiency, we could consider negative rating actions.

While we believe there are some signs supply chain issues could improve in 2022, risks remain. Auto volumes declined further in 2021, even with factories reopening, because of the computer chip shortage. Volumes could fall further if production rates do not improve. Union contracts at the largest U.S. ports come due for renewal in 2022, which could pressure intermodal volumes if negotiations result in disruptions. Finally, like other freight transportation sectors, railroads face a difficult labor market and the risk of disruptions from infections among employees. Nonetheless, we believe their mostly unionized workforce provides some visibility to labor costs.

Transportation Equipment Leasing

Ratings trends and outlook

Ratings have been stable-to-improving for many transportation equipment leasing sectors. Aircraft lessors have fared better than their airline customers, despite airline and aircraft lease restructurings, with requests for payment deferrals abating through 2021. Car renters have enjoyed record rental rates and record gains on sale of vehicles due to the shortage of vehicles to meet increased demand, especially within the U.S. Intermodal equipment lessors--railcar, truck, marine cargo container and chassis--have continued to benefit from supply chain shortages and port congestion. Downgrades have involved mostly those few transportation equipment lessors that have encountered liquidity issues or engaged in large debt-financed dividends to their financial sponsor owners. We expect these trends to continue well into 2022, with some modest upside rating potential.

Main assumptions about 2022 and beyond

1. Global air traffic continues to recover, but remains below pre-pandemic levels

We expect short haul leisure demand to continue fueling the recovery in air travel, resulting in continued strong demand for narrow-body aircraft. We believe the recovery in business travel and long-distance international travel will be more prolonged than expected due to the pandemic. In 2022, aircraft lessors' revenue and cash flow should benefit from fewer requests for lease deferrals and restructurings, and airlines becoming current on their lease payments. Aircraft lessors should benefit from their ownership of relatively young, new-technology aircraft, which will be more in demand as environmental regulations become more stringent.

2. Car renters will continue to benefit from vehicle shortages

We expect vehicle fleets will remain tight due to the shortage of chips used to manufacture new vehicles, which also keeps supply tight for used vehicles. This should result in continued vehicle shortages, especially at airports, as the recovery in airline traffic continues, resulting in continued strong pricing. The shortage of vehicles is also expected to result in strong gains (which are netted against depreciation expense) on vehicles when they are disposed of. The offset is that new vehicles, where available, are more expensive as well. We expect these trends to continue well into 2022, if not longer, as long as the chip shortage continues and demand for airline travel, including international travel, recovers.

3. Transportation equipment lessors will continue to have strong access to capital, even with rising interest rates

Throughout the pandemic, most transportation equipment lessors have maintained ready access to the capital markets, on both a secured and unsecured basis, and often at record low rates. Even lessors with large debt-financed dividends to their financial sponsors were able to raise capital. With expected higher interest rates in 2022 and beyond, we expect lessors will mostly pass on higher financing costs through higher lease rates in the current strong demand environment. As long as interest rates increase moderately, rather than through sharp upward spikes, we don't foresee higher interest rates having a material negative effect on credit metrics for transportation equipment lessors.

Transportation equipment lessors involved with freight transportation (such as railcars, trucks, marine cargo containers, and chassis) have all benefited from the surge in consumer demand and supply chain problems that have plagued the U.S. economy since the pandemic began. The congestion at the ports, which has caused delays in unloading and loading ships, resulted in a need for more equipment, because some was tied up in the delays (most notably marine cargo containers sitting on ships). These conditions have resulted in record high utilization and, in many cases, record high pricing, as the demand for transportation has far outstripped supply. These conditions are expected to last well into 2022 and potentially into 2023 as inventory is replenished and economic growth continues (albeit more slowly).

A similar supply-demand situation, albeit for different reasons, has benefited car renters. After they reduced their auto fleets when the pandemic began and rentals at airports plunged, the supply-demand balance reversed itself starting in summer 2020. This is the result not only of a pickup in demand for airline travel (particularly domestic leisure trips), but also a shortage of new and used vehicles as the chip shortage constrained auto production. Car renters benefited from the vehicle shortage through higher rental rates and gains on used vehicle sales. New cars were more expensive, but car renters were buying fewer of them, given the shortage. Indeed, Hertz emerged from bankruptcy with new owners around a year after it filed Chapter 11, and we raised our ratings on it a few months later due to its much improved operating performance and credit metrics.

