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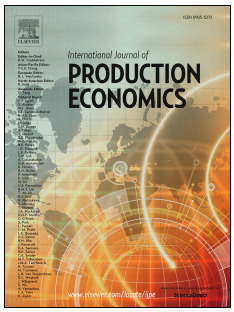

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Performance effects of complementarity between environmental management systems and environmental technologies

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This paper analyzes whether the performance effects of environmental management systems (EMS) and environmental technologies (ET) can be enhanced by the complementarity between them. Our complementarity hypotheses are theoretically grounded in the strategic fit and asset complementarity approaches of the resource-based view of the firm. We examine two distinct types of ET: externality-reducing technologies (ERT) that focus on reducing emission and pollution, and efficiency-increasing technologies (EIT) that emphasize reduction of material and energy consumption. Results based on a sample of 36,645 firms from eight countries show that three-way complementarities exist, in that firms that adopted EMS and the two types of ET achieved higher turnover growth compared to those firms that adopted either EMS, ERT or EIT singularly, or none of them.

Keywords: Environmental management systems; Environmental technologies; Complementarity analysis; Firm performance.

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