

Fed Challenge Brief:

Gross Domestic Product (GDP)

Overview

Purpose: Providing reliable, consistent data on the overall income and production of the US economy.

Gross Domestic Product

Defined as the market value of current, final, domestic production during a specific interval of time.

Today, estimates extend as far back as 1929.

History of the National Income and Product Accounts:

Other nations compiled production estimates before the US began doing so, primarily to study the effects of fiscal policy.

The period of time between WWI and WWII marked a major effort to measure national income for several reasons:

- Keynes's *The General Theory of Employment, Interest, and Money* heightened interest in fiscal activities
- The Depression focused attention on the macroeconomy.
- Easier access to data facilitated governmental ability to collect national income and product accounts.

How are they compiled today?

Prepared quarterly by: Bureau of Economic Analysis (BEA)

Compiled from sources such as tax returns, labor and price data, and Census Bureau information.

Cautions with Interpretation:

GDP is not designed to measure economic welfare – The NIPA measure only income, production, and spending – not the nation's economic well-being. Some items included in GDP do not affect individual welfare; other items that affect economic welfare are not included.

GDP definitions should be examined closely – The products in NIPA data series are limited by very particular definitions. If cited, one should make sure that such definitions are appropriate for the particular study.

Real vs. nominal depends on accurate price data – The differences between nominal and real GDP depend on price data whose quality, integrity, and applicability can be problematic.

Data used for GDP come to BEA from other government agencies – BEA compiles a tremendous amount of data, much of it from government sources, to calculate GDP. Some data may be inaccurate or not well-suited for the NIPA.

Use caution when citing preliminary and advance reports – To release timely estimates of data, BEA is often forced to extrapolate from past data and make estimates that are revised in subsequent reports.

GDP – Two Approaches

Every financial transaction entails an expenditure for the buyer and equivalent revenue for the seller. Thus, *national spending (GDP) and national income are theoretically equal*. National income data and spending data (GDP) data are not exactly equal because data collection and compilation are imperfect.

GDP (Income Approach)

Measuring output from the income (revenue) side:

Compensation of Employees – employee compensation takes many forms. Included are wages, salaries, fringe benefits (which are difficult to measure), employer payments to social security, and unemployment insurance taxes.

Profits – measured using corporate tax returns. Includes income made by the Federal Reserve (counting its payments to the US Treasury as corporate tax payments.) Depreciation and inventories can complicate accurate measurement.

Other forms of income – includes income from assets such as non-incorporated businesses like partnerships, rental income, and royalties. Interest income is included as well.

Non-income items – accounts for items such as indirect taxes and state and local taxes

GDP (Expenditures) Approach:

Measuring output from the expenditure side:

Gross Domestic Product - the market value of current, final, domestic production during a specific interval of time.

Gross – implies that what is measured is the total amount of output, regardless of the existing stock of past outputs (without considering depreciation). For example, some of what is produced in an economy is used to replace capital that has been destroyed or worn out in the actual production. Measures for *Net Domestic Product* are available, but are not widely used as calculating NDP requires further estimation.

Domestic – output is measured for all production within national borders, regardless of foreign ownership within the country or domestic ownership of foreign capital.

Value – the amount of money actually paid for the transactions that occur during the given period. Sometimes it is difficult to obtain a *market price*. For example, it is difficult to objectively value the military or the environment. The BEA makes estimates using available data, such as supply costs.

Current – production is measured during a set period of time.

Final – sales of good in the intermediate stages of production are disregarded to help avoid double counting.

Calculating Total Spending: $C+I+G+(X-N) = Y$

Consumption Spending + Investment Spending +
Government Spending + (Exports – Imports) = GDP