1. Gross Domestic Product and the Performance of the National Economy

Gross Domestic Product (GDP) is the market value of an economy's final products produced within its borders over a period of one year.

- *Final products are goods and services that are sold for final use, and won't be resold or used as material or services that are included in the value of other products.*
- *Intermediate products are those produced for resale or for use as materials or services that will be included in the value of resold goods. GDP includes only the value added to intermediate products.*

Value added is the extra worth a business firm adds to intermediate products

Total value added in a nation
is the difference between
the market value of all products of business firms and
the market value of all intermediate products

Box 1. Computing Value Added

Box 1 **Computing Value Added**

Sales transactions	Intermediate purchases	Value added (Sales receipts- Intermediate purchases)
1. $1 million sale of cotton by farmers to weavers	None	$1 million
2. $2 million sale of cloth by weavers to manufacturer of blue jeans	$1 million of cotton	$1 million
3. $4 million sale of blue jeans by blue jean manufacturer to consumers	$2 million of cloth	$2 million

Market value of all products	–	Market value of intermediate products	=	Total value added
$7 million	–	$3 million	=	$4 million

Nominal GDP vs. Real GDP

- *Nominal GDP is current output valued at current prices = P_iQ_i = $14,264 billion in 2008. Changes in either prices or output will change nominal GDP.*
- *Real GDP is an estimate of the value of a nation's output adjusted for changes in the price level since a base year (2000, in the U.S.). Changes in real GDP reflect changes in output. Real GDP in 2008 = $11,652 billion.*

Calculating Real GDP

- *Step 1: Current output is valued both at current prices and at last year's prices.*
- *Step 2: The growth of GDP is calculated using both current year and past year prices.*
- *Step 3: The growth rates are averaged to compute a chain-weighted index for each year with 2000 = 100.*
- *Step 4: 2000 nominal GDP is multiplied by the index to approximate real GDP valued at "chained" 2000 dollars.*

What are not included in GDP

- *Nonmarket production*
- *The value of leisure*
- *Cost of environmental damage*
- *The underground economy*

Expenditure Components of GDP

GDP can be divided into major types of expenditures:

- *C = personal consumption expenditures*
- *I = gross private domestic investment*
- *G = government purchases*
- *NE = net exports (Exports – Imports)*
- *GDP = C + I + G + NE*

Personal consumption expenditures

Are purchases of final products (except new homes) by households and individuals

Durable goods

Are items that last for a number of years

Nondurable goods

Are items that consumers use up soon after purchase

Gross private domestic investment

Includes purchases of new machinery, equipment, and structures by businesses, purchases of new homes by households, and the change in business inventories during the year.

Depreciation (also consumption of fixed capital)

Is an estimate of the value of capital goods that wear out or become obsolete during the year

Net private domestic investment is gross investment less depreciation

Government purchases

Include expenditure on final products of business firms and all input costs, including labor costs

Transfer payments are payments for which no good or service is currently received in return

GDP = Aggregate Income

- *Whatever is spent on domestic production ends up as domestic income—compensation of employees, interest, rent, depreciation, profit.*
- *Aggregate expenditure covers the cost of producing products and the profit of sellers.*
- *When real GDP goes up, so does real aggregate income.*