Determinants Investment
Why Businesses Invest?

Building Capital
• Investment involves sacrifice (on someone’s part)
• To invest
  – We must work more
  – We must consume less (save)

Determinants of the Level of Investment
• Sales outlook
• Capacity utilization rate
• Interest rate
• Expected rate of profit (ERP)

The Sales Outlook
• You won’t invest if the sales outlook is bad
  – If sales are expected to be strong the next few months the business is probably willing to add inventory
  – If sales outlook is good for the next few years, firms will probably purchase new plant and equipment

Capacity Utilization Rate
• This is the percent of plant and equipment that is actually being used at any given time
• You won’t invest if you have a lot of unused capacity
  – During recessions, why build more when you are not using all of what you have
• Other factors
  – Manufacturing is a shrinking part of U.S. economy due to imports and increasing investment overseas by U.S. Companies

Since the mid-1980s, our capacity utilization rate has been in the low 80s. Note that it fell during each recession.
The Interest Rate

• You won’t invest if interest rates are too high

Interest rate = The interest paid / The amount borrowed

Assume you borrow $1000 for one year @ 12 %, how much interest do you pay?

\[ \frac{.12}{1000} = X \]

\[ X = $120 \]

The Interest Rate

• You won’t invest if interest rates are too high

Interest rate = The interest paid / The amount borrowed

Assume you borrowed $1000 for one year and paid $120 interest. What was the interest rate?

\[ \frac{120}{1000} = X \]

\[ X = .12 = 12 \% \]

Expected Rate of Profit (ERP)

ERP = \[ \frac{\text{Expected Profits}}{\text{Money Invested}} \]

How much is the ERP on a $10,000 investment if you expect to make a profit of $1,650?

ERP = \[ \frac{1650}{10000} \]

ERP = .165 = 16.5 %

You Won’t Invest If Interest Rates Are Too High

• In general, the lower the interest rate, the more business firms will borrow

• To know how much they will borrow and whether they will borrow, you need to compare the interest rate with the expected rate of profit

• Even if they are investing their own money they need to make this comparison

Why Do Firms Invest?

• Firms will only invest if the expected profit rate is “high enough”

• Firms invest when
  – Their sales outlook is good
  – Their capacity utilization rate is high
  – Their expected profit rate is high

• Even if firm’s invest their own money, the interest rate is still a consideration
What Accounts for our Low Rate of Investment?

• The short time horizon of corporate America
• The quality of management in America
• The quality of labor in America
• The low savings rate in America
  – The less we save, the less we can invest
  – The less we invest, the slower our rate of economic growth