

Current global trends of aviation insurance

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Abstract: *Aviation insurance represents a special form of activity related to providing financial protection for companies operating in the aviation field. Aviation insurance is intended for the aerospace industry to cover the risks associated with its activities. It provides general liability coverage for air transport of passengers and cargo; losses caused by military operations or terrorist activities; physical damage; and liability to passengers and third parties. The recent changes in the global market situation, influenced by a complex of factors, determine the general development of aviation insurance. On the other hand, rising costs in aviation insurance and limiting the activities of service providers may hinder market growth in the medium term.*

Key Words: *aviation insurance, aviation insurance market, global trends*

1. INTRODUCTION

Captain A. G. Lamplugh, chief underwriter and principal surveyor of British Aviation Insurance Company, said: “Aviation in itself is not inherently dangerous. But to an even greater degree than the sea, it is terribly unforgiving of any carelessness, incapacity or neglect” [7].

Aviation insurance is a special field of the global insurance industry and has become very dynamic under the influence of the following changes [4], [10], [14]:

- First, there is an increase in air passenger traffic and the number of international airlines.
- Second, there is a global increase in the number of airports and a thriving airport industry.
- Thirdly, there is the development of space exploration activities and lower rates of insurance premiums.
- Fourthly, there is a growing number of high net worth individuals choosing to fly around the world.
- Fifth, there is an increase in tourism, which is linked to a host of problems such as canceled flights, accidents, natural calamities and other such occurrences of uncertainties.

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- Sixth, rapid digitization is taking place in the corporate and tourism sectors, as well as the increasing penetration of the Internet of Things in various businesses has boosted international travel.
- Seventh, there is an expansion of government rules and regulations for the safety of the aviation industry.

It is also worth noting that the COVID-19 pandemic devastated the aviation insurance market by imposing air travel restrictions and disrupting aircraft demand [13].

Recently the experts at Global Market Estimates published the following: “The global airline industry market is projected to grow at a CAGR value of 25.5% from 2022 to 2027. The worldwide airline sector is expected to grow in the next few years, owing to rising disposable income, rapidly growing middle class, and increased travel demand.

Furthermore, the price of jet fuel is expected to stay relatively stable over the forecast period, allowing airlines to levy surcharges and earn additional revenue from passenger and freight transport” [10].

The given article aims to examine the essence of aviation insurance and the global trends in the development of the respective global market.

2. THE ESSENCE OF AVIATION INSURANCE

To begin with, in order to examine trends in aviation insurance, a conceptual clarification of this notion is necessary.

Experts from Allied Market Research say: “Aviation insurance refers to indemnification of a client against losses arising from the result of damages, maintenance, or use of aircraft, and hangars at the airport. In addition, it provides coverages for damage to aircraft, property damage, and personal injury. ...This insurance typically covers repair or replacement of damaged parts of accidental aircraft” [4].

The specialists at Research Dive are of the opinion that aviation insurance represents a special form of insurance that is intended to cover risks related to specific activities associated with the operation of an aircraft, as well as other possible risks in aviation. This insurance covers losses in the form of property damage, loss of cargo, or personal injury. It also protects against losses related to aviation risks (maintenance and use of aircraft, destruction of property, seizure of cargo, or personal injury). It also covers the protection of aircraft owners and operators in the related industry against unexpected losses [15].

Verified Market Research states: “Aviation insurance is a type of specialized insurance designed to cover the unique activities of an aircraft as well as other possible dangers in aviation. Physical damage to the aircraft, as well as legal liability arising from its ownership and operation, are often covered by aviation insurance. Specific insurance is also offered to protect airport operators against legal responsibility stemming from the operation of hangars or the selling of different aviation items. This sort of insurance varies from other types of transportation insurance in numerous respects. Aviation insurance has its own set of terms, conditions, and limitations” [16].

Aviation insurance is mainly aimed at corporate entities and includes insurance services for aircraft, accidents, passenger liability, baggage and cargo, third party liability, and airport liability [6].