Aircraft lessors performed better than expected through the pandemic despite the fragile balance sheets of many of their airline customers. While the lessors had to grant widespread lease deferrals and enter into lease restructurings with some, the pace of requests for deferrals has declined and, in many cases, airlines have become current on their deferred payments. Large lessors were mostly able to negotiate deferrals of new aircraft orders, reducing planned capital spending. That resulted in lower-than-expected debt levels and interest costs (the capital markets have been quite receptive to lessor borrowing). Indeed, AerCap, the world's largest aircraft lessor, raised \$23 billion in debt to finance its Nov. 1, 2021, acquisition of GE Capital Aviation Services (GECAS), with interest from lenders at more than \$70 billion. As a result, we mostly affirmed our ratings and stable outlooks on aircraft lessors in 2021. Although ratios declined during 2020 and 2021, we expect a gradual return to pre-pandemic levels in the next few years. Higher interest rates are not a risk so long as the increase is not too sudden. Typically, lease rates are a function of interest costs and demand. Therefore, we expect rising interest rates to be passed along in higher lease rates.

Credit metrics and financial policy

For the most part, credit metrics have either been relatively stable or improved. Those transportation equipment lessors' credit metrics that have improved--in the freight sectors such as railcars, trucks, marine cargo containers and chassis--are due primarily to the supply-demand imbalance, which has boosted lease rates and margins. Car renters' credit metrics have also improved and exceeded expectations due to their strong operating performance and strong gains on sale of vehicles. We expect their capital spending to increase, given higher vehicle prices and an eventual improvement in availability. In terms of financial policy, some financial sponsor-owned companies have taken large debt-financed dividends that resulted in downgrades, such as that on PODS. On the other hand, Hertz, which is now owned by financial sponsors since its June 30, 2021, emergence from bankruptcy, refinanced its sponsor owner's payment-in-kind (PIK) preferred shares with proceeds from an unsecured debt issuance at about half the interest cost. This will help its credit metrics, a factor in our upgrade to the company.

Key risks or opportunities around the baseline

1. Economic growth is weaker than expected

If economic growth is below expectations, demand for goods transported intermodally could decrease. While this could alleviate supply chain issues and port congestion, it could also result in weaker demand for railcars, trucks, marine cargo containers and chassis. If this leads to excess capacity, it could result in equipment returned to lessors, and pressure on utilization and pricing. Offsetting this, most lessors have the ability to reduce spending on new equipment fairly quickly if weaker demand warrants.

2. The recovery in airline traffic is stronger than expected

Stronger than expected traffic growth would benefit aircraft lessors. Demand in certain regions for short-haul domestic leisure travel (such as North America and China) has recovered somewhat, aiding demand for narrow-body aircraft. However, long distance international travel continues to suffer from the effects of the pandemic--border closures, quarantine restrictions, and the like. When restrictions have been lifted, demand has picked up. Some countries are lifting restrictions, and if passengers become more comfortable traveling despite the pandemic, pent-up demand for long-haul travel could translate into substantially increased international travel. In that case, demand for widebody aircraft (along with their values and lease rates), could strengthen.

3. Used car pricing weakens

This is both an opportunity and a risk for car renters. The opportunity is increased availability of vehicles will lead to added capacity to satisfy demand (albeit at potentially lower rental prices). The risk is that with more availability of vehicles, used car prices will likely decline and the sector will realize lower gains upon disposal of vehicles while undertaking heavy capital spending to restore their fleets.

Transportation equipment lessors are a disparate group, with different opportunities and risks by sector. In addition to those listed above, another major risk is the inability to access the capital markets at advantageous rates, while other opportunities include consolidation and demand for newer equipment (particularly aircraft) to help meet environmental goals.

These companies are all capital-intensive, with a corresponding heavy reliance on the capital markets for secured and unsecured debt. So far, during the pandemic, the capital markets have been quite receptive. Aircraft lessors continued to have access to the capital markets at record low rates and the asset-backed securities (ABS) market for aircraft financing returned in 2021 after a weak 2020. The capital markets were receptive to other equipment asset classes as well. Marine cargo container lessor Triton converted a large portion of its balance sheet debt to unsecured from secured, and ABS issuance remained strong for marine cargo containers and railcars. At the same time, car renters accessed the capital markets to raise debt and refinance existing debt at lower rates. Witness Hertz's emergence from bankruptcy on June 30, 2021, using the capital markets to issue secured debt to finance its acquisition by financial sponsors, and just a few months later issuing \$1.5 billion of lower-coupon unsecured debt to refinance the PIK preferred debt. We expect these trends to continue well into 2022, despite expected rising interest rates. Indeed, in early January, Air Lease issued \$1.5 billion of unsecured notes, including \$750 million of 10 year notes at a record low coupon for the company.

