Preface

This manuscript compares efficiency and competitiveness of world's major 39 airlines over the 1998–2012 period. We analyzed airlines' production and cost efficiency using stochastic frontier function methodology and investigated which factors account for differences in level and variations in technical efficiency of airlines. The results suggest that our approach which looked at cost and production efficiency seems to have an advantage over the commonly used approach of estimating efficiency using only one of the two aspects. An estimation of efficiency from both perspectives better captures the factors affecting the efficiency and more accurately reflects the reality of the ongoing process of airline mergers and exits from the market. The mean and the distribution of both production and cost efficiency among airlines differ according to geographical areas of operation, which may be a result of different market structure and de-regulation processes, and of specific competitive conditions such as resource availability and strategic cooperation with competitors.

The empirical results from rigorous analysis of the unique and up-to-date data confirmed that the sample airlines displayed a reasonable level of production efficiency during 1998–2012, but they were much less successful in achieving cost efficiency. Airlines with a higher market share achieved a relatively better production efficiency. Airlines' operation performance measured in terms of stage, flying hours, and frequency showed a positive correlation with the production efficiency and their statistical significance were very robust. The effect of airline alliances was, however, not progressive. Airline size showed a progressive effect on the level of output efficiency, but larger airlines were not more competent than their smaller counterparts with respect to cost efficiency.

Our main findings show that carriers based in the Asia region are in general more capable of achieving production efficiency than carriers based in Europe and North America, but as regards cost efficiency, we could not establish the transcendence of the Asian carriers. Airlines in Asia region including People's Republic of China attained a remarkable gain in efficiency over time. The high performance and growth achievers include CA (Air China), CZ (China Southern Airlines), and MU

(China Eastern Airlines)—in the case of production efficiency and GA (Garuda Airlines) and SU (Aeroflot Russian Airlines)—in the case of cost efficiency.

Considering that the quality of human capital and level of education are relatively high among the service staff of the airlines in this region, Asian carriers are suggested to concentrate on enhancing the software with the maximum utilization of skilled manpower, which will help airlines to attain premium brand value while still keeping prices reasonably low. Asia, especially East Asia, now has a well-developed, globally competitive manufacturing sector, but its service sector still lags far behind that of the advanced economies. As such, competitiveness analysis of the airline industry, one of the most important service industries, can help Asian policymakers to better prepare for the liberalization of the service sector, which is expected to gain momentum in the coming years.

http://www.springer.com/978-981-10-1015-6

Efficiency and Competitiveness of International Airlines
Heshmati, A.; Kim, J.
2016, XXII, 192 p. 20 illus., Hardcover
ISBN: 978-981-10-1015-6