Reference:
Kioulepoglou, Panagiotis, Ilias Makris, *Exploring Aviation Accidents and Related Costs: A Critical Literature Review across Global and Greek Skies*, (2024), Global Business & Economics Anthology, ISSN:1553–1392, Volumes I & II, December 2024, pp 105-116.

DOI: 10.47341/GBEA.24129

Exploring Aviation Accidents and Related Costs: A Critical Literature Review across Global and Greek Skies (*)

Panagiotis Kioulepoglou
Department of Accounting and Finance, University of Peloponnese, Greece
Email: pan.kioulepoglou@gmail.com

Ilias Makris
Department of Accounting and Finance, University of Peloponnese, Greece
Email: i.makris@teipel.gr

Introduction

Safety has a direct impact on the economic policy of an organization, especially when it concerns critical sectors such as military, commercial, and general aviation. It is apparent that such organizations prioritize aviation safety with great attention since even a single accident can cost not only human lives but also the financial survival of the respective company (Chance & Ferris, 1987).

According to data from the National Transportation Safety Board (NTSB), the rate of accidents per 100,000 flight hours for U.S. air carriers has significantly declined over time, dropping from 1.77 in 1965 to 0.20 in 1990, and further decreasing to 0.13 in 2020 (NTSB, 2021). Also, the Massachusetts Institute of Technology (MIT) revealed a significant decline in airline passenger fatalities by considering the total number of passengers boardings. Specifically, this rate stood at one fatality for every 7.9 million passenger boardings in 2020, which is a notable improvement from one fatality per 2.7 million boardings between 1998 and 2007. Looking further back in history, the risk of fatality for commercial airline passengers was one death per 750,000 boardings during the period of 1978-1987 and one death per 350,000 boardings between 1968 and 1977 (Barnett, 2020).

Nevertheless, despite aviation is currently safer than ever, accidents still occur globally. In this context, and by drawing on the literature, a critical review is conducted so as to analyze the financial consequences of aviation accidents and explore accident rates globally. Also, a special focus on Greece is attempted to facilitate comparison between worldwide and national accident rates. The aforementioned goals were pursued by discriminating between military, commercial and general aviation in order to pinpoint differences between these sectors. It is envisaged that through this process, additional knowledge will be built regarding the accident cost in aviation. By acknowledging that diagnosis is the initial response to overcoming challenges, it is envisioned that analyzing the current accident rates and costs will aid in the development of more advanced mitigation strategies aimed at safety optimization.

Keywords: Transportation Safety, Aviation Industry, Cost Analysis, Regulation.