



Aviation Debt

Newsletter Q4 2021

Global Aviation Market Q4 2021 - Overview

- > Recovery slowed down in Q3 but still continued with rising passenger numbers and less aircraft being stored.
- > The significant rise in jet fuel prices during Q3, is expected to impact operating costs and hence profitability going forward. This is also reflected in a decline in airlines stocks.
- > IATA reports that initial financial results for airlines in Q3 have further improved, compared to Q2 2021. However expects rising fuel prices to impact Q4 results.
- > IATA announced its goal to transform the aviation sector to net-zero emissions by 2050. The plan contains detailed steps and heavily relies on the usage of Sustainable Aviation Fuels. However some experts criticize, that this might not be sufficient.
- > Conclusion: While the recovery continued during Q3 2021, increased fuel prices and continued regional lock downs still pose risks to the airline industry. Spread and LTV levels remained mostly flat during Q3, while the large disparity across regions still lead to very different risk profiles and financing terms. We currently see a generic spread for a narrowbody loan at around 340 bps. New deliveries next year still require a significant amount of financing, as some airlines also used the recent month to further expand their fleet to profit from a recovery.

Aviation Debt – Market Summary

While August saw a slight deterioration in the development of passenger traffic due to the spread of the Delta variant, the recovery of the global aviation sector continued overall in the third quarter of 2021. Accordingly, the parked passenger aircraft fleet continued to reduce steadily, thus at the end of September 2021 there were 750 fewer passenger aircraft parked than at end of July 2021. The latest expectations are that there are going to be just under 5,000 passenger aircraft in storage at the end of 2021. As international travel restrictions remained in place during the third quarter, domestic flights continued to dominate the gradual recovery. Brazil, Russia and the U.S. posted overall positive developments. The U.S. domestic market in terms of passenger traffic even returned to 87% of pre-crisis levels. In the Chinese domestic market, passenger volumes declined in August due to new virus outbreaks and the resulting travel restrictions. In September, Chinese domestic traffic recovered, but remained below its pre-pandemic peak. Internationally, Europe showed a robust recovery, reaching 43% of pre-crisis levels (mostly based on recovering intra-European travel, which is not categorized as a domestic market), above the industry-wide average of 31%. However, overall traffic levels remained well below pre-COVID 19 pandemic levels in 2019. Fundamentally, the potential spread of new virus variants and associated travel restrictions remain the main risk to a further recovery in air travel, while ongoing vaccination progress provides cause for further optimism and contributes to an overall positive recovery trend in 2021.

Financing Terms

The ABS issuance in H1 2021 significantly surpassed the level of the full year issuance of 2020. With USD 4.3bn in the first half of 2021 the year is on track to reach levels seen in 2017/ 18 (USD 6.2bn and USD 7bn respectively). The market has received the issuances very well as an opportunity to play the recovery in the aviation market, which was also reflected in the comparably low pricing for the higher ranking tranches, due to increased liquidity inflows.

Lufthansa announced at the beginning of November, that it had fully repaid the state aid received during the pandemic. This was also accomplished with the help of a total of three bond issuances in 2021, which raised more than USD 3bn in 2021 and also executed a capital increase.

Several large airlines issued capital market instruments during Q3 2021 including Lufthansa (see above), British Airways and Air Canada, sizes ranged from USD 500m to USD 3bn, compared to aircraft financings the majority of bonds is unsecured, on average pricing in the low 3's.

Spread and LTV levels remained constant through Q3 2021, with slightly reduced transaction volumes. Banks continue to be cautious and airlines had to cope with local travel restrictions. However the beginning of Q4 saw a pickup in

transaction volumes, also some airlines took a long term approach already securing financings for deliveries in Q3 / Q4 2022.

Institutional investors in Europe have been seen to increase their allocation to the aviation debt space to profit from the further recovery.

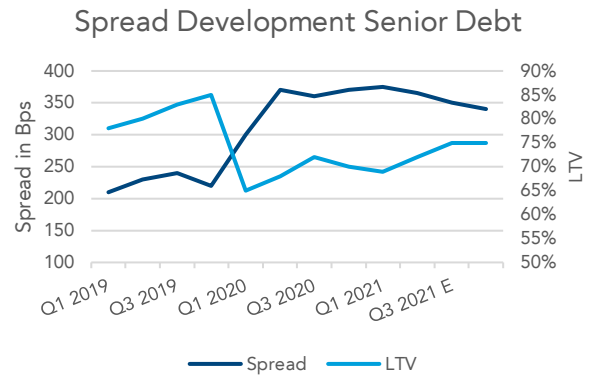


Figure 1, Source: Prime Capital Research

Airline Equity Market

IATA reports that initial Q3 results further improved compared to Q2 2021. Main improvements were seen in domestic and short-haul routes, in regions where travel restrictions had been lifted. Again, US airlines have been among the best performers in Q3, due to the strong US domestic market. However the significant rise in jet fuel prices has put cost pressure on the airlines operating costs. IATA expects, that this will represent a risk to the further recovery in Q4 2021. Other issues mentioned are rising infrastructure costs and staff shortages in the US as well as rising inflation around the globe. Stocks have reacted to the increase in fuel prices after a short rebound in September, airline stocks edged lower in October. Leaving the overall performance at 1.8% year to date, compared to 15.2% of the wider stock market.

