

Economic insights

Aviation insurance: opportunities ahead from greener flying

Key takeaways

- Despite the challenges of the war in Ukraine and the pandemic, we see a promising outlook for aviation insurance. We estimate premium growth of 4-5% per year to 2030.
- Both air cargo and air passenger traffic have robust long-term prospects. The commercial fleet is forecast to double in size between 2019 and 2040, to around 50 000 aircraft, creating strong growth in exposure to insurance.
- The drive towards decarbonisation will create long-term opportunities for aviation insurers.

About Economic Insights

Analysis of key economic developments and their implications for the global re/insurance industry.

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In a nutshell

Times are challenging for aviation insurers as airlines grapple with the fallout from war in Ukraine, directly after the unprecedented shock of COVID-19. However, air traffic is rebounding strongly, and passenger and cargo numbers are expected to grow over the long term. As airlines invest in greener and safer new aircraft, we see growing opportunities for aviation insurance.

The outlook for aviation insurance is promising. After the grounding of planes during COVID-19, passengers are returning to the skies: global passenger numbers are expected to recover to pre-pandemic levels by 2024.¹ Demand for air cargo is also expected to increase over the long run. Combining cargo and passenger traffic, the commercial aircraft fleet is forecast to rise from around 25 000 airplanes in 2019 to close to double that number in 2040 (see Figure 1). That corresponds to a compound annual growth rate of around 3.1%. More airplanes flying means a larger premium opportunity for insurers. Based on our economic growth forecasts, and expected increases in air passenger traffic and aircraft fleet size, we estimate global nominal gross written premiums in aviation (and space) insurance could grow by 4% to 5% annually on average to 2030 in nominal terms (0.7%-1.7% in real terms).

Aviation insurance typically covers all risks related to aircraft loss or liability. War risk aviation cover is also typically purchased by airlines. Important drivers of premium volumes are air passenger and cargo traffic, aircraft fleet size and value, as well as trends in the frequency and severity of accidents and the impact of social inflation liability claims. Aviation also provides risk diversification opportunities for insurers.

In relation to the conflict in Ukraine, some 500 aircraft currently in Russia are leased from international firms. The outcome of the evolving situation is uncertain and does not negate the tailwinds that will boost growth in aviation insurance over the longer-term. The pandemic inflicted an unprecedented shock on the aviation sector. Global revenue passenger-kilometres (RPK) – a unit of measurement for air passenger traffic that takes distance into account – fell by 66% in 2020, interrupting a long-term (1990-2019) growth trend of around 5.5% per annum.² In 2022 passenger growth has accelerated as the pandemic recedes, with RPK up by 88.8% y-o-y in the first quarter. Over the longer term, growth in passenger numbers will be largely driven by the populous emerging markets, notably in Asia as the middle class expands and more individuals and businesses can afford air travel and access global goods markets. We expect this growth in passenger traffic to benefit aviation insurance exposure in the long term.

¹ As expected by several industry participants. See for example IATA, March 2022.

² *World Air Transport Statistics 2021*, IATA, August 2021.

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Figure 1: Forecast commercial aircraft fleet evolution (passenger and cargo) in 000s aircraft, 2040 horizon. Numbers refer to changes versus the previous column

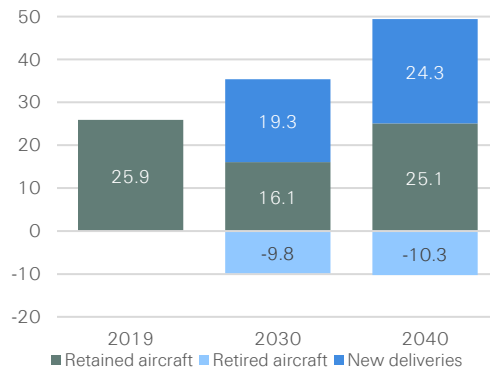


Figure 2: Historical trends and outlook in the aviation insurance market. Arrow colour and direction indicate how the metric evolves

Dimension	Historical trend	Pandemic	Short-term outlook	Long-term outlook
Claims frequency	↓	↓ ↓	↑	→
Claims severity	↑	↑	↑ ↑	↑
Passenger traffic growth	↑ ↑	↓ ↓	↑ ↑	↑
Air cargo growth	↑	↑ ↑	↓	↑
Premium rates	↓	↑	↑ ↑	→
Premiums growth	↓	↑	↑	↑

Source: Boeing Commercial Market Outlook, IATA, Swiss Re Institute

Air cargo performed better than passenger traffic during the pandemic. Volumes carried rose by 6.9% in 2021 versus 2019.³ Cargo accounts for a smaller share of global aviation industry revenue than passenger traffic, and the volume increase during the pandemic did not offset the loss impact of the drop in passenger numbers. Air cargo traffic has eased since the second half of 2021 as economic growth has slowed. That said, strong growth in e-commerce, in which air cargo plays a crucial role, is a favourable long-term development and will increase air cargo insurance exposure.⁴

Airlines used the lull in traffic during the pandemic to renew their passenger aircraft fleets, leading to investments in greener and safer planes. This has created additional near-term opportunities for insurers. Aircraft are expensive and the associated value of sums insured are significant. Another long-term tailwind for insurers is the uninterrupted historical downward trend in air travel accidents, which is likely to continue and so reduce the frequency of claims.⁵ However, claims severity has gone in the opposite direction, as aircraft become increasingly valuable due to growing complexity in their design and manufacturing process, and with social inflation.⁶

The global drive for decarbonisation, and related trend of travellers looking for alternatives to flying, are emerging challenges. We expect green taxes to increase and airlines to work to fly more sustainably.⁷ This may raise air fares and so lower demand, but it may also make air travel more attractive to the environmentally conscious. We believe the aviation industry and its insurers can find optimal solutions and that despite the near-term uncertainty, there are significant opportunities, from e-commerce to greener flying, ahead.

³ Air Cargo Market Analysis, IATA, December 2021.

⁴ eMarketer predicts a CAGR of 10.6% between 2021 and 2025, Feb 2022 update

⁵ On a 5-year moving average basis, airliner fatalities fell from a peak of ~1870 in 1974 to ~245 in 2021, Aviation Safety Network, consulted in May 2022.

⁶ Aviation insurance is seeing higher loss awards than in the past, Marsh Q1 2021 report.

⁷ See: KLM further expands approach for Sustainable Aviation Fuel, KLM, 10 January 2022.

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