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The Difference between Observed Level and Theoretically Possible Level of CSR Investments:
Analysis of CSR Slack using Stochastic Frontier Model

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Abstract

The purpose of this study is to investigate the determinants of the slack of CSR investments using stochastic frontier model. The slack of CSR investments, which we call “CSR slack” in this paper, is the difference between the real level and the theoretically possible level of CSR investments. Our study has three contributions to the existing field. First, we propose the concept of CSR slack for measuring CSR performance. Second, we make clear the determinants of CSR slack in empirical model and show what to do for reducing CSR slack. Third, we use stochastic frontier method to calculate the theoretically possible level of CSR investments. We obtained the following three results. First, firm size is important for decreasing CSR slack, while financial performance is not related to CSR slack. Second, concentrated investment reduces CSR slack of environmental investment but increases CSR slacks of labor issues and social contribution. Third, available slack and potential slack are positively related to CSR slack, while recoverable slack is negatively related to CSR slack. We also examined the level of CSR slack of each industry and obtained the following three results. First, public utilities such as electricity, gas, shipping, and broadcasting industries have the least slacks in all kinds of CSR investment among all industries. Second, service industry has large slack of environmental investment, while it engages actively in labor issues. Third, slack of the investment for social contribution is the largest in manufacturing industry such as food, machinery, and construction industry.

Keywords: Corporate Social Responsibility; Stochastic Frontier Model; Corporate Governance; Investment Strategy; Japanese Firms

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