We expect M&A to continue across the sector in 2022, after a strong year in 2021 that included the combination of the two largest aircraft lessors, when AerCap acquired GECAS for approximately \$25 billion. Other M&A transactions included Carlyle's acquisition of aircraft lessor Fly and Japanese finance company Mitsubishi HC Capital's

Industry Top Trends 2022: Transportation

acquisition of marine cargo container lessor CAI International. More recently, Carlyle has announced the acquisition of another large aircraft leasing portfolio. New leasing companies, particularly in the aircraft leasing space, have been set up since 2020, due to the abundance of available capital from both existing and new participants. There could be more consolidation as lessors seek growth, which could lead to larger aircraft lessors, although not as large as the combined AerCap/GECAS.

Finally, we see opportunities for some lessors as airlines enhance their ESG initiatives. We believe the aircraft lessors, especially those with large order books for new technology aircraft, will benefit from airlines seeking to upgrade their fleets to new, more environmentally friendly aircraft. In another development, aircraft lessor Avolon has announced its investment in a developer of and order for up to 500 small electrical vertical takeoff and landing aircraft. Meanwhile, Hertz announced in late October that it will acquire 100,000 Teslas by end-2022, up to 50,000 of which it will rent to Uber drivers.

Industry Forecasts

Global Transportation

Chart 9

Revenue growth (local currency)

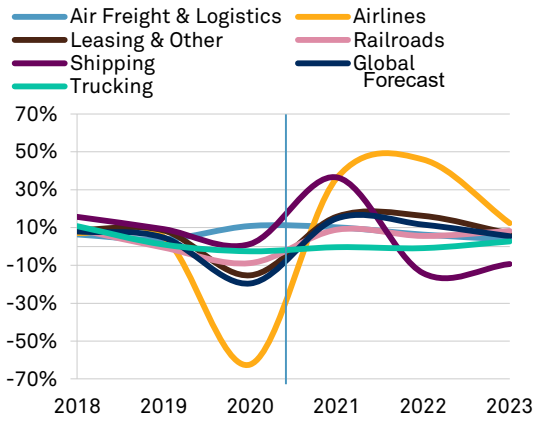


Chart 10

EBITDA margin (adjusted)

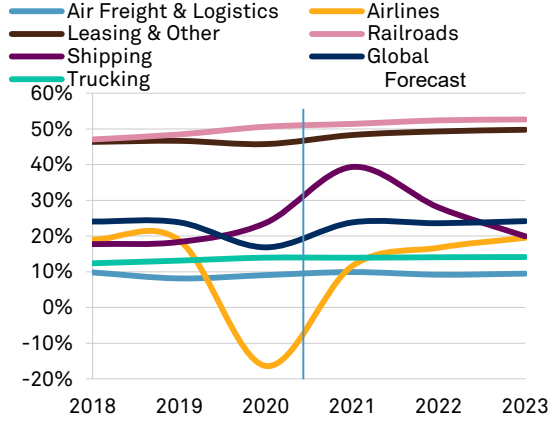


Chart 11

Debt / EBITDA (median, adjusted)

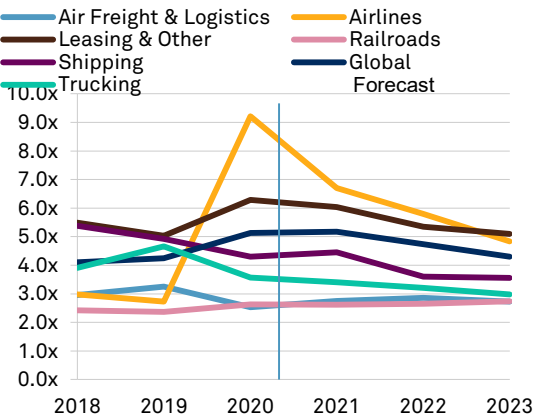
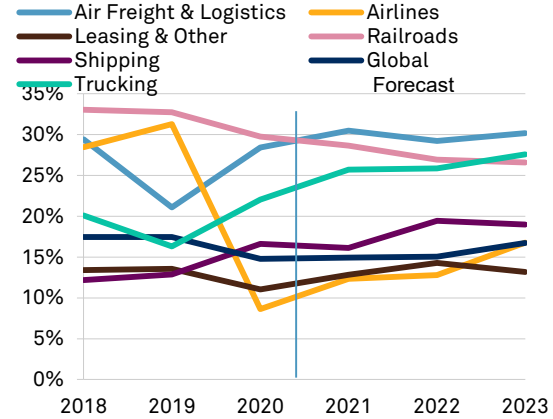


