## FORMATION OF DECENTRALIZED MANUFACTURER-SUPPLIER NETWORKED MARKET Yasuhiro Shirata \*

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## **Abstract**

This paper studies trading in a two-sided market where firms strategically form a network. In a networked market, manufacturers and suppliers must be connected by links for trading. We show that if no contingent contract is available, then any pairwise Nash stable network is inefficient. Each supplier under-invests in links (a hold-up problem). If a contract contingent on direct links is available and link cost is low, then the under-investment problem solves. Furthermore, the complete network resulting in the Walrasian outcome is uniquely pairwise Nash stable. However, this outcome is also inefficient. A new hold-up problem, over-investment in links, arises.

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