

Behavioral Finance Body of Knowledge

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Exhibit 1: Cognitive Biases: Making irrational financial decisions due to faulty cognitive reasoning

Cognitive Bias	Manifestation	Example
Cognitive Dissonance	Encompasses the response that arises as people struggle to harmonize cognitions and thereby relieve their mental discomfort	A consumer purchases a specific brand of mobile phone, initially believing it is the best available, only to discover a better brand soon after, representing an imbalance. Cognitive dissonance will often lead the individual to justify the purchased phone is the best or drive the individual to purchase the other phone (beliefs should equal actions)
Confirmation	Seeking out information that supports an investor’s view and rejecting, distorting, or ignoring information that conflicts with it	While conducting research on stocks that are owned or considered for purchase, individuals will often downplay negative information such as new competitive threats
Conservatism	A mental process in which people cling to their prior views or forecasts at the expense of acknowledging the latest information	Investors persevere in a previously held belief rather than acknowledging new information
Framing	The tendency of decision-makers to respond to various situations differently, based on the context in which a choice is presented (framed)	An investor focuses on buying or selling a stock when looking at the risk and reward in one specific way presented
Hindsight	After a setback, an individual considers mutual fund managers to be useless	An investor may look at the sudden and unforeseen death of an important CEO as something that should have been expected since the CEO was likely to be under a lot of stress
Illusion of Control	The tendency of human beings to believe that they can control or at least influence outcomes when, in fact, they cannot	In the casino game “craps” people cast the dice more vigorously when they are trying to attain a higher number or when an “important” roll is happening
Overconfidence	A person’s subjective confidence in his or her judgments is reliably greater than the objective accuracy of those judgments, especially when confidence is relatively high.	An investor misjudges the value of a stock when having more confidence than they should when deciding to buy or sell
Mental Accounting	People’s tendency to code, categorize and evaluate economic outcomes by grouping their assets into any number of non-fungible mental accounts	People alter their perspectives on money and investments according to the surrounding circumstances that they face.

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Cognitive Bias	Manifestation	Example
Momentum Extrapolation	Assuming recent trends will continue, even if historical evidence and metrics suggest they are unsustainable	After a recommended stock has rallied to a realistic price target, the analyst raises the valuation multiple or financial forecast to unrealistic levels to justify an even higher price target that ultimately isn't achieved
Home Bias	90% of an individual's portfolio is in domestic stocks	An academic study from the late 1980s showed that although Sweden possessed a capitalization that only represented about 1% of the world's market value of equities, Swedish investors put their money almost exclusively into domestic investments.
Recency	A cognitive predisposition that causes people to more prominently recall and emphasize recent events and observations than those that occurred in the rear or distant past	A cruise passenger seeing an equal number of green and blue boats passing by. If the passenger were to see more green boats towards the end of the cruise, the passenger would assume there were more green boats
Representativeness	People tend to perceive probabilities and odds that resonate with their own preexisting ideas	Investors relying on stereotypes when making investment decisions
Self-Attribution	Taking full credit for wins and placing blame on others for losses	After a recommended stock goes the wrong way, blaming a colleague (or the sell-side) for conducting shoddy research.

Exhibit 2: Emotional Biases: Making irrational financial decisions due to faulty emotional reasoning

Emotional Bias	Manifestation	Example
Affinity	An individual's tendency to make irrationally uneconomical consumer choices or investment decisions based on how they believe a certain product or service will reflect their values	A consumer may purchase a fine bottle of well-known wine in a restaurant to impress dinner guests, while a bottle that costs much less could be equally delicious but would not convey the same status
Familiarity or Availability Bias	Preferring stocks a person is familiar with over those they are less familiar with	When asked for a favorite stock and replying with the one an investor is most familiar with rather than the one that may have the most upside
Optimism	Being too optimistic about a stock's valuation and future earnings potential	Modeling a company's EPS growth at a 12% CAGR over the next 2 years, even though it has grown EPS at an 8% CAGR for the past 10 years
Status Quo	Changing nothing in a portfolio that a grandmother has left	After the passing of a grandparent, they leave a stock portfolio which an individual does not change for 10+ years

