

## DO SIZE, DEBT, LIQUIDITY, CAPITAL STRUCTURE, AND CAPACITY AFFECT FINANCIAL PERFORMANCE IN U.S. LEGACY AND LOW-COST AIRLINE CARRIERS?

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### ABSTRACT

*Ever since airline deregulation in the late seventies, airlines have been operating in a tough environment perpetuated by exogenous forces faced by no other industry. Oil price volatility, calamitous events, such as the terrorist attacks of September 11, bird flu, consumer preference, disposable income, the financial crises of 2008-2009, airline consolidations, and the emergence of new carriers have all played their part in creating a very challenging landscape through which airlines have to navigate on a day-to-day basis.*

*This article addresses whether there exists a relationship between an airline's size, debt, liquidity, asset structure, and capacity utilization with its performance. Using associational inferential statistics together with an independent t-test, the results show that while, all these variables contribute to a usable model, only liquidity and capacity utilization are statistically significant. Furthermore, the results of this study show that there is no significant difference in performance between legacy and low-cost carriers.*

**Keywords:** Size, debt, liquidity, capital structure, capacity, airline industry

### 1. INTRODUCTION

With the passing of the Airline Deregulation Act of 1979, the airline industry found itself operating in new environment in which initiating and developing business practices were not hitherto possible (Parast & Fini, 2010). Even though productivity in the airline industry was improving before deregulation (Murphy, 1969), it is debatable whether deregulation improved the airline industry (Parast & Fini, 2010). Prior research has shown that size is a fundamental variable in explaining corporate performance and that the relationship between company size and company performance can be positive or negative (Serrasqueiro & Nunes, 2007). Studies have also shown that large companies have a propensity of taking advantage of economies of scale, staving off competition resulting in positive performance (Feigenbaum and Karnani, 1991). Conversely, size can also have a negative effect on performance as a large enterprise could be cumbersome, less nimble to make changes, and suffer from managerial hierarchy (Pi and Timme, 1993; and Goddard, Tavakoli, and Wilson (2005). Given this wealth of prior research, this article makes the following contributions: first it extends the extant research. Second, a rigorous approach to measure the robustness of the results was replicated following the study of Serrasqueiro & Nunes, (2007) whereby size is measured in terms of assets and sales. Third, this study compares the performance between legacy and low-cost carriers.

The remainder of this study is organized as follows: Following a discussion of the airline industry and a literature review, the research design and instrumentation is discussed in the methodology section. The findings and limitations of this study are presented in the results section. Conclusion and recommendations and suggestions for further research are presented in subsequent sections.

### 2. BACKGROUND OF THIS STUDY

#### The Airline Industry

The airline industry continues to conjure excitement and awe. Hardly a day goes by without a story about it in the press, be it passenger frustration, seat pitch, ticket prices, cancellation fees, frequent flyer