Supplier Carbon Management and Firm Idiosyncratic Risk: Empirical Evidence from China

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Abstract: While existing research emphasizes the importance of internal carbon management (CM) on firm risk, the effect of external stakeholder CM remains unclear. This research employs signaling theory to explore how supplier CM affects firm idiosyncratic risk (IR), as well as the moderating roles of the supply chain information environment and relationship criticality. We find that supplier CM can reduce firm IR. The risk-reduction effect is stronger when the information environment between the firm and its supplier is richer. The effect is also stronger when supplier-firm relationships are more critical. Path analysis shows that supplier CM plays a role in reducing firms IR by alleviating the information asymmetry. Further analysis shows that the risk-reduction effect increases for firms with smaller sizes. Our research extends the application of signaling theory to the supply chain management field and links the CM and firm IR literature in a supply chain context.