

Transitivity in International Trade: Evidence from Colombia-U.S. Firm Relationships

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Abstract :

A large literature has documented transitivity as a key feature of social networks: individuals are more likely connected with each other if they share common connections with other individuals. We take this idea to trading relationships between firms: firms are more likely to trade with each other if they share common trading partners. Transitivity leads to a clustered pattern of relationship formation and break-up. It is therefore important for understanding how firms meet and how shocks propagate through firm networks. We describe a method for detecting and quantifying transitivity in firm-to-firm transactions, based on systematic deviations from conditional independence across firm-to-firm relationships. We apply the method to Colombia-U.S. exporter-importer data and show in counterfactuals that transitivity is a significant and economically meaningful factor in how firm networks adjust to cost shocks.