Exhibit 3: Effects: Making irrational financial decisions due to tendencies

Effects	Manifestation	Example
Disposition Effect	Holding on to losing securities longer than those that are earning	An investor refuses to sell a stock that has lost value, hoping it will bounce back
Snakebite Effect	Categorically dismissing a stock as a bad investment due to substandard performance in the past	Telling someone, "I can never own that stock"
Sunk Cost Fallacy	Investing considerable time or capital into a given stock prevents an individual from looking at it objectively	When analysts initiate coverage on an entire sector, they may mistakenly recommend many of the names, when only one or two are likely to substantially outperform the market
The "House Money Effect"	Take more risks after bringing in unexpected gains	Capital is kept separate from recent profits, leading investors to view said profits as disposable. As a result, they are more inclined to take greater risks with the money.
The Endowment Effect	People value stocks they own more than stocks that they do not own	Investors tend to stick with certain assets because of familiarity & comfort, even if they are inappropriate or become unprofitable.

Exhibit 4: Aversions: Making irrational financial decisions based on a strong dislike or disinclination

Aversions	Manifestation	Example
Anxiety	Allowing elevated levels of anxiety to lead to investment decisions that are not based on sound analysis and research	Feeling the need to change a view toward a stock on a weekly or monthly basis, even though fundamentals haven't changed
Extremes Aversion	Never choosing the safest or riskiest funds	When planning for their futures, many retirees can succumb to Extreme Loss Aversion, clinging to their money like a passenger on the Titanic holds onto a floating plank of wood.
Loss-Aversion	Greater sensitivity to losses than gains	An analyst finds a new rationale to keep recommending a stock that hasn't been performing as well as originally expected
Myopic Loss Aversion	Loss aversion combined with a tendency to evaluate outcomes frequently	Investors take a view of their investments that is strongly focused on the short term, leading them to react too negatively to recent losses, which may be at the expense of long-term benefits
Regret Aversion	Investors trying to avoid the possibility of regret when they made decisions	Regret-averse people may fear the consequences of both errors of omission (e.g., not buying the right [optimal] investment property) and commission (e.g., buying the wrong [suboptimal] investment property)
Rules of Thumb (Heuristics)	Blindly relying on or over-using mental shortcuts or heuristics to make investment decisions without checking to ensure they are reliably accurate	Recommending a stock or a sector every time its P/E ratio drops below 12x forward earnings and selling every time it moves above 15x

Exhibit 5: Other Key Behavioral Finance Concepts

Other Key Terms	Manifestation	Example
Anchoring	A tendency to “anchor” decision to a reference point, even when it has no relevance to the decision at hand	Financial analyst or investor, to reject a correct decision (buy an undervalued investment, sell an overvalued investment) or accept an incorrect decision (ignore an undervalued investment or buy/hold an overvalued investment)
False Consensus	People tend to believe that others also think the same way they do	Believing that all people think that saving the environment is important because the individual feels that way
Forgetting Correlations	Refusing to put foreign stocks in a portfolio	This implies that as one security moves, either up or down, the other security moves in lockstep, in the same direction
Group Polarization	Investment clubs take more risks than individual investors	Groups show a pronounced tendency to shift toward more extreme positions than those they initially held
Hedonic Framing	Framing outcomes to maximize psychological pleasure and minimize pain	In situations where an individual has a choice of thinking of something as one large gain or as several smaller gains (such as finding \$100 versus finding a \$50 bill from two places), thinking of the latter can maximize the amount of positive utility
Naïve Diversification	Portfolio’s asset allocation depending on the funds offered	An investor simply invests in several different assets in the hope that the variance of the expected return on the portfolio is lowered
Reference Point	Outcomes are perceived as gains or losses relative to a reference point	Moving to a less desirable location and spending more than usual on an expensive apartment
Social Norms Groupthink	A colleague becomes an individual’s top financial advisor in matters of saving for retirement	When a team or organization becomes so similar in their outlook that they lose the ability to be creative in their decision making
The Gambler’s Fallacy	Playing black at roulette when red has come up 4 times in a row	An individual erroneously believes that the onset of a certain random event is less likely to happen following an event or a series of events
Money Illusion	The tendency of people to think of currency in nominal, rather than, real terms	Investors are happier with a 7% nominal return under 6% inflation than a 3% nominal return under 0% inflation