Measurement of National Income

A variety of measures of national income and output are used in economics to estimate total economic activity in a country or region, including gross domestic product (GDP), gross national product (GNP), net national income (NNI), and adjusted national income (NNI* adjusted for natural resource depletion). All of the measures are especially concerned with counting the total amount of goods and services produced within some boundary. The boundary is usually defined by geography or citizenship, and may also restrict the goods and services that are counted. For instance, some measures count only goods and services that are exchanged for money, excluding bartered goods, while other measures may attempt to include bartered goods by imputing monetary values to them.

Arriving at a figure for the total production of goods and services in a large region like a country entails a large amount of data-collection and calculation. Although some attempts were made to estimate national incomes as long ago as the 17th century, the systematic keeping of national accounts, of which these figures are a part, only began in the 1930s, in the United States and some European countries. The impetus for that major statistical effort was the Great Depression and the rise of Keynesian economics, which prescribed a greater role for the government in managing an economy, and made it necessary for governments to obtain accurate information so that their interventions into the economy could proceed as well-informed as possible .

$$\mathrm{GDP} = C + I + G + (\mathrm{X} - M)$$

Expenditure approach

The expenditure approach is a common method for evaluating the value of an economy at a given point in time.

Measuring National Income

In order to count a good or service, it is necessary to assign value to it. The value that the measures of national income and output assign to a good or service is its market value – the price when bought or sold. The actual usefulness of a product (its use-value) is not measured – assuming the use-value to be any different from its market value. Three strategies have been used to obtain the market values of all the goods and services produced: the product or output method, the expenditure method, and the income method.

Product or Output Method

The output approach focuses on finding the total output of a nation by directly finding the total value of all goods and services a nation produces:

At factor cost = GDP at market price - depreciation + NFIA *(net factor income from abroad)* - net indirect taxes

Income Method

The income approach equates the total output of a nation to the total factor income received by residents or citizens of the nation:

NDP at factor cost = compensation of employees + net interest + rental and royalty income + profit of incorporated and unincorporated NDP at factor cost

Expenditure Method

The expenditure approach focuses on finding the total output of a nation by finding the total amount of money spent and is the most commonly used equational form:

GDP = C + I + G + (X - M); where C = household consumption expenditures / personal consumption expenditures, I = gross private domestic investment, G = government consumption and gross investment expenditures, X = gross exports of goods and services, and M = gross imports of goods and services.

Source: Boundless. “National Income.” *Boundless Economics* Boundless, 26 May. 2016. Retrieved 15 Feb. 2017 from https://www.boundless.com/economics/textbooks/boundless-economics-textbook/measuring-output-and-income-19/other-measures-of-output-93/national-income-353-12450/