Abstract

Beijing Capital International Airport (Beijing Airport) is one of the biggest airports in China, and even in Asia. Now it is planning and implementing its fifth expansion to develop the cargo service level so as to gain more competitive power in the competition of airfreight market. This study applies data envelopment analysis (DEA) to provide an efficiency ranking for six airports including Beijing Airport, and get the evaluation of Beijing Airport's performance in cargo business by the comparison of these airports. The DEA technique is useful in resolving the measurement of airport efficiency because the calculations are nonparametric and do not require specification or knowledge of a priori weights for the inputs or outputs, as is required for estimation of efficiency using production functions. Due to the lack of previous research on the air cargo performance of an airport in China, the variables are selected from referential studies related to airfreight and finally determined by a survey. The result of the thesis shows that Beijing Airport is not efficient in cargo business for its over capacity, inefficient operations, and limited market.