

Chapter 24: Measuring Domestic Output and National Income

With so many moving parts in our national economy, how can we possibly measure its overall performance? National income accounting provides a series of statistics we can use to assess multiple aspects of the national economy. Chapter 24 explains the detailed calculation of GDP, as well as several other measures of economic performance, which provide the data necessary for potential stabilization decisions.

Gross Domestic Product (GDP) is the primary measure of a nation's macroeconomic performance, so it is important to understand how GDP is calculated and to address cautions in its use. GDP is the value of all final products produced in a country in one year. GDP focuses on production within the United States, regardless of where in the world the company's headquarters are located, so Toyotas produced in the United States are counted in the GDP of the United States, not Japan. GDP does *not* include intermediate goods, purely financial transactions, secondhand sales, household production (cooking one's own food, mowing one's own yard), or illegal activity.

GDP can be calculated via two different approaches. The expenditure formula is: $GDP = C + I + G + X_n$. The consumer sector (C) represents purchases by households, representing about 70% of all consumption in the economy. The investment sector (I) includes business purchases of equipment, all construction, and inventories. Investment is particularly important because if investment is less than depreciation, capital stock will fall, hurting future economic growth. The government sector (G) includes government purchases and investment (as in libraries), but does not include transfer payments such as Social Security checks (because they will be counted when spent by households). Net exports (X_n) are calculated by the formula: Exports – Imports. Because the United States imports significantly more than it exports, the foreign sector is a negative number. GDP can also be calculated from an income approach: $GDP = \text{Wages} + \text{Rents} + \text{Interest} + \text{Proprietors' Income} + \text{Corporate Profits}$. If we had accurate numbers, GDP calculated from either approach would be equal, because one person's spending is income to someone else.

Because nominal GDP measures the economy in current dollars, increases in nominal GDP result partly from increases in production and partly from inflation. Adjustments must be made to compensate for inflation if we want to compare GDP over different periods of time. By constructing a price index and removing the effects of inflation from nominal GDP, we find the real GDP. Real GDP measures output in different years in the same value of dollars, so that actual output can be compared.

While GDP is a good measure of economic performance, it has shortcomings. Household production and the underground economy are not counted. The value of leisure, improvements in product quality, and externalities are not considered. GDP also does not address the composition of the economy; if most output benefits the government sector, consumer standards of living may be low.

Other measures of national income give us different views of economic performance. Net domestic product adjusts GDP for depreciation, giving us an indication of our capacity for future production. Disposable income (personal income minus taxes) tells us how much income households have available to buy goods and services. National income and personal income are also measures of economic performance, but the focus of AP Macroeconomics Exam questions is nominal and real

GDP, with an occasional net national product or disposable income question or reference.

Material from Chapter 24 is very likely to appear in a few multiple-choice questions and has occasionally appeared as a free-response question on the AP Macroeconomics Exam. It is important to know how to calculate nominal and real GDP from both approaches, to identify what is not counted in GDP, and to identify the purpose and uses of GDP.