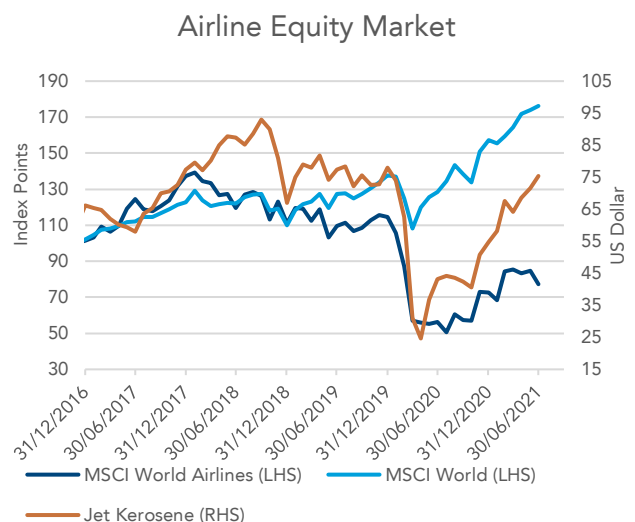


Figure 2, Source: Bloomberg

Jet fuel prices have reached their highest level since 2014. The price increases are mainly driven by increased economic activity. While some analysts expect oil prices to rise even higher, the International Energy Agency (IAE) expects, that an increased supply, especially from the US may reduce the upward pressure on oil prices going forward. Also OPEC+ has gradually increased its production.

Commercial Aviation

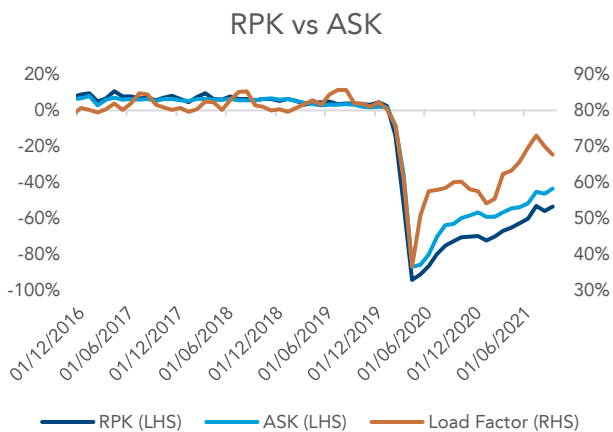


Figure 3, Source: IATA

According to IATA, industry-wide revenue passenger-kilometres (RPKs), an indicator of global passenger demand, were -53% below pre-crisis levels compared to September 2019, while available seat-kilometres (ASKs) recorded a -44% decline compared to 2019. Although RPKs and ASKs remain subdued compared to 2019, they show a steady recovery trend compared to previous months. Airlines are increasingly optimistic and plan to add further capacity by the end of the year. Recent global flight schedules indicate that capacity for domestic and international flights should reach 88% and 62% of pre-crisis levels, respectively, for December. Similar trends are visible in airline financial results, with declining net losses compared to the previous quarter and even positive results in some cases (predominantly among North American carriers). However, for the last quarter in 2021 and beyond, airlines are facing sharply increased fuel costs as well as soaring inflation. If this trend of rising prices continues, it could slow the economic activity as well as have a negative impact on travellers' future travel plans. However, this is currently not observed as there is substantial pent-up demand for travel and, with further easing of travel restrictions, stronger demand for international and domestic air travel is expected in 2022.

Aviation aiming for net-zero

Commercial aviation is estimated to be responsible for around 3% of the global CO₂-emissions, however international climate protocols have struggled to include aviation explicitly into its goals, as the emissions usually can't be attributed to a specific country. Nevertheless the general public has been aware of the negative effects of air travel for

the climate for several years, which is expressed in measures from compensation programs to flight shaming.

In October IATA approved a resolution for the global aviation industry to achieve net-zero carbon emissions by 2050. This commitment is aligned with the Paris Agreement goal for global warming not to exceed 1.5°C.

IATA representing the aviation industry states that its resolution strives to "ensure the freedom of future generations to sustainably explore, learn, trade, build markets, appreciate cultures and connect with people the world over". It sees the goal as a joint effort along the value chain and accompanied by supportive government policies.

The ambitious goal needs to balance the expected overall growth in passenger traffic which is projected to significantly grow until 2050, while there are no carbon neutral alternatives at hand, which can serve the huge scale of the aviation market. IATA estimates that to be able to serve the needs of the ten billion people expected to fly in 2050, at least 1.8 gigatons of carbon must be abated in that year. Moreover, the net zero commitment also implies that a cumulative total of 21.2 gigatons of carbon will be abated between now and 2050.

IATA sees the International Civil Aviation Organization's (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) as key enabler. As the program is supposed to stabilize international emissions at 2019 levels in the short-to-medium term. Support for the program was also part of the resolution. CORSIA has its drawbacks though, as it only applies to flights that start and end in countries, that are part of the program and hence don't cover the entire global passenger traffic.

The goal of net-zero emissions in 2050, remains ambitious as it also heavily relies on Sustainable Aviation Fuel (SAF), which today can only be produced at a very small scale.

Climate experts additionally criticize, that it is estimated that CO₂-emissions not even account for half of the warming effect caused by flight emissions. This is mainly due to the height in which the emissions are produced, which beside CO₂ also contain nitrogen oxides, which has a much stronger effect at the typical cruising altitude of an aircraft. Hence CO₂-neutral aviation will not equal climate neutral. Thus it can be expected, that the self-imposed measures will need to be revised at some point.

In general the resolution shows clearly, that ESG will be in focus going forward from the industries- as well as from the investor's side. It can however be expected that there might be further changes in the future, driven by new technologies and changing views regarding the effects of aviation on global warming.

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