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Evolution of ESG Performance within Supply Chain Networks

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Whether firms and their supply chains operate sustainably attracts considerable stakeholder attention. Despite empirical evidence at the supply chain level, it remains undifferentiated by tier. By building three-tier supply chain networks, we study environmental, social, and governance (ESG) performance across tiers. We define Tier 2 as focal firms, with Tier 1 and Tier 3 being their direct customers and suppliers, respectively. Using 2010-2019 FactSet datasets, we examine temporal trends in category-specific ESG performance, the difference between Tier 1 and Tier 3, and the moderating effects of network structure on tier differences. We find significant upward trends in ESG scores for most ESG categories. In addition, Tier 3 exhibits higher ESG scores than Tier 1 after controlling for financial characteristics. Further analysis shows that distance to final demand is negatively associated with ESG scores, and that Tier 3 is closer to final demand than Tier 1. Regarding network structure, we find a positive moderating effect of betweenness centrality and a negative moderating effect of degree centrality on tier differences. Our results offer insight into how to coordinate sustainability efforts across supply chain tiers.