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## War risks and perspectives of aviation insurance

A review of current war risks and their implication for aviation insurance based on experts' analysis is presented. The prospects of aviation insurance with regard to the growing fleet and other factors are provided.

Today, the majority of retail insurance contracts concluded on the Ukrainian market do not provide for coverage of losses caused as a result of military operations. Insurance of such risks was carried out by insurers mainly only in the corporate segment and was limited due to the complexity of the underwriting process, high cost and small capacity of the Ukrainian market for insurance and reinsurance of war and other catastrophic risks. A limited number of insurers in the world provide insurance and reinsurance of war risks. After all, they use special conditions of their insurance. Unfortunately, with the beginning of the war, obtaining reinsurance protection for war risks and, accordingly, concluding such insurance contracts became almost impossible, because for Ukraine the war ceased to be a risk, but turned into a reality. But in the future, in order to protect the interests of individuals, legal entities and the state, this issue must be settled. The Ukrainian government is already considering various options for introducing an effective protection mechanism against such risks. It would be expedient to change the approaches of insurers regarding the coverage of impact of war risks. It will be possible to do this after the end of active war in Ukraine. At the same time, the National Bank of Ukraine is involved in finding ways to resolve this situation. One of the mechanisms is the creation of a special compensation fund or pool at the state level with the involvement of funds from donors and insurers. As successful international experience shows, the creation of similar funds is possible on the basis of public-private partnership [1].

Aviation insurance typically covers all risks related to aircraft loss or liability. War risk aviation cover is also purchased by airlines. In relation to the war in Ukraine, more than 500 aircraft currently in Russia are leased from international firms. As the war between Russia and Ukraine continues to rage on, the already hard international aviation insurance market faced with Russia confiscated the more than 500 airplanes in the country that are financed or owned by non-Russian lessors. Insurers and reinsurers are thus faced with potential claims as high as \$10 billion, which for aircraft owners/operators would result in increased premiums, additional exclusion clauses, and more dropped policies. These lessors have hull and liability insurance, as well as specific aviation war cover, and will call on their insurance to be indemnified against expropriation of their airplanes. Most aviation policies are underwritten through the Lloyd's of London market, and 30 to 40 percent of primary insurers' exposure is ceded to reinsurers. To date it is hard to quantify ultimate claims with a high degree of certainty as outcomes are likely to be subject to legal

disputes. Industry experts estimate the total insured residual value of the grounded aircraft at \$13 billion, but aggregate loss limits written into policies means potential hull insurance claims should be \$5 billion to \$6 billion but could be as high as \$10 billion worst-case. The latter figure would be by far the largest annual claims in the history of aviation insurance [2].

After the European Union imposed sanctions against Russia for its full-scale war in Ukraine, the leasing companies announced the termination of their leases with Russian firms, and asked Russian airlines to return the aircraft. In May 2022, the world's largest aircraft lessor AerCap Holdings NV filed a \$3.5 billion insurance claim related to aircraft and equipment, stolen by Russia. Another lessor, Air Lease Corp. determined losses for aircraft leased by Russian airlines valued at \$802 million, and would claim to recover the losses from its insurers.

The COVID-19 pandemic caused an unprecedented shock on the aviation sector. Global revenue passenger-kilometers (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.

Today, airline passenger numbers are recovering from the slump in demand during the pandemic, and this growth is the strongest in Europe and North America. Globally, passenger numbers are expected to reach 83% of pre-pandemic levels in 2022, up from 47% in 2021, and return to 2019 levels in 2024, according to the International Air Transport Association (IATA).

Rising passenger numbers mean positive perspective for airlines and insurance companies, and potentially higher insurance premiums, despite a relatively stable insurance rates environment. The number of airline renewals will occur in the fourth quarter of 2022 and insurers will likely be under pressure to increase rates.

Today the insurance all-risk market is influenced by the Russia-Ukraine losses come through disputes. Also their reinsurance programs may be impacted. Insurers are discussing new restrictions for insurance coverage, e.g. geographic limits to exclude Russia. Belarus and Ukraine.

Despite the potential losses, insurance is still available in the aviation risk and war insurance, although at a higher cost. The importance of war insurance is growing today. The main airline insurance market has remained competitive throughout the pandemic and continued to provide broad coverage for airlines. These conditions attracted new players to market and unlocked dormant capacity from existing insurers during the pandemic. While rates have been artificially high, in many cases due to reduced flights, still there is an opinion among the insurance community that current premium levels are below those required to sustain profitability. Also prices in the airline insurance market are likely to be driven by the aviation reinsurance market, which can see large losses from the Russia-Ukraine war.

