Enforcing Cooperation in Networked Societies

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Abstract

Which social norms and networks maximize cooperation in bilateral relationships? We study a network of players in which each link is a repeated bilateral partnership with two-sided moral hazard. The obstacle to community enforcement is that each player observes the behavior of her partners in the partnerships with her, but not how they behave in other partnerships. We introduce a new metric of the rate at which information diffuses in a network, which we call *viscosity*, and show that it provides an operational measure for how conducive a network is to cooperation. We prove that clique networks have the lowest viscosity and that the optimal equilibrium of the clique generates more cooperation and higher average utility than any other equilibrium of any other network. This result offers a strategic foundation for the perspective that tightly knit groups foster the most cooperation. We apply this framework to analyze favor exchange arrangements, decentralized trade in networked markets, and social collateral.

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