

Gross Domestic Product as a Measure of U.S. Production

Beginning with the upcoming comprehensive revision of the national income and product accounts (NIPA's), BEA will feature gross domestic product (GDP), rather than gross national product (GNP), as the primary measure of U.S. production. This change in emphasis recognizes that GDP is more appropriate for many purposes for which an aggregate measure of the Nation's production is used. GNP will remain a key aggregate in the NIPA's and will continue to be published regularly.

How do the GDP and GNP concepts differ?

Both GDP and GNP are defined in terms of goods and services produced, but they use different criteria for coverage. GDP covers the goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the suppliers (that is, the workers and, for property, the owners) may be either U.S. residents or residents of the rest of the world. GNP covers the goods and services produced by labor and property supplied by U.S. residents. As long as the labor and property are supplied by U.S. residents, they may be located either in the United States or abroad.

As shown in table 1, to move from GNP to GDP one must subtract factor income receipts from foreigners, which represent the goods and services produced abroad using the labor and property supplied by U.S. residents, and add factor income payments to foreigners, which represent the goods and services produced in the United States using the labor and property supplied by foreigners. Factor incomes are measured as compensation of employees, corporate profits (dividends, earnings of unincorporated affiliates, and reinvested earnings of incorporated affiliates), and net interest.

Why feature GDP?

GDP refers to production taking place in the United States. It is, therefore, the appropriate measure for much of the short-term monitoring and analysis of the U.S. economy. In particular, GDP is consistent in coverage with indicators such as employment, productivity, industry output, and investment in equipment and structures.

In addition, the use of GDP facilitates comparisons of economic activity in the United States with that in other countries. GDP is the primary measure of production in the System of National Accounts, the set of international guidelines for economic accounting that the U.S. economic accounts will be moving toward in the mid-1990's, and virtually all other countries have already adopted GDP as their primary measure of production. Canada, for example, began featuring GDP in 1986.

The emphasis on GDP is consistent with measurement considerations. Data from BEA's direct investment survey, which is one of the primary sources for estimating factor income payments and receipts, are not available for the first two of the three quarterly estimates of GNP. For these two estimates, factor income payments and receipts are based on judgments about trends in the pace of economic activity in the United States and abroad and about the value of the dollar in foreign countries, on announced profits of individual companies, and on other information. Even when all of the source data become available, BEA does not have the information needed to make a full set of adjustments to reflect the concepts underlying the NIPA's. For example, the profits of foreign affiliates do not include inventory valuation and capital consumption adjustments, and they are affected by intracompany transfer prices and exchange rates. In addition, the deflation of current-dollar factor incomes is problematic because incomes such as interest and dividends cannot be separated into price and

quantity components. Lacking a component-specific deflator, BEA uses the implicit price deflator for net domestic product to derive constant-dollar estimates.

GNP, however, continues to be a useful concept. Because it refers to the income available to U.S. residents as the result of their contribution to production, it is appropriate for analyses related to sources and uses of income. For example, saving rates are normally expressed as a percentage of income, and GNP is the more appropriate measure for this purpose. In addition, GNP is better than GDP for analyses that focus on the availability of resources, such as the Nation's ability to finance expenditures on education.

How much do the estimates of GDP and GNP differ?

For the United States, the dollar levels of GDP and GNP differ little—that is, the net receipts (receipts from foreigners less payments to foreigners) of factor income have been small (tables 1 and 2). The main reason is that the value of the property owned abroad by U.S. residents (U.S. investment abroad) less the value of the property owned by foreigners in the United States (foreign investment in the United States) has been small relative to the size of the U.S. economy. (The value of labor supplied to, and by, foreigners is even smaller.) Since 1929, the receipts by U.S. residents from their investments abroad have exceeded payments to foreigners for their investments here, so GNP has been larger than GDP. The largest percentage difference, 1.8 percent, was in 1980. In 1990, GNP was 0.8 percent larger than GDP.

In some countries, the difference between GDP and GNP is much larger. For example, there is much more foreign investment in Canada than Canadian investment abroad; consequently, its GNP was 3.6 percent smaller than its GDP in 1990. However, the difference in France, Japan, the United Kingdom, and several other industrialized countries is now similar, at 1 percent or less, to that in the United States.

Although the differences between the dollar levels of U.S. GNP and GDP are small, their growth rates sometimes differ. Table 2 shows that the annual growth rate of real GNP was slightly less than that of real GDP in most years of the 1980's. Differences between quarterly growth rates tend to be larger and to fluctuate more.

How will BEA's presentations differ?

Although BEA will continue to publish GNP, the emphasis on GDP will change some of the NIPA tables. The several tables that now show GNP and its components will show GDP, with the components adjusted accordingly. For example, in the tables showing GNP as the sum of personal consumption expenditures, gross private domestic investment, net exports of goods and services, and government purchases of goods and services (NIPA tables 1.1 and 1.2), net exports will be adjusted to exclude factor income.

The "Business Situation," the lead article in BEA's SURVEY OF CURRENT BUSINESS, will feature GDP in its analyses of the first two of the three quarterly NIPA estimates. For the third estimate, the article will discuss both GNP and GDP.

Table 1.—Relation of GNP and GDP

| | 1990 | |
|----------------------------------------------|--------------------|--------------------------|
| | Billion of dollars | Billions of 1982 dollars |
| GNP | 5,465.1 | 4,157.3 |
| Less: Factor income receipts from foreigners | 137.4 | 102.2 |
| Plus: Factor income payments to foreigners | 95.7 | 70.3 |
| GDP | 5,423.4 | 4,125.4 |

1. From tables 4.1 and 4.2 of the "Selected NIPA Tables." Factor income receipts less factor income payments equals rest-of-the-world (ROW) product, shown in tables 1.7 and 1.8. ROW product can also be derived, using estimates in the full set of NIPA tables, as the sum of ROW compensation of employees (table 6.4B), ROW corporate profits (table 6.18 B), and ROW net interest (table 6.17B).

2. From tables 1.7 and 1.8 of the "Selected NIPA Tables."

Table 2.—Differences Between GNP and GDP

| Year or quarter | GNP less GDP (Billions of dollars) | GNP less GDP, as a per cent of GDP | Growth rate of GNP less growth rate of GDP, based on 1982 dollars (Percentage points) |
|-----------------|------------------------------------|------------------------------------|---------------------------------------------------------------------------------------|
| 1980 | 47.6 | 1.8 | 0 |
| 1981 | 52.1 | 1.7 | -1 |
| 1982 | 51.2 | 1.6 | 0 |
| 1983 | 49.9 | 1.5 | -1 |
| 1984 | 47.4 | 1.3 | -2 |
| 1985 | 40.7 | 1.0 | -2 |
| 1986 | 34.4 | .8 | -2 |
| 1987 | 29.0 | .6 | -2 |
| 1988 | 33.5 | .7 | -1 |
| 1989 | 37.6 | .7 | 0 |
| 1990 | 41.7 | .8 | .1 |
| 1990: I | 41.6 | .8 | -1 |
| II | 31.6 | .6 | -8 |
| III | 42.9 | .8 | .7 |
| IV | 50.8 | .9 | .5 |
| 1991: I | 54.8 | 1.0 | .2 |
| II | 42.4 | .8 | -9 |

1. Percent changes in GNP and GDP are found in table 8.1 of the "Selected NIPA Tables."

NOTE.—The quarterly estimates are based on seasonally adjusted annual rates.