

Abstract

We study an expected-utility maximizer who controls a stochastic growth process over a long horizon.

Using large deviations theory, we show that optimal actions are generically driven by responses to arbitrarily unlikely contingencies. Unrealistic fears of ruin preclude extraordinary wealth, while unrealistic hopes for extraordinary wealth induce choices that almost surely disappoint. We show that a CRRA investor assigns zero value to perfect information at the exponential (growth-rate) scale: she will not sacrifice even an arbitrarily small fraction of long-run growth rate to learn the frequency of future economic shocks.

This extends to broader utilities with hedging