Stochastic optimal control and the U.S. financial debt crisis

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Abstrak

[Stochastic Optimal Control (SOC), a mathematical theory concerned with minimizing a cost (or maximizing a payout) pertaining to a controlled dynamic process under uncertainty—has proven incredibly helpful to understanding and predicting debt crises and evaluating proposed financial regulation and risk management. Stochastic Optimal Control and the U.S. Financial Debt Crisis analyzes SOC in relation to the 2008 U.S. financial crisis, and offers a detailed framework depicting why such a methodology is best suited for reducing financial risk and addressing key regulatory issues. Topics discussed include the inadequacies of the current approaches underlying financial regulations, the use of SOC to explain debt crises and superiority over existing approaches to regulation, and the domestic and international applications of SOC to financial crises. , Stochastic Optimal Control (SOC), a mathematical theory concerned with minimizing a cost (or maximizing a payout) pertaining to a controlled dynamic process under uncertainty—has proven incredibly helpful to understanding and predicting debt crises and evaluating proposed financial regulation and risk management. Stochastic Optimal Control and the U.S. Financial Debt Crisis analyzes SOC in relation to the 2008 U.S. financial crisis, and offers a detailed framework depicting why such a methodology is best suited for reducing financial risk and addressing key regulatory issues. Topics discussed include the inadequacies of the current approaches underlying financial regulations, the use of SOC to explain debt crises and superiority over existing approaches to regulation, and the domestic and international applications of SOC to financial crises.]