The Disposition Effect under the Reference Dependent Smooth Model of Ambiguity

Hideki Iwaki¹ and Daiske Yoshikawa²

¹Faculty of Business Administration, Kyoto Sangyo University, Motoyama, Kamigamo, Kita-Ku, Kyoto 603-8555 Japan,

²Department of Business Administration, Hokkai-Gakuen University.

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Abstract

The disposition effect is one of the representative puzzles observed in the financial market. Several theoretical explanations for the disposition effect have been tried, but we cannot yet say that they have been successful. The seminal paper of Barberis and Xiong (2009), which tries to explain the disposition effect by prospect theory, concludes the opposite of the effect appears if an investor gets her/his utility from the terminal wealth while the effect can be partially explained if he/she gets her/his utility from the realized gains and losses.

We try to explain the effect by incorporating ambiguity attitude which varies depending on the reference point. We extend the smooth model of ambiguity by Klibanoff et al. (2005) to depend on the reference point. Numerical example shows that the disposition effect is more pronounced under our reference dependent smooth model of ambiguity if the investor gets her/his utility from the realized gains and losses although we cannot find superiority to the results of Barberis and Xiong (2009) if the utility is obtained from the terminal wealth.