

Committing to Contract for a Supplier's Social and Environmental Compliance

Nagesh N. Murthy
University of Oregon

Date: 20.12.2018, Venue: P11, @ 12.00PM

Abstract

Problem definition: Consumers hold brands accountable when their suppliers' sustainability violations become known in the marketplace. Brands find it challenging to reduce the likelihood of social and environmental violations in their supplier base. We examine the effect of the buyer's commitment to price and/or quantity in enhancing the supplier's compliance to the code of conduct for sustainability.

Academic/practical relevance: While the efficacy of commitment to contract terms has been studied in the operations management literature with mixed results, it has not been hitherto examined in the literature on sustainability in operations and supply chains.

Methodology: We analyze and compare multi-stage game-theoretic models to investigate the effect of varying levels of commitment to contract terms on sustainability and financial metrics.

Results: We find that increasing the level of commitment improves the supplier's likelihood of compliance to the sustainability standard. Interestingly, we also find that both contracting opportunity and profit for the buyer increase monotonically with the degree of commitment. Additionally, committing to only the price or only the quantity (vis-à-vis no-commitment) has an asymmetric effect. We show that committing to the price and committing to the quantity are complementary strategies for the buyer and substitutes for the supplier.

Managerial implications: Our study provides managers with yet another effective tool to consider to improve compliance in their supplier base. Our results show that commitment provides the buyer with significant opportunity to advance both social good and profit in a win-win manner.

Speaker Profile:

<https://business.uoregon.edu/faculty/nagesh-murthy>