**Behavioral Finance Principles**

Behavioral finance is the study of how psychological phenomena impact financial behavior.

Heuristic – a rule of thumb

Representativeness – a heuristic marked by overreliance on stereotypes

 Leads to violation of Bayes rule (too much weight placed on conditional probabilities and not enough weight placed on unconditional probabilities)

 Leads to predictions that are insufficiently mean-regressive

 Leads to an expectation of high returns from safe stocks (good stocks are stocks of good companies)

Continuation – trend following – tendency to believe that recent returns will continue

Gambler’s Fallacy – tendency to predict reversals too frequently

 Due to belief that law of large numbers extends to small numbers

Overconfidence – leads to an underestimation of risk

Sentiment – measures the degree of excessive optimism or pessimism among investors

 Investors tend to be overly optimistic or pessimistic

Traditional asset pricing theorists assume that investors seek to maximize expected utility

Proponents of Behavioral Finance are critical of expected utility as a descriptive theory They believe that Prospect Theory better describes behavior

Framing – the manner in which a decision task is described

People act as if they are risk averse when only gains are involved, but become risk-seeking when they perceive themselves to be facing the possibility of a loss

Myopic Loss Aversion – basing decisions of gains or losses on a point of reference rather than in absolute terms.

Mental accounts are framed as gains and losses. These gains and losses are defined in terms of a benchmark or reference point.

Investors gravitate towards certain gains and away from certain losses when faced with portfolio choices.

Portfolio Implications:

Portfolios selected by investors whose choices conform to prospect theory will differ in key respects from the portfolios selected by investors whose choices conform to expected utility theory.

Expected Utility Theory – Well-diversified portfolios

 Ignore sunk costs

Prospect Theory – Not well-diversified portfolios

 Combine very safe and very risky choices (insur. and lottery tickets)

 Reluctant to realize losses

 Overweights low probabilities

 Underweights high probabilities

 Risk aversion in the domain of gains

 Risk seeking in the domain of losses

Prospect Theory – people do not judge outcomes on an absolute scale, but compare outcomes with an initial reference point.

 Their objective function has a kink at the reference point

 The objective functoiin is concave for gains, but convex for losses

 Risk aversion is locally infinite at that point

Disposition Effect – Investors tend to sell winners too quickly

 Investors tend to hold on to losers too long

 Relative to Expected Utility Maximization

Odean found that investors realized 14.8 % of their gains but only 9.8% of their losses (except December)