World Academy of Science, Engineering and Technology International Journal of Economics and Management Engineering Vol:13, No:09, 2019

Comparative Sustainability Performance Analysis of Australian Companies Using Composite Measures

Authors: Ramona Zharfpeykan, Paul Rouse

Abstract : Organizational sustainability is important to both organizations themselves and their stakeholders. Despite its increasing popularity and increasing numbers of organizations reporting sustainability, research on evaluating and comparing the sustainability performance of companies is limited. The aim of this study was to develop models to measure sustainability performance for both cross-sectional and longitudinal comparisons across companies in the same or different industries. A secondary aim was to see if sustainability reports can be used to evaluate sustainability performance. The study used both a content analysis of Australian sustainability reports in mining and metals and financial services for 2011-2014 and a survey of Australian and New Zealand organizations. Two methods ranging from a composite index using uniform weights to data envelopment analysis (DEA) were employed to analyze the data and develop the models. The results show strong statistically significant relationships between the developed models, which suggests that each model provides a consistent, systematic and reasonably robust analysis. The results of the models show that for both industries, companies that had sustainability scores above or below the industry average stayed almost the same during the study period. These indices and models can be used by companies to evaluate their sustainability performance and compare it with previous years, or with other companies in the same or different industries. These methods can also be used by various stakeholders and sustainability ranking companies such as the Global Reporting Initiative (GRI).

Keywords: data envelopment analysis, sustainability, sustainability performance measurement system, sustainability performance index, global reporting initiative

Conference Title: ICMAM 2019: International Conference on Management Accounting and Methods

Conference Location : Zurich, Switzerland **Conference Dates :** September 16-17, 2019