



Q&A's on Gross Domestic Product and Outsourcing

Questions about the magnitude of foreign outsourcing have caused some to suggest that imports of services may be understated and growth in gross domestic product (GDP) overstated. Some have pointed to alternative measures of output that suggest less rapid economic growth than exhibited by the GDP estimates. These include (1) slower growth in gross domestic income (GDI), which is conceptually identical to GDP, but is based on measures of the incomes derived from production while GDP is based on measures of final expenditures, and (2) slower growth in the industrial production index (IPI), which is published by the Federal Reserve Board, than in GDP goods, which is published by BEA.

Q1. What do we know about the accuracy of GDP?

A1. Early vintages of the GDP estimates are based on partial and incomplete source data. Subsequent GDP estimates incorporate increasingly comprehensive and improved source data. Periodically, BEA conducts studies of reliability. In these studies, reliability is defined as whether the successive vintages of GDP estimates present a consistent, general picture of the economy. The most recent reliability study found (as have previous studies) that the early estimates of GDP present a useful picture of economic activity. They consistently indicate whether growth is positive or negative, whether growth is accelerating or decelerating, whether growth is high or low relative to the trend, and where the economy is in relation to the business cycle. In addition, the latest study found that the average revisions to GDP are small and positive, indicated a tendency toward upward revisions, and found that the GDI estimates have not contained information that would have improved the prediction of future revisions to GDP growth. For other key findings of the study, click [here](#).

Q2. Is there evidence that GDP is overstated because imports are mismeasured?

A2. GDP is calculated as domestic spending plus exports less imports. If imports are understated, this would result in an overstatement of GDP. Conversely, if exports are understated, this would result in an understatement of GDP. Although evidence from studies by the Government Accounting Office and the International Monetary Fund, as well as from bilateral studies, suggest that both imports *and* exports of goods and services may be mismeasured, there are no reliable estimates available to adjust the international trade estimates. There is also no evidence of a systematic bias in the resulting estimates of net exports in GDP.

Q3. In the national income and product accounts (NIPAs), growth in real imports of services has been slowing since 2000, and 2003 showed no growth. Yet, we know that outsourcing has been growing dramatically. Does this imply that the NIPAs are failing to capture the effects of outsourcing?

A3. The NIPA component that is most relevant to outsourcing is imports of “other private services,” which includes business, professional, and technical services ([NIPA Table 4.2.6](#)). Separate estimates of real spending in this subcategory are not available, but nominal spending on business, professional, and technical services rose 14 percent in 2003, after rising at an average rate of 4 percent over the preceding 3 years ([Balance of Payments Table 3](#)). Despite this growth, the overall size of imports of business, professional, and technical services remains small, and growth in this component was more than offset by continued post-September 11th declines in travel abroad, the largest single category of services imports, and slowing growth in insurance services. In 2003, real travel imports fell 9 percent.

Q4. How do the IPI and the gross domestic product GDP compare conceptually?

A4. The IPI is a monthly series that measures output in manufacturing, mining, and electric and gas utilities. Individual indexes of industrial production are constructed from two types of source data: (1) output measured in physical units and (2) inputs used in the production process (e.g., production-worker hours). GDP is a quarterly series that measures the market value of the goods and services produced by labor and property located in the United States. The aggregate GDP measure that corresponds most closely to the IPI is a GDP for goods measure that consists of durable and nondurable goods within personal consumption expenditures, fixed investment, change in private inventories, and net exports. GDP values production in terms of *purchasers’ prices*, the final prices paid by consumers and by other final-demand sectors. The IPI values production in terms of *producers’ prices* paid to manufacturers by wholesalers, by retailers, and, in the case of direct sales, by consumers. These differences may explain some of the discrepancies between the growth in the IPI versus the growth in GDP goods because, for recent periods, much of the growth in GDP goods has been in the retail trade and wholesale trade industries rather than in the goods-producing industries. For example, in 2003, retail trade industries grew 5.0 percent, whereas, goods-producing industries (measured in producers’ prices) grew 1.1 percent (GDP by Industry).

Q5. How do the source data and estimating methods compare for estimating the IPI and GDP for goods?

A5. For current periods, GDP goods estimates primarily reflect monthly Census source data ([GDP methodologies and source data](#)), while the IPI estimates reflect a mix of energy use, tons of materials shipped, and employment indicators. For historical periods, both the IPI and GDP goods reflect more of the same Census source data (e.g., the Annual Survey of Manufactures). As a result, differences in the movements of the two series for current periods tend to diminish when examining historical periods.