



ELSEVIER

Contents lists available at [ScienceDirect](http://www.sciencedirect.com)

## Journal of Air Transport Management

journal homepage: [www.elsevier.com/locate/jairtraman](http://www.elsevier.com/locate/jairtraman)



# Does asset-light strategy contribute to the dynamic efficiency of global airlines?



Wei-Kang Wang<sup>a</sup>, Fengyi Lin<sup>b</sup>, Irene Wei Kiong Ting<sup>c</sup>, Qian Long Kweh<sup>d</sup>,  
Wen-Min Lu<sup>e,\*</sup>, Tzu-Yu Chiu<sup>a</sup>

<sup>a</sup> Department of Accounting, Yuan Ze University, 135 Yuan-Tung Road, Chung-Li, Taiwan, ROC

<sup>b</sup> Department of Business Management, National Taipei University of Technology, Taiwan, ROC

<sup>c</sup> Faculty of Industrial Management, Universiti Malaysia Pahang, Lebuhraya Tun Razak, 26600 Gambang, Kuantan Pahang, Malaysia

<sup>d</sup> Institute of Management Technology, Dubai International Academic City, P.O. Box 345006, Dubai, United Arab Emirates

<sup>e</sup> Department of Financial Management, National Defense University, No. 70, Sec. 2, Zhongyang North Rd., Beitou, Taipei 112, Taiwan, ROC

### ARTICLE INFO

#### Article history:

Received 14 February 2016

Received in revised form

11 March 2017

Accepted 13 March 2017

Available online 24 March 2017

#### Keywords:

Asset-light strategy

Dynamic data envelopment analysis

Efficiency

Global airline industry

Corporate performance

### ABSTRACT

This study analyses the effect of asset-light strategy on the dynamic efficiency of global airlines from 2008 to 2013. First, a dynamic data envelopment analysis is employed to estimate the dynamic efficiency of global airlines. Second, the degree of asset-lightness is computed by combining the concepts of the DuPont equation and financial ratios. Third, a multivariate analysis is performed to analyze the association between asset-light strategy and dynamic efficiency. The findings show that asset-light strategy significantly enables global airlines to have better corporate performance. Overall, this study suggests that global airlines should efficiently manage and allocate their light resources to sustain challenges in the dynamic global airline industry.

© 2017 Elsevier Ltd. All rights reserved.