

Uncertainty Traps

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Abstract

We develop a quantitative theory of endogenous uncertainty and business cycles. In the model, higher uncertainty about fundamentals discourages investment but agents can learn from the actions of others. Therefore, in times of low activity information flows slowly and uncertainty stays high, further discouraging investment. This creates room for uncertainty traps – self-reinforcing episodes of high uncertainty and low activity. We characterize conditions that give rise to uncertainty traps. Negative shocks to average productivity or beliefs may have permanent effects on the level of activity through the persistence of uncertainty. We also characterize optimal policy interventions. The socially efficient allocation can be implemented with aggregate-beliefs dependent subsidies, but under certain conditions it necessarily features uncertainty traps. We embed these forces into a standard quantitative model of the business cycle to evaluate the impact of uncertainty traps.

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