

In common ambiguity settings, updating theoretically dilates the degree of ambiguity. This paper experimentally investigates whether this dilation property is really observable. Subjects are asked to bet

on the color in ambiguous boxes consecutively before and after observing a picked color and to reveal certainty equivalents respectively.

Theory predicts that the value of certainty equivalents decreases for ambiguity-averse subjects and increases for ambiguity-seeking ones.

We find the experimental results rather opposite. The possible interpretation suggests that some subjects integrate each bet and expect

that there is a correlation between probabilities of drawn colors before and after observation in which the same colors are likely or unlikely to be drawn. We find that statistically significant part of subjects who consider no correlation does not exhibit the opposite result compared to those who expect such correlation. We also conduct an experiment

of twice updating and ask subjects qualitative questions as to the degree of this ambiguous situation. Their answers exhibit that subjects

are more confused after the second updating than the first one.

JEL codes: C91; D81; D90