A Theory of Mood-Influenced Investment in Health

A mood-utility link is incorporated into a theory of rational investment in personal health, whereby one's mood worsens as instantaneous utility falls below a threshold but improves as instantaneous utility rises above the threshold. The analysis is conducted within an intertemporal framework, where instantaneous utility is gained and good and bad moods are experienced along a health-dependent random lifespan. The qualitative properties of the resulting optimal control model are investigated by making use of the Frischian form of the feedback demand functions. The investigation highlights the effects of many parameters, including the inclination to be moody, on an agent's investment in personal health, rate of consumption, and health and mood flows.