

The National Income and Product Accounts and Relation to Consumption and Income

THE ECONOMY

The economy produces goods and services. There are three categories of goods and services: consumption, investment and intermediate.

People consume consumption goods and services. If consumed by an individual household, it is private consumption. If consumed collectively, it is public (or government) consumption.

Investment (or capital) goods are durable and enhance future production possibilities. They are valued because they make possible greater future production and therefore consumption.

Intermediate goods and services are produced and used up by businesses in the period they are produced.

Final goods and services are consumption goods and services and investment (capital) goods. Final good output is used to judge the current performance of the economy.

NATIONAL PRODUCT ACCOUNT

Definition: Gross National Product (GNP) is the value of all final goods (and services).

Definition: The final goods are the consumption and capital (investment) goods produced.

Categories of final goods reported in National Product Account:

	Accounting Category	Theory Category
Personal Consumption Expenditures: <ul style="list-style-type: none"> • Durable goods • Non-durable goods • Services 	C	I C C
Gross Private Domestic Investment	I	I
Net Exports	NE	I
Government Purchases: <ul style="list-style-type: none"> • Public Consumption* • Public Investment* 	G	C I
*new in US NIPA		

Question: What is the difference between GNP and GDP?

Answer: $GNP = GDP + \text{Net receipts of factor income from the rest of the world.}$

Question: What is the distinction between nominal and real variables?

Answer: For nominal values, current period prices are used to value current output. For real values, base year prices are used to value current output.

BUSINESS TRANSACTIONS – Production Side

Sales from firm A to firm B are either intermediate goods/services or investment.

- Investment if durable (e.g. factory, machine)
- Intermediate if used up in the current period's production

Examples:

- Computer (investment good)
- Desk (investment good)
- Car bought for firm use (investment good)
- Car leased by a firm for its sales force (intermediate service)
- Pencils (intermediate good)

NATIONAL INCOME ACCOUNT

Definition: Value added by a business (firm) is the value of production minus the value of intermediate goods used up. The sum of value added in the economy is equal to its national product.

Proposition: Total value added equals GNP.

Exercise: Show that, if two firms are consolidated, value added by the consolidated firm is equal to the sum of value added by the two individual firms.

Definition: Aggregate income is the sum of claims against the value added by businesses.

Therefore, by definition,

$$\text{Income} = \text{Product}$$

Reason: Every business has a residual claimant. The claim of residual claimant is value added by that business less the claims of the other claimants. For a corporation, the

residual is corporate profits. For an unincorporated business, the residual is proprietors' income. For an owner occupied dwelling, the owner is treated as a business that rents the dwelling to the owner. The residual is rental income of the owners.

Major categories of claims against product listed in the National Income Accounts:

- Indirect Business Taxes (Property, Sales and Excise Taxes)
- Business Transfers
- Wages, Salaries, and other Compensation
- Profit of Government Enterprises less Subsidies
- Net Interest Income (Business Net Interest Payments plus Home Mortgage Interest Payments)
- Capital Consumption Allowances (Depreciation)
- Proprietors' Income
- Rental Income
- Corporate Profits

NOTE: The sum of the above categories is equal to GNP.

BUSINESS TRANSACTIONS – Income Side

A prime source of national income data is the profit and loss statements of businesses.

Profit and Loss Statement of a Business:

For every firm,

Sales - Intermediate good purchases = Value Added (VA)

Components of Value Added:

- Depreciation
- Net Interest Payments
- Property, Sales and Excise Taxes
- Wages, Salaries and other Compensation
- Business Transfers (Mostly bad debt)
- Profit Residual

NOTE: This residual has different names depending on the nature of the business. It is called corporate profits if the business is incorporated, proprietors income if unincorporated, profit of government enterprise if government, and rental income in the case of owner occupied housing.

OWNER OCCUPIED HOUSING

NOTE: Owner occupied housing is a special case and is treated as a business.

Rents (imputed, this is part of consumption)

- Intermediate goods (e.g. maintenance)

= Value Added (VA)

Components of Value Added:

- Depreciation
- Mortgage Interest Payments (Net Interest)
- Property Taxes
- Wages, Salaries, and other Compensation (If any)
- Residual (Rental Income)