

EC132.02

Principles of Macroeconomics

Boston College

Tuesday, January 29

Reminders

Aplia homework on Supply and Demand due this Friday, February 1, at 9am.

US Gross Domestic Product, Fourth Quarter and Full Year 2012, released tomorrow, Wednesday, January 30, at 8:30am.

Ch 23 Measuring a Nation's Income

1. Income and Expenditure ✓
2. Measuring GDP ←
3. The Components of GDP
4. Real and Nominal GDP
5. GDP and Economic Well-Being

Next week: Ch 24 Measuring the Cost of Living

Measuring GDP

Gross Domestic Product (GDP) =

The market value of all final goods and services produced within a country in a given period of time.

Measuring GDP

Gross Domestic Product (GDP) =

The **market value** of all final goods and services produced within a country in a given period of time.

Because “you can’t add apples and oranges.”

Measuring GDP

Gross Domestic Product (GDP) =

The market value of **all** final goods and services produced within a country in a given period of time.

GDP attempts to be a comprehensive measure of a nation's income.

Measuring GDP

Gross Domestic Product (GDP) =

The market value of all **final** goods and services produced within a country in a given period of time.

Excludes intermediate goods to avoid double counting.

Measuring GDP

Gross Domestic Product (GDP) =

The market value of all final **goods and services** produced within a country in a given period of time.

Includes services as well as goods.

Measuring GDP

Gross Domestic Product (GDP) =

The market value of all final goods and services **produced** within a country in a given period of time.

Includes new cars and homes but not used cars and preexisting homes.

Measuring GDP

Gross Domestic Product (GDP) =

The market value of all final goods and services produced **within a country** in a given period of time.

A Canadian works in the US = US GDP.

A US citizen works in Canada = Canada's GDP.

Measuring GDP

Gross Domestic Product (GDP) =

The market value of all final goods and services produced within a country **in a given period of time.**

A quarter (3 months) or a year.

Components of GDP

The **national income accounting identity**

$$Y = C + I + G + NX$$

$Y = \text{GDP}$

$C = \text{consumption}$

$I = \text{investment}$

$G = \text{government purchases}$

$NX = \text{net exports}$

Components of GDP

$$Y = C + I + G + NX$$

Spending (by households) on:

- Durable goods.
- Nondurable goods.
- Services.

Components of GDP

$$Y = C + I + G + NX$$

Spending (mostly by firms) on:

- Capital equipment (machines, tools).
- Structures (factories, office buildings).
- Inventories (goods produced but not yet sold).
- New homes purchased by households.

Components of GDP

$$Y = C + I + G + NX$$

Inventory investment:

- Ford builds a car in 2012, but it doesn't sell until 2013.
- I goes up in 2012.
- C goes up in 2013 but I goes down in 2013.
- Y goes up in 2012 but not in 2013.

Components of GDP

$$Y = C + I + G + NX$$

Spending by federal, state, and local governments on:

- Goods and services.
- Salaries of government workers.

Does not include **transfer payments** like social security, unemployment benefits.

Components of GDP

$$Y = C + I + G + NX$$

$$Y = C + I + G + X - M$$

Net exports equal exports – imports:

- **Exports**: purchases of US produced goods by foreigners.
- **Imports**: purchases of foreign goods by US households and firms.

Components of GDP

$$Y = C + I + G + NX$$

$$Y = C + I + G + X - M$$

Boeing sells airplanes to British Airways:

- US exports (X) go up.
- $NX = X - M$ goes up.
- Y goes up.

Components of GDP

$$Y = C + I + G + NX$$

$$Y = C + I + G + X - M$$

You buy a new Porsche:

- US consumption goes up.
- But US imports (M) also go up.
- $NX = X - M$ goes down.
- US GDP stays unchanged.