

Coalitions are the basic unit of economic organization; they represent trading relationships, contracts, firms and the very structure of the economic system. Little is known about how agents discover their opportunities for cooperation and form coalition structures that capture those gains. This paper explores how coalitions form through decentralized means. Self-organizing coalitions are modelled as an evolving neural network composed of local hill-climbing agents whose actions are coordinated by information they receive through the network. Properties of the network that influence the evolution of coalitions are explored through computer experiments. The results suggest that coalition formation is path dependent and there are critical points of transition to equilibrium patterns. strongly interacting networks adapt rapidly but tend to form fragmented coalition structures that evolve to local rather than global optima. Broken symmetry and randomness are important sources of order.