

## PERFORMANCE OF AIRLINES: TOPSIS ANALYSIS

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### ABSTRACT

**Purpose-** Airline industry is very important for modern society and has a crucial role for globalization and business development by connecting regions, promoting global trade and tourism and hence enabling economic and social development. Over the last two decades, the troubled airlines were oftenly on news delebrating financial difficulties, layouts and distrupted sceduled flights. Covid-19 also has a crucial impact on the deterioration of the industry due to quarantinas and break downs for travel and business. This empricial research intends to analyse and rank the financial performance of the top 11 airlines in the Word for the periods of 2019-2020-2021 (Covid era) and also group and rank these airlines as US Airlines, European Airlines and Chinese Airlines.

**Methodology-** This study employs TOPSIS method. 11 biggest airline companies are selected by the total revenue generated in 2021. A total of 18 financial indicators are used to measure the profitability, liquidity, financial structure and operational efficiency for the period of 2019-2021. Utilizing a TOPSIS analysis, the performance scores of these airline companies are calculated and a ranking is determined according to these scores.

**Findings-** United Airlines, Delta Airlines and Southwest Airlines are the top performers in 2019. These airlines have a big drop in 2020 and their performance ranks are 8, 10 and 7, respectively. The best performer in 2020 is the Turkish Airlines. Also, United Airlines and Southwest Airlines show a fast recovery in 2021 by ranking 2 and 1, respectively. When performance ranking is applied for the groups of companies (namely; USA based, Europe based and China based companies), the USA based group is the best performer in 2019, the worst performer in 2020 and the second best performer in 2021. Meanwhile, China based group are the best performer in 2020 and 2021.

**Conclusion-** This study shows that the Covid era has affected profitability and operational efficiency of airline companies significantly. As a result of the study, it is observed that China based airline companies managed the Covid era better than the USA based and European based airline companies.

**Keywords:** TOPSIS, multi-criteria decision making, financial ratios, airline companies, performance ranking.

**JEL Codes:** C02, D22, D53

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