Aviation insurance is mainly aimed at airlines, airports, air operators performing air work or general aviation operations, aircraft or aircraft component manufacturers, flying clubs, military aviation units, and individuals or legal entities owning aircraft for private transport [5]. The notion of aviation insurance in some sources is replaced by that of aerospace insurance

[14]. Also, Marguerite Chauvin mentions: “Aviation insurance provides coverage for aircraft from liability and property damage. Aviation insurance, often known as aircraft insurance, is available for a variety of planes, including regular, experimental, and vintage planes, as well as seaplanes. The type of coverage offered includes physical harm caused by third-party or passenger negligence; war or terrorist actions; general liability coverage for cargo and passenger airlines; and certain types of coverage for specific aircraft models. Aviation insurance was created by keeping in mind aviation service providers, airport operators, and other stakeholders” [8].

3. FORMS OF AVIATION INSURANCE

Aviation insurance provides protection for [1]:

- Aircraft, their installations, and/or the equipment mounted on them (aviation hull and machinery);
- Civil liability for third parties and passengers, as well as their luggage or personal belongings (Aviation Third Parties Liability, Passenger Liability);
- Manufacturer's liability for manufacturers of aircraft or spare parts (Aviation Product Liability);
- Crew, flight, and ground personnel accidents (Aviation Personal Accidents);
- Liability of airport operators.

Romanian experts present the following types of aviation insurance [5]:

- Total loss aircraft insurance;
- Third party liability insurance, including or exclusively for passengers, goods and mail;
- Passenger, cargo and mail liability insurance;
- War risk aircraft insurance;
- Personal accident insurance;
- Damage to aircraft engine;
- Airport, fuel supply and air traffic liability insurance.

Also, the specialized literature presents the major segments of aviation insurance market as follows [7], [9]:

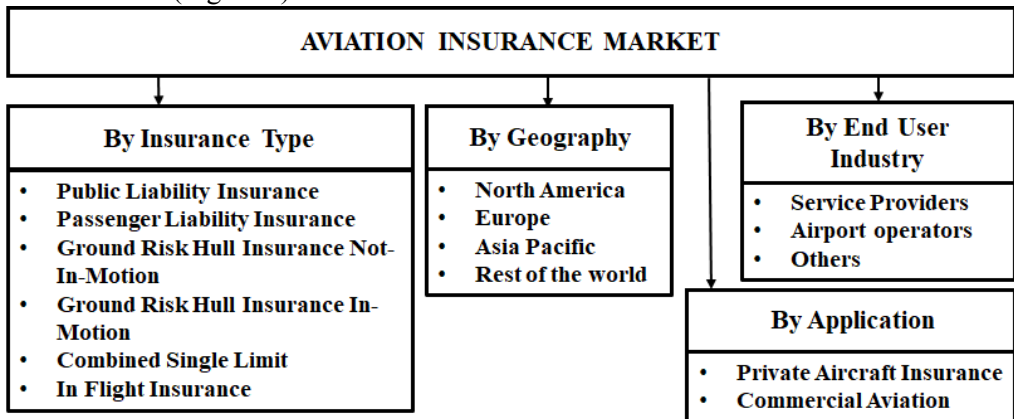
➤ **Segment by insurance type:**

- *Public liability insurance* (often called third-party liability) is intended for aircraft owners for damage their aircraft causes to third-party property (homes, cars, crops, airport facilities, and other aircraft hit in a collision). It does not provide coverage for damage to the insured aircraft or coverage for injured passengers on the insured aircraft.
- *Passenger liability insurance* protects passengers traveling in the accident aircraft who are injured or killed and is only required for commercial or large aircraft. This coverage is often sold on a per-boarding-seat basis, with a limit specified for each passenger seat.
- *Combined single limit* combines public and passenger liability into one policy with a single global limit for each accident. It offers more flexibility in paying liability claims, especially if passengers are injured but there is little damage to third-party property on the ground.
- *In-flight insurance* protects an insured aircraft against damage during flight and ground operations. It is more expensive than non-moving coverage because most aircraft are damaged during movement.
- *Ground risk hull insurance not in motion* provides the insured aircraft with cover against damage when it is on the ground and not in motion. This is for events such as fire, theft,

vandalism, flooding, mudslides, animal damage, wind or hail storms, hangar collapse, or for uninsured vehicles or aircraft striking the aircraft. The cover value can be a book value or an agreed value that was established at the time of the purchase of the policy.

