LOSS AVERSION OR PROSPECT THEORY

WHAT ARE YOU GOING TO LEARN?

▸ Prospect theory – or loss aversion – was formulated first by Dan Kahneman and Amos Tversky in 1979.

  ▸ Starting point: how people respond to a loss. Nobody likes to lose!

LOSS AVERSION

▸Suppose you face a choice between
  ▸A. Sure loss of $7500
  ▸B. 75% chance you will lose $10,000 and a 25% chance you will lose $0.

LOSS AVERSION

▸The idea of loss aversion also includes the finding that people try to avoid locking in a loss.
  ▸Consider an investment bought at $1,000, which rises quickly to $1,500.
  ▸What about the investment dropped to $500?

EXAMPLE: INVESTORS IN STEADMAN MUTUAL FUNDS

▸According to quarterly ranking data from Lipper Analytical Services, between June 30, 1994 and April 15, 1997, at least one of the four Steadman funds has had the worst ten-year returns.

EXAMPLE: INVESTORS IN STEADMAN MUTUAL FUNDS

▸Through the 1950s, 1960s, and early 1970s, Melvin Klahr, a math instructor living in Florida invested $1000 in Steadman American Industry and a predecessor fund.

▸In June 1997, his position was $434. His last purchase was at the end of 1974. Had he placed $1,000 in the average fund at the time, his position would have grown to $29,000. But Klahr continues to hold onto his Steadman shares.

▸Why has he not been able to bring himself to sell them?

# PROSPECT THEORY

▸ Investors find the pain of losses to be greater than the joy from gains.

▸ Loss aversion utility allows the investor to have different marginal utilities for gains and losses.

PROSPECT THEORY

▸ Instead of probabilities, Kahneman and Tversky use decision weights.

▸ Decision weights allow investors to potentially overestimate low probability events – including both disasters and winning the lottery.

LOSS AVERSION UTILITY

Kahneman-Tversky Loss Aversion Utility
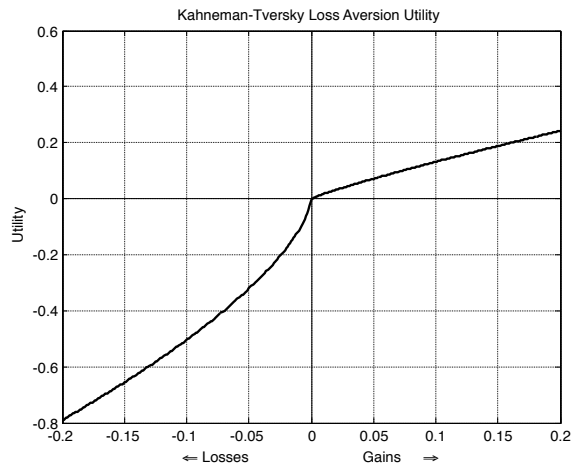
GET-EVENITIS

▸Investors with losing positions show a strong desire to get back to break-even.

  ▸Take chances in order to avoid taking a loss.

GET-EVENITIS

▸ In 1995, Nicholas Leeson became famous for having caused the collapse of Barings.

▸ He lost over $1.4 billion through trading.

▸ In 1992, Leeson began to engage in rouge trading in order to hide errors.

  ▸ He "gambled on the stock market to reverse his mistakes and save the bank."

SUMMARY

▸ Prospect theory or loss aversion utility describes how people make choices in the face of risk and uncertainty.

▸ People hate to lose!