Power influence in horizontal collaboration relationships

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MIT GLOBAL SCALE NETWORK

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Motivation / Background

IMPACT

Logistics cost
- Colombia 13,5% - OECD 8%

Vehicle utilization
- Urban 53% - National 62%

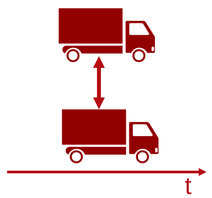
62%

Logistics performance index
- Colombian LPI rank 71/167

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- **Logistics inefficiency**
- **Poor country competitiveness**

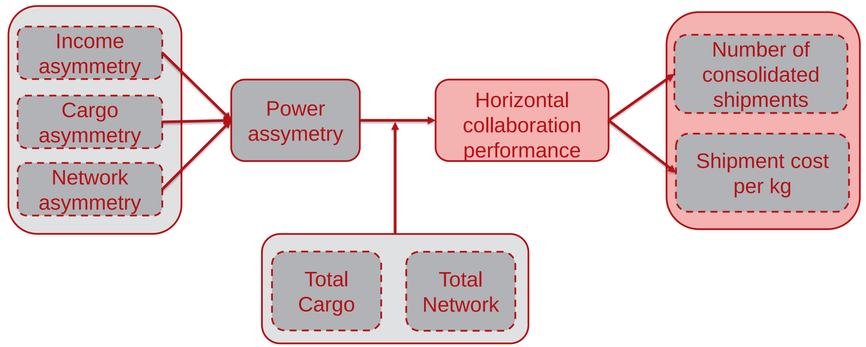
Key Question / Hypothesis



- Since horizontal collaboration has proven to get efficiencies, why it is not implemented in as a long-term strategy among supply chain partners?
- Do power relationships influence long-lasting horizontal collaboration?

Relevant Literature

- Schmoltzi, C., & Wallenburg, C. M. (2011). Horizontal cooperation between logistics service providers: motives, structure, performance. International Journal of Physical Distribution and Logistics Management, 41(6), 552–576.
- Sheffi, Y., Saenz, M. J., Rivera, L., & Gligor, D. (2019). New forms of partnership: the role of logistics clusters in facilitating horizontal collaboration mechanisms. European Planning Studies, 27(5), 905–931
- Zhao, X., Huo, B., Flynn, B. B., & Yeung, J. H. Y. (2008). The impact of power and relationship commitment on the integration between manufacturers and customers in a supply chain. Journal of Operations Management, 26(3), 368–388



The Problem



- Horizontal collaboration emerges from resource dependencies, underlying this there is a power relationship.
- However non-mediated power may improve horizontal collaboration
- Power may have a positive impact in long-lasting horizontal collaboration relationships.

Methodology

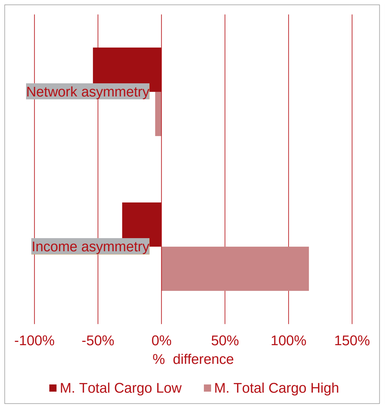
1. Conceptual modelling

2. Data gathering, data sets processing

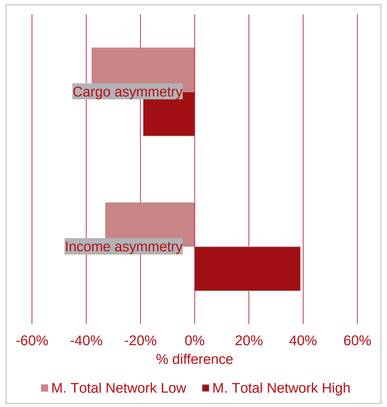
3. Quasi - experimental design (ATE)

Initial Results

Total cargo effect on the number of consolidated shipments (High - Low) – Total cargo as moderator.



. Total cargo effect on the number of consolidated shipments (High - Low) – Total network as moderator.



Expected Contribution

- Power asymmetries when analyzed in isolation reduces the number of consolidated shipments.
- High-Income and network asymmetries reduce the shipment cost.
- Total cargo and total network (size) moderates the horizontal collaboration performance.
- Power has different effects on horizontal collaboration performance. So, identifying the power relationship is important to improve performance.

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