Prototype Measures of Economic Well-Being and Growth

While the United States produces some of the most accurate, timely, and relevant sets of national economic accounts, in recent years there has been a renewed interest in economic statistics that build on GDP to better understand well-being. This includes better tracking and highlighting economic activity that is included in GDP—a key driver of economic well-being—and capturing nonmarket goods and services that are not included in GDP but are also important determinants of economic well-being.

BEA embarked on the GDP and Beyond initiative to identify ways to use its data resources and statistical knowledge to inform the discussion of well-being. As part of that initiative, BEA has re-packaged statistics from its core accounts with data from statistical agency partners in ways that provide new perspectives on economic well-being and the distribution and long-term growth of the economy. These measures include:

- Economic well-being measures like GDP per capita and inflation and employment trends.
- Distribution statistics such as real GDP growth by industry, real personal income per capita by state, and the distribution of personal income across households.
- Long-term growth indicators including trade balances, U.S. budget deficits over time, and trends in U.S. business cycles.

Spotlighting data that are already included in BEA’s datasets or that can easily be derived from existing statistics provides an expanded look at trends in economic well-being and the drivers of economic growth.

For more information on these prototype measures of economic well-being and growth and BEA’s broader GDP and Beyond Initiative, or to provide input into this project, see Background Materials and Feedback. Find open-source code and related documentation for these charts and tables in BEA’s GitHub repository.

These measures reflect data available at the time of the 2023Q2 “third” GDP release, including initial results of the 2023 Comprehensive Updates, published on September 28, 2023. Select BEA and partner agency information is currently unavailable. This information will be incorporated for the next release of the well-being measures planned for January 2024. For a snapshot of the missing content, see the archived June 2023 release of this product.
Real GDP and Real GDP Per Capita

While the growth and size of GDP are oft-cited measures of the nation’s economic health, they are not measures of economic well-being. A large and growing GDP may simply reflect a large and growing population. GDP per capita standardizes for population and is often used as a proxy for a nation’s standard of living.

Real—inflation-adjusted—GDP per capita has grown more slowly than real GDP, increasing 2.5 percent per year on average between 1947 and 1973, compared with 4.0 percent for real GDP. Over the last two business cycles, between 2007 and 2022, growth slowed with real GDP per capita increasing at 1.1 percent per year and real GDP growing at 1.8 percent per year.

Data. Real GDP and real GDP per capita, 1947–2022
Source. BEA NIPA table 1.1.6 and NIPA table 7.1
Although growth in U.S. GDP per capita has been slower in recent years than in earlier periods (see "Real GDP and Real GDP Per Capita" above), U.S. growth has exceeded growth in G-7 developed economies and is well above the growth in other select nations. As a result, U.S. GDP per capita remains amongst the highest in the world.

Data. GDP per capita for G-7 developed economies and selected other countries, 2007 and 2022
Source. BEA NIPA table 7.1, International Monetary Fund DataMapper
Real GDP per capita and real median personal income provide two different perspectives on economic growth. Real GDP per capita spreads total production across the entire population equally.

Alternatively, real median equivalized personal income—that is, adjusted for household size—provides an inflation-adjusted measure of total income received by the “middle” income household, whose income is below 50 percent of households and above the other 50 percent of households.

Real median personal income is a more appropriate gauge of how the U.S. economic pie is distributed because it focuses on how income accrues to households rather than on GDP, which is a measure of production.

For 2007–2021, real median equivalized personal income grew 1.8 percent per year, higher than the growth of 1.1 percent per year in real GDP per capita. The main driver of the difference in growth between the two measures was personal current transfer receipts, which impact personal income but not GDP. These receipts include benefits from programs like social security, Medicaid, and unemployment insurance.

