

Measuring the Macroeconomy

Basic Concepts

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Gross Domestic Product (GDP)

- **GDP** = the market value of all final goods and services produced within an economy in a given period of time
 - Market value = price x quantity
- **Nominal GDP** = the sum of the quantities of final goods produced multiplied by their *current* prices
 - Increases over time due to both increases in quantity and increases in prices
- **Real GDP** = the sum of the quantities of final goods multiplied by *constant* prices
 - Takes out the increase due to increase in price. Constant prices used are “base year” prices.
 - Better for comparing output at different points in time

Price Level

- **Measures of the Price Level**
 - **Consumer Price Index (CPI)** = the price of a set basket of goods and services purchased by a typical consumer relative to the price of the same basket in some base year
 - **Producer Price Index** = measures the price of a typical basket of goods purchased by firms rather than consumers
 - **GDP Deflator** = measures the price of output relative to its price in the base year
 - = nominal GDP / real GDP
 - **Personal Consumption Expenditures (PCE) Deflator** = like the deflator but for the consumption component of GDP
 - **Core Measures** = exclude food and energy prices

Inflation Rate

- The inflation rate is the rate of change in the price level.
- To compute
 - Pick the measure of price level you want to use
 - Calculate the price level measure for two points in time
 - The rate of change in the price level between those two points of time is the inflation rate
- Don't confuse the price level measures with the inflation rate!



Unemployment

- Reference Population = adult civilian non-institutionalized population
- Employed = people who worked in the last week
- Unemployed = (1) people who have not worked in the last week, and (2) who is available for work and actively seeking employment
 - Narrower definition than most people would probably expect
- Labor Force = people who are employed + people who are unemployed
- Not in the Labor Force = reference population – labor force