### Lecture 2: Basic Definitions

- Review Lecture 1
  - The U.S. (deficit/surplus; growth)
  - Europe (unemployment; EMU)
  - Japan (stock market; banks)
  - Emerging Markets (capital flows; complex international financial links)
- Current events (FT 09/12/99)

# 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		
	<ul> <li>Revenue from sales</li> </ul>		\$100
	<ul> <li>Expenses (wages)</li> </ul>		80
	– Profit		20
•	• Car Company		
	<ul> <li>Revenue from sales</li> </ul>		\$210
	– Expenses		
	• Wages	\$70	
	<ul> <li>Steel purchases</li> </ul>	100	
	– Profit		40
• What is this economy's GDP?			

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
- GDP Growth: (Y(t)-Y(t-1))/Y(t-1)

### The Inflation Rate

- More than one.... (P(t)-P(t-1))/P(t-1)
- GDP deflator and CPI
- GDP deflator = Nominal GDP / GDP
   P0 = 1
  - P1 = 230,000/210,000 = 1.1 (approx.)
- NGDP growth = GDPg + Inflation (defl)
- 15 5 10
- Why do we care?

#### The Unemployment Rate

- Labor force (L) = Empl. (N) + Unemployed (U)
- Unemployment Rate (u) = U/L
- Willing to work? Looking for work? L < Pop.
  - Not in the labor force

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- Discouraged workers (recessions)
- High unemployment often comes hand on hand with low *participation rate* :
  - L/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; Brazil

### First Model: The Goods Market