Data: Real GDP per capita and real median equivalized personal income in 2017 dollars, 2000–2021
Source: BEA NIPA Table 7.1. BEA Distribution of personal income estimates
In addition to differences related to the concepts of "median" and "mean" and between GDP and personal income, there are other important conceptual differences between GDP per capita, median personal income, and other available measures of the distribution of income (like those produced by the Census Bureau).
One driver of the changing distribution of income is the movement in the share of labor income relative to capital income. “Capital income” refers to income arising from the use of fixed assets, such as property, plant, and equipment. After reaching 63 percent in 1970, labor’s share of income has generally declined, and in 2022 stood at 56.1 percent. Capital’s share of income increased from 37 percent in 1970 to 43.9 percent in 2022.
Select BEA and partner agency information reflecting the 2023 Comprehensive Updates will not be available until December 2023. This information will be incorporated for the next release of the well-being measures planned for January 2024. For a snapshot of the missing content, see the archived June 2023 release of this product.
Inflation, especially high and variable rates of inflation, can affect economic well-being, including eroding the real income and purchasing power of those on fixed incomes and more generally transferring income from debtors to creditors.

After a period of deflation during the Great Depression, inflation peaked in the immediate post-WWII era and later in the 1970s and 1980s. Since the mid-1990s, inflation has generally remained in the 2 percent range, low by historical standards; however, inflation was 4.2 percent in 2021 and 6.5 percent in 2022.

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Data. Percent changes in personal consumption expenditures (PCE) price index, 1930-2022
Source. BEA NIPA table 1.6.7
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State Comparison of Real Personal Income Growth and Real Income Per Capita

Select BEA and partner agency information reflecting the 2023 Comprehensive Updates will not be available until December 2023. This information will be incorporated for the next release of the well-being measures planned for January 2024. For a snapshot of the missing content, see the archived June 2023 release of this product.
Economists since Adam Smith have been concerned with sustaining a level of economic growth that would provide for a rising standard of living for a growing population. In the national accounts, sustainable growth is measured by net domestic product (NDP), which is equal to GDP less depreciation, that is, what is left over for consumption after deducting the amount necessary to replace the capital used up in that production.

Over the last few decades, NDP has grown more slowly than GDP. From 1973 to 2022, real NDP grew at 2.4 percent per year on average, compared with 2.6 percent for real GDP. This is the result of gross investment spending (a component of GDP) growing more slowly than depreciation. This slowing of investment spending has reduced the net investment available for activities that produce economic growth and that lead to a rise in productivity and standards of living.

Data. Real GDP and real net domestic product, 1929–2022
Source. BEA NIPA table 1.7.6
Select BEA and partner agency information reflecting the 2023 Comprehensive Updates will not be available until December 2023. This information will be incorporated for the next release of the well-being measures planned for January 2024. For a snapshot of the missing content, see the archived June 2023 release of this product.
International trade is an important factor in economic growth. By allowing for specialization across nations and raising productivity, trade yields higher growth and standards of living.

Between 1947 and 2022, overall U.S. trade (exports plus imports) as a percentage of GDP grew from about 10.5 percent to about 27 percent. The increased international trade—along with higher quality economic data and better-informed policies and institutions—contributed to an unprecedented period of growth in standards of living in the United States and other developed economies. Since 1947, real GDP per capita more than quadrupled in the United States.

Until the mid-1970s, the United States had an international trade balance that was usually in surplus. Over time, the U.S. trade balance moved to persistent trade deficits (with deficits on goods more than offsetting surpluses in services). These trade deficits were the result of domestic spending that exceeded domestic production, or its mirror image, low national saving that reflects the higher domestic spending. The lower investment that often accompanies lower saving may slow growth in productivity, the economy, and standards of living, thereby offsetting some of the positive contributions of international trade to economic growth.

Data. Ratios of total trade, net exports, net exports of goods, and net exports of services to GDP, 1929–2022
Source. BEA NIPA table 1.1.5 and NIPA table 1.1.10
Select BEA and partner agency information reflecting the 2023 Comprehensive Updates will not be available until December 2023. This information will be incorporated for the next release of the well-being measures planned for January 2024. For a snapshot of the missing content, see the archived June 2023 release of this product.
The movement of U.S. jobs abroad by U.S. companies often is seen as a threat to the long-term growth of the U.S. economy and its ability to produce high-paying domestic jobs. A look at the data shows that most of U.S. multinational companies’ employment remains in the United States. For example, in 2020, about 67 percent of U.S. multinationals' employment was in the United States.

