

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

The Effect of Investment Position on Belief Formation and Trading Behavior

Permalink

<https://escholarship.org/uc/item/5nd7f4jv>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 43(43)

ISSN

1069-7977

Authors

Trutmann, Kevin

Heinke, Steve

Rieskamp, Jörg

Publication Date

2021

Peer reviewed

The Effect of Investment Position on Belief Formation and Trading Behavior

Kevin Trutmann

University of Basel, Basel, Switzerland

Steve Heinke

U Basel, Basel, Switzerland

Jörg Rieskamp

University of Basel, Basel, Switzerland

Abstract

We propose an interaction in expectation formation between returns of an investment and the favorability of new information. Such an interaction can have consequences in trading behavior like leading to the Disposition Effect or differences in the profitability of selling and buying decisions. We introduce a context sensitive Reinforcement Learning model to capture this effect and validate it in a pre-registered investment experiment. Using a Bayesian Hierarchical model fitting approach we find the interaction to stem mainly from participants incorporating unfavorable information more strongly when in a gain position and less so when in a loss. By providing increasing levels of additional information about the price movements we are able to mitigate these effects in a second phase of the experiment. Speaking for a strong effect of belief formation, very clear information is needed to mitigate the observed aversive belief and investment patterns.