BIAS #1

OVERCONFIDENCE

BIAS DESCRIPTION

Unwarranted faith in one's intuitive reasoning, judgments, cognitive abilities and the precision of the information they've been given.

- People are poorly calibrated in estimating probabilities.
- People think they are smarter and have better information than they actually do.
- They may get a tip from a financial advisor or read something on the Internet, and then they're ready to take action.

BIAS DESCRIPTION

- Prediction overconfidence
  - The confidence intervals that investors assign to their investment predictions are too narrow.
  - Investors may underestimate the downside risks to their portfolios

- Certainty overconfidence
  - Investors
    - are often too certain of their judgments
    - often trade too much in their accounts
    - may hold portfolios that are not diversified enough.
  - Results in the tendency of investors to fall prey to a misguided quest to identify the “next hot stock.”

PRACTICAL APPLICATION

Prediction Overconfidence

- Roger Clarke and Meir Statman (2000)
  - In 1896, the Dow Jones Average, which is a price index that does not include dividend reinvestment, was at 40. In 1998, it crossed 9,000.

1. If dividends had been reinvested, what do you think the value of the DJIA would be in 1998?
2. Also predict a high and low range so that you feel 90 percent confident that your answer is between your high and low guesses.

PRACTICAL APPLICATION

Certainty Overconfidence

- People display certainty overconfidence in everyday life situations and the investment arena.
- As people find out more about a situation, the accuracy of their judgments is not likely to increase, but their confidence increase
  - Equate the quantity of information with its quality.
- Baruch Fischoff, Paul Slovic, and Sarah Lichtenstein
  - gave subjects a general knowledge test and then asked them how sure they were of their answer. Subjects reported being 100% sure when they were actually only 70% to 80% correct.
- A classic example of certainty overconfidence
  - Occurred during the technology boom of the late 1990s.

IMPLICATIONS FOR INVESTORS

1. Overconfident investors overestimate their ability to evaluate a company as a potential investment. As a result, they can *become blind to any negative information* that might normally indicate a warning sign.

2. Overconfident investors can *trade excessively* as a result of believing that they possess special knowledge that others don't have. Excessive trading behavior has proven to lead to poor returns over time.

IMPLICATIONS FOR INVESTORS

3. Because they either don’t know, don’t understand, or don’t heed historical investment performance statistics, overconfident investors can *underestimate their downside risks*. As a result, they can unexpectedly suffer poor portfolio performance.

4. Overconfident investors hold *underdiversified portfolios*, thereby taking on more risk without a commensurate change in risk tolerance. Often, overconfident investors don’t even know that they are accepting more risk than they would normally tolerate.

RESEARCH REVIEW

- Professors Brad Barber and Terrance Odean (2001)
  - University of California at Davis,
  - “Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment.”
  - 1991–1997 investment transactions of 35,000 households
  - All holding accounts at a large discount brokerage firm

- The relationship between overconfidence as displayed by both men and women and the impact of overconfidence on portfolio performance.

RESEARCH REVIEW

- Overconfident investors
  - Overestimate the **probability** that their personal assessments.
  - Overestimate the precision of their information and thereby the **expected gains** of trading.
  - Disproportionate confidence influences **trading**.
    - Rational investors only trade and purchase information when doing so increases their expected utility.
    - Overconfident investors decrease their expected utilities by trading too much.
    - They may even trade when the true expected net gains are negative.

