

**Lecture 2:
National Income Accounting
Reference - Chapter 5**

LEARNING OBJECTIVES

- 5.1 What gross domestic product (GDP) is, and how to measure it.
- 5.2 Other measures of a nation's production of goods and services.
- 5.3 The distinction between nominal GDP and Real GDP
- 5.4 The shortcomings of GDP as a measure of domestic output and well-being.

NATIONAL INCOME ACCOUNTING

National income accounting is the technique used to measure the overall production of the economy and other related variables for the nation as a whole.

GROSS DOMESTIC PRODUCT (GDP)

GDP is the total market value of all final goods and services produced in a given year within the boundaries of a country.

- Japanese-owned factory in ON
- It is a monetary measure of the output of a nation

Three Approaches to Measure GDP

- 1) Product Approach or Value Added Approach
- 2) Expenditures Approach
- 3) Income Approach

1) Product or Value Added Approach

The product approach defines a nation's GDP as the market value of final goods and services newly produced within a nation during a fixed period of time.

- Example: 3 sofas (\$500 each) and 2 PCs (\$2000 each) versus 2 sofas and 3 PCs
- Avoid Multiple Counting
- Include only *final goods* and ignore *intermediate goods* altogether
- *Intermediate goods* are goods and services that are purchased for resale or for further processing or manufacturing.

- *Final goods* are goods and services that are acquired for final use by the purchaser, and not for resale or for further processing or manufacturing.
- Avoid Multiple Counting by measuring and cumulating only the *value added* at each stage.
- *Value added* is the market value of the product sold by a firm, less the value of the products purchased and used by the firm to produce the product.
- Example: Table 5-2
- GDP Excludes Non-Production Transactions
 - 2) Financial Transactions
 - Public Transfer Payments
 - Private Transfer Payments
 - Stock-market Transactions
 - 2) Second-Hand Sales

2) Expenditures Approach

The expenditures approach defines GDP as the sum of all the money spent in buying final goods and services.

$$\begin{aligned} - \text{GDP} = & \text{Consumption (C)} + \\ & \text{Gross Investment (Ig)} + \\ & \text{Government Purchases (G)} + \\ & \text{Net Exports (Xn)} \end{aligned}$$

- Example: For Canada in 2002

$$\text{GDP} = \$656.2 + 196.8 + 251.6 + 50.3 = 1154.9$$

Personal Consumption Expenditures (C)

C are the expenditures of households for durable and non-durable consumer goods and services.

Gross Investment (Ig)

Ig are the expenditures for newly produced capital goods and for additions to inventories.

- 1) All final purchases of machinery, equipment, and tools by businesses
- 2) All construction (residential construction as well as the construction of new factories, warehouses, and stores)
- 3) Changes in inventories
 - Increases in inventories (unsold goods) are considered to be investment because they are unconsumed output.
 - Positive and negative changes in inventories
 - Positive inventories mean more output produced than was purchased, vice versa.

- Non-investment transactions- transfer of paper assets (stocks, bonds) or resale of tangible assets (houses, jewellery, boats). Investment has to do with the creation of new, physical capital assets – assets that create jobs and income. The transfer (sale) of claims of existing capital goods does not create new capital.
- Gross investment includes investment in replacement capital and in added capital.
- Net investment= Gross Investment-
Depreciation
- Capital consumption allowance or depreciation is the amount of capital that is used up (consumed) in producing the GDP.

Government Purchases (G)

G are the expenditures for goods and services that government consumes in providing public services.

- include all government expenditures on final goods, investment goods, and all direct purchases of resources, including labour.
- does not include government transfer payments.

Net Exports (Xn)

Net Exports (Xn) = Exports (X) –
Imports (M)

-GDP records all spending on goods and services produced in Canada, including spending on Canadian output by people abroad (exports).

- Canadians spend a great deal of money on imports- goods and services produced abroad. That spending shows up in some other nation's GDP. So, we must subtract the value of imports from GDP to avoid overstating total production in Canada.
- In 2002, net exports were a positive \$50.3 billion.