

## Macroeconomic Definitions -- Dr. Tom McGahagan -- Spring 2005

### I. NATIONAL INCOME AND PRODUCT ACCOUNTS

1. **NIPA** - the set of National Income and Product Accounts produced by the Bureau of Economic Analysis of the Department of Commerce, and published on their website (bea.doc.gov)

2. **National income** - the sum of all incomes earned from current production of goods and services, including wages, profits, rents, and interest payments. Does not include transfer payments such as Social Security or unemployment.

3. **Personal income** - that part of national income received by persons. This measure excludes the retained earnings of corporations.

4. **Disposable personal income** - After-tax personal income.

5. **Circular flow model** - a model of the economy which stresses the flow of goods from firms to households, and the flow of productive services from households to firms. Payment for those goods and services flows in the opposite direction.

The simplest version of the model incorporates only goods markets and factor markets. Households make **CONSUMPTION EXPENDITURES** on the goods they purchase from firms, firms make **FACTOR PAYMENTS** for the productive services they receive from households. Since factor payments are another term for income, and since consumption expenditures are the firms' only source of revenue, the model shows that **EXPENDITURE = INCOME**. More elaborate versions of the model include financial markets, government and international markets.

6. **Product accounts**. Since expenditure on products is equal to income, keeping track of what is produced and sold should give the same result as adding up incomes. All product accounts try to give a picture of the production of final goods and services produced during the current year. None counts financial transactions or the sale of previously produced goods.

7. **Final goods and services**: goods produced for sale to those who will actually consume them. Excludes **INTERMEDIATE GOODS**, or goods used in the production of other goods, as wheat is used in the production of bread, or steel in the production of automobiles. To count both intermediate and final goods in the product accounts would be **DOUBLE COUNTING**.

8. **Gross Domestic Product**. The sum total ("gross") of the market value of all goods and services produced within the borders ("Domestic") of a country during a given year.

9. **Gross National Product**. The sum total the market value of all goods and services produced by factors of production whose owners are of the same nationality ("National") during a given year.

Note: **GDP and GNP**: the difference between the two reflects the fact that location and ownership will be different in the case of multinational companies or expatriate workers. The product of the Honda plant in Ohio is all counted as part of US GDP, but because the Japanese owners of the plant provide the capital equipment, the part of the output due to capital services is part of Japanese Gross National Product.

10. **Net National Product**. Gross National Product less ("net of") depreciation.

11. **Depreciation.** The wearing out of capital equipment (machinery, computers, etc.)

12. **National Income.** Net National Product minus indirect taxes such as sales and excise taxes will equal National Income as the sum of all factor incomes except for errors in measurement ("**statistical discrepancy**").

However measured, National Income gives a measure of how much is added to the NATIONAL WEALTH in any given year.

13. **National Wealth.** The stock of assets, real and financial, owned by the citizens of a nation.

**Real assets** include homes, automobiles, factories and the machinery used in factories. **Financial assets** include bonds, stocks and bank accounts. Note that in calculating the national wealth, financial assets would sum to zero in a closed economy, since for every financial asset there is an equal and opposite financial liability -- if one person owns a bond, the corporation that issued the bond has the liability to pay.

14. **Stock and flow.** A stock, such as National Wealth or the stock of real capital, is measured at one point in time but built up over a long period of time. A flow is a yearly addition to or subtraction from stock -- National Income is the flow corresponding to National Wealth; investment and depreciation are the flows corresponding to the capital stock.

15. **GDP and GNP components.** The equation for either GDP, GNP or NNP may be written as:

$$\text{GDP} = \text{PCE} + \text{GPDI} + \text{GOVT} + \text{NX}$$

$$\text{GDP} = \text{Consumption} + \text{Investment} + \text{Government Spending} + \text{Net Exports}$$

Note that both GDP and GNP include Net Exports (Exports minus Imports)

The difference between the two relates to incomes earned abroad by multinational companies or workers working abroad, not to whether or not goods cross international boundaries.

GDP and GNP measure investment as gross or total investment, whereas NNP measures investment as net investment or gross investment minus depreciation.

16. **Consumption** (PCE or Personal Consumption Expenditures) is expenditure on durable or non-durable goods or services by consumers.

**Durable goods** include automobiles, refrigerators and TV sets; **non-durable goods** include food and clothing and notebook paper; **services** include medical care, education, banking, retail store services and restaurant meal preparation.

17. **Investment (GPDI or Gross Private Domestic Investment)** is an addition to the **real capital stock** of the country. It does not include "financial investment." The three main types are: **investment in plant and equipment**, **investment in housing** and inventory investment. **Inventory investment** ("Change in Business Inventories" or CBI for short) can be either **voluntary** (businesses add to their inventory in anticipation of increased sales) or **involuntary** (businesses fail to sell as much as they had planned and the unsold goods are added to inventory).

18. **Net exports** are exports minus imports. We also speak of international **account balances**, such as the

- Balance on merchandise trade (goods only)
- Balance on goods and services.
- Net income payments (includes the profits of multinational corporations and the incomes of individuals working abroad; part of GNP but **not** of GDP).

The **Current Account** includes all of the above; it is also referred to as the balance on goods, services and income.