RESEARCH REVIEW

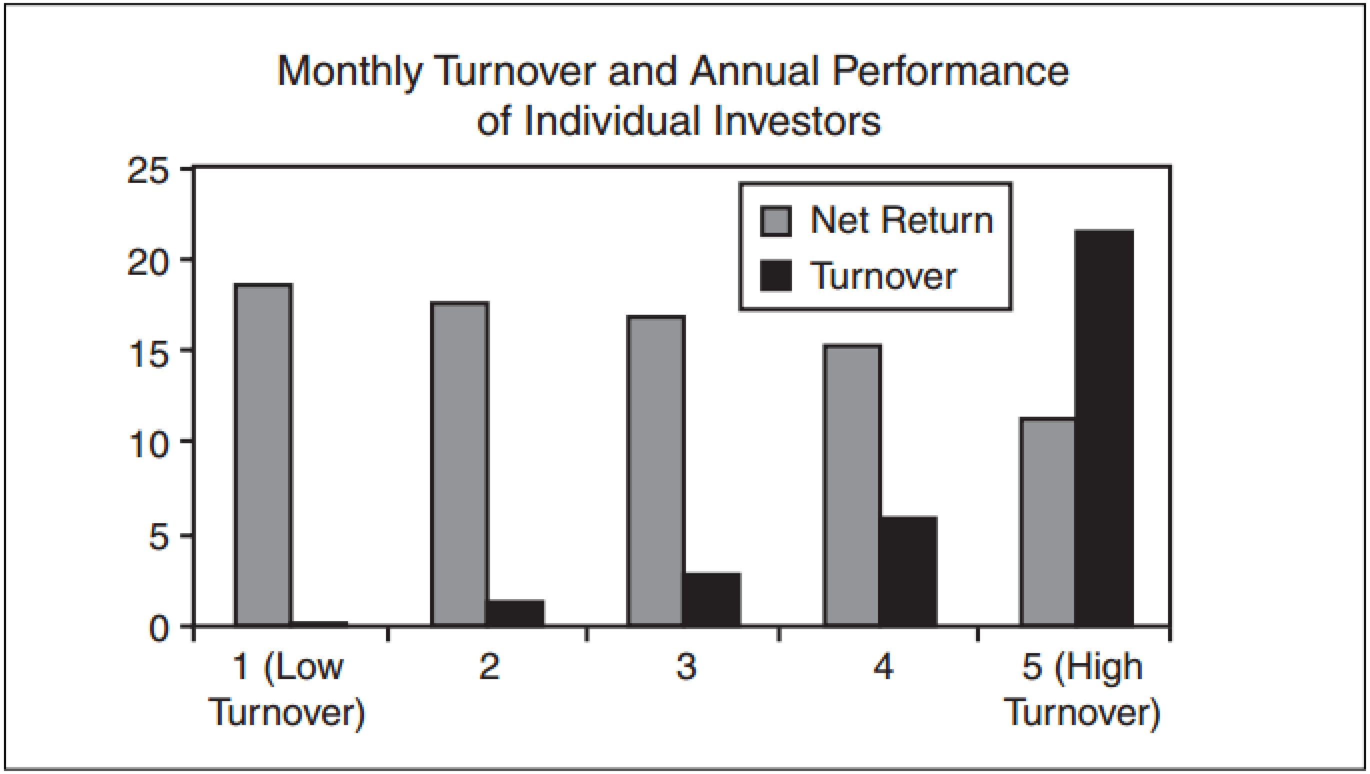

FIGURE 4.1 Trading Is Hazardous to Your Wealth

RESEARCH REVIEW

- Men are more overconfident than women
- Men will trade more and perform worse than women.
- Both men and women would have done better, on average, if they had maintained their start-of-the-year portfolios for the entire year.
- In general, the stocks that individual investors sell go on to earn greater returns than the stocks with which investors replace them.
  - The stocks men chose to purchase underperformed those they chose to sell by 20 basis points per month.
  - For women, the figure was 17 basis points per month.

RESEARCH REVIEW

- Individuals turn over their common stock investments about 70 percent annually.
- Mutual funds have similar turnover rates.
- Yet, those individuals and mutual funds that trade most earn lowest returns.
- There is a simple and powerful explanation for the high levels of counterproductive trading in financial markets: overconfidence.

Overconfidence is “hazardous to your wealth.”

DIAGNOSTIC TESTING

Prediction Overconfidence Bias Test

Question 1:

Give high and low estimates for the average weight of an adult male sperm whale (the largest of the toothed whales) in tons.

Choose numbers far enough apart to be 90 percent certain that the true answer lies somewhere in between.

Question 2:

Give high and low estimates for the distance to the moon in miles. Choose numbers far enough apart to be 90 percent certain that the true answer lies somewhere in between.

