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Another Attempt to Explain an Illiquid Banking System: The Diamond and Dybvig Model With Sequential Service Taken Seriously (p. 3)

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Neil Wallace

Time Consistency and Optimal Policy Design (p. 17)

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In This Issue

Staying in Line

Sticking to Plan

Banks lend long and borrow short, and their resulting illiquid portfolios can lead to problems, such as bank runs. Although economists for many years have been aware of these problems and have proposed a variety of solutions, only recently has there been anything like a coherent explanation of illiquid bank portfolios. Douglas Diamond and Philip Dybvig seemed to provide one in a model they described in 1983.

In "Another Attempt to Explain an Illiquid Banking System: The Diamond and Dybvig Model With Sequential Service Taken Seriously" (p. 3), Neil Wallace describes an amended version of that model and argues that part of Diamond and Dybvig's original analysis was faulty. Wallace builds into his model an environment that implies bank withdrawals are made sequentially, according to the order customers line up. In the original model, this sequential service constraint was merely assumed. Wallace shows that the solution Diamond and Dybvig proposed to the bank illiquidity problem, deposit insurance, is not feasible in the environment which forces customers to stay in line. He also shows that giving customers at the back of the line lower returns may be a natural result of desirable banking arrangements rather than a problem for policymakers to solve.

Optimal policy is a plan that describes how a policy instrument should be set at each moment in time, based on available information, to attain the most desirable outcome for current and future periods. For instance, an optimal monetary policy might describe how the monetary base should be set each month, based on available data, to produce a favorable inflation path over time. But, as V. V. Chari points out in "Time Consistency and Optimal Policy Design" (p. 17), the optimal policy may not be attainable unless there is a way of committing policymakers to the plan. Otherwise, later on, they may want to deviate from the original plan. And the public, aware of the policymakers' incentive to deviate, will take defensive actions, thus leading to an unfavorable outcome.

Using examples dealing with capital taxation and public debt, Chari concretely describes these notions and then derives the best

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policies with and without commitment. For finitely lived economies, policy commitment is shown to be desirable. However, for infinitely lived economies, policy commitment is not always necessary for a favorable outcome. In some cases, the damage from the policymakers' lost credibility exceeds the short-term gain from the deviation. In these cases, even with no commitment, it is best for policymakers to stick to the optimal plan.

> Preston J. Miller Editor