

A Bank Run Model for the Twentieth Century

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Abstract

Diamond and Dybvig 1983 is a now classic model of banking failure. This model and the considerable ancilliary literature studies two equilibria: the “good” equilibrium of bank stability and the “bad” equilibrium of bank failure. A major limitation of these models is that while they acknowledge the fact of these two equilibria, they are silent on how a system in the desired equilibrium suddenly moves into the run equilibrium. Agentization refers to the process of taking usually classic models, economic or otherwise, and representing them in agent-based simulations that hopefully reproduce those model’s central features. I consider an agentized Diamond-Dybvig model that reveals some major conceptual limitations in Diamond-Dybvig that limits its utility as the foundation of agent-based studies of bank runs. Then I present an alternative bank run model that may provide such a basis not only for the study of bank runs but also for broader models of financial contagion.