

# Tough Middlemen

Gregor Jarosch  
(Stanford University)

Maryam Farboodi  
(Princeton University)

Guido Menzio  
(University of Pennsylvania)

## Abstract:

We study a decentralized asset market in the spirit of Duffie, Gârleanu, and Pedersen (2005). We assume that agents are heterogeneous with respect to their valuation of an asset, and with respect to their bargaining ability. Specifically, a tough agent can make a take-it-or-leave-it offer when meeting a soft agent and (with probability  $1/2$ ) when meeting a tough agent. A soft agent makes (with probability  $1/2$ ) a take-it-or-leave-it offer to another soft agent. In this environment, we show that tough agents become intermediaries, in the sense that they carry out trades with soft agents purely motivated by re-selling (and -buying) considerations. We show that, in the presence of positive transaction costs, these non-fundamental trades are socially inefficient. We then show that, if tough agents cannot distinguish the identity of their trading partners (that is, they post bid and ask prices), the rent-seeking motives driving intermediation can lead to a breakdown of socially desirable trades, adding a second source of inefficiency. Finally, we show that the coexistence of tough and soft players is a natural equilibrium outcome when ex-ante homogeneous agents can acquire the superior bargaining technology at a cost.