The Demand for Risky Assets

Risk and the Budget Line

- Observations

1) The final equation $R_p = R_f + \frac{(R_m - R_f)}{m}\,{}_p$

is a budget line describing the trade-off between risk (σ_p) and expected return (R_p).

The Demand for Risky Assets

Risk and the Budget Line

- Observations: $R_p = R_f + \frac{(R_m - R_f)}{m}\,{}_p$

2) Is an equation for a straight line:

$R_m, R_f,$ *and* σ_m *are constants*

3) $Slope = (R_m - R_f)/\sigma_m$

The Demand for Risky Assets

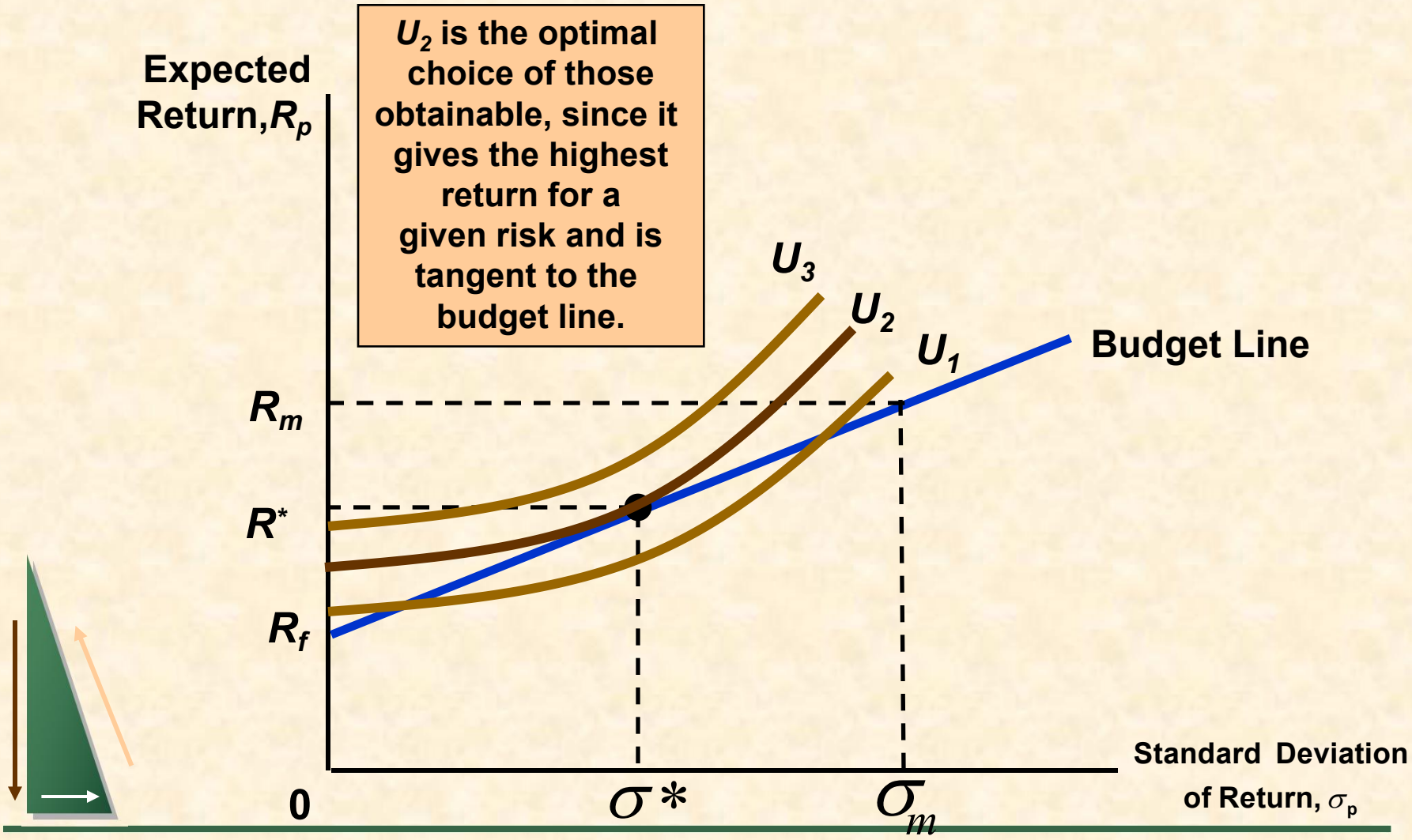
Risk and the Budget Line

- Observations

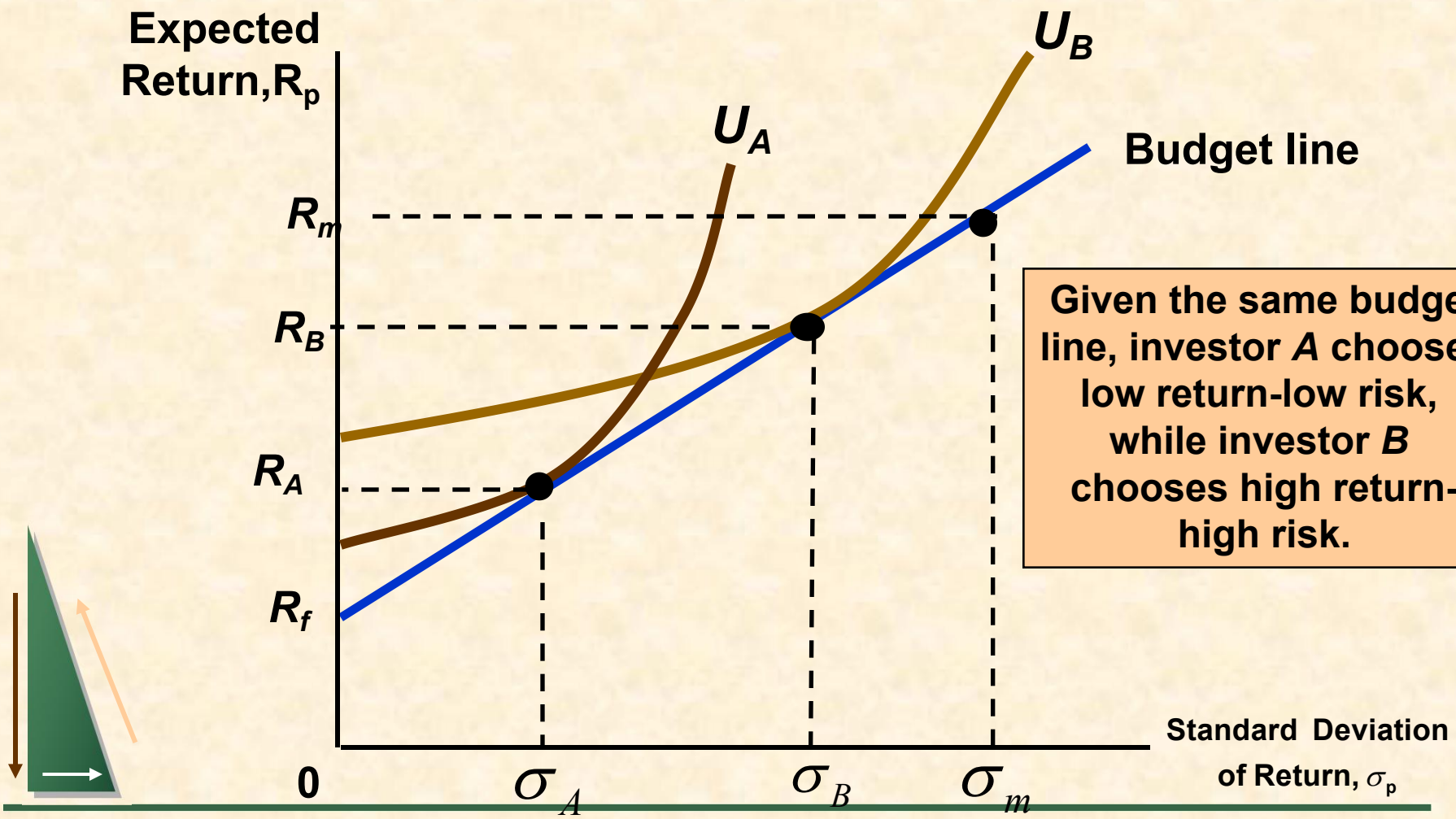
3) Expected return, R_P, increases as risk increases.

4) The slope is the price of risk or the risk-return trade-off.