Chart 12

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 Transportation

Chart 13

Cash flow and primary uses

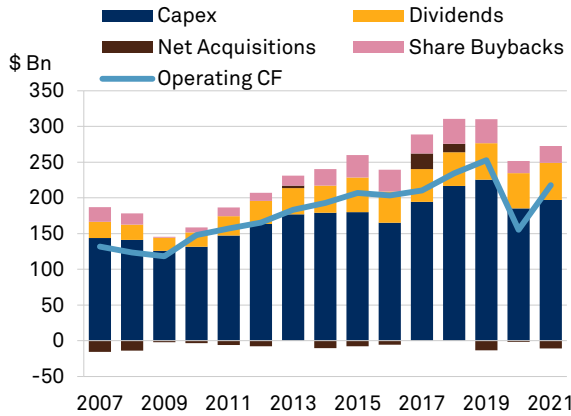


Chart 14

Return on capital employed

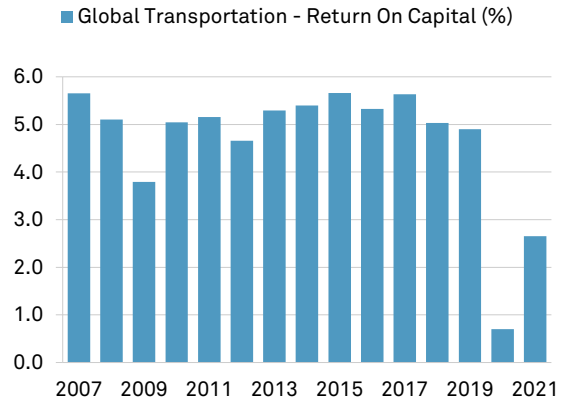


Chart 15

Fixed versus variable rate exposure

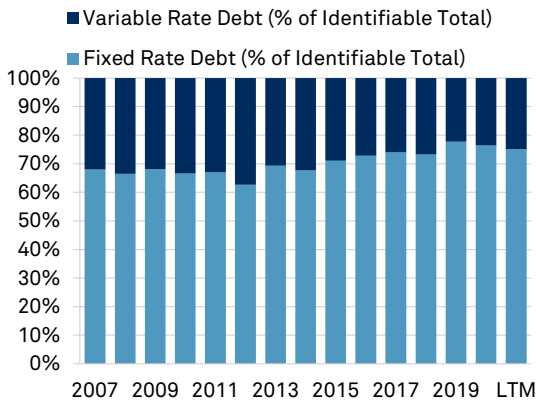


Chart 16

Long term debt term structure

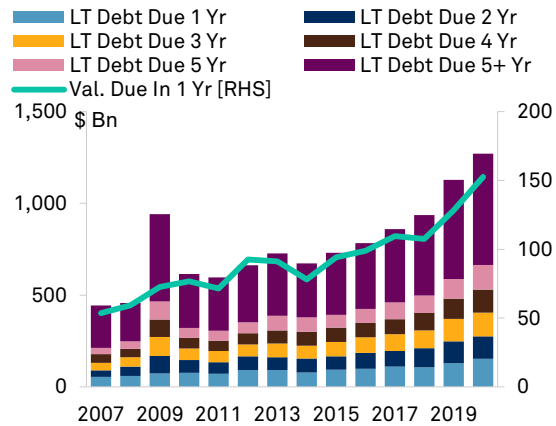


Chart 17

Cash and equivalents / Total assets

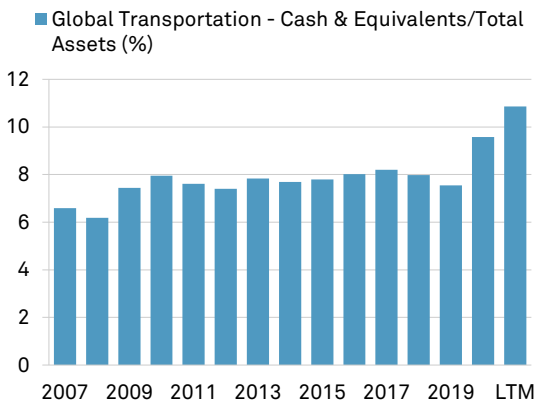
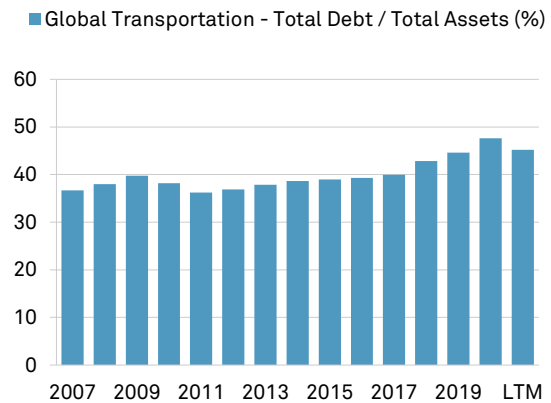


Chart 18

Total debt / Total assets



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

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