MEASURING AND BENCHMARKING THE COMPARATIVE PERFORMANCE OF MAJOR RAILROAD COMPANIES IN THE U.S.A.

Seong-Jong Joo, Hasan School of Business, Colorado State University-Pueblo, 2200 Bonforte Blvd., Pueblo, CO 81001, 719-549-2579, seongjong.joo@colostate-pueblo.edu
He-Boong Kwon, Division of Business, Concord University, Athens, WV 24712, 304-384-5122, kwonh@concord.edu

ABSTRACT

The efficiency of companies is directly related to their sustainability. Like other firms, it is also imperative to rail road companies for measuring and benchmarking their performance for improved profitability. We employ data envelopment analysis (DEA) for measuring the relative efficiency of major U.S. railroad companies. We select pertinent variables and apply various DEA models to computing efficiency scores. Then, the sources of inefficiency and potential improvements are discussed as a part of managerial insights.

INTRODUCTION

Railroad companies in the United States are nearly all privately owned. A majority of the railroads serve large retail, wholesale, and resource-based industry in today's economy. Railroads have spent billions of dollars each year to compete and keep up with other transport companies keeping them well ahead of other transport industries. Many of the strategies railroads have to contend with to stay ahead of their competition are maintenance, improvements and creating bigger railways. Customer service and productivity are a very important factor in keeping cost and revenues balanced. There are three categories railroad freight companies are separated into based on their revenues. Railroads that produce revenues above 346.8 million are classified as Class I. Railroads that have revenue between $27.8 million and $346.8 million are Class II, and all others are Class III (Association of American Railroads, 2008). In the later part of 2010 all Class I freight railroads had a massive growth in business volume and profit which in part were related to the Staggers Act adopted by Congress many years ago. Some of the benefits that were developed from the Stagger's Act were discretionary pricing power which allowed the railroads to hike their freight rates on an average of 5% per year providing a double digit profit margin. One of the competitive advantages from a customers' point of view is that freight costs are cheaper and more cost-efficient than trucks and ship transport. Railroads focused on improvement of service keeping them well ahead of other transport companies. This study examines the performance and operating efficiency major Class I Railroads companies within the U.S. using data envelopment analysis.