## Essays in Behavioral Finance

Kamran Quddus

January 22, 2020



**Thesis Committee** 

Prof. Ashok Banerjee (Thesis Guide) Prof. Purusottam Sen (Member) Prof. Parthapratim Pal (Member)

## Abstract

Behavioral finance as a distinct paradigm started evolving around the second half of the twentieth century. As a separate research field, academic finance began imbibing the broader perspective from allied social sciences discipline including psychology and sociology into mainstream finance. Shiller (2003) best describes the onslaught of this new research paradigm as an "eclectic way of thinking about financial markets and the economy" with an apparent shift towards developing psychological models for explaining investment behavior. However, unlike psychology, finance models are primarily concerned with prediction as opposed to the mere description (Olsen, 1998).

Extant literature on investor attention maintains that collecting and processing information require scarce cognitive resources. Our first essay develops hypotheses to examine the limited attention theory. If a limited cognitive budget indeed bounds the attention of market participants, any external disturbance that consumes their attention would impair their ability to process value-relevant information. We examine the asset pricing dynamics where a subset of traders are naïve and trade manually and the second set engages sophisticated algorithms to trade mechanically.

Research findings from experimental studies reveal that individual preferences conform to the peak-end rule (Fredrickson & Kahneman, 1993; Redelmeier & Kahneman, 1996). Fredrickson & Kahneman (1993) proposed a snapshot model to explain this behavior, in which individuals retain snapshots of their affective experiences and ultimately recall only the most extreme and most recent experiences. The peak-end rule refers to this behavior. Such a memory-based evaluative rule differs from the moment-based approach of affect evaluation (Kahneman, 2003) and appears to work for experiences with a well-defined beginning and end. This rule contradicts the normative utility axioms and adheres to the behavioristic approach of remembered utility principles.

Existing research on the peak-end rule remains limited, which creates an opportunity for further exploration. Our second essay examines whether a trading strategy based on the peak-end rule can be devised that will beat other popular trading strategies such as Jegadeesh and Titman's (1993) momentum chasing strategies or rules based on contrarian bets. In the process, we explore the mechanism through which market participants' emotional experiences intervene in the decision-making process. Further, the second essay examines whether economic agents' usage of heuristics distorts equilibrium asset prices.

Our third essay tries to unravel the psychological underpinnings of asset pricing dynamics. In particular, we aim to investigate the role of behavioral biases, such as the disposition effect, and its implications for stock market mispricing. Using monthly holdings data on equity-oriented mutual funds, we explore the decision-making dynamics of institutional investors. We examine whether the cognitive constraints faced by investors amplify some of these biases. Our study, therefore, contributes to the relatively nascent psychology-based asset pricing literature.