Real GDP vs. nominal GDP

- GDP is the value of all final goods and services produced.
- **Nominal GDP** measures these values using current prices.
- **Real GDP** measure these values using the prices of a base year.
- Real GDP statistic, it controls for inflation by adding up all the goods and services produced in an economy using the same set of prices over time. The same set of prices.
- Real GDP tells us - if the prices of goods and services hadn't changed, how much would GDP have increased, or decreased?

Practice problem, part 1

	2006		2007		2008	
	P	Q	P	Q	P	Q
good A	$30	900	$31	1,000	$36	1,050
good B	$100	192	$102	200	$100	205

- Compute nominal GDP in each year.
- Compute real GDP in each year using 2006 as the base year.

Answers to practice problem, part 1

nominal GDP *multiply Ps & Qs from same year*

2006: $\$46,200 = \$30 \times 900 + \$100 \times 192$

2007: $51,400

2008: $58,300

real GDP *multiply each year's Qs by 2006 Ps*

2006: $46,200

2007: $50,000

2008: $\$52,000 = \$30 \times 1050 + \$100 \times 205$

Real GDP controls for inflation

Changes in nominal GDP can be due to:

- changes in prices.
- changes in quantities of output produced.

Changes in real GDP can <u>only</u> be due to changes in quantities,

because real GDP is constructed using constant base-year prices.

U.S. Nominal and Real GDP, 1950–2006