- *Ground risk hull insurance in motion (taxiing)* is similar to non-moving ground risk insurance, but provides cover while the aircraft is taxiing, but not during take-off or landing. Coverage usually ends at the start of the take-off roll and is only in effect after the aircraft has completed its subsequent landing.
- **Segment by application:** commercial aviation insurance; general and business aviation insurance; others.
- **Segment by end user:** service providers; airport operators; others.

Verified Market Research offers a complex of structural insights into the global aviation insurance market (Figure 1).



Source: [16]

Figure 1. Structure of the global aviation insurance market

4. THE TRENDS AND FACTORS OF THE GLOBAL DEVELOPMENT OF AVIATION INSURANCE

Some experts have reported the development of the global aviation insurance market in 2018 with a price increase, which was partly driven by the COVID-19 pandemic. In 2021 this process continued at a slower pace [9].

Analysis by SNS Insider demonstrates the size of the aircraft insurance market was 3.86 billion dollars in 2021 and is forecast to reach a level of 5.41 billion dollars in 2028, with a possible compound annual growth rate (CAGR) of 5.8% in the period 2022-2028 [8].

According to Allied Market Research, the global aviation insurance market size was estimated at USD 3,430.20 million in 2020 and is forecast to reach USD 5,759.97 million in 2030, with a CAGR of 5.6% during 2021-2030 [4].

The report presented by Research Dive forecasts the global aviation insurance market to generate revenues of USD 6,326.30 million with a CAGR of 5.20% during the period 2021-2028 [13]. The report by Market Research Future estimates that the aircraft insurance market will touch USD 16,844.43 million by 2027 at 2.78% CAGR [2].

The reports of specialized companies contain important information regarding the state and prospects of some important segments of aviation insurance [11], [12], [15]:

- Public liability insurance is likely to be the most profitable, and the related revenue is forecast to amount to USD 2,162.80 million during the period of 2021-2028. This is due to third party and property damage coverage.

- Passenger liability insurance is anticipated to grow from USD 1,057.80 million in 2020 to USD 1,632.20 million by 2028 mainly due to the increase in the fleet of commercial aircraft intended to serve passenger traffic. Also of great importance is increased infrastructure investment and initiatives to connect secondary cities with major aviation hubs. It is also expected that middle-class passengers by increasing the demand for aviation industry services will contribute to the growth of this sub-segment of the analyzed market.
- Commercial aviation will grow revenue from USD 2,121.40 million in 2020 to USD 3,196.5 million by 2028.
- Business and general aviation will experience the fastest revenue growth, with a CAGR of 5.70% from USD 1,503.40 million in 2020 to USD 2,315.90 million by 2028.
- The market in North America constituted USD 1,693.90 million in 2020 and is expected to generate a revenue of USD 2312.30 million by 2028.
- The market in the Asia-Pacific region was valued at USD 1248.90 million in 2020 and is forecast to reach USD 1983.90 million by 2028.

Some experts mention the profitable opportunities for the expansion of the aerospace insurance market due to [3]:

- The expansion of the aviation industry and the increase in the smart development of airports;
- Decreases in the insurance premium rate;
- Buyers of accident insurance have financial security;
- Increases in investigative activities by aircraft, drones, and spacecraft.

At the same time, delayed services and a lack of knowledge hinder the growth of the market.

The actual aerospace insurance market trends are as follows [3]:

- *Expansion of the aviation industry.* The aerospace industry offers certain opportunities for several sectors, including exploration, communication, and transportation. The development of safe transportation, better communication, and navigation support contributed to the growth of the aviation industry. In turn, the development of the aviation industry contributes to the growth of the aerospace insurance market.
- *Smart airport development.* Smart airports apply multiple automated technologies, such as automated baggage handling systems and self-check-in counters. In different countries, new and existing airports are in the process of being modernized and expanded to meet the growing demand for air transport. It is highly likely that such developments in smart airports aimed at increasing airport efficiency will boost the growth of the aerospace insurance market.

5. CONCLUSIONS

Aviation insurance is an important segment of the global insurance market. Due to the development of different fields of global aviation as well as the development of the related infrastructure, favorable opportunities are created for the expansion of aviation insurance in the perspective until 2028.

Within this industry, the key growth drivers will be in public liability insurance and passenger liability insurance. Geographically, the core regions of aviation insurance expansion will be North America and Asia-Pacific.

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