

Prediction in Networks

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April 2012

In firms, neighborhoods, and many other environments, individuals form probabilistic beliefs about the state of the world based on private information and the beliefs revealed by others who are connected with them in their communication network. We experimentally test the benchmark predictions for belief dynamics under common knowledge of Bayesian updating in several ten-agent networks (star, chain, circle, core-periphery, and complete) with multiple rounds of communication. We document significant differences in belief accuracy and convergence across network structures for group and individual beliefs.

We find suggestive evidence of behavioral biases such as double-counting and characterize the impact of network position on beliefs.