

EVALUATING BRAND EQUITY FOR CONTAINER-BASED OCEAN CARRIERS IN TAIWAN: AN EMPIRICAL STUDY

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Received May 2008; revised October 2008

ABSTRACT. *The main purpose of this paper is to apply a fuzzy multi-criteria decision-making (MCDM) model to evaluate brand equity for the container-based shipping companies from shippers' perspective in Taiwanese stock market. At first, some concepts and methods of the fuzzy set theory are applied to develop a fuzzy MCDM algorithm. For matching this evaluation process, a hierarchical structure is constructed with five criteria, twenty-four sub-criteria and three alternatives. Subsequently, the relative importance weights of criteria and sub-criteria are evaluated by using the fuzzy analytic hierarchy process (AHP) approach. The linguistic values are employed to appraise the superiorities of alternatives versus all sub-criteria. Furthermore, by combining the ideal and anti-ideal concepts, the highest brand equity company can be evaluated. Finally, an empirical survey about three famous container shipping companies in Taiwanese stock market is performed to appraise the systematic approach. The results of this study show that: (1) brand loyalty is the most important criterion for brand equity from the shippers' perspective in Taiwan; (2) the top five key sub-criteria are customer loyalty, freight and price, safety in shipment, accuracy for shipment, and high total quality service with deeper contents, respectively; (3) the company E is evaluated as the highest brand equity company based on the results of the proposed fuzzy MCDM algorithm.*

Keywords: Brand equity, Container-based ocean carriers, Fuzzy MCDM

1. Introduction. In recent years, much attention has been devoted to the brand name, especially the brand equity, which represents, for customers, an increased and/or a perceived value associated with the brand name. It is the value that customers perceive and recognize for goods or products or merchandises caring such brand name [13]. Aaker [1,2] emphasized that brand equity is the main source of gaining margins of profit and keeping competitive advantage for a business. The brand equity is also highly regarded by both industry and academia due to the fact that the highly reputed brand names would give owners the competitive edge and added value. For an industry with a highly equitable brand name, the associated benefits include enhancing the success of brand name extension, weakening the restorable power of the rival competitors under keen competitions environments, and creating a market-entry-barrier for potential competitors [13]. Porter [29] believed that the reputation of an industry brand name is one of the foundational sources of differentiation among companies. Barney [3] considered that positive reputation and brand equity impacted the advantage of differentiation of goods and services. This is because that a successful brand name creating high equity to achieve the success of marketing, to resist the promotion stress of competitors, and to build entry barriers of rivals. Besides, high brand equity can also bring the advantage [22] on better customer image, superior marketing place, lower marketing expenditures, and switching cost. In