Family control, R&D expenses and Family control, R&D expenses firm efficiency: evidence from Taiwanese cultural and creative industries

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Abstract

Purpose – First, this study assesses the link between research and development (R&D) expenses and firm efficiency. Second, this study explores how family control moderates the link between the two.

Design/methodology/approach - This study uses two measures of time-based firm efficiency, namely, a window slacks-based measure (WSBM) and a window epsilon-based measure (WEBM) of data envelopment analysis (DEA). Then, 216 firm-year observations are analyzed in the Taiwanese cultural and creative industries from 2005 to 2017.

Findings – This study finds that R&D expenses significantly worsen firm efficiency, and that family control positively moderates this effect. A further test separating the sample into family-controlled and nonfamilycontrolled firms indicates that R&D expenses negatively affect the efficiency of nonfamily-controlled firms but positively affect that of family-controlled firms.

Research limitations/implications - The existing literature has examined the link between R&D expenses and corporate performance. However, the process by which R&D expenses affect corporate performance from a production perspective remains unknown.

Originality/value – Overall, this study provides insights for policymakers to scrutinize resource management and R&D expenses from the production and resource-based perspectives.

Keywords R&D expenses, Firm efficiency, Family control, Data envelopment analysis, Culturaland creative industries

Paper type Research paper

1. Introduction

Studies on the relationship between a firm's research and development (R&D) expenses and firm performance have shown mixed findings (Eberhart et al., 2004; Alam et al., 2019; Bae et al., 2008). R&D expenses is essential for the long-term development of firms (Bae and Noh, 2001), wherein increasing the R&D level contributes to innovation, long-term value creation and wealth accumulation (Cardoso and Teixeira, 2009). However, such an investment may be



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