## UNLOCKING THE FINAL CODE TO MANAGING FINANCIAL RISK IN THE AIRLINE INDUSTRY

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## **ABSTRACT**

This paper explores the evolution of risk management practices for the aviation industry. Until now, the industry has been confined to hedging risks posed by its major cost drivers, including fuel, foreign exchange and interest rates. However, even the most significant driver of these costs (fuel) makes up only 20 to 30% of the total cost and until now, airlines did not have an ability to hedge the revenue side of their profit and loss account, limiting the impact of their hedging strategies. Skytra, a subsidiary of Airbus, has recently proposed a novel approach to managing the yield risk for airlines, which will complement the cost side hedging. Further, the ability to hedge yield would make the treasury functions of an airline more complete, by allowing it to focus on its two most significant drivers of economic outcome- yield and fuel. Finally, the paper reports our findings on effectiveness of revenue hedging using the newly proposed price indices by Skytra

Keywords: Hedging, Skytra Price Indices, Derivatives

## 1. INTRODUCTION

Risk management is the practice of defining the risk level a firm desires, identifying the risk level the firm currently has, and using derivatives or other means to adjust the actual level of risk to the desired level of risk (Chance and Brooks, 2016). For example, for an airline, its core activity and expertise is in transporting people safely from one destination to the other. However, airlines in transporting people and goods from one place to another, assume a number of risks over which they have little or no control or expertise. These risks such as the cost of fuel, borrowing costs and exchange rate have a significant influence on an airlines profitability. Although some airlines merely accept all these risks as part of doing business, others choose to actively manage these risks by hedging their fuel price, interest rates and currency.

Whether airlines choose to hedge their costs or not, they have long recognized their uncontrollable risks from rising fuel prices, interest rates or unfavorable currency movements. While the cost side of the aviation business draws most of the attention, it is the inability to exercise significant control over revenues, which makes the aviation business riskier and more volatile than other service centric businesses such as retail and consulting. Effective risk management, therefore, must consider both the revenue and cost of an airline. However, until recently, airlines did not have the tools or the market infrastructure to hedge their revenues. *Skytra*, a subsidiary of Airbus, is recently developing the infrastructure and tools necessary for an airline to hedge its yield. This introductory paper, which is the first in a series of research papers, examines the history of the airline industry; the tools and mechanisms airlines use to hedge and makes a case for revenue hedging using the infrastructure proposed by *Skytra*.

The paper is organized as follows. This introductory section looks at the nature of the airline business it's current and historical state and discusses the major cost drivers in the industry. Section 2, discusses the tools and infrastructure proposed by *Skytra* to enable an airline to hedge its yield. Section 3, illustrates through an example, how airlines can hedge their yields using the *Skytra* Price Indices. Section 4 concludes and discusses future research papers in this series.