The share of foreign employment has risen as large and emerging economies like India and China have expanded their share of world income. However, most employment remains in high- and middle-income countries rather than low-income countries. Growth in foreign employment has been concentrated in middle-income countries.

In addition, BEA data on U.S.-owned foreign companies show that most overseas subsidiaries sell their goods and services in the countries where they are located or to other foreign countries. In 2020, only 13 percent of U.S. foreign subsidiaries' sales were to the United States. These trends suggest that the location of foreign production is more for access to large and growing markets than for low-cost labor.

For a given year, shares may not sum to 100 percent due to rounding and classification differences. Income classifications reflect those issued by the World Bank as of October 2006. The income levels are classified in the following tiers based on countries’ annual per capita gross national income in 2005 dollars: High-income ($10,726 or more), middle-income ($875 to $10,725), and low-income ($875 or less).

Data. Domestic and foreign employment by U.S. multinational companies, select years: 1999–2020
Source. BEA Activities of U.S. Multinational Enterprises
Since 1930, the United States has run a federal budget deficit in most years. Higher deficits have generally resulted from economic downturns and war (the Great Depression, World War II, the Korean War, the Vietnam War, the Great Recession, and the coronavirus pandemic).
There are several key indicators used to assess the economic effects of debt burdens. This includes borrowers' ability to service their debt and how borrowing in each period compares with income.

For the federal government, the ability to service debt is measured by the "federal debt service ratio," calculated as federal interest payments divided by gross national income (GNI). Borrowing compared with income is measured using the "federal net borrowing to income ratio," calculated as federal total expenditures less federal total receipts divided by national income.

The federal debt service ratio has remained relatively flat over the last few decades. The federal net borrowing to income ratio has been much more volatile, peaking in 2020 during the coronavirus pandemic.

Data: Trends in federal deficits, debt, and debt service, 1960–2022
Source: BEA NIPA table 1.1.5 and NIPA table 3.2
The federal debt service ratio is calculated as federal interest payments divided by gross national income (GNI). The federal net borrowing to income ratio is calculated as total federal expenditures less total federal receipts divided by national income.
Saving & Investment for the Future

Net Saving and Net Investment as Percentages of GDP

Net investment—gross investment less depreciation—is often called sustainable investment. A significant share of gross investment in plant, equipment, and IT goes toward replacing capital that wears out (that is, depreciation). Net investment increases the nation's production capabilities.

Net saving represents the amount of net income that is available to finance net investment; however, net investment can also be financed by borrowing from the rest of the world.

During the post-WWII era, net investment and net saving have been trending down (with the related drags on productivity, growth, and standards of living).

The downward trend in net investment has slowed growth in U.S. capital stock and capital services, accounting for a large share of the decline in trend GDP growth (see "Trends in Real Economic Growth" above).

The gap between the net investment rate and the net saving rate has widened over the last 35 years, with the net saving rate turning negative in 2008 during the Great Recession for the first time since the Great Depression.

Data. Net saving and net investment as percentages of GDP, 1929-2022
Source. BEA NIPA table 1.1.5 and NIPA table 5.1
The current expansion began in April 2020. Since the trough in 2020Q2, the economy has increased 5.3 percent on average. Since 1947, the average expansion has lasted 21 quarters, with an average increase of 4.5 percent.

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Avg. length: 4.0 qtrs -3.3% Avg. length: 21.0 qtrs 4.5%

Data. Real GDP, 1947Q1–2023Q2
Source. BEA NIPA table 1.1.3 and NIPA table 1.1.6
Expansions and contractions are determined by the business cycle turning points identified by the National Bureau of Economic Research.