Choosing Between Risk and Return

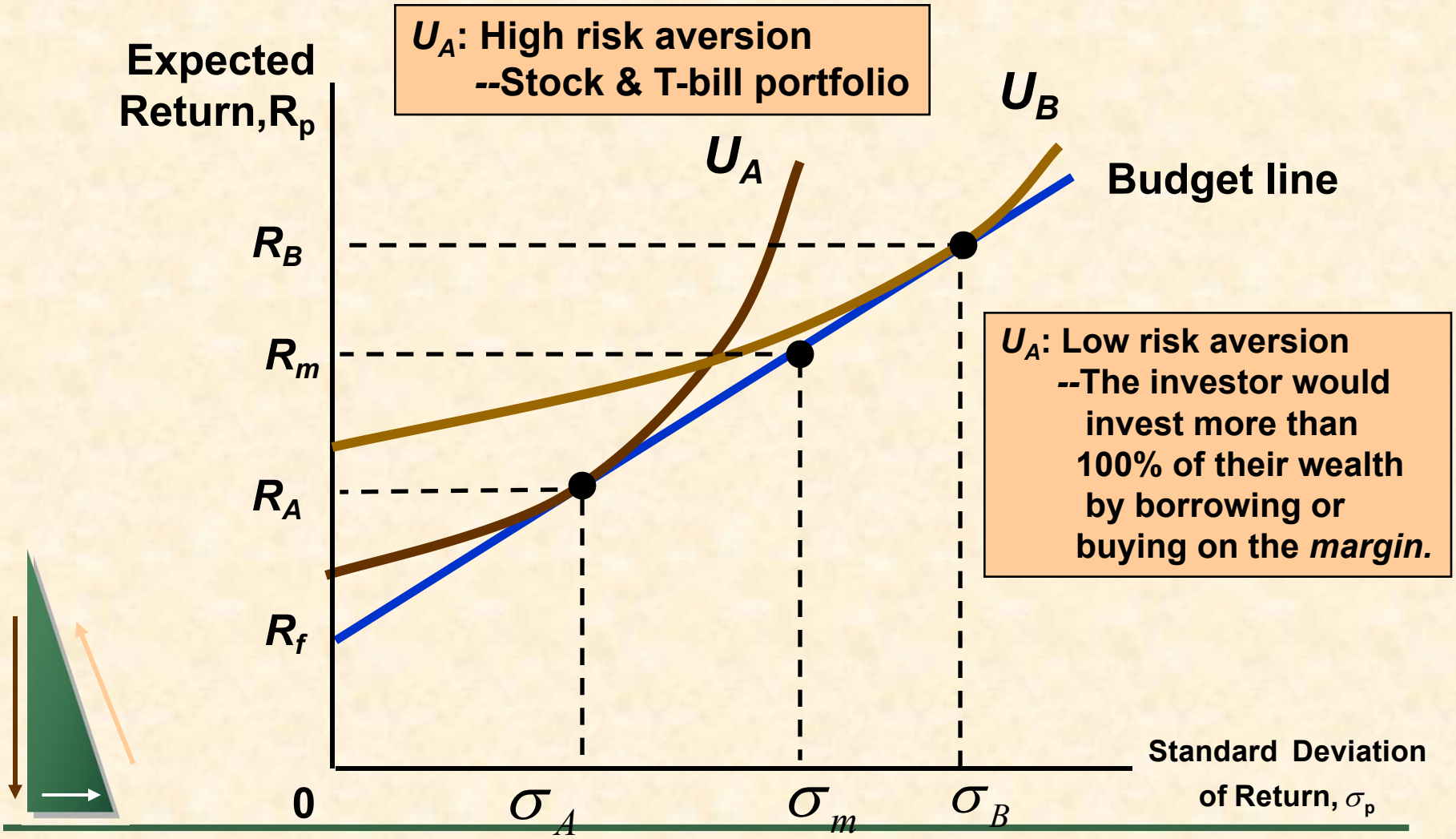


The Choices of Two Different Investors



Given the same budget line, investor *A* chooses low return-low risk, while investor *B* chooses high return-high risk.

Buying Stocks on Margin



Investing in the Stock Market

- Observations
  - Percent of American families who had directly or indirectly invested in the stock market
    - 1989 = 32%
    - 1995 = 41%

Investing in the Stock Market

- Observations
  - Share of wealth in the stock market
    - 1989 = 26%
    - 1995 = 40%

Investing in the Stock Market

- Observations
  - Participation in the stock market by age
    - Less than 35
      - 1989 = 23%
      - 1995 = 29%
    - More than 35
      - Small increase

Investing in the Stock Market

- What Do You Think?
  - Why are more people investing in the stock market?

Summary

- Consumers and managers frequently make decisions in which there is uncertainty about the future.
- Consumers and investors are concerned about the expected value and the variability of uncertain outcomes.

Summary

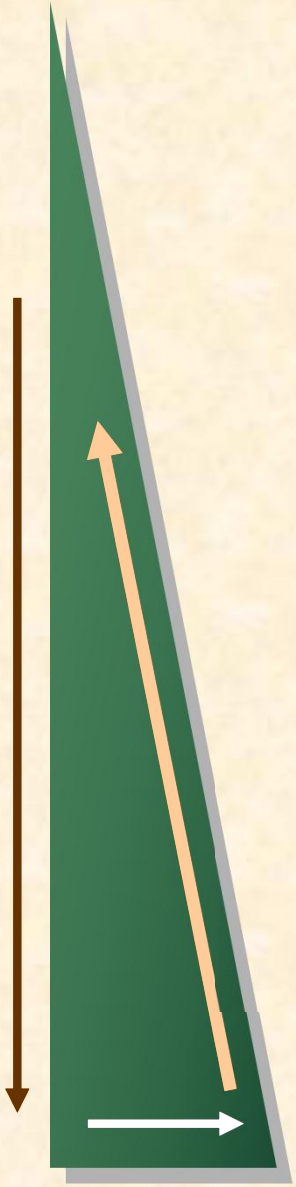
- Facing uncertain choices, consumers maximize their expected utility, and average of the utility associated with each outcome, with the associated probabilities serving as weights.
- A person may be risk averse, risk neutral or risk loving.

Summary

- The maximum amount of money that a risk-averse person would pay to avoid risk is the risk premium.
- Risk can be reduced by diversification, purchasing insurance, and obtaining additional information.

Summary

- The law of large numbers enables insurance companies to provide actuarially fair insurance for which the premium paid equals the expected value of the loss being insured against.
- Consumer theory can be applied to decisions to invest in risky assets.



End of Chapter 5

Choice Under Uncertainty