At the same time, air traffic is rebounding strongly, and numbers of passenger and cargo are expected to grow over the long term. Also, as airlines invest in greener and safer new aircraft, there are additional growing opportunities for aviation insurance.

Taking into account these conditions, the following factors may influence the international insurance market.

Important factors 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. Demand for air cargo is expected to increase over the middle and long term perspective. According to the forecast of the Swiss Re Institute, Boeing, IATA, the commercial aircraft fleet (cargo and passenger traffic), will rise from around 25 000 airplanes in 2019 to almost 50 000 in 2040 (see Figure 1).

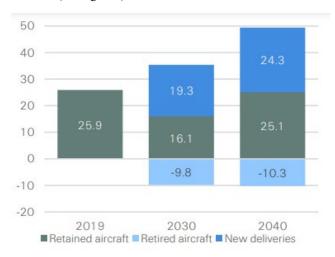


Fig.1. Forecast of the fleet of commercial aircraft (in thousands of aircraft) until 2040. Source: Swiss Re Institute, Boeing Commercial Market Outlook, IATA

That corresponds to a compound annual growth rate of around 3.1%. And more airplanes flying mean a larger premium opportunity for insurers. Based on economic growth forecasts, and expected increases in air passenger traffic and aircraft fleet size, the 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) [3].

Air cargo has performed better than passenger air during the pandemic. Transportation volumes increased by 6.9% in 2021 compared to 2019. In 2022, passenger growth accelerated as the pandemic subsided, with RPK up 88.8% year-on-year in the first quarter. In the long term, passenger growth will be largely driven by populous emerging markets, particularly in Asia (China, India, and others), as the middle class expands and more people and companies can afford air travel and gain access to global commodity markets. This increase in passenger traffic will benefit aviation insurance in the long run.

Growth in international trade and ecommerce, in which air cargo plays a significant role, is a favorable long-term development and will increase air cargo insurance development [4].

Airlines have used the lull in traffic during the pandemic to upgrade their fleets of passenger aircraft, leading to investments in greener and safer aircraft. This has created additional near-term opportunities for insurers. Airplanes are expensive, which affects the corresponding cost of insurance. Insurance companies may benefit from the long-term downward trend in air travel accidents, leading to lower claim rates [3, 5].

Global trends towards decarbonisation, increase green taxes and force airlines to work on more ecological flights. This may raise airfares and thus reduce demand, but it may also make air travel more attractive to the environmentally conscious (in case of introduction of new technologies, e.g. electric aircrafts).

Today the aviation insurance market is facing potentially large losses from the Russian-Ukrainian war, putting pressure on rates, terms and cautions. However, there is also a better understanding of the importance of military insurance. The aviation industry and its insurers can find optimal solutions, and that despite near-term uncertainty, there are more opportunities ahead, from international trade and e-commerce development and to greener flying. The move towards a greener fleet will create long-term opportunities for aviation insurers [3].

Despite the consequences of the war in Ukraine and the COVID-19 pandemic, aviation insurance has promising future. The premium can grow by 4-5% per year until 2030. Both cargo and passenger air transportation have reliable long-term prospects. Between 2019 and 2040, the commercial fleet is projected to double to approximately 50,000 aircraft, providing significant insurance growth.

## References

- 1. Бурбель Л. Шість головних викликів, з якими зустрівся страховий ринок упродовж шести місяців війни. Interfax Ukraine, 05.09.2022.
  - 2. Trautvetter C. Insurers Face Losses Due To Grounded Aircraft in Russia/
- March 2022. https://www.ainonline.com/aviation-news/business-aviation/2022-03-23/insurers-face-losses-due-grounded-aircraft-russia.
- 3. Vanolli A. Aviation insurance: opportunities ahead from greener flying. Economic Insights, Issue 13/2022.
- 4. Abernikhina, I. (2022). Essence, features and current state of aviation insurance in Ukraine. Economy and Society, (38). https://doi.org/10.32782/2524-0072/2022-38-8.
- 5. Балабанова Г.П. Авіаційне страхування як чинник розвитку авіаційної галузі України у світовому господарстві. Національний авіаційний університет. 2021. https://dspace.nau.edu.ua/bitstream/NAU/53172/1/.