



R&D in the U.S. National Income and Product Accounts

Comprehensive revision of the U.S. gross domestic product (GDP) and related national income and product accounts (NIPA), released by the Bureau of Economic Analysis (BEA) in July 2013, included a change to treat R&D as a fixed investment with long-term benefits. R&D investment is now recognized in NIPA in a new asset category called “intellectual property products,” or intangible assets, along with software and entertainment, literary, and artistic originals. Before this change, the NIPA considered R&D as an expense or intermediate input cost in the business sector and as consumption in the government and nonprofit sectors (BEA 2013). This update is one of several NIPA changes aimed at capturing the role of intangible assets in economic growth. (BEA’s comprehensive updates occur about every 5 years—the most recent of which was the aforementioned July 2013 update. However, there have also been annual updates since July 2013, each of which has affected GDP and related data for the most recent years.) The National Center for Science and Engineering Statistics (NCSES) surveys of U.S. R&D expenditures serve as the primary data source for the R&D component of these revisions. (For a further discussion, see Moris et al. [2015].)

As a part of these July 2013 revisions, BEA provided a revised time series for GDP and its components going back to 1929. After these comprehensive revisions, GDP levels are somewhat higher in this revised time series than previously reported. An implication is that the R&D-to-GDP ratios reported in past editions of *Science and Engineering Indicators* and related publications on U.S. R&D are somewhat smaller because of this higher reported GDP. For example, the U.S. R&D-to-GDP ratio for 2000, previously reported as 2.70%, is now 2.61% under the revised NIPA, or what was 2.84% in 2011 under the previous methodology is revised to 2.75%. The U.S. R&D statistics reported throughout in this chapter fully reflect BEA’s revised GDP data series from the July 2013 comprehensive update and subsequent annual updates.