

# Farsightedly Basic Networks

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## Abstract

We make two main contributions to the theory of network formation. First, we introduce a new notion of farsighted equilibrium in network formation. In particular, we introduce the notion of a *farsightedly basic network*, as well as the notion of a *farsighted basis*. Given the feasible set of networks, the rules governing network formation, and the preferences of individuals, a farsightedly basic network contained in the farsighted basis represents a possible final resting point (or absorbing state) of a network formation process in which agents behave farsightedly. Thus, the set of networks forming a farsighted basis contains networks which are likely to emerge and persist if individuals behave farsightedly. Second, we show that given any set of rules governing network formation and given any profile of individual preferences over the feasible set of networks, there exists a nonempty subset of networks forming a farsighted basis of the network formation process.

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