

Role of power on supply chain performance: empirical evidence from the agribusiness sector

Keywords: Buyer/Supplier relationships, Performance measurements, Power

Topic(s): 1. Supply Chain Management, 2. Managing Inter-firm Relationships in Supply Chains

Purpose: This empirical study has examined an important research question - “what consequence power has on the supply chain performance (SCP)” in a triadic context. Previous studies demonstrate that power imbalance in supply chains is inevitable due to differences in the chain actors’ expertise, size, dependence, and nature of contract (Gellynck and Molnár, 2009). Powerful supply chain members may assume a greater influence on the supply chain thereby creating some stability, or they may leverage the power advantage at the cost of the weaker members (Nyaga et al., 2013). Hence, it is important to understand the nature and effect of power in supply chains in order to provide balanced benefit distributions. Past studies on power in supply chains have focused on its influence on power asymmetry (Nyaga et al., 2013), relationship commitment (Zhao et al., 2008), relationship strength (Maloni and Benton, 2000) and performance (Crook and Combs, 2007). However, most of these studies collect and analyse data from one side of a relationship dyad using a focal firm approach. Analysing a supply chain at firm or dyadic levels does not bring out the underlying dimensions of the entire supply chain relationships (Touboulic et al., 2014). Hence, this paper examines the supply chain members’ perceptions of power on SCP in a triadic context underlying social network theory. The key hypothesis tested is that suppliers, focal firms and customers differ in their perception of power use and affects supply chain performance in terms of efficiency, responsiveness, quality and supply chain balance (Aramyan et al., 2007).

Methodology: A matched triad approach (Kühne et al., 2015) was used to collect data from 150 supply chain members constituting 50 agribusiness supply chains (maize) in Uganda. Each supply chain considered had a triplet of supply chain members (supplier, focal firm, and customer). A matched triad approach has been used because it helps to minimize the chances of sampling bias (Boyer and Swink, 2008). Multi-group analysis and structural equations modeling have been used to assess the perceptions of power and its influence on supply chain performance.

Findings: The results highlight the difference in the perception of power use and how it influences SCP. First, the findings are in accordance with the previous studies that the use of coercive power has a negative effect on SCP (Nyaga et al., 2013). The findings also support that the use of coercive power in supply chains diminishes the value of the relationship, even though the powerful party may gain initially (Zhao et al., 2008). This implies that managers of agribusiness supply chains need to properly control their use of coercive power in supply chain relationships, as it may be counterproductive in the long run.

Second, the perception of suppliers and customers deviate with regards to the use of coercive power on different performance parameters. For suppliers, efficiency and supply chain balance are significantly influenced by the use of coercive power by the focal firm. For customers, it is quality and supply chain balances that are critical. As for the focal firm, the use of coercive power by the supplier positively and significantly influences responsiveness. Contrary to previous studies (Terpend and Ashenbaum, 2012), focal firms perceived the use of coercive power to have a positive influence on their performance. This suggests the existence of a power asymmetry in the supply chain due to fewer suppliers, providing maize with specific quality requirements.

Third, focal firms perceived that the use of non-coercive power has significant positive effects on the responsiveness (speed at which the requested product is provided) and chain balance. This is in agreement with previous studies (Nyaga et al., 2013), which suggest a positive association between non-coercive power and SCP. This implies that the use of rewards and incentives is a strong signal from a partner that they value the relationship.

Four, while, responsiveness is an important factor in the upstream, quality (product and process) is vital in the downstream. On the other hand, chain balance (distribution of risk and benefits, and chain understanding) appears to be critical in both upstream and downstream of the supply chain.

Contribution: This work contributes to the ongoing debate in the supply chain management literature that a firm or a dyad is heavily influenced by the network in which it operates. The novelty of this work is that the perception of power among the supply chain actors is assessed in a triadic context, a perspective that has not been adequately tested in agribusiness supply chain management studies before. A practical implication of the finding is that managers of agribusiness supply chains should be aware of their power positions and appropriately influence the supply chain based on their relative power positions.

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