



In our series *Learning Outcomes Decoded* we break down a single Learning Outcome Statement (LOS) from the CFA level 1 curriculum. Dave Kaczorowski, CFA, author of this article, is the Content Manager of the CFA team at the Princeton Review and teacher of the live online review sessions. He is a professor of finance at the University of San Francisco.

PORTFOLIO MANAGEMENT 2: BEHAVIORAL BIASES OF INDIVIDUALS

LOS: Compare and contrast errors and emotional biases

The module on behavioral biases was introduced in the 2022 curriculum. Investor psychology is a growing field in the investment industry, and is considered by some to be the most viable path to market-beating returns. This module introduces a long list of specific ways investors behave irrationally, all of which are highly testable.

Two categories of behavioral biases

COGNITIVE ERRORS—These are situations where the decision-maker processes the data improperly to reach the wrong conclusion. The curriculum divides these errors into two types: belief perseverance biases, and processing errors.

Believe perseverance biases

- Conservatism bias—Ignoring new evidence to maintain prior views
- Confirmation bias—Only paying attention to evidence that supports current beliefs
- Representativeness bias—Basing decisions on only the portion of the data that relates to personal experiences or beliefs
- Illusion of control bias—Overestimating one's ability to control an outcome
- Hindsight bias—Believing past events to be more predictable than they were at the time

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Processing errors

- Anchoring and adjustment bias—Making a decision that relies too heavily on the initial information received
- Mental accounting bias—Dividing money into separate "accounts" when it should be grouped together
- Framing bias—Answering the same question differently based on how it is phrased
- > Availability bias—Assigning unfairly high weight to the most easily recallable information

EMOTIONAL BIASES—In this case, the decision-maker ignores the data completely and bases the decision entirely on emotion, again often leading to the wrong conclusion

- Loss-aversion bias—Attaching more pain to a loss than to a gain of equal size
- > Overconfidence bias—Overestimating one's skill as a factor in the outcome
- Self-control bias—Acting in pursuit of short-term satisfaction at the expense of long-term goals
- Status quo bias—Failing to make changes for the sake of keeping the situation as is
- Endowment bias—Attaching too much value to an asset solely because it is owned
- Regret-aversion bias—Avoiding a decision out of fear that it will turn out poorly

The curriculum lists the negative outcomes of these biases and ways to correct them which is highly testable information.

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PRACTICE QUESTION

Which of the following is the *least likely* way to prevent a cognitive error regarding an investment portfolio?

- A. Conducting attribution analysis on returns results to separate skill from luck
- B. Scrutinizing investment decisions to root out "default assumptions"
- C. Documenting investment decisions and the key reasons behind them

A is correct. Confusing skill with luck defines overconfidence bias as an emotional bias rather than a cognitive error. Overconfidence is characterized by a tendency to ignore the data and assume success is the result of one's skill, a hallmark of emotional bias. Answers B and C both describe ways of increasing the robustness of the analysis to prevent drawing faulty conclusions from the data. Answer choice B is described as a remedy for anchoring bias, while answer choice C is a remedy for hindsight bias.