

both an agricultural company and a bank in China. Our dataset provides support for the hypotheses, indicating that hybrid HR systems positively relate to employee well-being, with a positive association with work engagement and a negative association with emotional exhaustion. Furthermore, our findings reveal that this relationship is mediated by the satisfaction of basic psychological needs. We conclude by discussing the theoretical and practical implications of our research.

Keywords: Hybrid HRM, Basic Psychological Needs, Self-Determination Theory, Employee Well-Being, China

Impact of Marketing Costs and Firm Size on the Efficiency of Ukrainian Pharmaceutical Firms

Hanna Olasiuk

Jindal Global Business School, O.P. Jindal Global University, India

Sanjeev Kumar

Jindal Global Business School, O.P. Jindal Global University, India

Abstract

Objective – The current study aims to investigate the correlation between technical efficiency, marketing expenses, and the size of Ukrainian pharmaceutical companies. The analysis employs overall, pure, and scale efficiency measures specific to the pharmaceutical industry. Moreover, the research presents practical recommendations to improve technical efficiency, offering valuable policy insights for managerial decision-making and firm strategies. **Data and methods** – The data for the study was acquired from the Ukraine Stock Market Infrastructure Development Agency, focusing on the year 2020. This research applied an input-oriented methodology, known as Data Envelopment Analysis (DEA), to investigate the efficiency of pharmaceutical companies. DEA measured revenue as an output factor and considered the inputs to be the costs related to raw materials, sales, and general administrative expenses. **Results** – The findings reveal that within the top 9 firms, 2 exhibit overall technical efficiency using the CCR method, while 5 are deemed purely efficient under the BCC model. The study highlights that 44% of these firms can benefit from minimizing their inputs, and approximately 78% could improve their scale efficiency by an average of 10%. The slack analysis suggests that inefficient firms should consider reducing their sales and general administrative costs by 266.2 million UAH. Furthermore, the research identifies a positive influence of firm size on overall efficiency and marketing expenses on scale efficiency. **Conclusions** – The research reveals a positive correlation between higher marketing expenses, larger firm size, and enhanced technical efficiency in companies. This significant positive influence underscores the importance of marketing expenditure. The study's findings hold valuable implications for marketing and operational managers, providing insights into strategies for optimizing sales and administrative expenditures and resizing the company, all without negatively affecting the revenue stream.

Keywords: Technical Efficiency, Returns to Scale, Marketing Expenditures, Pharmaceutical Industry of Ukraine, Pharmaceutical Firms
