

# Lecture 2: Basic Definitions

- Econ NEWS... to be filled

# Today's plan: Basic Concepts

- GDP
- Inflation Rate
- Unemployment Rate
- Trade and Budget Deficits

# Gross Domestic Product

- First thing we look at (its rate of growth)
- Aggregate output: Not easy!
  - Sum of apples and oranges
  - Double-counting
- Example

# A Simple Economy

- ## Steel Company

  - Revenue from sales \$100
  - Expenses (wages) 80
  - Profit 20
- ## Car Company

  - Revenue from sales \$210
  - Expenses
    - Wages \$70
    - Steel purchases 100
  - Profit 40
- What is this economy's GDP?

# Calculating GDP

- Method 1: GDP is the value of the *final goods and services* produced by the economy during a *given period*
- Method 2: GDP is the sum of *valued added* produced....
- Method 3: GDP is the sum of *incomes* in the economy...

# Nominal vs Real GDP

- Nominal GDP: sum of final goods produced times their *current price*
  - Growth due to quantity (production)
  - Growth due to prices
- Real GDP: ... times their *base year price*
- Example (next trp.)
- GDP Growth:  $(Y(t) - Y(t-1)) / Y(t-1)$

# Nominal vs Real GDP

## Year 0

|             | Q       | P        | Value          |
|-------------|---------|----------|----------------|
| Potatoes    | 100,000 | \$1      | 100,000        |
| Cars        | 10      | \$10,000 | 100,000        |
| Nominal GDP |         |          | <b>200,000</b> |

## Year 1

|             | Q       | P        | Value          |
|-------------|---------|----------|----------------|
| Potatoes    | 100,000 | \$1.2    | 120,000        |
| Cars        | 11      | \$10,000 | 110,000        |
| Nominal GDP |         |          | <b>230,000</b> |





# The Unemployment Rate

- Labor force (L) = Empl. (N) + Unemployed (U)
- Unemployment Rate (u) =  $U/L$
- Willing to work? Looking for work?  $L < \text{Pop.}$ 
  - Not in the labor force
  - Discouraged workers (recessions)
- High unemployment often comes hand on hand with low *participation rate* :
  - $L/\text{Pop of working age}$
- U.S. (u = 4%, pr = 80% ) France (u=13%, pr = 65%)
- Why do we care? Too high and.... too low??

# Deficits

- Expenditure  $>$  Income
- Trade Deficit :
  - Imports  $>$  Exports
  - U.S. today (FED, Treasury, Japan)
- Budget deficit
  - Gov. Expenditure  $>$  Gov. Revenue
- Why do we care? Smoothing; Argentina...  
the US

# First Model: The Goods Market

