Disappointment Cycles[*]

David Dillenberger[†]   Kareen Rozen[‡]

University of Pennsylvania   Yale University

August 2010

Abstract

We propose a model of history dependent disappointment aversion (HDDA), allowing the attitude of a decision-maker (DM) towards disappointment at each stage of a T-stage lottery to evolve as a function of his history of disappointments and elations in prior stages. We establish an equivalence between the existence of an HDDA representation and two documented cognitive biases. First, the DM overreacts to news: after suffering a disappointment, the DM lowers his threshold for elation and becomes more risk averse; similarly, after an elating outcome, the DM raises his threshold for elation and becomes less risk averse. This makes disappointment more likely after elation and vice-versa, leading to statistically cycling risk attitudes. Second, the DM displays a primacy effect: early outcomes have the strongest effect on risk attitude. "Gray areas" in the elation-disappointment assignment are connected to optimism and pessimism in determining endogenous reference points.

Keywords: history dependent disappointment aversion, disappointment cycles, overreaction to news, primacy effect, endogenous reference dependence, optimism, pessimism

JEL Codes: D03, D81, D91