DIAGNOSTIC TESTING

Prediction Overconfidence Bias Test

Question 3:

How easy do you think it was to predict the collapse of the tech stock bubble in March of 2000?

a. Easy.

b. Somewhat easy.

c. Somewhat difficult.

d. Difficult.

Question 4:

From 1926 through 2004, the compound annual return for equities was 10.4 percent. In any given year, what returns do you expect on your equity investments to produce?

a. Below 10.4 percent.

b. About 10.4 percent.

c. Above 10.4 percent.

d. Well above 10.4 percent.

DIAGNOSTIC TESTING
Certainty Overconfidence Bias Test

Question 5:

How much control do you believe you have in picking investments that will outperform the market?

a. Absolutely no control.

b. Little if any control.

c. Some control.

d. A fair amount of control.

Question 6:

Relative to other drivers on the road, how good a driver are you?

a. Below average

b. Average

c. Above average

d. Well above average

DIAGNOSTIC TESTING

Certainty Overconfidence Bias Test

Question 7:

Suppose you are asked to read this statement: “Capetown is the capital of South Africa.” Do you agree or disagree? Now, how confident are you that you are correct?

a. 100 percent. b. 80 percent.

c. 60 percent. d. 40 percent. e. 20 percent.

Question 8:

How would you characterize your personal level of investment sophistication?

a. Unsophisticated b. Somewhat sophisticated

c.. Sophisticated d. Very sophisticated

ADVICE

- Overconfidence is one of the most detrimental biases that an investor can exhibit. This is because
  - Trading in pursuit of the “next hot stock,”
  - Trading too frequently
  - Underestimating downside risk,
  - Holding an underdiversified portfolio
- All pose serious “hazards to your wealth”

What can we do?

ADVICE

1.Unfounded belief in own ability to identify companies as potential investments.

- After trading costs, the average investor underperformed the market by approximately 2% per year (The Odean study).
- Many overconfident investors also believe they can pick mutual funds that will deliver superior future performance,
  - They tend to trade in and out of mutual funds at the worst possible times because of unrealistic expectations.
- An advisor whose client claims an affinity for predicting hot stocks
  - consider asking the investor to review trading records of the past two years and then calculate the performance of the client’s trades.
  - More often than not, the trading activity will demonstrate poor performance

ADVICE

2. Excessive trading

- In Odean and Barber’s study, “Boys Will Be Boys,”
  - The average subject’s annual portfolio turnover was 80%
  - The least active quintile of participants, earned 17.5% annual returns, outperforming the 16.9% garnered by the S&Poor’s index.
  - The most active quintile of investors realized only 10% annual returns
  - The authors of the study label trading as hazardous.

- When a client’s account shows too much trading activity,
  - The best advice is to ask the investor to keep track of each and every investment trade and then to calculate returns.
  - Since overconfidence is a cognitive bias, updated information can often help investors to understand the error of their ways.

ADVICE

3. Underestimating downside risks

For an advisor whose client exhibits this behavior, the best course of action is twofold.

- First, review trading or other investment holdings for potentially poor performance, and use this evidence to illustrate the hazards of overconfidence.
- Second, point to academic and practitioner studies that show how volatile the markets are.

ADVICE

4. Portfolio underdiversification

- The reminder that numerous, once-great companies have fallen is, oftentimes, not enough of a reality check.
- In this situation, the advisor can recommend various hedging strategies, such as costless collars, puts, and so on.
- Another useful question at this point is: “If you didn’t own any XYZ stock today, would you buy as much as you own today?”

A FINAL WORD ON OVERCONFIDENCE

Overconfident investors may not be well prepared for the future.

- For example, a vast majority of households do not actually save adequately for educational expenses.
- Even smaller percentage actually possess any “real” financial plan that addresses such basics as investments, budgeting, insurance, savings.
- These families are likely to feel unhappy and discouraged when they do not meet their financial goals.
- OTHER EXAMPLES: Students????

- Investors need to guard against overconfidence, and financial advisors need to be in tune with the problem.
- Recognizing and curtailing overconfidence is a key step in establishing the basics of a real financial plan.