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)

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Determinants of the Level of Investment

- **Sales outlook**
- **Capacity utilization rate**
- **Interest rate**
- **Expected rate of profit (ERP)**

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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

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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

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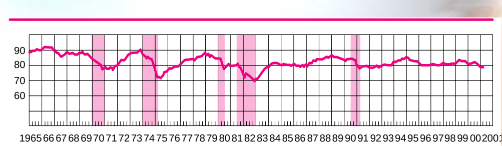
Capacity Utilization Rate in Manufacturing, 1965-2000



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

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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?

$$.12 = \frac{X}{\$1000}$$

X = $120

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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?

$$X = \frac{\$120}{\$1000}$$

X = .12 = 12 %

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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?

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

$$ERP = \frac{\text{Expected Profits}}{\text{Money Invested}}$$

$$ERP = \frac{\$1,650}{\$10,000}$$

ERP = .165 = 16.5 %

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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

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Why Do Firms Invest?

- Firm's 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

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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