

# Inter-firm networks and location choice: A new perspective on industrial agglomeration and tax competition

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This study investigates the multi-regional location choices of firms embedded in a given transaction network in which collocation of directly linked firms is profitable. We use a simultaneous move game under incomplete information about other firms' stand-alone profits obtained from their locations. Supposing uniformly distributed random stand-alone profits, this model represents the unique equilibrium described by the Katz-Bonacich centrality measure in which the most advantageous region is selected with a higher propensity by more central firms in the network; this result holds even in the multi-region case. The model is extended to an interregional tax competition between two decentralized regional governments that tax firms differently based on their positions in the network to maximize tax revenue. In the equilibrium of this competition, the disadvantageous region becomes a relative tax haven for every firm, both governments propose lower tax levels for firms with more direct partners because of the advertisement effect of these tax incentives, and social welfare falls.

**Key words:** *network structure, industrial agglomeration, incomplete information, Katz-Bonacich centrality, discriminating tax competition*

**JEL classification:** D21,D85,R12.

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